







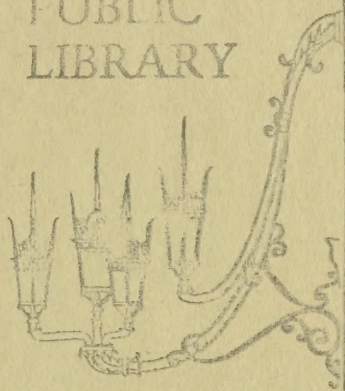
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# THE AGRICULTURAL INDEX



SUBJECT INDEX TO A SELECTED  
LIST of AGRICULTURAL PERIODICALS *and* BULLETINS  
1916-1918

EDITED BY  
NELTJE TANNEHILL SHIMER

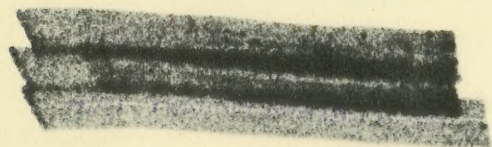
VOLUMES I-III

THE H. W. WILSON COMPANY  
958 - 964 UNIVERSITY AVENUE  
NEW YORK CITY  
1919

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This volume is the tenth and final  
number of Volume III in the regular  
series and is a cumulation in one alpha-  
bet of Volumes I, II, and III.

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## PREFACE

The period of three years, 1916, 1917 and 1918, of which this volume marks the close, has been a significant one for agriculture and agriculturists. The great war has perhaps stimulated wider interest in agrarian matters than in any other subject.

The references included in this cumulation form a permanent record of the articles in a selected list of seventy-eight periodicals, including farm papers and technical journals, the publications of agricultural experiment stations, state and federal departments and boards, the reports of agricultural and horticultural associations, and the extension bulletins of colleges and universities.

The Agricultural Index was started in January, 1916, at the earnest request of agricultural college librarians. The plan, as at first proposed, was that of a periodical index, with the addition of the experiment station publications and the United States Department of Agriculture bulletins. It was soon apparent, however, that the plan would have to be broadened to serve other needs than those of the agricultural libraries.

Business and technical libraries, college, county, and government libraries, banks, schools, county agents, editors appear on the list of cooperators or subscribers. The Index also goes to fourteen foreign countries, including China and Russia.

Because of the increased interest in the subject, the literature published has been voluminous. The publications of the United States Food Administration on food preparation and conservation, the statistics published by the Food Administration and the United States Bureau of Labor and Statistics in the Monthly Review on food supply and food control in the United States and other countries, the Commerce reports, the publications issued by banks and railroads, by fertilizer and farm machinery industries, these and many other agencies have been contributing much literature of value to those interested in agriculture in its many phases.

It has been the aim of the Index to assemble references to the most important of this material. Much of it is elusive, and cannot be found in other indexes. Some of it is scattered in many different places. To gather it together seemed to be the natural function of a special index. In pursuit of this literature, other indexes, the Readers' Guide to Periodical Literature, and the Supplement, the Industrial Arts Index, the Public Affairs Information Service bulletin, general bibliographies, Library of Congress cards are carefully checked.

A checklist has been given in each number of the Index to enable the user to secure this material. Since much of it is sent gratis, it is of special value, particularly to the smaller libraries. In this cumulation a checklist is given of the material entered during 1918.

\* [REDACTED]

[REDACTED] 535761  
[REDACTED] 016003  
[REDACTED]



## PREFACE

The magazines have been indexed completely, in most cases, for the three years. In the case of those added since 1916, the indexing has been carried back to cover the period. In some instances the indexing has been carried back to the beginning of the magazine, as in the case of the *Journal of Agricultural Research* and the *American Journal of Botany*. The United States Department of Agriculture Department bulletins are also indexed from the beginning of the series.

The *Journal of Dairy Science*, *Soil Science*, the *Journal of Bacteriology*, *System on the Farm*, the United States Food Surveys, and the United States Seed Reporters have all been started since 1916. The index to these journals is, therefore, complete.

A third questionnaire asking for a vote on a selected list of magazines to be added to the list will be sent out early in the year. Periodicals will be added to meet the need as it is expressed in the replies to this questionnaire.

It is with pleasure that acknowledgement is made of the valuable assistance of the Massachusetts agricultural college library, Mr. Charles R. Green, librarian, in the work of indexing a few magazines not obtainable by the Index. This service has made it possible to complete the indexing of several volumes which would otherwise have been difficult of accomplishment.

The work of the members of the staff has been particularly efficient and painstaking. Grateful acknowledgement is made to Inez Cavert, Florence Arnold, Angelina Vasti, and Agnes Flanagan for their aid in the endeavor to make this volume an accurate record. Many helpful suggestions have been received from subscribers and friends of the Index. Criticisms have been made in a kindly spirit of cooperation. The new year is welcomed as a year of extraordinary opportunity in all countries for all workers interested in agriculture.

N. T. S.

January 20, 1919.



# List of Periodicals and Bulletins Indexed

The periodicals and bulletins listed below are now indexed regularly in the Agricultural Index. This list will be increased as rapidly as seems advisable, the additions being selected by vote of the subscribing libraries. All subscribers are invited to send us the names of any periodicals they would find useful if indexed.

Society and association proceedings and annual volumes indexed will not be entered in this list. The full entry giving data as to secretary, address, price, etc., will be found in the main alphabet under the name of the society.

\* One cooperator made the suggestion that it would save time for the librarian if the data regarding the publication of the title page and index were shown in this list. This information will be found below. Abbreviations are given at bottom of page.

It has been suggested that it would be a convenience to the librarian to know which experiment bulletins have been indexed. The inclusive bulletin and circular numbers of material indexed in this volume have been given in the list below. The inclusive volume numbers of the magazines indexed are also given.

**Ag Digest**—The Agricultural Digest. \$1.50; single numbers 15c. The Agricultural Digest, Inc., 2 W. 45th st, N.Y.

Vols. 1-3 (Discontinued, J1 '18)

**Ag Gaz of Canada**—Agricultural Gazette of Canada. \$1; single numbers 10c. Department of Agriculture, Ottawa, Canada (i-s)

Vols. 3-5

**Ag Gaz of New South Wales**—Agricultural Gazette of New South Wales. Single numbers 6p. Dept. of agriculture, Sydney, Australia

Vols. 27-29

**Ag J of India**—Agricultural Journal of India. 8s 6d; single numbers 3s. W. Thacker & Company, 2 Creed Lane, London

Vols. 11-13

**Ala Ag Exp**—Alabama Agricultural Experiment Station. Publications. Auburn, Ala.

Bulletins 187-204

Circulars 25-38

Press Bulletin 90

Reports, 1916, 1917

**Alaska Ag Exp**—Alaska Agricultural Experiment Station. Publications. U. S. Dept. of agriculture, Division of publications, Washington, D.C.

Circular 1

Report, 1916

**Am Bee J**—American Bee Journal. \$1. 1st National Bank bldg., Hamilton, Ill. (i-s)

Vols. 56-58

**Am Coop J**—American Co-operative Journal. \$1; single numbers 10c. American Co-operative Publishing Company, 230 S. La Salle st, Chicago (i-none)

Vols. 11-14

**Am Fert**—American Fertilizer. \$2; single numbers 25c. Ware Bros. Company, 1010 Arch st, Philadelphia (tpi-none)

Vols. 44-49

**Am Flor**—American Florist. \$1. American Florist Company, 440 S. Dearborn st, Chicago

Vols. 45-51

**Am For**—American Forestry. \$3; single numbers 25c. American Forestry Assn., 1410 H st, N. W., Washington, D.C. (tpi-r)

Vols. 22-24

**Am Fruit Grower**—American Fruit Grower. 50c; single numbers 10c. American Fruit Grower Company, Inc., 329 Plymouth Court, Chicago

Continuation of the combination of American Fruit Grower, Fruit-Grower, Green's Fruit-Grower, and Green's American Fruit Grower

Vol. 38

**Am J Bot**—American Journal of Botany. \$5; single numbers 60c. American Journal of Botany, Brooklyn Botanic Garden, Brooklyn, N.Y. (i-s)

Vols. 1-5 (1914-1918)

**Am P Advocate**—American Poultry Advocate. 50c; single numbers 5c. Clarence C. DePuy, editor & publisher, 1009 S. Salina st, Syracuse, N.Y.

Vols. 24-26

**Am P J**—American Poultry Journal. 60c. American Poultry Journal Publishing Company, 523 Plymouth Court, Chicago (i-none)

Vols. 47-49

**Am Pom Soc Pro**—American Pomological Society. Proceedings. E. R. Lake, sec., Washington, D.C.

Elected but not yet indexed

**Am Sheep B & W**—American Sheep Breeder and Wool Grower. \$1.25; single numbers 15c. 817 Exchange st, Union Stock Yards, Chicago (tpi-none)

Vols. 36-38

**Am Soc Ag Eng**—Transactions of the American Society of Agricultural Engineers. American Society of Agricultural Engineers. F. W. Ives, sec.-treas., Ohio State University, Columbus, O.

Vols. 9-11

**Am Soc Agron J**—Journal of the American Society of Agronomy. \$2.50; single numbers 30c. American Society of Agronomy, L. Carrier, sec., 41 N. Queen st, Lancaster, Pa. (i-s)

Vols. 8-10

**Am Vet M Assn J**—Journal of the American Veterinary Medical Association. \$3; single numbers 30c. Journal of the American Veterinary Medical Assn., Ithaca, N.Y. (tpi-s)

Vols. 48-54

## \*Abbreviations:

i- index.

-l sent loose in last number of volume.

-lb sent loose in first number of volume.

-lfn sent loose in a following number of succeeding volume.

-none none issued.

-r sent on request.

-s stitched in last number of volume.

-sb stitched in first number of volume.

-sfn stitched in a following number of succeeding volume.

tp- title page.

tpi- title page and index.



# LIST OF PERIODICALS INDEXED

- Ann Bot**—Annals of Botany. 30s per volume. Humphrey Milford, Oxford University Press, Amen Corner, London, E. C. (tpi-s)  
Vols. 30-32
- Ariz Ag Exp**—Arizona Agricultural Experiment Station. Publications. Tucson, Ariz.  
Bulletins 77-82  
Reports, 1916, 1917  
Timely hints 93 (rev), 114-135
- Ark Ag Exp**—Arkansas Agricultural Experiment Station. Publications. Fayetteville, Ark.  
Bulletins 123, 125-144, 153  
Circulars 30-44
- Assn Am Ag Coll & Exp Pro**—Association of American Agricultural Colleges and Experiment Stations. Proceedings. J. L. Hills, sec., Burlington, Vt.
- Assn Offic Ag Chem J**—Journal of the Association of Official Agricultural Chemists. \$5. Williams & Wilkins Company, 2419-21 Greenmount av, Baltimore (i-s)  
Vols. 1-3 (1916-May 15, 1917)
- Banker-F**—Banker-Farmer. 50c. Agricultural Commission of the American Bankers Association, Champaign, Ill. (i-none)  
Vols. 3-6
- Better Fruit**—Better Fruit. \$1; single numbers 10c. Better Fruit Publishing Company, 407 Lumber Exchange, Portland, Ore. (tpi-none)  
Vols. 10-13
- Bot Gaz**—Botanical Gazette. \$7; single numbers 75c. University of Chicago Press. Chicago (tpi-s)  
Vols. 61-66
- Breeder's Gaz**—Breeder's Gazette. \$1.50. Sanders Publishing Company, 542 S. Dearborn st, Chicago (tpi-l)  
Vols. 69-74 (1916-S 1918)
- Cal Ag Exp**—University of California, College of Agriculture. Agricultural Experiment Station. Publications. Berkeley, Cal.  
Bulletins 263-300  
Circulars 146-198, 200-203, 205  
Reports 1916, 1917
- Cal State Comm Hort B**—The monthly bulletin of State Commission of Horticulture, Sacramento, Cal. (i-s)  
Vols. 5-7
- Cal Univ Pub**—University of California. Publications in Agricultural Science, Botany and Entomology. Berkeley, Cal.  
Agricultural Sciences v 1, nos. 10-13; v 2, no. 3; v 3, nos. 1-10  
Botany v 5, nos. 9-12, 14; v 6, nos. 9-13, 15-16; v 7, nos. 1-4  
Entomology v 1, nos. 3-8; v 2, no. 1
- Canada Ag**—Dominion of Canada; Department of Agriculture. Publications. Publications Branch, Dept. of Agriculture, Ottawa, Canada
- Colo Ag Exp**—Colorado Agricultural Experiment Station. Publications. Fort Collins, Colo.  
Bulletins 180, 217-246  
Reports, 1916, 1917
- Conn State Ag Exp**—Connecticut Agricultural Experiment Station. Publications. New Haven, Conn.  
Bulletins 190-206  
Report, 1916, pts 1-6
- Conn Storrs Ag Exp**—Storrs Agricultural Experiment Station. Publications. Storrs, Conn.  
Bulletins 86, 88-95
- Coop Manager & F**—Co-operative Manager and Farmer. \$1; single numbers 10c. Manager Publishing Company, Corn Exchange bldg., Minneapolis, Minn.  
Vols. 6-8
- Cornell Ag Exp**—Cornell University. Agricultural Experiment Station of the N. Y. State College of Agriculture. Publications. Ithaca, N.Y.  
Bulletins 369-395, 397  
Circular 32  
Memoirs 9-14  
Reports, 1916, 1917
- Cornell Countryman**—Cornell Countryman. \$1; single numbers 25c. New York State College of Agriculture, Cornell University, Ithaca, N.Y. (i-s)  
Vols. 14-15 (1917-1918)
- Country Gent**—Country Gentleman. \$1; single numbers 5c. Curtis Publishing Company, Independence square, Philadelphia (tpi-l)  
Vols. 81-83
- Country Life**—Country Life in America. \$5; single numbers 50c. Doubleday, Page & Co., Garden City, N.Y. (tpi-l)  
Vols. 29-35
- Creamery**—Creamery and Milk Plant Monthly. \$1; single numbers 15c. National Milk Publishing Company, 327 S. La Salle st, Chicago  
Vols. 4-7
- Del Ag Exp**—Delaware College. Agricultural Experiment Station. Publications. Newark, Del.  
Bulletins 111-119
- Exp Sta Record**—Experiment Station Record. \$1; single copies 15c. U. S. States Relations Service, Washington, D.C.  
Only the longer digests indexed.
- Farm Eng**—Farm Engineering. Magazine of Farm Engineering Society of America. \$1; single numbers 10c. Farm Engineering Publishing Company, 608 S. Dearborn st, Chicago (tpi-none)  
Vols. 3-7 (1916-April, 1918)
- Farmers' B**—United States Department of Agriculture. Farmers' Bulletin. U. S. Dept. of Agriculture, Division of publications, Washington, D.C.  
Bulletins 700-708, 710-944, 946-980, 982-998, 1000, 1004, 1006, 1008, 1010, 1012, 1014, 1018  
Revised bulletins issued during period also indexed
- Field II**—Field Illustrated. \$3; single numbers 25c. Advanced Agricultural Publishing Company, 2 W 45th st, N.Y. (tpi-none)  
Vols. 26-28
- Fla Ag Dept Quar B**—Florida Department of Agriculture. Quarterly Bulletin. Tallahassee, Fla.  
Bulletins Ja, Ap, Jl, O '16, Ja, Ap, Jl, O '17, Ja, Jl, O '18
- Fla Ag Exp**—University of Florida. Agricultural Experiment Station. Publications. Gainesville, Fla.  
Bulletins 129-150  
Reports, 1916, 1917
- Fla State Plant Bd**—State Plant Board of Florida. Publications. Gainesville, Fla.  
Nursery Inspection Circular 8  
Quarterly Bulletins O '16, Ja, Ap, Jl, O '17, Ja, Ap, Jl, O '18
- For Quar**—Combined with the Proceedings of the Society of American Foresters and continued as the Journal of Forestry  
Vol. 14 (1916)
- Fruit-Grower**—Combined with American Fruit Grower and Green's Fruit Grower and continued as Green's American Fruit Grower  
Vols. 27-28
- Ga Ag Coll**—Georgia State College of Agriculture. Publications. Athens, Ga.  
Bulletins 109, 114, 116, 119, 121, 125-128, 138, 144, 153, 160  
For missing numbers see Extension list
- Ga Ag Exp**—Georgia Agricultural Experiment Station. Publications. Experiment, Ga.  
Bulletins 118-125  
Circulars 69, 74-76  
Report, 1916
- Gard Chron (Lond)**—Gardeners' Chronicle. \$5.50. Gardeners' Chronicle, Ltd., 41 Wellington st, Covent Garden, London, W. C. 2 (tpi-s)  
Vols. 59-64
- Gard Chron Am**—Gardeners' Chronicle of America. \$1.50; single numbers 15c. Chronicle Press, Inc., 286 5th av, N.Y.  
Vols. 20-22
- Gard M**—Garden Magazine. \$2; single numbers 25c. Doubleday, Page & Co., Garden City, N.Y. (tpi-r)  
Vols. 22-28



# LIST OF PERIODICALS INDEXED

- Gleanings**—Gleanings in Bee Culture. \$1. A. I. Root Company, Medina, O. (i-s)  
Vols. 44-46
- Green's Am Fruit Grower**—Continued as American Fruit Grower  
Vols. 37-38
- Green's Fruit Grower**—Combined with American Fruit Grower and Fruit-Grower and continued as Green's American Fruit Grower  
Vols. 36-37
- Guam Ag Exp**—Guam Agricultural Experiment Station. Publications. U.S. Dept. of Agriculture, Division of publications, Washington, D.C.  
Reports, 1915, 1916
- Hawaii Ag Exp**—Hawaii Agricultural Experiment Station. Publications. U.S. Dept. of Agriculture, Division of publications, Washington, D.C.  
Bulletins 41-44  
Press Bulletins 51-53  
Reports, 1915, 1916, 1917
- Hoard's D**—Hoard's Dairyman. \$1. W. D. Hoard & Sons Company, Fort Atkinson, Wis. (i-lfn)  
Vols. 50-56
- Ia Ag Exp**—Iowa State College of Agriculture and Mechanic Arts. Agricultural Experiment Station. Publications. Ames, Ia.  
Bulletins 163-180  
Circulars 24, 26-53  
Report, 1916  
Research Bulletins 27, 29-44, 46  
Soil survey report 1
- Idaho Ag Exp**—University of Idaho. Agricultural Experiment Station. Publications. Moscow, Idaho  
Bulletins 85-108, 110-111  
Circulars 2-6
- Ill Ag Exp**—University of Illinois. Agricultural Experiment Station. Publications. Urbana, Ill.  
Bulletins 185-198, 201-206, 208-211  
Circulars 185-197, 199-207, 209-232  
Reports, 1916, 1917  
Soil Reports 12-16
- Ind Ag Exp**—Purdue University. Indiana Agricultural Experiment Station. Publications. La Fayette, Ind.  
Bulletins 185-214  
Circulars 52, 54-57, 59-82  
Report, 1917
- Int R Ag Econ**—International Review of Agricultural Economics. 18 frs; single numbers 2 frs. International Institute of Agriculture, Rome, Italy (tpi-none)  
Years 7-9 (1916-Mr, 1918)
- Int R Sci & Prac Ag**—International Review of the Science and Practice of Agriculture. 18 frs; single numbers 2 frs. International Institute of Agriculture, Rome, Italy (tpi-r)  
Years 7-9 (1917-My, 1918)
- Int Yearbook Ag Leg**—International Yearbook of Agricultural Legislation. 10fr. International institute of agriculture, Rome, Italy  
Yearbook, 1916
- Irr Age**—Irrigation Age. \$1. D. H. Anderson, 213 Templeton bldg., Salt Lake City, Utah (tpi-none)  
Vols. 31-33
- J Ag (Quebec)**—Journal of Agriculture and Horticulture. \$1. Dept. of Agriculture, Province of Quebec, Canada (i-s)  
Vols. 19-22
- J Ag New Zealand**—Journal of Agriculture of New Zealand. 2s 6d; single numbers 6d. New Zealand Department of Agriculture, Wellington (tpi-l)  
Vols. 12-17
- J Ag Research**—Journal of Agricultural Research. \$3. U.S. Dept. of Agriculture, Division of Publications, Washington, D.C. (tpi-s)  
Vols. 1-15 (1913-1918)
- J Ag Sci**—Journal of Agricultural Science. 15s; single numbers 5s. Cambridge University Press, Fetter Lane, London, E. C. (tp-s)  
Vols. 7-9
- J Bact**—Journal of Bacteriology. \$5. Williams & Wilkins Company, 2419-21 Greenmount av, Baltimore (i-s)  
Vols. 1-3
- J Bd Ag**—Journal of the Board of Agriculture (Great Britain). Single numbers 4d. Board of Agriculture and Fisheries, 3 St James's sq., London, S. W. 1 (tpi-sb)  
Vols. 22-25
- J Bd Ag Porto Rico**. See J Dept Ag Porto Rico
- J Dairy Sci**—Journal of Dairy Science. \$5. Williams & Wilkins Company, 2419-21 Greenmount av, Baltimore (i-s)  
Vol. 1
- J Dept Ag Ireland**—Journal of the Dept. of Agriculture and Technical Instruction, Ireland. 6d. E. Ponsonby, Ltd., 116 Grafton st, Dublin, Ireland (tpi-s)  
Vols. 17-18
- J Dept Ag Porto Rico**—Journal of the Department of Agriculture. Dept. of Agriculture and Labor, San Juan, P. R. (tpi-s)  
Vols. 1-2 (1917-1918)
- J Dept Ag S Australia**—Journal of the Dept. of Agriculture of South Australia. 2s 6d. Victoria sq., Adelaide (i-lfn)  
Vols. 20-22
- J Dept Ag Victoria**—Journal of the Dept. of Agriculture of Victoria. 5s; single numbers 3p Melbourne, Australia (i-lb)  
Vols. 14-16
- J Econ Entom**—Journal of Economic Entomology. \$2.50; single numbers 50c. American Association of Economic Entomologists, Railroad sq., Concord, N. H. (tpi-s)  
Vols. 9-11
- J For**—Journal of Forestry. Official Organ of the Society of American Foresters. \$3; single numbers 50c. Society of American Foresters, 930 F st, N.W., Washington, D.C. (tpi-s)  
Continuation of the combination of Forestry Quarterly and the Proceedings of the Society of American Foresters  
Vols. 15-16 (1917-1918)
- J Heredity**—Journal of Heredity. \$2; single numbers 25c. American Genetic Association, P.O. Box no. 472, Eleventh st station, Washington, D.C. (tpi-s)  
Vols. 7-9
- J Home Econ**—Journal of Home Economics. \$2; single numbers 25c. American Home Economics Assn., 1211 Cathedral st, Baltimore (tpi-s)  
Vols. 8-10
- Jersey B**—Jersey Bulletin and Dairy World. \$2. Jersey Bulletin Company, 600 Century bldg., Indianapolis, Ind. (i-s)  
Vols. 35-37
- Kan Ag Exp**—Kansas State Agricultural College. Agricultural Experiment Station. Publications. Manhattan, Kans.  
Bulletins 210-220  
Circulars 27 (rev), 39, 55-62, 64-69  
Inspection Circulars 2-5  
Report, 1916  
Technical Bulletins 1-5
- Kimball's D F**—Kimball's Dairy Farmer. 70c; single numbers 5c. Fred L. Kimball Company, 407-13 Commercial st, Waterloo, Ia. (i-s)  
Vols. 13-16
- Ky Ag Exp**—Kentucky Agricultural Experiment Station. Publications. Lexington, Ky.  
Bulletins 197-217  
Circulars 11, 13-19, 21  
Report, 1916, 1917
- La Ag Exp**—Louisiana Agricultural Experiment Station. Publications. Baton Rouge, La.  
Bulletins 155-164  
Reports, 1915, 1916, 1917
- Maine Ag Dept B**—Maine Department of Agriculture. Quarterly Bulletin. Augusta, Maine  
Bulletins Mr, Je, S, D '16, Mr, Je, S, B '17, Mr, Je, S '18
- Maine Ag Exp**—Maine Agricultural Experiment Station. Publications. Orono, Maine  
Bulletins 246-271  
Documents 515, 522-523, 525-526, 528, 531-532  
Official Inspections 75-87  
Report, 1917

# LIST OF PERIODICALS INDEXED

- Market Growers J**—Market Growers Journal. \$1.50. Market Growers Journal Company, Inter-Southern bldg., Louisville, Ky. (i-s)  
Vols. 18-23
- Mass Ag Exp**—Massachusetts Agricultural Experiment Station. Publications. Amherst, Mass.  
Bulletins 167-183  
Circular 66  
Control Ser. Bulletins 5-8
- Mass Hort Soc**—See Massachusetts Horticultural Society in main alphabet
- Md Ag Exp**—Maryland Agricultural Experiment Station. Publications. College Park, Md.  
Bulletins 192-219  
Reports, 1916, 1917
- Mich Ag Exp**—Michigan Agricultural College. Agricultural Experiment Station. Publications. East Lansing, Mich.  
Bulletins 276-281  
Circulars 28-34  
Reports, 1916, 1917  
Special Bulletins 77-89  
Technical Bulletins 25-40, 42
- Minn Ag Exp**—University of Minnesota. Agricultural Experiment Station. Publications. University Farm, St Paul, Minn.  
Bulletins 153-174  
Reports, 1916, 1917  
Reports, North Central, 1916; Northeast, 1916; Northwest 1910-1916; West Central, 1917
- Minn Hort**—Minnesota Horticulturist. \$1. Minnesota State Horticultural Society. A. W. Latham, sec., 207 Kasota block, Minneapolis, Minn.  
Vols. 44-46
- Miss Ag Exp**—Mississippi Agricultural Experiment Station. Publications. Agricultural College, Miss.  
Bulletins 173, 175-184  
Circular O '17  
Technical Bulletins 7-8
- Mo Ag Bd**—Missouri State Board of Agriculture. Publications. Columbia, Mo.  
Bulletins Ja-D '16, Ja-D '17, Ja-F, Jl-D '18  
Yearbooks, 1916, 1917
- Mo Ag Exp**—University of Missouri. College of Agriculture. Agricultural Experiment Station. Publications. Columbia, Mo.  
Bulletins 139-153, 155  
Circulars 79-85  
Research Bulletins 22-27
- Mont Ag Exp**—Montana Agricultural Experiment Station. Publications. Bozeman, Mont.  
Bulletins 109-122  
Circulars 51-76  
Reports, 1915, 1916
- Monthly Crop Rep**—Monthly Crop Report. Chief of the Bureau of Crop Estimates, Department of Agriculture, Washington, D.C.  
Vols. 3-4 (1917-1918)
- Mycol**—Mycologia. \$3. New York Botanical Garden, Bronx Park, New York (i-s)  
Vols. 8-10
- N C Ag Exp**—North Carolina Agricultural Experiment Station. Publications. Raleigh, N.C.  
Bulletins 235-238, 240  
Circulars 34-35  
Reports, 1916, 1917  
Technical Bulletins 11-15
- N D Ag Exp**—North Dakota Agricultural Experiment Station. Publications. Agricultural College, N.D.  
Bulletins 114-127  
Circulars 10-13  
Reports, 1915, 1916  
Special Food Bulletins v 4, nos. 5, 12; v 5, nos. 3-4
- N H Ag Exp**—New Hampshire Agricultural Experiment Station. Publications. Durham, N.H.  
Bulletins 178-181, 183-186  
Circular 18  
Technical Bulletins 10-12
- N J Ag Dept**—New Jersey Department of Agriculture. Publications. Trenton, N.J.  
Bulletins 1-17  
Circulars 1, 3-5, 7-11, 13  
Leaflet 2
- N J Ag Exp**—New Jersey Agricultural Experiment Station. Publications. New Brunswick, N.J.  
Bulletins 288-324  
Circulars 49-91, 93-96  
Hints to poultrymen v 5, nos. 1-12; v 6, nos. 1-12; v 7, no. 1  
Report, 1916
- N M Ag Exp**—New Mexico College of Agriculture and Mechanic Arts. Agricultural Experiment Station. Publications. State College, N.M.  
Bulletins 100-107, 109-110, 113, 115  
Reports, 1916, 1917
- N Y Ag Dept**—New York Department of Agriculture. Publications. Albany, N.Y.  
Bulletins 79-94, 96  
Circular 136  
Report, 1916, pts 2 & 3
- N Y Farms & Markets Dept**—New York State Department of Farms and Markets, Publications. Albany, N.Y.  
Agricultural Bulletins 97, 101-108
- N Y Prod R**—New York Produce Review and American Creamery. \$1. Urner-Barry Company, 173 Chambers st, N.Y. (i-lfn)  
Vols. 41-47
- N Y State Ag Exp**—New York State Agricultural Experiment Station. Publications. Geneva, N.Y.  
Bulletins 414-450  
Report, 1915  
Technical Bulletins 48-64
- Nat Stock & F**—National Stockman and Farmer. \$1. Stockman-Farmer Publishing Company, Penn and Shady av, Pittsburgh, Pa. (i-s)  
Vols. 40-42
- Nat Wool Grower**—National Wool Grower. \$1. National Wool Growers' Association Company, 718 McIntyre bldg., Salt Lake City, Utah (i-none)  
Vols. 7-8 (1917-1918)
- Neb Ag Exp**—University of Nebraska. Agricultural Experiment Station. Publications. Lincoln, Neb.  
Bulletins 155-163, 165-168  
Circulars 1-5  
Reports, 1917, 1918  
Research Bulletins 6-13
- Nev Ag Exp**—Nevada Agricultural Experiment Station. Publications. Reno, Nev.  
Bulletins 84-95  
Reports, 1916, 1917
- O Judd Farmer**—Orange Judd Farmer. \$1; single numbers 5c. Orange Judd Company, Springfield, Mass. (i-none)  
Vols. 60-65
- Ohio Ag Dept**—Ohio Department of Agriculture, Columbus, O.  
Bulletins F, My, Ag, 1918
- Ohio Ag Exp**—Ohio Agricultural Experiment Station, Publications. Wooster, O.  
Bulletins 291-325, 327-328  
Monthly Bulletins v1, nos. 1-12; v2, nos. 1-12; v 3, nos. 1-10
- Ohio F**—Ohio Farmer. \$1. Lawrence Publishing Company, 1011-13 Oregon av, N.E., Cleveland, O. (i-s)  
Vols. 137-142
- Okla Ag Exp**—Oklahoma Agricultural and Mechanical College. Agricultural Experiment Station. Publications. Stillwater, Okla.  
Bulletins 108-119  
Circulars 40-44, 68, 79  
Report, 1917
- Ontario Ag Dept**—Ontario Department of Agriculture. Publications. Toronto, Ontario, Canada  
Bulletins 235-267  
Circulars 2-3, 6-15  
Crop Bulletins 133
- Ore Ag Exp**—Oregon Agricultural College. Agricultural Experiment Station. Publications. Corvallis, Ore.  
Bulletins 131, 134-155



# LIST OF PERIODICALS INDEXED

**Pa Ag Exp**—Pennsylvania State College, School of Agriculture, Agricultural Experiment Station. Publications. State College, Centre County, Pa.

Bulletins 137-153  
Separate 17

**Penn State F**—Penn State Farmer. 75c; single numbers 10c. Agricultural Society, Pennsylvania State College, State College, Pa.

Vols. 9-11

**Philippine Ag R**—Philippine Agricultural Review. \$1. Director of Agriculture, Manila P.I.

Vols. 9-11

**Phyt**—Phytopathology. Official Organ of the American Phytopathological Society. \$5; single numbers 50c. Williams & Wilkins Company. 2419-21 Greenmount av, Baltimore (tpi-s)

Vols. 6-8

**Porto Rico Ag Dept J**. See J Dept Ag Porto Rico

**Porto Rico Ag Exp**—Porto Rico Agricultural Experiment Station. Publications. U.S. Dept. of Agriculture, Division of Publications, Washington, D.C.

Bulletins 19-25

Circulars 16-17

Reports, 1916, 1917

**Porto Rico Insular Exp**—Porto Rico Department of Agriculture and Labor. Insular Experiment Station. Publications. Rio Piedras, P.R.

Bulletin 17

Circulars 12-13

Reports, 1916, 1917

**Power F**—Power Farming. 50c. Power Farming Press, St Joseph, Mich. (i-none)

Vols. 25-27

**Prac F**—Practical Farmer. 50c Walker Publishing Company, 121 N. 7th st, Philadelphia (i-none)

Vols. 112-114

**Prog F**—Progressive Farmer. \$1; single numbers 5c. Progressive Farmer Company, 1702 4th av, Birmingham, Ala. (i-r)

Vols. 31-33

**Purdue Ag**—Purdue Agriculturist. 50c Purdue University, Lafayette, Ind. (i-none)

Vols. 10-13

**R I Ag Exp**—Rhode Island Agricultural Experiment Station. Publications. Kingston, R.I.

Bulletins 164-173

Inspection Bulletins My, O '16, My, O '17, My '18

Report, 1917

**Reliable P J**—Reliable Poultry Journal. 50c; single numbers 10c. Reliable Poultry Journal Publishing Company, Quincy, Ill. (tpi-none)

Vols. 22-25

**Royal Hort Soc J**—Journal of the Royal Horticultural Society. 10s. Royal Horticultural Society, Vincent square, London, S.W. (tpi-none)

Vol. 42 (pts. 1-3)

**Rural Manhood**—Rural Manhood. \$1; single numbers 15c. International Committee of Y. M. C. A.'s, 347 Madison av, N.Y. (i-s)

Vols. 7-9

**Rural N Y**—Rural New-Yorker. \$1; single numbers 5c. Rural Publishing Company, 333 W. 30th st, N.Y. (i-r)

Vols. 75-77

**S C Ag Dept**—South Carolina Department of Agriculture, Commerce and Industries. Publications. Columbia, S.C.

Bulletins 57, 59-61

**S C Ag Exp**—South Carolina Agricultural Experiment Station. Publications. Clemson College, S.C.

Bulletins 185-197

Circular 29

Reports, 1916, 1917

**S D Ag Exp**—South Dakota State College of Agriculture and Mechanic Arts. Agricultural Experiment Station. Publications. Brookings, S.D.

Bulletins 163-181

Reports, 1916, 1917

**Soc Am For Pro**—Combined with Forestry Quarterly and continued as Journal of Forestry Vol. 11 (1916)

**Soil Sci**—Soil Science. \$6. Williams & Wilkins Company, 2419-2421 Greenmount av, Baltimore (tpi-s)

Vols. 1-6

**Swine World**—Swine World. \$1; single numbers 10c. James J. Doty Publishing Company, 608 S. Dearborn st, Chicago

Vols. 5-6 (S 1917-1918)

**System on the Farm**—System on the Farm. \$2; single numbers 20c. A. W. Shaw Company, Wabash and Madison st, Chicago (tpi-none)

Vols. 1-3

**Tenn Ag Exp**—University of Tennessee. Agricultural Experiment Station. Publications. Knoxville, Tenn.

Bulletins 115-119

**Tex Ag Exp**—Texas Agricultural Experiment Station. Publications. College Station, Tex.

Bulletins 184-221, 223-224

Circulars 11-18

**Tuskegee Exp**—Tuskegee Normal and Industrial Institute. Experiment Station. Publications. Tuskegee Institute, Ala.

Bulletins 31-33, 35-36

**U S Ag**—United States Department of Agriculture. Publications. Division of Publications, Washington, D.C.

(A copy of any of the publications listed except those otherwise noted, may be obtained free as long as the Department's supply lasts. After this Department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. Send all remittances to the Superintendent of Documents direct. In cases where the free copies are exhausted at the time of entering publication, the price will be given)

A. I. 26, 31, 34

B. S. Doc. 109

Bulletins 1-390, 392-403, 405-407, 409-414, 416, 418-419, 421, 423-612, 614-616, 618-675, 677-710, 712-717, 719, 721-733, 725, 729, 731-736

B. P. I. Inventories 38-44

C. T. & F. C. D. Circulars 1-5

Circulars 55-56, 58-60, 63-72, 75, 77-82, 85-120, 122-123

D. R. P.—2

Doc.—Markets 3, 5, 8-17

Farmers bulletin. See Farmers' B

F. I. C. 17

Index to Department bulletins 1-325 (13) pts

Index to Farmers' Bulletins 501-775 (11 pts)

No. Am. Fauna—40, 42-44

Reports 110-117

S. R. A.—B. A. I. 125-126, 128

S. R. A.—B. S. 22-23

S. R. A.—Chem. Index 1918

S. R. A.—Fed. Hort. Bd. 45-47, 49-52, 54, 56

S. R. A.—Insecticide 22

S. R. A.—Markets 6-8, 10-11, 18, 20-28, 30-38.

Separates 686-688, 691-696, 698-724, 729, 731-732, 736, 739-740, 742, 744-745, 747, 751, 755, 757, 760

Soils Bur. advance sheets. See entries under

Soil surveys in main alphabet

W. I. A.—16-23

Weekly N L. See Weekly N L

Yearbooks 1915-1917

## Miscellaneous

Annual reports of the Department, 1917.

Also issued separately

Bibliographical work, special indexes, directories and lists of publications in progress in Department of agriculture

Cooperative extension work in agriculture and home economics, 1916; pt 2 of report on experiment station and extension work in the U.S.

Geography of the world's agriculture

List of publications issued since July 1 '13 (rev. D 31 '16)

List of workers in subjects pertaining to agriculture and home economics

Manual of dangerous insects likely to be introduced in the U. S. through importations

# LIST OF PERIODICALS INDEXED

- U S Ag**—Miscellaneous—*Continued*  
 Reports, 1918, of the Director of the States Relations Service, the Librarian, and the Secretary of the Department  
 Story of the cattle fever tick  
 Supplying the farm labor need  
 Work and experiments of the agricultural experiment stations, 1916; pt 1 of report on experiment stations and extension work in U. S.
- U S Ag Farmers' B.**—See Farmers' B.
- U S Food Surveys**—Food Surveys. United States Department of Agriculture, Bureau of Markets, Washington, D.C.  
 Vols. 1-2
- U S Seed Rep**—United States Seed Reporter. Seed Reporting Service, 59 Board of Trade bldg., Chicago  
 Vols. 1-2
- Utah Ag Exp**—Utah Agricultural College Experiment Station. Publications. Logan, Utah  
 Bulletins 142-164  
 Circulars 18, 20-33
- Va Ag Dept**—Virginia Department of Agriculture & Immigration. Publications. Richmond, Va.  
 Bulletins 115-132, 134
- Va Ag Exp**—Virginia Polytechnic Institute. Agricultural Experiment Station. Publications. Blacksburg, Va.  
 Bulletins 210-219  
 Report, 1916  
 Technical Bulletins 10-18
- Va Truck Exp**—Virginia Truck Experiment Station. Publications. Norfolk, Va.  
 Bulletins 18-24
- Vt Ag Exp**—Vermont Agricultural Experiment Station. Publications. Burlington, Vt.  
 Bulletins 192-209
- W Va Ag Dept**—West Virginia Department of Agriculture. Publications. Charleston, W. V.  
 Bulletins 13-35
- W Va Ag Exp**—West Virginia University. Agricultural Experiment Station. Publications. Morgantown, W. Va.  
 Bulletins 152, 156-166  
 Circulars 24-28  
 Inspection Bulletins 4-5  
 Report, Jl 1 '14-Je 30 '16
- Wallaces' F.**—Wallaces' Farmer. \$1. Wallace Publishing Company, 11th & Walnut sts, Des Moines, Ia. (i-r)  
 Vols. 41-43
- Wash Ag Exp**—State College of Washington. Agricultural Experiment Station. Publications. Pullman, Wash.  
 Bulletins 124, 128-150  
 Popular Bulletins 98-115
- Weekly N L**—Weekly News Letter. U. S. Dept. of Agriculture, Washington, D.C.  
 Vols. 4-6 (1917-1918)
- Western Wash Ag Exp B**—Western Washington Agricultural Experiment Station. Monthly Bulletin. Puyallup, Wash.  
 Bulletins v 4, nos. 4-8, 10-12; v 5, nos. 1-12; v 6, nos. 1-8
- Wis Ag Dept**—Wisconsin Department of Agriculture. Publications. Madison, Wis.  
 Bulletins 2-4, 9-14  
 Circulars 2-3, 5, 8-10
- Wis Ag Exp**—University of Wisconsin. Agricultural Experiment Station. Publications. Madison, Wis.  
 Bulletins 261-291, 293-5; 2d ed 222, 230, 238  
 Research Bulletins 39-42
- Wyo Ag Exp**—Wyoming Agricultural Experiment Station. Publications. Laramie, Wyo.  
 Bulletins 110-117  
 Reports, 1916, 1917



## List of Selected Extension Publications

The valuable extension bulletins of all the agricultural colleges will be indexed as they are received. Inclusive bulletin and circular numbers are given for the publications indexed in this volume.

- Ala Ag Ext**—Alabama Polytechnic Institute. Extension Service. Publications. Auburn, Ala. Circulars 4, 7, 9-10, 12, 14-15, 18, 22
- Ariz Ag Ext**—University of Arizona. College of Agriculture. Extension Service. Publications. Tucson, Ariz. Circulars 3, 6-11, 15-20, 22, 24 Reports, 1916, 1917
- Ark Ag Ext**—University of Arkansas. Extension Division. Publications. Fayetteville, Ark. Bulletin 1 Circulars 50-51 Clovers for Arkansas farmers Food is the greatest necessity Spraying manual
- Clemson College Ext.** See S C Ag Ext
- Colo Ag Ext**—Colorado Agricultural College. Extension Service. Publications. Fort Collins, Colo. Bulletins 123, 126-127, 129-130, 132-137, 139-143, 145 Report, 1917 Series 103-105
- Conn Ag Coll Ext**—Connecticut Agricultural College. Extension Service. Publications. Storrs, Conn. Bulletins 1-11 Biennial report for year ending Sept. 30, 1916 Joint Circular 3
- Cornell Ag Ext**—N.Y. State College of Agriculture at Cornell University. Extension Service. Publications. Ithaca, N.Y. Bulletins 1-2, 5-6, 9-10, 12, 14, 24-28
- Cornell Reading Course**—Cornell University. N. Y. State College of Agriculture. Cornell Reading Course for the Farm. Ithaca, N.Y. Reading Course, nos. 100, 103-119, 121, 123-132 Reading Course Farm Home 117-118
- Del Ag Ext**—Delaware College. Division of Agricultural Extension. Publications. Newark, Del. Bulletin 3 Circulars 4-6 Liberty recipes
- Fla Ag Ext**—University of Florida. Agricultural Extension Division. Publications. Gainesville, Fla. Bulletins 4-12 Circulars 2, 4-5 Report, 1917
- Fla State College for Women.** Publications. Tallahassee, Fla. Bulletins 12-15, 17-18 Leaflet 1
- Ga Ag Coll (Ext)**—Georgia State College of Agriculture. Extension Division. Publications. Athens, Ga. Bulletins 104-105, 107, 110-111, 113, 115, 117-118, 120, 122-124, 129-134, 136-137, 139-142, 145-147, 157-159 Circulars 19-26, 29-30, 33, 35, 37, 40-45, 47-51, 53-67, 69, 72 (rev), 73b, 73c, 74-76 Posters 14, 16, 20-21
- Hampton Leaflets**—Hampton Normal and Agricultural Institute. Hampton Leaflets, Hampton, Va. v 7, nos. 6-11; v 7 (sup. to no. 11); v 8, no 1
- Ia Ag Ext**—Iowa State College of Agriculture and Mechanic Arts. Extension Department. Publications. Ames, Ia. Bulletins 25 (rev), 38-45, 47, 50, 54, 56, 60-65 Emergency Leaflets 3-7, 17, 19, 35, 38, 40-41, 42 (rev), 43-44 Home Economics Bulletins 1, 3-9 Home Economics Circulars 2 ('16-'17), 2 ('17-'18) 5-13, 15-16 Junior Circulars 37, 40, 46, 48 (Mr), 48 (Ap) Short Course Notes 15-16, 20-21 (rev), 23, 25 Tractor troubles and remedies
- Idaho Ag Ext**—University of Idaho. Extension Division. Publications. Boise, Idaho Bulletins 15-17
- Ill Ag Ext**—University of Illinois. College of Agriculture. Extension Service in Agriculture and Home Economics. Publications. Urbana, Ill. Circulars 1-2, 4-5, 7-10, 12-25 Boys and girls' pig clubs
- Kan Ag Ext**—Kansas State Agricultural College. Division of College Extension. Publications. Manhattan, Kansas Bulletins 5-11, 14-18; v 6, Ja '16 Circulars 5, 7-10 x—Forms 1-2
- Ky Ag Ext**—University of Kentucky. College of Agriculture. Extension Division. Publications. Lexington, Ky. Circulars 40-42, 44-46, 48-49, 54, 56-61, 63-65
- Ky Univ B**—Bulletin of University of Kentucky. College of Agriculture. School of Home Economics. Lexington, Ky. Bulletins v 8, no 1 (5 nos.), v 9, no 1, 8
- La Ag Ext**—Louisiana State University and Agricultural and Mechanical College. Extension Division. Publications. Baton Rouge, La. Bulletin 25 Circulars 10-19, 26
- Maine Ag Ext**—Maine University. College of Agriculture. Agricultural Extension Service. Publications. Orono, Me. Bulletins 109, 111, 112 (rev), 113, 115-120 Circulars 32-36
- Manitoba Ag Dept Farmers' Lib (Ext)**—Manitoba Farmers' Library. Extension Division. Publications. Manitoba Department of Agriculture and Immigration, Winnipeg Bulletins 1-2, 4-5, 12
- Mass Ag Ext**—Massachusetts Agricultural College. Extension Service. Publications. Amherst, Mass. Bulletins 9-15, 18-21, 23 Bulletins for Farm Women 4-5 Circulars 1, 5-11, 13-20, 23-28, 30-32, 34, 36-54, 56, 58-61, 63, 67-69, 71-72, 74 Library Leaflet 28
- Md Ag Ext**—Maryland State College of Agriculture. Extension Service. Publications. College Park, Md. Bulletins 3 (rev) 8-13 Circular 43 Letters nos. 9, 9a, 24, 28, 31, 33-34 Report, 1917
- Mich Ag Ext**—Michigan Agricultural College. Extension Division. Publications. East Lansing, Mich. Bulletins 1-5, 9, 11, 13-15, 16 (Jl), 16 (Ag) Club Bulletins 5-8 Course Notes 10 (reprint), 19 Extension Course Notes 10
- Minn Ag Ext**—University of Minnesota. College of Agriculture. Extension Division. St Paul, Minn. Minn Farmers' Lib Ext B 61-64 Special Bulletins 15-20, 22-29
- Miss Ag Ext**—Mississippi Agricultural and Mechanical College. Agricultural Extension Department. Publications. Agricultural College, Miss. Bulletins 1-2, 4-6 Circulars 1-3, 6-9, 19 Home Economics Bulletins 6-8 List of farm building plans
- Mo Ag Ext**—University of Missouri. College of Agriculture. Agricultural Extension Service. Publications. Columbia, Mo. Circulars 8-21, 23-45, 47-52 Project Announcements 9, 11
- Mont Ag Ext**—Montana State College of Agriculture and Mechanic Arts. Extension Service. Publications. Bozeman, Mont. Publications nos. 24-27

## LIST OF SELECTED EXTENSION PUBLICATIONS

- N C Ag Ext**—North Carolina College of Agriculture and Mechanic Arts. Agricultural Extension Service. Publications. Raleigh, N.C.  
Circulars 7-18, 20-21, 24, 28-30, 32, 37-39, 53, 56-57, 60-64, 66-71, 73, 75-76, 78, 80  
Extension Farm News v 3, no 51; v 4, no 3  
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- N D Ag Ext**—North Dakota Agricultural College. Agricultural Extension Department. Publications. Agricultural College, N.D.  
Bulletins 4-13  
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- N H Ag Ext**—New Hampshire College of Agriculture and the Mechanics Arts. Extension Service. Publications. Durham, N.H.  
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- N J Ag Ext**—New Jersey State Agricultural College. Division of Extension. Publications. New Brunswick, N.J.  
Bulletins v 1, nos 8, 10, 13-18  
Emergency Bulletin 24
- N M Ag Ext**—New Mexico College of Agriculture and Mechanic Arts. Extension Service. Publications. State College, N.M.  
Circulars 28 (D), 29 (F), 29 (Ap), 30 (F), 30 (Mr), 30 (Je)
- Neb Ag Ext**—University of Nebraska. College of Agriculture. Extension Service. Lincoln, Neb.  
Bulletins 37-48, 50  
Cooking club lessons 1-9  
Corn club lessons 1-8  
Emergency Bulletins 26, 33-34  
Pig club lessons  
Sewing club lessons 1-12
- Nev Ag Ext**—University of Nevada. College of Agriculture. Extension Division. Publications. Reno, Nev.  
Bulletins 1-11, 14-18  
Leaflets 2-3
- Ohio Ag Ext**—Ohio State University. Agricultural College. Extension Service. Publications. Columbus, O.  
Bulletins v 11, nos 2-3, 7-12, 14-15; v 12, nos 1-7; v 13, nos 2-4, 6-12, 15-16; v 14, no 1  
Circular v 1, no 2
- Okla Ag Ext**—Oklahoma Agricultural and Mechanical College. Extension Division. Publications. Stillwater, Okla.  
Bulletins 66-67, 69-71  
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- Ore Ag Ext**—Oregon Agricultural College Extension Service. Publications. Corvallis, Ore.  
Bulletins 131, 146, 157-158, 165, 167, 180, 182-195, 197-198, 200-201, 203-204, 206-207, 209, 211, 295-297  
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- Pa Ag Ext**—Pennsylvania State College. School of Agriculture. Department of Agricultural Extension, Publications. State College, Centre County, Pa.  
Bulletins v 3, no 9; v 4, nos 4, 12; v 5, no 3  
Circulars 45-48, 50-59, 68-71, 73
- Purdue Ag Ext**—Purdue University. Department of Agricultural Extension. Publications. LaFayette, Ind.  
Bulletins 44-45, 47-48, 50-56, 58-70, 72  
Leaflets 58, 66, 68, 71-88, 90, 92-100, 102-103  
Maintain the wheat acreage and increase the yield for 1919  
Report, 1917
- R I Ag Ext**—Rhode Island State College. Extension Department. Publications. Kingston, R. I.  
n s Bulletins 2-3
- S C Ag Ext**—Clemson Agricultural College. Extension Division. Publications. Clemson College, S.C.  
Bulletins A (rev), 14 (rev), 19-22, 29 (rev), 32-33, 38-40  
Report, 1916
- S D Ag Ext**—South Dakota State College of Agriculture and Mechanic Arts. Extension Division. Publications. Brookings, S.D.  
Circulars 3-9  
Jelly making, preserving and pickling
- Tenn Ag Ext**—Tennessee University. College of Agriculture. Division of Extension. Publications. Knoxville, Tenn.  
Home economics circulars 1-6  
Publications 13 (General ser. 6), 14 (Home econ. ser. 7), 15 (General ser. 7), 18 (General ser. 10), 23 (Home econ. ser. 9), 24 (General ser. 14), 40, 52-58, 64, 68, 70, 73  
What to do every month on the management and feeding of hogs
- Tex Ag Ext**—Texas Agricultural and Mechanical College. Extension Service. Publications. College Station, Texas  
Bulletins 10, B17, B21-B22, B25-B32, B34-B35, B42-B46, C3-C7  
Tex Ag Ext Farm News v 3, no 7-B, 12, 22-A
- Utah Ag Ext**—Utah Agricultural College. Extension Division. Publications. Logan, Utah  
Circulars v 5, no 29; v 6, nos 4, 6-7, 9-11, 13-19, 28
- Va Ag Ext**—Virginia Agricultural and Mechanical College and Polytechnic Institute. Division of Extension Work. Publications. Blacksburg, Va.  
Bulletins 22, 6-28
- Vt Ag Ext**—University of Vermont. College of Agriculture. Extension Service. Publications. Burlington, Vt.  
Circulars 6, 8-14  
Production and Conservation Series 1-20, 23-25, 31-39, 50-52
- W Va Ag Ext**—West Virginia University. College of Agriculture. Extension Department. Publications. Morgantown, W.Va.  
Circulars 51-52, 54-71, 73-77, 79-87, 89, 91-94, 97, 104, 113, 117-118, 124, 126-129, 142, 153, 157, 172-173, 175, 194-96 202-206, 208, 211-213, 215  
Boys' and girls' clubs instruction sheets (Numbered in regular series of circulars, not consecutively)
- Wash Ag Ext**—State College of Washington. Department of Extension. Publications. Pullman, Wash.  
Series 1, nos 5, 10-12, 14-16, 18-24, 30-33, 35-40, 42-43, 45-46
- Wis Ag Ext**—University of Wisconsin. College of Agriculture. Extension Service. Publications. Madison, Wis.  
Circulars 56-69, 69 (rev), 70-75, 77-79, 80 (rev), 81-116

## Key to Abbreviations

abr. abridged	comr. commissioner	no. number
Ag. Agricultural	cond. condensed	O. October
Ag. August	conf. conference	p. pages
Ap. April	cont. continued	pamph. pamphlet
B. Bulletin	D. December	por. portrait
Bd. Board	econ. economic	Pro. proceedings
bibliog. bibliography	ed. editor	Pub. publications
bdg. building	Educ. education	Rep. report
Bot. Botanical	eng. engineering,	Sci. science, scientific
Bur. bureau	engineers	S. September
C. Circular	Exp. Experiment sta-	Ser. Series
c. cents	tion	Soc. Society
chm. chairman	ext. extension	sup. supplement
com. committee	F. February	Trans. Transactions
comp. compiled, com-	gen. general	Univ. University
piler	hdbk. handbook	v. volume
	il. illustrated, -ion,	yr. year
	-ions	
	Inst. Institute, In-	
	stitution	
	Int. International	
	J. Journal	
	Ja. January	
	Je. June	
	Jl. July	
	lib. library	
	mim. mimeographed	
	misc. miscellaneous	
	Mr. March	
	My. May	
	Nat. National	
	N. November	
	n.d. no date	
	n.p. no paging	



# Checklist of Occasional Literature for 1918

Following the usual practice, references to occasional material entered for the first time are indicated in the main alphabet by an asterisk.

- Alabama Department of education, Montgomery**  
Better farming day March 16, 1917. (B. 50)  
Clean-up and school improvement day, January 12, 1917  
Consolidation of schools and transportation of pupils. (B. 56)
- Alabama State highway commission, Montgomery**  
6th annual report, from April 1st, 1916, to April 1st, 1917. (B. 14)
- Alaska, Governor, Sitka**  
Information for the public in regard to the Alaska game law and regulations of the Department of agriculture. (Game C. 5)
- Alberta Department of agriculture, Live stock Branch, Edmonton**  
Proceedings of the 5th annual convention of the Western Canada live stock union, Regina, Saskatchewan, Nov. 14-15, 1917
- Alberta Women's institute branch, Edmonton**  
4th annual conference of the Women's institutes of Alberta
- American agricultural chemical company, Agricultural service bureau, 92 State st. Boston**  
Important factors in potato production. H. J. Wheeler. (B. no. 9)
- American association of agricultural college editors, Manhattan, Kansas**  
Editing the agricultural bulletin; stylebook. F. C. Dean and others
- American cotton manufacturers association, W. D. Adams, sec., Charlotte, N. C.**  
Proceedings of the 21st annual convention, Washington, D. C., May 22-23, 1917
- American home economics association, Emergency committee, 19 W. 44th st. N.Y.**  
Conservation of fats. H. T. Vulté  
Save our sugar; emergency recipes. B. E. Shapleigh
- American railway perishable freight association, 135 E. 11th Place, Chicago**  
Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473-A)
- American school of poultry husbandry, Leavenworth, Kansas**  
Solving the poultry feeding problem. T. E. Quisenberry
- American steel and wire company, Chicago**  
Potato flakes and flour. (Crop report June 15)  
Weekly crop reports
- American sugar refining company, 117 Wall st., N. Y.**  
Annual report for the 27th year ending Dec. 31, 1917
- Arizona Commission of agriculture and horticulture, Phoenix**  
9th annual report for the year ending June 30, 1917  
Plant inspection and quarantine laws, orders and regulations applying in the state of Arizona
- Arizona Live stock sanitary board, Phoenix**  
Live stock laws of the state of Arizona
- Arizona State fair commission, B. W. Zachau, sec., Phoenix**  
Premium list, 1917
- Arizona State game warden, Phoenix**  
Arizona fish and game law; 1918 revised edition
- Arizona State land department, Phoenix**  
4th bi-annual report, Jan. 1-June 30, 1917  
5th bi-annual report, July 1-Dec. 31, 1917  
6th bi-annual report, Jan. 1-June 30, 1918
- Atlanta Chamber of commerce, Atlanta, Ga.**  
Proceedings of the Southeastern food conference held at Atlanta, April 5, 1917
- Atlantic coast line, Agricultural department, Wilmington, N.C.**  
Nation's garden spot  
New beginning in the nation's garden spot, south Georgia and Alabama. A. Maull
- Australia Advisory council of science and industry, Melbourne**  
Alunite deposits of Australia and their utilization. (B. 3)  
Cattle tick in Australia. (B. 1)  
Executive committee report, 1918, p 15 Agricultural and pastoral industries  
Worm nodules in cattle. (B. 2)
- Australia. Advisory council of science and industry, Queensland committee, Brisbane**  
Report of committee on tuberculosis, with special reference to cattle and pigs
- Australia quarantine service, Melbourne**  
Malaria mosquito survey of irrigation areas in the Murray river district. F. H. Taylor. (Service Pub. no. 12)
- Bachman, H. F., & Co., Bankers, 61 B'way, N.Y.**  
Cost of cotton production—season, 1917-18.  
Semi-monthly scientific reports on condition and acreage of the cotton crop
- Barrett company, Agricultural dept., 17 Battery Place, N.Y.**  
Sulphate of ammonia; its source, production and use  
Sweet potatoes and yams
- Boston Chamber of commerce**  
Milk question in New England
- Boston League for preventive work, 44 Bromfield st**  
Food supply in families of limited means; a study of present facts of the food problem in Boston families. M. M. Davis, jr. (Pub. no. 3)
- British Columbia Dept. of agriculture, Victoria**  
Proceedings of the Entomological society of British Columbia, 1916  
16th annual report of Farmers' institutes of British Columbia and minutes of the proceedings of the 17th annual convention of the Central farmers' institute  
27th annual report of the British Columbia fruit-growers' association for the year ending December 31st, 1916
- Brooklyn institute of arts and sciences, Department of biological laboratory, Brooklyn, N.Y.**  
New York city's biological reserve; the biological laboratory at Cold Spring harbor, Long Island
- Bureau of educational experiments, 16 W. 8th st. N.Y.**  
Camp Liberty, a farm cadet experiment. (B. 7) (10c)

# CHECKLIST

- California Board of fish and game commissioners**, San Francisco  
California laws relating to fish and game and federal game regulations, 1917-1919. 20th ed
- California Commission on land colonization and rural credits**, Sacramento  
Report, 1916
- California Industrial welfare commission**, 525 Market st., San Francisco  
Report on the regulation of wages, hours and working conditions of women and minors in fruit and vegetable canning industry of California. (B. 1)
- California prune and apricot growers, Inc.**, San Jose  
All about prunes and apricots
- California State board of education**, Sacramento  
Landscape improvement of rural school grounds. J. W. Gregg and others. (B. 20)
- California State board of forestry**, Sacramento  
Handbook of forest protection, 1918.
- California State board of viticultural commissioners**, Sacramento  
California's grape industry. (B. 10)  
Grape syrup; the possibilities of production in California. (B. 12)  
Ohanez grape. (B. 11)
- California State commissioner of horticulture**, Sacramento  
7th biennial report, 1915-1916
- California State dairy bureau**, 268 Market st, San Francisco  
11th biennial report, 1915-1916  
Laws of California relative to production and standard of dairy products
- California State forester**, Sacramento  
Fire prevention day  
6th biennial report, 1915-1916  
Wood utilization service. (C. 6)
- California State land settlement board**, Berkeley  
Act creating a State land settlement board and defining its powers and duties and making an appropriation in aid of its operations. (Senate Bill no. 584)  
Farm allotments and farm laborers' allotments in the Durham State land settlement  
Information for landowners. (C. 1)
- California State market commission**, 525 Market st., San Francisco  
2d annual report of the State market director, 1917
- California State veterinarian**, Sacramento  
8th biennial report for the two years ending June 30, 1916
- Canada Commission of conservation**, Ottawa  
Forest regeneration on certain cut-over pulpwood lands in Quebec. C. D. Howe.  
Report of conference on urban and rural development in Canada, held at Winnipeg, May 28-30, 1917  
Report of the 8th annual meeting, held at Ottawa, Jan. 16-17, 1917  
Rural planning and development. T: Adams  
Wood fuel to relieve the coal shortage in eastern Canada. C. Leavitt
- Canada Department of interior**, Ottawa  
Canadian Douglas fir; its mechanical and physical properties. J. S. Bates. (Forestry Branch B. 60)  
Forest products of Canada, 1916. Forestry Branch—B. 62)  
Report of the director of forestry, 1917  
Wood-using industries of Quebec. R. G. Lewis and J. A. Doucet, comps. (Forestry Branch B. 63)
- Canada Department of mines**, Ottawa  
Hawks of the Canadian prairie provinces in their relation to agriculture. P. A. Taver-ner. (Museum B. 28)
- Canada Food board**, Ottawa  
Can. dry and store for victory. (F. C. Pamph. 2)  
Eat more fish  
Food control or famine. E. B. Roberts  
Food laws; manual of orders relating to the production, conservation and distribution of food
- One week's budget for a family of five  
Report of the Food controller. W. J. Hanna  
Report of the Milk committee  
War meals
- Canada Geological survey**, Ottawa  
Road material surveys in 1915. L. Reinecke. (Memoir 99, Geological ser. no 82)
- Canadian forestry association**, Ottawa  
Case for New Brunswick's forests. R. Black
- Canadian seed growers' association**, Canadian bldg., Ottawa  
13th annual report, 1917
- Central of Georgia railway co.**, Industrial and agricultural departments, Savannah  
Peanuts and their possibilities for the grower and manufacturer  
Peanuts for profit
- Charity organization society**, Committee on home economics, 105 E. 22d st., N.Y.  
My money won't reach
- Chicago city council**, Chicago  
Journal of Proceedings. O 15 '17 p 1226-7  
Ordinance relating to a loan (\$200,000) for purchase, storage and distribution of potatoes
- Chicago city council**, Committee on license  
Meat-food-products establishments; licens- ing and regulation. (Pamph. no. 778) (1c)  
Meat markets, delicatessen stores, meat- food products establishments, etc: repeal of superseded provisions
- Chicago Municipal reference library**, 1005 City hall  
Report on the more economic distribution and delivery of milk in the city of Chicago. (B. 8)
- Cleveland, O., Chamber of commerce**  
Shall we have enough to eat next winter? W. O. Thompson
- Cleveland Mayor's advisory war committee**, 226 City Hall, Cleveland, O.  
How was your war garden?
- Colorado agricultural college**, Fort Collins  
Rural school improvement in Colorado. C. G. Sargent. (B. ser. 17, no. 9)
- Colorado State entomologist**, Fort Collins  
9th annual report 1917. (C. 26)  
Pocket gophers with suggestions for con- trol. W. L. Burnett. (C. 23)  
Rodents of Colorado in their economic rela- tion. W. L. Burnett. (C. 25)  
Suggestions for combating prairie-dogs, ground squirrels and other rodent pests. W. L. Burnett. (C. 24)  
Wyoming ground squirrel in Colorado with suggestions for control. W. L. Burnett. (C. 20)
- Colorado State forester**, Fort Collins  
3d biennial report, 1915-1916
- Connecticut academy of arts and sciences**, New Haven  
Vegetation of Northern Cape Breton Island, Nova Scotia. G: E. Nichols. (Trans., v. 22, p 249-467)
- Connecticut Commissioner of domestic animals**, Hartford  
Report for two years ending September 30, 1916  
Not available for distribution
- Connecticut Dairy and food commissioner**, Hart- ford  
Dairy and pure food laws of the state of Connecticut; corrected to the close of the legislative session of 1917
- Connecticut State board of education**, Hartford  
Arbor and bird day manual for April, 1918. (School doc. no. 2—1918; Whole no.—422)
- Connecticut State highway commissioner**, Hart- ford  
Annual report for the term beginning Oc- tober 1, 1916 and ending September 30, 1917  
Biennial report for the term beginning Oc- tober 1, 1914, and ending September 30, 1916. (Pub. doc. no. 36)



# CHECKLIST

- Co-operative league of America**, 70 5th av., N.Y.  
 Consumers' co-operation during the war. A. Sonnichsen  
 Co-operative store management. W: A. Kraus
- Corey & McKenzie printing company**, 1407 Harney st, Omaha, Neb.  
 Complete accounting system and record for national farm loan associations
- Dairymen's association of the province of Quebec**  
 35th annual report, 1916
- Disston, Henry & sons**, Philadelphia  
 Disston lumberman handbook containing a treatise on the construction of saws and how to keep them in order
- Dunstan printing and stationery**, Missoula, Mont.  
 Flour and wheat in the Montana gold camps, 1862-1870. H. A. Trexler
- Du Pont de Nemours, E. I., and Company**, Wilmington, Del.  
 Agricultural and miscellaneous uses of Du Pont explosives  
 Du Pont explosives handbook; instructions in the use of high explosives for clearing land, planting and cultivating trees, drainage, ditching, subsoiling and general work
- Egypt Ministry of agriculture**, Cairo  
 Machines for the treatment of cotton seed against pink boll worm. G. Storey. (Tech. and Sci. B. 14) (10c)  
 Notes on an ephestia, an insect injurious to stored dates in Khargeh oasis. L. H. Gough
- Farm implement news**, Masonic Temple, Chicago  
 Tractor field book
- Farmer and breeder**, Sioux City, Ia.  
 Rural credits or how to finance the farmer. H. G. McMillan
- Florida State live stock association**, P. O. Box 1181, Jacksonville  
 Florida, an ideal cattle state
- Georgia Department of education**, Atlanta  
 School architecture, Georgia  
 Suggestions for teaching household arts and agriculture
- Georgia Geological survey**, Atlanta  
 Agricultural drainage in Georgia. H. H. Barrows and others
- Georgia State forest school**, Athens  
 Georgia forest trees. (25c)
- Georgia State normal school**, Athens  
 Brief economic and social survey of Putnam county. (Farm life conditions in the South)  
 Brief social and economic survey of Floyd county. E. Hughes. (B. v. 4, no. 4)  
 Brief social and economic survey of Muscogee county. E. Jones. (B. v. 4, no. 3)  
 Farm life conditions in the South. (Chapters 4, 6, 9)  
 Geography of the soils of Georgia. F. A. Merrill  
 Health lessons for rural schools. (B. v. 5, no. 1)  
 Webster county; a brief economic and social survey. A. Kidd and E. C. Branson
- Great Britain Board of agriculture and fisheries**, London  
 Regulations for grants in aid of agricultural education and research in England and Wales.  
 Not available for general distribution
- Hartford county league**, 450 Asylum st, Hartford, Conn.  
 By the farmers, for the farmers and every one who grows food or eats food
- Harvard university**, School of landscape architecture library, Cambridge, Mass.  
 Brief list of books suggested for reading and study in landscape architecture
- Hawaii Territorial marketing division**, Honolulu  
 Report for the period July 1, 1915, to Dec. 31, 1916. A. T. Longley
- Henry George lecture association**, 538 So. Dearborn st, Chicago  
 Single tax; what it is and what it will accomplish. J. Grenell
- Horton, H. E.** Agricultural commissioner, American steel and wire company, 208 S. La Salle st, Chicago  
 Working bibliography of the cost of producing milk. H. E. Horton. (Typew)
- Idaho Department of farm markets**, Boise  
 Laws governing farm markets department, 1917  
 2d annual report, Dec. 15, 1916
- Idaho State board of education bulletin**, Boise  
 Je '17 Handbook for rural school trustees. J. C. Werner
- Idaho State fish and game warden**, Boise  
 Fish and game laws of Idaho, 1917-1918; with the Lacey bird law
- Illinois, University of, College of agriculture**, Urbana  
 Bees and honey; selected list prepared by A. L. A. committee on food information. (Mim)  
 Poultry husbandry; a selected bibliography prepared for A. L. A. committee on food information. G: A. Deveneau. (Mim)  
 Small fruits; list of references  
 Vegetable gardening; a bibliography prepared by the A. L. A. committee on food information. J. W. Lloyd and C. E. Durst. (Mim)
- Illinois Department of public health**, Springfield  
 House fly. (B. 2)
- Illinois Department of public instruction**, Springfield  
 Arbor and bird days. H. T. Swift. (C. 128)  
 Courses in agriculture in the recognized high schools. (C. 129)
- Illinois farmers' institute**, H. E. Young, sec., Springfield, Ill.  
 Department of household science: yearbook, 1917  
 Liberty garden for every home  
 22d annual report, 1917
- Illinois food administration, Library publicity committee**, Univ. of Ill., Urbana  
 Patriotic food show given at the University of Illinois; and recipes used. 2pts (Mim.)
- Illinois State beekeepers' association**, J. A. Stone, sec., Springfield, Ill.  
 17th annual report, 1917
- Illinois State council of defense**, 120 W. Adams st, Chicago  
 Official recipe book; what to eat, how to cook it. (Educ. doc. no. 5) (5c)
- Illinois State highway department**, Springfield  
 5th report for the years 1913-1916
- Illinois State laboratory of natural history**, Urbana  
 Some edible and poisonous mushrooms. W. B. McDougall. (B. v. 11, Article 7)
- Illinois State natural history survey**, Urbana  
 North American species of the genus tiphia (hymenoptera, aculeata) in the collection of the Illinois state natural history survey (parasitic on white grubs). J. R. Malloch. (B. v. 13, Article 1)  
 Ways and means of measuring the dangers of pollution to fisheries. V. E. Shelford. (B. v. 13, Article 2)
- Illinois Supt. of public instruction**, Springfield  
 One room and consolidated country schools of Illinois, 1916. 5th ed (C. 100)  
 Plans for one-room school building. (C. 104)  
 Programs and suggestions for rural schools and community meetings. (C. 111)
- Illinois university bulletin**, Urbana  
 Meat; what to use—how to use it. L. Wheeler. (B. v. 15, no. 43)  
 Milk. R. Wheeler. (B. v. 15 no. 42)  
 Sugar in war time. V. J. Anderson. (B. v. 15, no. 47)
- India Inspector general of forests**, Calcutta  
 Note on Babul; acacia arabica, Willd. J. D. Maitland Khrwan. (Forest B. 35)

# CHECKLIST

- India. Superintendent of government printing, Calcutta**  
Indian forest records; a further note on the antiseptic treatment of timber. R. S. Pearson (4s 6d)  
Note on an enquiry by the government of India into the relation between forests and atmospheric and soil moisture, in India. M. Hill. (Forest B. 33) (1s 6d)
- Indiana Commissioner of fisheries and game, Indianapolis**  
Laws of the state of Indiana for the protection of fish, game, birds and fur-bearing animals, 1917-1918
- Indiana Committee on food production and conservation, Silo division, Indianapolis**  
10,000 silos for Indiana in 1918
- Indiana Public library, South Bend**  
Books on the farm and garden
- Indiana State board of forestry, Indianapolis**  
16th annual report, 1916  
Report of the State board of forestry and of the State park committee for the year 1917
- Indiana State farm, R. R. no. 7, Greencastle**  
2d annual report of the Indiana state farm, Putnamville, Ind.
- Indiana University, Extension division, Bloomington**  
Public markets: what curb markets may be expected to accomplish. W. S. Bittner. (B. v. 3, no. 11)
- Institute of makers of explosives, 103 Park av, N. Y.**  
Clearing land of rocks for agricultural and other purposes. J. R. Mattern  
Clearing land of stumps  
Use of explosives in making ditches. J. R. Mattern  
Use of explosives in the tillage of trees. J. R. Mattern
- International harvester co., Agricultural extension dept., Harvester bldg., Chicago**  
Bunch of sheep on every farm. (15c)  
Getting a start with alfalfa in the corn belt. P. G. Holden  
Grow a vegetable garden; we must feed ourselves. J. H. Prost  
How to vitalize the teaching of agriculture in the rural schools  
Liberty book  
Making money from pigs  
Practical books on agriculture which everyone should read  
Seed corn; do you know that it will grow? P. G. Holden and J. E. Waggoner  
Stencils vitalize school work
- International institute of agriculture, Rome**  
International movement of fertilisers and chemical products useful to agriculture. (no. 8)
- Interstate commerce commission, Washington, D.C.**  
Dimmitt-Caudle-Smith live stock commission company et al. v. Chicago, Burlington & Quincy railroad company et al. (No. 9131)  
Live stock classification. (Investigation and suspension docket no. 956)
- Iowa, University of, Iowa City**  
Social surveys of three rural townships in Iowa. P. S. Peirce. (Univ. of Iowa monographs, 1st ser., no. 12; Studies in the social sciences, v. 5, no. 2) (50c)
- Iowa Dairy and food commission, Des Moines**  
Agricultural seed law, effective July 4, 1915  
Concentrated commercial feeding-stuffs law in effect July 4, 1917  
Dairy laws of Iowa effective April 30, 1917  
Insecticide and fungicide law, effective July 4, 1917  
Regulations governing cream and milk stations  
Report for the year ended Oct. 31, 1917  
Weight and measure laws of the state of Iowa, effective July 1, 1917
- Iowa State college, Dept. of botany, Ames**  
Germination and juvenile forms of some oaks. L. H. Pammel and C. M. King. (Contribution no. 63)
- Notes on some North American conifers based on leaf characters. L. W. Durrell. (Contribution 66)
- Iowa State highway commission, Ames**  
Report for the year ended December 1, 1916
- Ireland co-operative reference library, Dublin**  
Milk supply of Dublin: report of a bacteriological investigation of the city of Dublin milk supply. D. Houston
- Jewish agricultural and industrial aid society, Gabriel Davidson, gen. mgr., 174 2d av, N.Y.**  
Annual report for the year 1917
- Kansas State council of defense, State House, Topeka.**  
Canning instructions. (C. 3)  
Home-made apparatus for drying fruits and vegetables. G. E. Bray. (C. 4)  
How to prepare ground for wheat, and time to sow. W. M. Jardine. (C. 6)  
One-dish meals. O. A. Sheets. (C. 10)  
Seed list; dealers in Kansas. (C. 11)  
Suggestions for teachers giving practical instruction to city boys in: (a) Care and handling of work horses; (b) Care, adjustment, and use of farm machinery; (c) Care and handling of dairy cows and milk. W. M. Jardine. (C. 7)  
Use of wheat-saving cereals. H. L. Green and others. (C. 9)
- Kansas State council of defense, Seed wheat committee, Topeka**  
Winning the war with wheat
- Kansas state horticultural society, Topeka**  
Beans as a field crop in Kansas
- Kansas State irrigation commissioner, Scott City**  
Report for the period July 1, 1915, to Jan. 1, 1917  
Successful irrigation
- Kearney (Nebraska) State normal school. Quarterly bulletin**  
Ap '18 Special rural library number. A. V. Jennings
- Kellogg, J. H., Battle Creek, Mich.**  
Relation of diet to dental caries and mouth infection. J. H. Kellogg
- Kentucky State board of agriculture, Frankfort**  
11th annual state farmers' institute held at Frankfort, Ky., Feb. 15-17, 1916
- Kentucky State forester, Frankfort**  
Farm and the woodlot. J. E. Barton  
Manual of instructions for county forest wardens and district forest wardens and information in regard to the prevention and suppression of forest fires. (rev.)  
Third biennial report, 1917
- Keystone pecan company, Manheim, Pa.**  
Paper shell pecans
- Korstin, C. F., Ogden, Utah**  
Value of scientific research in forestry
- Ladies home journal, Independence square, Philadelphia**  
Candies, cakes and cookies. (10c)  
How to can fruit, vegetables and meat. (15c)  
Like grandmother used to make; a book of old-fashioned recipes. (15c)  
Low-cost meals for high-cost times. (15c)  
100 thrift recipes that use little wheat, meat, fat and sugar. (10c)  
Plantation corn dishes as mammy used to make them
- Los Angeles city school district, Los Angeles, Cal.**  
California agriculture as an occupation for city-bred boys. (School Pub. no. 5)
- Los Angeles city teachers club, Trinity auditorium, Los Angeles, Cal.**  
Liberty cook book
- Louisiana Department of conservation, Court bldg., New Orleans**  
Forest and grass fires in Louisiana. R. D. Forbes. (B. 6)
- Louisiana State live stock sanitary board, Baton Rouge**  
5th biennial report, 1916-1918. E. P. Flower



# CHECKLIST

- Louisiana swine breeders' association, O. P. Geren, pres., Baton Rouge**  
Call for a general conference of all agricultural and allied interests of Louisiana, Mar. 4th to discuss matters of vital importance
- Mc Farland, J. H., co., Harrisburg, Pa.**  
Home grounds; their planning and planting. L. H. Bailey
- Mac Nair, Frederick, 318 William st., Elmira, N.Y.**  
Depleted soils of New York and their economical restoration
- Maine Commissioner of inland fisheries, Augusta**  
Maine inland fish and game laws; 1917-18 revision
- Maine forest commissioner, Augusta**  
Forest protection and conservation in Maine, 1917  
Forest trees of Maine and how to know them  
Laws relative to forest fires in district
- Maryland Conservation commission, 512 Munsey bldg., Baltimore**  
2d annual report, 1917
- Maryland Council of defense, 703 Union trust bldg., Baltimore**  
Milk cost survey for the week Nov. 26 to Dec. 2, 1917
- Maryland State board of forestry, Baltimore**  
Fire wood to relieve the coal shortage. F. W. Besley. (Forestry leaflet no. 19)  
Maryland forest fire laws and fire protection  
Plan of co-operation between woodland owners and the state forester. (Forestry leaflet no. 18)  
Report for 1916 and 1917
- Massachusetts agricultural college, Amherst**  
Bibliography of the college; part I, The institution  
Brief history. L. B. Caswell
- Massachusetts Board of education, Boston**  
State-aided vocational agricultural education in 1916. (B. 1917, no. 5)
- Massachusetts Commissioner of weights and measures, Boston**  
Statutes of Massachusetts relating to weights and measures and the licensing, inspection and sale of various articles, with an appendix containing recent federal legislation
- Massachusetts Commissioners on fisheries and game, State House, Boston**  
New acts and amendments to Massachusetts fish and game laws, 1916-1917; supplement to 1915, ed.
- Massachusetts Committee on public safety, Boston**  
Report of the Committee on mobilization of high school boys for farm service  
Why and wherefore of the Food administration
- Massachusetts credit union association, J. C. Bills, jr., sec., 78 Devonshire st, Boston**  
You should know about credit unions
- Massachusetts Department of weights and measures, Boston**  
Cost of production and weight of loaves of bread. (B. 9)
- Massachusetts forestry association, 4 Joy st., Boston**  
Arbor and bird day. E: H. Forbush and H. A. Reynolds. (B. 122)  
Silviculture for country roadsides. R: T. Fisher. (B. 123)
- Massachusetts Highway commission, Boston**  
24th annual report for the fiscal year ending November 30, 1916. (Pub. Doc. 54)
- Massachusetts State department of health, Boston**  
Anthrax in Massachusetts. W. H. Brown and others  
Food and the calorie  
Food; what it is and what it does  
Food for children from two to six years old  
Prevention of flies
- Massachusetts State forester, Boston**  
Forests of Plymouth county. J. J. Morris  
13th annual report, 1916. F. W. Rane. (Pub. Doc. 73)  
14th annual report, 1917. (Pub. Doc. no. 73)  
Utilization of forest products in Massachusetts. P. D. Kneeland
- Massachusetts State printers, Wright & Potter printing co., 32 Derne st, Boston**  
Report of the Commission on the investigation of agricultural education
- Mayor Mitchell's food supply committee, 71 Broadway, N.Y.**  
Garden primer; how to plant and care for a vegetable garden
- Memphis (Tenn.) Chamber of commerce, Woman's department, Bureau of farm development**  
Canning and drying of vegetables. B. R. Murphy. (Home Econ. B. 7)  
Canning and preserving of fruits; jelly making. B. R. Murphy. (Home Econ. B. 8)  
Pickles and ketchup. B. R. Murphy. (Home Econ. B. 9)
- Merchants' association of New York, Woolworth bldg., 233 Broadway, N.Y.**  
Report of the food problem committee
- Michigan Department of state, Lansing**  
Michigan monthly crop reports. (no. 441)
- Michigan Public domain commission, Lansing**  
Michigan; the land of plenty  
Proceedings, 1916-1917
- Michigan Secretary of state, Lansing**  
Game and fish laws and laws relative to destruction of noxious animals
- Michigan State board of control for vocational education, Lansing**  
General rules and regulations concerning the establishment and maintenance of agricultural departments or schools under the Smith-Hughes and Tufts laws. (Vocational educ. B. no. 202)
- Michigan State highway department, Lansing**  
Gravel roads. 3d ed. F. F. Rogers. (B. 2)
- Mills college, Department of home economics, Oakland, Cal.**  
War breads and meat substitutes. M. B. Vail
- Minnesota Forestry board, St Paul**  
What thirty-nine states are doing in forestry. C. C. Andrews
- Minnesota library notes and news, Public library commission, St Paul**  
D '17 p 112-15 Libraries and the food campaign. H. W. Sewall
- Minnesota Secretary of state, St Paul**  
Minnesota road laws, 1917
- Minnesota State dairy and food department, St Paul**  
Care of milk and cream. (B. 62)  
Food values. J. Hortvet. (B. 65)  
How to operate the Babcock test. (B. 61)  
Minnesota creameries, cheese, ice cream and canning factories, 1917  
Pasteurization of cream for buttermaking. (B. 63)  
16th biennial report, 1917  
Workmanship of butter. J. Sorenson and M. P. Mortenson. (Exp. Creamery B. 66)
- Minnesota State entomologist, University Farm, St Paul**  
Fruit tree cankers and their control. E. C. Stakman and A. G. Newhall. (C. 51)  
Household insects. F. L. Washburn and C. W. Howard. (C. 44)  
Hydrocyanic acid gas treatment for the flour moth. F. L. Washburn. (C. 46)  
Red rose beetle. S. Marcovitch. (C. 36)  
Some useful birds found in Minnesota; their economic relations to the agriculturist. F. L. Washburn. (C. 43)  
Spraying. A. G. Ruggles. (C. 48)  
White marked tussock moth. A. G. Ruggles. (C. 42)  
Work on pine blister rust in Minnesota, 1917. F. L. Washburn. (C. 45)
- Mississippi Dept. of public education**  
Consolidation of schools and transportation of pupils. J. T. Calhoun. (B. 10)

# CHECKLIST

- Missouri botanical garden, St Louis**  
Studies in the mosaic diseases of plants.  
G. W. Freiberg. (Reprint from Annals,  
Ap '17)
- Missouri Grain warehouse commission, Kansas City**  
Summary 4th annual report, 1916
- Missouri State game and fish commissioner, Jefferson City**  
Game laws of Missouri
- Missouri State poultry experiment station, Mountain Grove**  
Incubation and brooding. (B. 15)  
Rules and regulations for the eighth annual egg laying contest  
Swat the rooster; market infertile eggs during the summer months. (C. 16)
- Mohawk book company, Little Falls, N.Y.**  
Story of cheese. J. D. Frederiksen
- Montana Board of sheep commissioners, Helena**  
Biennial report, 1915-1916
- National bank of commerce, New York**  
World's sugar supply; its sources and distribution
- National board of farm organizations, Woodward bldg., Washington, D.C.**  
Farmers win the war program
- National canners association, 1739 H st, N. W., Washington, D.C.**  
Address delivered before the Ohio canners association, Cincinnati, Dec. 11, 1917
- National child labor committee, 105 E. 22d st., N.Y.**  
Children in agriculture. R. McIntire. (Pamph. 284)  
Children in food production. (Pamph. 277 rev.)
- National conference of social work, 315 Plymouth court, Chicago**  
Agencies of socializing the rural mind. E. R. Groves. (Reprint 110 Pro. 1917)  
Community kitchen in a neighborhood house. F. Ingram. (Pamph. 146)  
Distributive co-operation. J. Ford. (Reprint 110 Pro. 1917)  
Feeding the family: a problem and a method for social workers in war time. M. M. Davis, jr. (Pamph. 166)  
Possibilities and limitations of special taxation of land. A. N. Young. (Reprint 101 Pro. 1917)  
Relation of food economics to the nutritive value of the diet. L. H. Gillet. (Reprint 98 Pro. 1917)  
Rural centers of community activity. W. H. Wilson. (Pamph. 159)  
Rural social work. W. T. Cross. (Reprint 92 Pro. 1917)  
Status of social work in rural communities. H. I. Curry. (Pamph. 131)  
Village as a factor in social progress. P. L. Vogt. (Pamph. 136)  
World's food and world politics. J. Addams. (Pamph. 128)
- National council of education, Committee on thrift education, A. H. Chamberlain, chm., Monadnock bldg., San Francisco**  
Agricultural preparedness and food conservation
- National education association, Joint committee on health problems in education, Dr T: D. Wood, chm., 525 W. 120th st, N.Y.**  
Health essentials for rural school children. T: D. Wood  
Minimum health requirements for rural schools. T: D. Wood
- National farm school, Bucks county, Pa.**  
20th annual report, 1917
- National fertilizer association, Soil improvement committee, Chicago**  
Fertilize to keep more stock. H: G. Bell and S. B. Haskell. (B. 21)  
Fertilizing the grass crop. S. B. Haskell and O. M. Kile. (B. 20)  
How to increase Ontario crop yields. H: G. Bell
- National grange of the patrons of husbandry, C. M. Freeman sec., Tippecanoe City, Ohio**  
Journal of proceedings, 51st annual session, 1917
- National implement and vehicle association, 76 W. Monroe st, Chicago**  
Effect of war conditions on the farm operating equipment industry
- National non-partisan league, St Paul**  
Address of A. C. Townley president of the National non-partisan league  
Facts for the farmer on conditions vitally important to him as producer and to the wage worker as consumer  
Facts kept from the farmer  
In and out of the yoke. C: E. Russell  
National nonpartisan league; origin, purpose and method of operation  
Where the people rule: North Dakota, a state where democracy is safe  
Why should farmers pay dues?
- National war garden commission, Maryland bldg., Washington, D.C.**  
Home canning and drying of vegetables  
War vegetable gardening and the home storage of vegetables
- Nebraska game and fish commission, Lincoln**  
Game and fish laws of the state of Nebraska in force April 24, 1917
- Nevada State board of education, Carson City**  
New course of study for the rural elementary public schools of Nevada
- New Brunswick Crown land department, Fredericton**  
Act respecting the taxation of wild lands passed 11th April, 1918  
57th annual report for the year ended 31st October, 1917
- New Brunswick Minister of lands and mines, Fredericton**  
Forest act and forest fires act of New Brunswick
- New Hampshire Forestry commission, Concord**  
Personnel of the Forest fire service. (C. 8) (rev.)
- New Jersey Department of conservation and development, Trenton**  
Annual report for the year ending October 31, 1917  
Shade tree guide. A. Gaskill
- New South Wales Dept. of agriculture, Sydney**  
Lime on the farm. F. B. Guthrie. (Farmers' B. 115)
- New South Wales forestry commissioner, 25 O'Connell st, Sydney**  
Determination of increment by stem analysis. W. A. W. De Beuzeville. (B. 13)  
Forestry handbook, pt. 2; some of the principal commercial trees of New South Wales. J. H. Maiden  
Silviculture
- New York, University of the state of, Albany**  
Directors of agriculture; regulations governing appointment and duties. (B. 654)  
Elementary education; report for the year ending July 31, 1916. T. E. Finegan
- New York association for improving the condition of the poor, 105 E. 22d st, N.Y.**  
Food and the obligation it places upon you and your institution. L. H. Gillett, comp.
- New York city Bureau of public health education, Dept. of health**  
Report of the Mayor's committee on milk
- New York city Department of health**  
Horse flesh as human food. L. Price. (Reprint ser. no. 65)
- New York city, Mayor's committee of women on national defense, 4 E. 39th st, N.Y.**  
Report of the committee on agriculture, May-December, 1917
- New York Commissioner of agriculture, Albany**  
Report relative to the licensing of dogs and the protection of domestic animals



# CHECKLIST

- New York Department of farms and markets, Albany**  
Act in relation to farms and markets, constituting chapter sixty-nine of the consolidated laws. (Ch. 802, P. L. 1917)
- New York public library, N.Y. city**  
Dehydrated foods. P. Jones. (Reprinted from the Bul. of the N.Y. Public library, Oct. 1917) (5c)
- New York state college of agriculture, Extension department, Ithaca**  
Plan for a definite community program and examples of work done by rural communities. (Sup. to Extension service news, v. 1, no. 4)
- New York State commissioner of highways, Albany**  
Report, 1916
- New York State comptroller's office, Albany**  
State finances; farm number. (v. 1, no. 11)
- New York State conservation commission, Albany**  
Conservation law in relation to lands and forests; chapter 451, laws of 1916, as amended, 1918.  
Violations of the conservation law disposed of during the month of July, 1918  
Wood fuel. W. G. Howard. (B. 16)  
Woodlot forestry. R. Rosenbluth and B. H. Paul. (B. 9)
- New York State department of health, Albany**  
Milk and its relation to health. (C. 27)
- New York state food supply commission, Agricultural hall, Albany**  
Food supply and the war  
Maple sirup and sugar production. B. A. Chandler. (Wartime conservation pub.)  
United States food administration act of August 10, 1917, and other acts
- New York State law library, Albany**  
Laws relating to fair grounds
- New York State museum bulletin, University of the State of New York, Albany**  
Household and camp insects. E. P. Felt. (B. 194)  
Key to American insect galls. E. P. Felt. (B. 200)  
Report of the State botanist 1916. (B. 197)
- New York State school of agriculture on Long Island, Farmingdale**  
Home vegetable garden. L. R. Hartill. (B. v. 3 Ja '18)
- New York State superintendent of weights and measures, Albany**  
Laws of the state of New York in relation to weights and measures
- North Carolina, University of, Bureau of extension, Chapel Hill**  
Extension courses and lectures, 1918-1919. (Ext. leaflets v. 2, no. 3; War information ser. no. 21)
- North Carolina, University of, Dept. of rural economics and sociology, Chapel Hill**  
Farm prosperity and the local market problem in Mecklenburg. E. C. Branson  
Farm prosperity in Forsyth. E. C. Branson
- North Carolina forestry association, Chapel Hill**  
Forestry; its place in the economic life of the South: two addresses
- North Carolina Geological and economic survey, Chapel Hill**  
Amendments to the drainage law by the general assembly of 1917. (Press B. 158)  
Cordwood for fuel. (Press B. 160)  
Farm forestry; its economic importance in agricultural development in North Carolina. (Press B. 157)  
Maple syrup and sugar making as a farm activity. (Press B. 161)  
Proceedings of the 9th drainage convention, Belhaven, Nov. 29-Dec. 1, 1915. (Econ. paper no. 45)  
Roadside trees in North Carolina. J. S. Holmes. (Press B. 162)  
Vegetation of Shackleford bank. I. F. Lewis. (Econ. paper no. 46)
- North Carolina Historical commission, Legislative reference dept., Raleigh, N.C.**  
Improvement and care of rural cemeteries. W. S. Wilson
- North Dakota State department of education, Bismark**  
Problem of rural school betterment. N. C. Macdonald  
Sixth annual report of the state inspector of consolidated graded, graded, and rural schools for the year ending June 30, 1917  
State rural school manual giving laws and regulations for standardization as state rural, graded, and consolidated graded schools
- Northern Pacific railway, D. E. Willard, Development agent, St Paul, Minn.**  
Feeding and care of sheep. D. E. Willard
- Oberlin college, Oberlin, Ohio**  
Wheat substitutes. K. R. Murray. (War papers no. 3)
- Official bulletin, Committee on public information, Washington, D.C.**  
Ja 10 '18 p 3 Farm labor specialists are designated to aid farmers in securing needed help
- Ohio Department of agriculture, Columbus**  
Market News & Exchange B., August 24, 1918. Special rules and regulations governing wholesalers, retailers and other dealers in cold storage eggs  
Ohio agricultural statistics, 1916-17
- Ohio public health journal, State department of health, Columbus**  
N '17 p 506 Warning is issued against freak food substitution ideas. R. H. Bishop, jr.
- Ohio red poll breeders' association, Frank Nelson, sec., London, O.**  
Red poll and farm conditions. F. Nelson
- Ohio state university, Columbus**  
Grasses of Ohio. J. H. Schaffner. (B. v. 21, no. 28)  
Relative cost of natural gas, soft coal, coal oil, gasoline and electricity for cooking, based on tests made in the laboratory of the Department of home economics
- Ohio vegetable growers' association, L. M. Montgomery, sec., Columbus**  
1918 directory; with membership list
- Oklahoma Board of vocational education, Oklahoma City**  
Application for state and federal aid in vocational agriculture under the provisions of the Smith-Hughes law. (Form 1)
- Ontario Department of agriculture, Toronto**  
Annual report of the Bureau of industries, 1917  
Annual report of the Live stock branch, 1917  
Annual reports of the dairymen's associations, 1917  
Appendix to annual report of the agricultural societies of the province of Ontario 1917  
Appendix to annual report of the Live stock branch 1917; co-operative wool sales  
18th annual report of the Agricultural societies of Ontario and the convention of Ontario association of fairs and exhibitions, for the year 1918  
48th annual report of the Entomological society of Ontario, 1917  
49th annual report of the Ontario fruit growers' association, 1917  
43d annual report of the college and experimental farm 1917  
Report of the horticultural experiment station, 1916-1917  
Report of the Minister of lands, forests and mines for the year ending 31st October, 1917  
Report of the Stallion enrolment board, 1918  
Report of the women's institutes of the province of Ontario, 1918; pt 2, List of meetings and speakers  
13th annual report of the Ontario vegetable growers' association, 1917  
12th annual report of the Horticultural societies of Ontario for the year 1917

# CHECKLIST

- Report for the year ending October 31, 1917  
38th annual report of the Beekeepers' association of the province of Ontario  
39th annual report of the Ontario agricultural and experimental union, 1917
- Oregon Department of education, Salem**  
Arbor day manual for Oregon, 1918
- Oregon Secretary of state, Salem**  
Act providing for the acquisition by the state of Oregon, for public use, real property containing limestone, calcareous shell deposits, and the manufacture and sale of the products thereof. (Ch. 397, P. L. 1917)  
Act to regulate the sale of agricultural lime and gypsum. (Ch. 230, P. L. 1917)  
Constitution and statutes relating to roads, highways, bridges and ferries, including 1917
- Oregon Stallion registration board, Corvallis**  
Stallion registration law of the state of Oregon
- Oregon State board of fish and game commissioners, Oregon building, Portland**  
Oregon fish and game laws, 1917-1918
- Oregon State board of forestry, Salem**  
Fire warden's handbook; Oregon forest fire laws (rev. 1918)  
Oregon forest facts; brief review of Oregon's timber resources  
Oregon forest fire laws, 1917-1918  
6th annual report, 1916  
7th annual report to the governor, 1917
- Oregon State engineer, Salem**  
Harney and Silver Creek projects: irrigation and drainage. J: T. Whistler and J: H. Lewis  
Malheur and Owyhee projects; irrigation and drainage. J: T. Whistler and J: H. Lewis
- Ottawa vacant lot association, A. S. Jost, sec., 23 Monk st, Ottawa**  
1st annual report
- Pacific press publishing association, Mountain View, California**  
Food question
- Pan-American union, Washington, D.C.**  
Proceedings of the 2d Pan American scientific congress, Washington, D.C., Dec. 27, 1915-Jan. 8, 1916. G. L. Swiggett, comp. and ed. 11v (cloth 75c-\$1.50 Supt. of doc.)  
These volumes have been widely distributed among libraries and are analyzed in this index where articles deal with agricultural subjects  
Rice in the Americas
- Patterson, C. G., Box 136, Salt Lake City, Utah.**  
Business, politics and religion in Utah; the Utah-Idaho sugar company versus the people of Utah and Idaho. C. G. Patterson. 3d ed (50c)  
Profit sharing in the sugar business. (50c)  
Salvation for the sugar beet grower. (Pamph. no. 4) (50c)  
Secrets of the Utah-Idaho sugar company  
Who gets the profits from sugar beets? (50c)
- Peck, Stow & Wilcox company, Cleveland, O.**  
Little pruner book; an intimate guide to the surer growing of better fruits and flowers. F. F. Rockwell
- Penn normal, industrial and agricultural school, St Helena island, Beaufort county, S.C.**  
Annual report, 55th year, 1916-1917  
Annual report, 56th year, 1917-1918
- Pennsylvania Department of forestry, Harrisburg**  
Report of the chief forest fire warden for the year 1916. (B. 16)  
Report of the chief forest fire warden for the year 1917. (B. 17)
- Pennsylvania game commission, Harrisburg**  
Digest of the game, fish and forestry laws. J. Kalbfus, ed.
- Pennsylvania health bulletin, State dept. of health, Harrisburg**  
My '17 p 1-23 Insects
- Pennsylvania State board of education, Harrisburg, Pa.**  
Standard rural schools. (B. 7)
- Pennsylvania State highway department, Harrisburg**  
Report for the period, June 1, 1914 to June 1, 1917
- Philadelphia Dept. of public works**  
Torrens system of land title registration
- Philippine Islands Bureau of education, Manila**  
Agriculture and other industries as honorable vocations. P. A. Hill. (Civico-Educ. Lectures no. 11)  
Care and treatment of domestic animals. C. Osias. (Civico-Educ. Lectures no. 13)  
Garden for every home. C. Osias. (Civico-Educ. Lectures no. 12)
- Philippine Islands Bureau of forestry, Manila**  
Annual report for the fiscal year ended Dec. 31, 1918  
Commercial woods of the Philippines: their preparation and uses. E. E. Schneider. (B. 14)
- Philippine Islands Bureau of internal revenue, Manila**  
Report on Philippine tobacco investigation in the United States. J. J. Rafferty
- Portland cement association, 111 W. Washington st, Chicago**  
Concrete grain tanks  
Monolithic concrete silos for your farm
- Porto Rico Commissioner of agriculture and labor, San Juan**  
Report, 1917
- Porto Rico Department of finance, San Juan**  
Comparative statistical report of sugar manufactured in Porto Rico from the crops of 1909 to 1917; tabulation
- Public affairs information service, 958-964 University av, New York City**  
Cattle & dairying in California; a selective list of articles on cattle and dairying in California state library. V. Clowe, comp. (Typew \$1.20)  
Compilation and digest of laws relating to compensation for injuries to livestock by dogs. N.Y. (state) Lib. legislative reference section. (Typew \$4.70)  
Law of Alberta, Canada, relating to noxious weeds. N. Y. (state) Lib. legislative reference section. (Typew 40c)  
Law of Massachusetts relating to destruction of gypsy and brown tail moth. N.Y. (state) Lib. legislative reference section. (Typew 90c)  
Laws relating to county or district demonstration farms. N.Y. (state) Lib. legislative reference section. (Typew \$1.60)  
List of recent references on agricultural credit (Typew. 40c)  
List of recent references on cost of living. (Typew. 45c)  
List of references on the potash industry. (Typew.)  
List of references on war bread. Comp. by U.S. Library of Congress. 4p '17 (Typew 20c)  
Marketing of milk; a contribution to a bibliography. E. D. Orr, comp. Univ. of Wisconsin library school, Madison (Typew \$1.15)  
Problem of agricultural labor; a contribution to a bibliography. I. M. Newman. Univ. of Wisconsin library school, Madison (Typew 90c)  
Regulating the sale of milk in cities. N.Y. State Bur. of Munic. Information  
Translation of French laws, decrees, and instructions, 1915-1917, on regulation of food supplies; translated from the original French. N.Y. (state) Lib. legislative reference section. (Typew \$3.60)
- Quebec Dept. of agriculture, Quebec**  
Annual report, 1916 of the Pomological and fruit growing society of the province of Quebec  
Report of the Minister of agriculture of the province of Quebec, 1917  
35th annual report, 1916, of the Dairymen's association of the Province of Quebec



# CHECKLIST

- Quebec Department of lands and forests,** Quebec  
Report for the twelve months ended 30th June, 1917
- Quebec society for the protection of plants from insects and fungous diseases,** J. M. Swaine, sec., Macdonald college, Ottawa  
9th annual report, 1916-1917
- Quebec union expérimentale des agriculteurs** L' Institut agricole d'Oka, Quebec  
Report, 1917
- Queensland Department of public lands,** Brisbane  
Annual report of the Director of forests for the year 1917. N. W. Jolly  
Australian study of American forestry. E. H. F. Swain. (5s)  
Notes on the principal timbers of Queensland. (Forestry B. 2)  
Structure and identification of Queensland woods. N. W. Jolly. (Forestry B. 1)  
Sylvicultural notes on forest trees of Queensland. (Forestry B. 3)
- Rand school of social science,** 7 E. 15th st., N. Y.  
Food and the people; the problem of the high cost of living in the New York legislature. L. Waldman
- Reinlein, Fred,** 192 Watt st., Portland, Oregon  
On the control of insects and fungi. F. Reinlein. (C. no. 151)
- Review publishing co.,** St Paul, Minn.  
Warehouse, grain, and weights and measures laws of Minnesota up to and including laws passed at the legislative session of 1917
- Rhode Island Commission of agricultural inquiry,** Providence  
Preliminary report into the agricultural resources of the state, 1916
- Rhode Island Commissioners of birds,** Providence  
Bird and game laws of Rhode Island, revised to June 1, 1917
- Rhode Island Commissioners of inland fisheries,** Providence  
Fisheries laws of Rhode Island, 1917  
48th annual report, 1917
- Rhode Island Commissioners of shell fisheries,** Providence  
Laws relating to shell fisheries, 1917
- Rhode Island Department of forestry,** Providence  
Forest fire tactics. J. B. Mowry  
12th annual report, 1917
- Rhode Island Food and drug commission,** Providence  
Food and drug laws of the state of Rhode Island  
Regulations as to declarations of net weight and measure of food products
- Rhode Island Food conservation office,** 77 Washington st, Providence  
Wheat substitutes
- Rochester, University of,** Rochester, N.Y.  
Menus for national needs. A. L. Weeks. (Ext. B. v. 1, no. 3)  
Tested menus and recipes. A. L. Weeks. (Ext. B. v. 1, no. 2)
- Russell Sage foundation,** Department of surveys and exhibits, New York city  
Chicago patriotic food show; brief review of its main features. M. S. Routzahn
- Russell Sage Foundation,** Division of remedial loans, 130 E. 22d st., N.Y.  
Credit union and the cooperative store. A. H. Ham
- Russell Sage foundation library,** 130 E. 22d st, N.Y.  
War gardens. F: W. Jenkins, comp. (no. 28)
- Sagamore sociological conference,** W: C. Ewing, sec., 985 Washington st, Boston  
Proceedings, 1917 (partly analyzed)
- St Louis Public library bulletin** F '18 p 67-70 Home garden; thrift gardens and flower gardens: bibliography. K. T. Moody, comp.; p 70-2 List of books about roses. H. Yeargain, comp.
- Scoates, D.,** Mississippi agricultural and mechanical college, Agricultural College, Miss.  
Scoates concrete construction laboratory manual  
Scoates' farm machinery laboratory manual. 2d ed  
Scoates' farm motor laboratory manual
- Scripps institution for biological research,** San Diego, Cal.  
Modern conceptions of heredity and genetic studies at the Scripps institution. F. B. Sumner. (B. no 3)
- Shirley, C: F.,** South Duxbury, Mass.  
Massachusetts agricultural college
- Smithsonian institution,** Washington, D.C.  
Mosses collected by the Smithsonian African expedition 1909-10. H. N. Dixon. (Misc. coll. v. 69, no. 2; Pub. 2494)  
Uganda mosses collected by R. Dümmer and others. H. N. Dixon. (Misc. coll., v. 69, no. 8; Pub. 2522)
- South Dakota Rural credit board,** Pierre  
Laws of South Dakota establishing a system of rural credits. (C. 1)
- South Dakota State live stock sanitary board,** Pierre  
Annual report for the fiscal year ending June 30th, 1917  
Annual report for the fiscal year ending June 30, 1918  
Live stock laws 1909-17; rules and regulations  
South Dakota live stock laws, 1909-11-13-17; rules and regulations of the Live stock sanitary board  
Stallion registration department; directory of stallions. (B. 8)  
Stallion registration department. (B. 9)
- South Dakota state college,** Brookings  
Farm bureau news. G: A. Starring. (Sup. to B. vol. 10, no. 3)
- Southern fertilizer association,** W. E. Richards, chm., Soil improvement committee, Atlanta, Ga.  
Corn production in the South. J. C. Pridmore. (B. 19)  
Cotton production. J. N. Harper. (B. 20)  
Fertilizing the home vegetable garden. J. C. Pridmore. (B. 23)  
First principles of plant food; outline of essential fertilizer facts in questions and answers. C: A. Whittle  
Functions of phosphorus in plant growth. J. N. Harper. (B. 24)  
Necessity of fertilizing peanuts. J. N. Harper. (C. 15)  
Production of bright tobacco. J. N. Harper. (B. 18)  
Profitable oat production in the South. J. N. Harper. (B. 21)  
Profitable wheat production in the South. J. C. Pridmore. (B. 22)  
Relative value of acid phosphate and rock phosphate. J. C. Pridmore. (C. 11)  
Southern fertilizers  
Soy beans. J. C. Pridmore. (B. 17)
- Southern pine association,** New Orleans, La.  
Dawn of a new constructive era, being the full and complete report of the Cut-over land conference of the South, held at New Orleans, La., April 11-13, 1917
- Supplee-Wills-Jones milk company,** Philadelphia  
Practical milk testing for dairymen. W. E. Evans
- Swift & co.,** Union stock yards, Chicago  
Rejoinder of Swift & company to the statement of the Federal trade commission  
Suggestions for a standard for butter presented on behalf of Swift & co. to the Joint committee on definitions and standards, representing food control officials of the United States and of the several states
- Tasmania agricultural and stock department,** Tasmania, Australia  
Fungicides and insecticides. H. M. Nichols. (B. 59)

# CHECKLIST

## Tasmania ag. and state dept.—Continued

- Mortality of dairy cows in the Hamilton district, Victoria, by E. W. Murphy; Oseotmalacia, or creeps in cattle, by V. T. Atkinson. (B. 70)
- Poultry industry. W. A. Bagley. (B. 72)
- Pruning young fruit trees. J. M. Ward. (B. 64)

## Tasmania, Government printer, Hobart

- Phosphate deposits in Tasmania. W. H. Twelvrees. (Geological survey, mineral resources no. 3)

## Teachers college, Columbia university, New York city

- Study of organization and method of the course of study in agriculture in secondary schools. T. H. Eaton. (Contributions to educ. no. 86)

## Tennessee State board of entomology, Knoxville

- Benefits to be derived from observing, collecting and studying insects. G. M. Bentley. (B. 20)
- Report of nursery inspections and a list of Tennessee nurserymen for 1917-1918. G. M. Bentley. (B. 23)
- Shipping instructions for nurserymen (revised to October, 1916). G. M. Bentley. (B. 16)
- Sodium cyanide as a fumigant. G. M. Bentley. (B. 18)
- Synopses of state laws regulating nursery shipments (revised to July 1, 1917). G. M. Bentley. (B. 21)

## Texas Department of education, Austin

- Fifteen lessons in food conservation. (B. 71)
- School grounds, school buildings and their equipment. W. F. Doughty. (B. 65)
- State aid for country schools: the two million dollar appropriation. W. F. Doughty. (B. 67)

## Texas Department of education, Board for vocational education, Austin

- Federal aid for vocational agriculture in Texas, under the Smith-Hughes law. W. F. Doughty and J. D. Blackwell. (B. 68)

## Texas Legislature, Von Boeckmann-Jones company, Austin, Tex.

- Markets and warehouse law of the state of Texas. (House bill no. 97)

## Texas university bulletin, Austin

- Beginning and developing a rural school. A. Stoltzfus. (B. 1729)
- Bobwhite. W. S. Taylor. (B. 1748)
- Food conservation to help win the war. M. M. Lawrence. (B. 1756)
- Food conservation to help win the war; recipes for saving wheat, sugar, meat, and fat. M. M. Lawrence. (B. 1756)
- Food for infants and growing children. A. E. Richardson and J. P. Rich. (B. 1804)
- Key to the families and genera of the wild plants of Austin, Texas. M. S. Young. (B. 1754)
- Mourning dove. W. S. Taylor. (B. 57)
- Principles of menu making. A. E. Richardson. (B. 1716)
- Water supply and sanitation. (B. 1733)

## Toronto Dept. of public health, City Hall

- Monthly Report p 575-81. Increased cost of milk and its influence on infant mortality

## Union stock yard & transit co., Union stock yards, Chicago

- Twelve good reasons why corn belt farmers should raise more live stock. J. A. Spoor

## United farmers of Alberta, P. P. Woodbridge, sec., Calgary

- Annual report and year book 1917. (25c)

## United grain growers' limited, Winnipeg, Manitoba

- Annual report for the twelve months ending the 31st of Aug. 1917

## U. S. Boys' working reserve, B. D. Butler, dir., Room 47, 120 W. Adams st., Chicago, Ill.

- Farm craft lessons for reserve volunteers: lessons 1-6
- Illinois bulletins 1-5

## U.S. Bureau of chemistry, Washington, D.C.

- Definitions and standards for foods and drugs enacted into law by the legislative bodies of the several states; comp. by J. S. Abbott and H. S. Bailey
- Directory of federal and state dairy, food, drug, and feeding stuffs officials

## U.S. Bureau of chemistry Library, Washington, D.C.

- List of references to periodical articles, and also to patents, which have appeared since July 1, 1914, on products of commercial value, produced by microorganisms

## U.S. Bureau of crop estimates, Washington, D.C.

- Government crop reports. (C. 17, rev.)

## U.S. Bureau of education, Washington, D.C.

- Agricultural instruction in the high schools of six eastern states. C. H. Lane. (B. 1918, no. 3)
- Bibliography of school lunches. L. Condell, comp. (C.)
- Community center; what it is and how to organize it. H. E. Jackson. (B. 1918, no. 11)
- Comparison of the salaries of rural and urban superintendents of schools. A. C. Monahan and C. H. Dye. (B. 1917, no. 33)
- Conifers of the northern Rockies. J. E. Kirkwood. (B. 1917, no. 53)
- Course in food economies for the housekeeper. (Home Econ. C. 6)
- Educational and economic value of school-directed gardening (B. 1917, no. 46)
- Garden clubs in the schools of Englewood, N.J. C. O. Smith. (B. 1917, no. 26)
- Government publications of interest to home economics teachers and students. (Home Econ. C. 5)
- Institutions in the United States giving instruction in agriculture, 1915-1916. A. C. Monahan and C. H. Dye, comps. (B. 1917, no. 34)
- Possibilities for school-directed home gardening in Atlanta, Georgia. (School home-garden C. 17)
- Preparation and the preservation of vegetables. H. W. Calvin and C. A. Lyford. (B. 1917, no. 47)
- Principles and policies in home economics education. H. W. Calvin. (Home econ. C. 4)
- Rural education of the negro
- Rural-teacher preparation in county training schools and high schools. H. W. Foght. (B. 1917, no. 31)
- Training little children; articles written by mothers who were formerly kindergarten teachers
- A series of 55 articles which are intended to run at weekly intervals for a little over a year. Not indexed.
- Vocational teachers for secondary schools. C. D. Jarvis. (B. 1917, no. 38)
- What the rural schools in the South must be and do after the world war. C. C. Hanson

## U.S. Bureau of fisheries, Washington, D.C.

- Bowfin: an old-fashioned fish with a new-found use. R. E. Coker. (Econ. C. 26)
- Burbot; fresh-water cousin to the cod. (Econ. C. 25)
- Carp: a valuable food resource. (Econ. C. 31)
- Fish ponds on farms. R. S. Johnson and M. F. Stapleton. (Doc. 825) 5c
- Fish roe and buckroe; with 85 recipes. L. Radcliffe. (Econ. C. 36)
- Menhaden industry of the Atlantic coast. R. L. Greer. (Doc. 811) 10c
- Nutrition of oysters; glycogen formation and storage. P. H. Mitchell. (Doc. 851) 5c
- Sharks as food; with thirty recipes. L. Radcliffe. (Econ. C. 35)
- Skates and rays. (Econ. C. 34)

## U.S. Bureau of foreign and domestic commerce, Washington, D.C.

- Agricultural implements and machinery in Australia and New Zealand. J. Homs. (Special agents ser.—no. 166) 25c



# CHECKLIST

**U.S. Bur. foreign & domestic commerce—Cont.**  
 East African markets for hardware and agricultural implements. H. P. Starrett. (Special Consular Rep 78)  
 Export lumber trade of the United States. E. E. Pratt. (Misc. ser. no. 67)  
 Foreign markets for cotton linters, batting, and waste. (Special consular reports no. 80) 10c  
 Olive growing in Spain; description of varieties grown, methods of cultivation, and the preparation of pickled olives. W. T. Gracey (Special Consular Rep. 79)  
 South American markets for dried fruits. W. Fischer. (Special agents ser. 148)  
 Tanning materials of Latin America. T. H. Norton. (Special agents ser.—no. 165) (5c)

**U.S. Bureau of labor statistics, Washington, D.C.**  
 Food situation in Central Europe, 1917. A. Maylander. (B. 242, Misc. ser.)  
 Prices and cost of living  
 From the Monthly Review of Feb. 1918  
 Retail prices, 1907-1916. (B. 228, Retail prices and cost of living ser. no. 18)  
 Articles analyzed: Food; Bread weights; Fresh beef; Retail prices of the principal articles of food

**U.S. Bureau of markets Library, Washington, D.C.**  
 Selected list of publications on the marketing of farm products. M. E. Griffith. 9pts (Mim)

**U.S. Bureau of mines, Washington, D.C.**  
 Potash situation (War minerals investigation ser. 2)

**U.S. Bureau of plant industry, Washington, D.C.**  
 Control of tomato leaf-spot. (C., T., & F. C. D. C.4)  
 Growing Bermuda onion seed in the southwestern United States. S. C. Mason. (C. P. & E. I.—3)  
 Japanese sugar cane. S. M. Tracy. (F. C. I. —49)

**U.S. Bureau of standards, Washington, D.C.**  
 Rules and regulations promulgated under authority of the federal standard-barrel law. (C. 71)

**U.S. Bureau of the census, Washington, D.C.**  
 Census of manufactures: 1914; butter, cheese, and condensed milk. B. L. McNulty  
 Census of manufactures 1914; canning and preserving. J. M. Brody  
 Census of manufactures: 1914; slaughtering and meat packing. I. K. Lane  
 Census of manufactures 1914; turpentine and rosin. J. B. Hopkins  
 Census of manufactures: 1914; wool manufactures including wool shoddy, wool pulling, and wool scouring. C. A. Freeman  
 Cotton production and distribution; season of 1916-17. (B. 135)

**U.S. Children's bureau, Washington, D.C.**  
 Maternity and infant care in a rural county in Kansas. E. Moore. (Pub. no. 26; Rural child welfare ser. no. 1)  
 Milk the indispensable food for children. (Pub. 35; Care of children ser. no. 4)  
 Studies of use of milk by families having little children. Baltimore

**U.S. Congress, Washington, D. C.** Apply to congressmen  
 Food-control bill; conference report on the bill (H. R. 4961). (65th Cong., 1st sess. Doc. no. 70)

**U.S. Congress, Committee on agriculture and forestry, Washington, D.C.** Apply to congressmen  
 Garden city movement; hearing pursuant of S. Res. 305  
 Grain for distilling purposes; hearing on prohibiting the use of grain for distilling purposes  
 Production and conservation of food supplies; hearing relative to the proposal for increasing the production, improving the distribution, and promoting the conservation of food supplies in the United States. 5pts.

**U.S. Congress, House committee on agriculture, Washington, D.C.** Apply to congressmen  
 Agriculture appropriation bills; hearings: estimates of different departments. (15 pts)  
 Food-production act, 1919; hearings on estimates of appropriations required to carry out, during the fiscal year ending June 30, 1919, the purposes of the act approved Aug. 10, 1917  
 Seed grain and feed for farmers and stockmen; hearings on H. R. 7795 and H. R. 9966. (pts 1 & 2)

**U.S. Congress, House committee on foreign affairs, Washington, D.C.** Apply to congressmen  
 Protection of migratory birds: report no. 243 to accompany S. 1553

**U.S. Congress, House committee on the merchant marine and fisheries, Washington, D.C.**  
 Alaska fisheries; hearings before the committee on merchant marine and fisheries and H. R. 9528; a bill for the protection, regulation, and conservation of the fisheries of Alaska

**U.S. Congress, House committee on the public lands, Washington, D.C.** Apply to congressmen  
 Consolidation of forest lands; hearings before a subcommittee on S. 5539

**U.S. Congress, Senate.** Apply to congressmen  
 Bill, introduced in the Senate by G. E. Chamberlain, to increase the productive agricultural area of the United States by the reclamation of arid and swamp lands therein. (Calendar no. 247; S. 758; Report no. 271)

**U.S. Congress. Senate committee on manufactures.** Apply to congressmen  
 Shortage of sugar; hearings before the subcommittee pursuant to S. Res. 163; a resolution to investigate the causes of the shortage of coal and sugar

**U.S. Council of national defense, Washington, D.C.**  
 Rural motor express to conserve foodstuffs and labor and to supply rural transportation. (B. 2)

**U.S. Department of Interior, Washington, D.C.**  
 National parks portfolio  
 Our mineral supplies. H. S. Gale. (U.S. Geol. survey B. 666-N)  
 Report of the director of the National park service for the fiscal year ended June 30, 1917

**U.S. Federal board for vocational education, Washington, D.C.**  
 Agricultural education, organization and administration. (B. 13, Agric. Series no. 1)  
 Agricultural education; some problems in state supervision. (B. 26; Ag. ser. no. 4)  
 Home project as a phase of vocational agricultural education. (B. 21; Ag. ser. 3)  
 Reference material for vocational agricultural instruction. (B. 14, Ag. Ser. 2)  
 Statement of policies. (B. 1) p 36-41 Questions relating to agricultural education

**U.S. Federal farm loan bureau, Washington, D.C.**  
 1st annual report covering the period from the organization of the board up to November 30, 1917. (House Doc. 714)

**U.S. Federal trade commission, Washington, D.C.**  
 Food investigation; report of the federal trade commission on canned foods  
 Report on flour milling and jobbing

**U.S. Food administration, Washington, D.C.**  
 Amendments and additions to rules and regulations governing the importation, manufacture, storage and distribution of food commodities and feeds for domestic trade by persons subject to license. (Ser. B Sup)  
 Cheese a substitute for meat  
 Commodity licensing

# CHECKLIST

## U.S. Food administration—Continued

- Conservation and regulation in the United States during the world war; an outline for a course of lectures to be given in higher educational institutions. C: R. Van Hise. (2 pts)
- Creation of United States Food administration. (B. 6)
- Doubling the wheat dollar. C: W. Holman
- Few food problems. M. L. Requa. (B. 9)
- Food and the war: a textbook for college classes, prepared with the co-operation of the Department of agriculture and the Bureau of education (80c)
- Food conservation. R. L. Wilbur. (Typew)
- Food conservation bibliography
- Food questions answered
- Garbage utilization with particular reference to utilization by feeding
- Grain and live stock; national policy touching vital food elements indicated by factors of war period. H. Hoover. (B. 10)
- Handbook for Pennsylvania train exhibit; food conservation car. J: H. Cover. (Mim)
- Ice harvest
- Licensed millers of corn, corn starch, barley, oats, rice; compiled to Feb. 1, 1918. (Ser. M)
- Meat buying in the United States by the allied nations. J. P. Cotton
- Milk committee makes report; some prominent results
- Mill feed regulations; new price relations between commercial mill; feeds and wheat. J. F. Bell
- Mill sales of wheat flour to farmers
- Mobilizing threshermen to save wheat. (Typew)
- Necessity for sugar conservation. (B. 1402) (Mim.)
- Official statements nos 1, 2, 3, 4, 5, 7
- Our wheat supply in 1918. C: W. Holman
- Present campaign; food administration, the world's food shortage, the American way. H. Hoover. (B. 7)
- Preserving vegetables by salting, drying, and storing
- Production, distribution and food value of milk; a report to Herbert C. Hoover
- Supply exhausted
- Publications on food in foreign languages. (Typew)
- Reference handbook of food statistics in relation to the war. R. Pearl and E. P. Matchett
- Report of Federal trade commission on bakery business in United States; report of bakery section of Food administration
- Revised rules and regulations governing licensees manufacturing bakery products, effective Feb. 1, 1918. (Ser. D)
- Rules and regulations governing the importation, manufacture, storage and distribution of food commodities for domestic trade by persons subject to license. (Ser. B)
- Some phases of the war food problem. H. Hoover. (Mim.)
- Standard loaf. (B. 11)
- Statements outlining administration's food-control policy. (B. 1)
- United States Food administration; policies and plan of operation; wheat, flour and bread
- Not available for general distribution
- United States food leaflets 1-10
- Victory bread; experimental formulas
- Wheat conservation program for the United States. (B. 12)
- Wheat needs of the world. A. Taylor
- U. S. Food administration for Illinois, Urbana**
- Canning, preserving, drying and storage of fruits, vegetables, and meats. G: A. Deveneau. (Mim)
- Conservation in clothing and clothing materials; selected list of references. M. Mitchell and others
- Reading list on sheep husbandry. G: A. Deveneau
- Selected bibliography of papers on fish, mollusks and crustacea as food. R. MacDonald

- U.S. Food administration grain corporation, 42**  
Broadway, N.Y.
- Conference of representatives of the grain trade of the United States, New York, April 30-May 1, 1918
- U.S. Forest service, Washington, D.C.**
- Homesteads in the national forests. (Misc. L-4)
- January field program, 1918. (No. 12)
- Landscape engineering in the national forests. F. A. Waugh
- List of books on forestry for a small library. (Mim.)
- National forest areas, January 1, 1918. (Misc. O-11)
- Report of the forester
- State forestry laws; Colorado. J. S. Peyton, comp. (Misc. S.-25)
- State forestry laws; New York. J. S. Peyton, comp. (Forestry laws leaflet no. 23)
- State forestry laws; West Virginia. J. S. Peyton, comp. (Misc. S.-26)
- Use but do not abuse farm woodlands. C. R. Tillotson. (Misc. R.-3)
- U.S. Fuel administration, Washington, D.C.**
- Burn wood and save coal
- Home heating; how to get the most out of a ton of coal
- U.S. Government printing office, Washington, D.C.**
- Interstate commerce commission decision no. 7969; National poultry, butter & egg association v. Baltimore & Ohio Southwestern railroad company et al
- Interstate commerce commission decision no. 9536; Willamette valley lumbermen's association v. Southern Pacific company et al
- U.S. Interstate commerce commission, Washington, D.C.**
- Cotton from New Orleans. (Investigation and suspension docket no. 1108; Opinion 5185)
- Sisal from New Orleans, La. (Investigation and suspension docket no. 1128; Opinion 5188)
- U.S. Library of Congress, Division of bibliography, Washington, D.C.**
- List of federal documents especially useful to librarians and citizens at the present time. (Mim.)
- List of references on community kitchens. (Mim.)
- List of references on food in relation to health, food rationing, dietetics, etc. (Mim.)
- List of references on government regulation of prices (supplementary to duplicated list, July 3, 1917). (Mim.)
- List of references on the mobilization of farm labor for war service. (Typew)
- U.S. National museum, Washington, D.C.**
- Allies of selaginella rupestris in the southeastern United States. G. P. Van Eseltine. (U.S. Nat herbarium, Contributions, v 20, pt. 5)
- Mineral industries of the United States; fertilizers. J. E. Pogue. (B. 102, pt. 2) (5c Supt. of doc.)
- New or noteworthy plants from Colombia and Central America. H: Pittier. (10c Supt. of doc.)
- New or noteworthy plants from Colombia and Central America. H: Pittier. (Contributions from U.S. Nat. herbarium, v. 20, pt. 3) (10c Supt. of doc.)
- North American species of aquilegia. E. B. Payson. (Nat. herbarium Contributions v. 20, pt. 4)
- Systematic investigations of tropical American plants. (Contributions from the U. S. Nat. herbarium v. 18) 7 pts '14-'17 (Supt. of doc.)
- U.S. National park service, Washington, D.C.**
- General information regarding Crater Lake national park
- General information regarding Glacier national park
- General information regarding Mount Rainier national park



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### U.S. Nat. park service—Continued

- General information regarding Sequoia and General Grant national parks
- General information regarding Yellowstone national park
- Geologic story of the Rocky Mountain national park, Colorado. W. T. Lee
- Report on the proposed Sand Dunes national park, Indiana. S. T. Mather

### U.S. Office of farm management, Washington, D.C.

- Tractor manufacturers in the United States. (Mim.)

### U.S. Public health service, Washington, D.C.

- Anopheles punctipennis. M. B. Mitzmain. (Reprint no. 407 Pub. health reports)
- Bacteriological examination of water. H. E. Hasseltine. (Reprint no. 432 Pub. health reports)
- Chemical closets. (Reprint no. 404 Pub. health reports)
- Dietary deficiency of cereal foods with reference to their content in "antineuritic vitamin," by C. Voegtlin and others; Growth-promoting properties of foods derived from corn and wheat, by C. Voegtlin and C. N. Myers; Phosphorus as an indicator of the "vitamine" content of corn and wheat products, by C. Voegtlin and C. N. Myers. 54p
- Diphtheria; an epidemic, probably of milk origin, at Newport, Rhode Island, and vicinity. G. W. McCoy and others. (Reprint no. 430 Pub. health reports)
- Foodstuffs. (Reprint no. 410 Pub. health reports)
- Malaria parasite in the mosquito. M. B. Mitzmain. (Reprint no. 422 Pub. health reports)
- Municipal ordinances, rules and regulations pertaining to public health, 1916. (Reprint no. 385 Pub. health reports)
- Articles indexed: Foodstuffs; Bakeries and bakery products; Milk and milk products; Ice cream—manufacture and sale; Meat—production, care, and sale; Privies and cesspools; Stables and disposal of manure
- Rat; a sanitary menace and an economic burden. R. H. Creel. (Reprint 135 Pub. health reports)
- Safe disposal of human excreta at unsewered homes. L. L. Lumsden and others. (B. 68)
- Typhoid fever; its causation and prevention. L. L. Lumsden. (B. 69)

### U.S. Quartermaster general of the army, Washington, D.C.

- Supply of animals for the army. J: S. Fair

### U.S. Reclamation service, Washington, D.C.

- 15th annual report, 1915-1916
- Grand Valley irrigation project
- Uncompahgre Valley irrigation project

### U.S. States relations service, Office of agricultural instruction, Washington, D.C.

- Beef production. H. P. Barrows. (Doc. 81)
- Care and feeding of chicks. (Doc. 69) How to set a hen and care for her. (Doc. 68)
- How to build a brood coop for hen and chicks. (Doc. 70)
- Feeding and housing winter layers. (Doc. 61)
- Growing seeds for the home garden. C. P. Close. (Doc.—87)
- Handbook on farm-bureau organization for county agricultural agents. L. R. Simons. (Doc. 65)
- Home canning of meats and sea foods with the steam-pressure canner. F. P. Lund. (Doc. 80)
- How teachers of elementary schools may use Farmers' bulletin 336, The city and suburban vegetable garden. F. E. Heald
- Instruction in sheep and goat husbandry. H. P. Barrows. (Doc. 76)
- Marketing farm products. H. P. Barrows. (Doc. 72)
- Peppers. (Doc. 39)
- Plan and tools for the home garden. C. P. Close. (Doc.—84)
- Publications of Department of agriculture classified for the use of teachers. (Typew.)

### Sewing for girls' club work. (Doc. 83)

- Texts and references for secondary schools; lists, frequently revised, of secondary school texts and manuals on agricultural subjects, elementary school texts of same kind, and sources of teaching material and supplies. (Typew.)

### U.S. Superintendent of documents, Washington, D.C.

- Animal industry; farm animals, poultry and dairying; list of publications for sale. (Price list 38-10th ed)
- Farm management; list of publications for sale
- Insects; list of publications relating to bees, honey and insects injurious to man, animals, plants, and crops, for sale. (Price list 41—8th ed.)
- Irrigation, drainage, and water power (exclusive of Pacific states). (Price list 42—9th ed)
- Plants; publications relating to culture of fruits, vegetables, grain, grasses and seeds for sale
- Soils and fertilizers; list of publications for sale. (Price list 46—11th ed.)
- Stocks of leaf tobacco and the American production, import, export, and consumption of tobacco and tobacco products, 1917. (Census B. 136) 10c

### U.S. War industries board, Washington, D.C.

- Government regulations for handling wool clip of 1918

### Utah State live stock board, Salt Lake City

- Diseases of sheep. R. W. Hoggan. (B. 1)

### Virginia Board of charities and corrections, Richmond

- Why Virginia needs prison farms for misdemeanants

### Virginia State forester, Univ. of Va., Charlottesville

- Administrative report for the calendar years, 1916-1917
- Farm forestry in Virginia. R: C. Jones. (B. 12)
- Forestry situation in Virginia. R: C. Jones. (Forestry Leaflet no. 9)
- Forests of Alexandria county, Virginia. W. B. Dunwoody. (B. 13)
- Forests of Chesterfield county, Virginia. G. D. Marekworth. (B. 15)
- Forests of Nottoway county, Virginia. G. D. Marekworth. (B. 14)
- How the forests and the lumber industry in Virginia can both be preserved. R: C. Jones. (Forestry Leaflet no. 8)
- Plan of forest fire protection for Virginia. R: C. Jones. (Forestry Leaflet no. 3) (Rev.)

### Virginia State highway commissioner, Richmond

- 11th annual report for the year ending September 30, 1917

### Ware bros. co., 1010 Arch st. Philadelphia

- American fertilizer handbook, 1918

### Washington, University of, College of forestry, Seattle

- Forest club annual, 1918. (75c)

### Washington forest fire association, 1126 Henry bldg., Seattle

- 10th annual report, 1917

### Washington State board of forest commissioners, Olympia

- Annual reports for the years ending Nov. 30, 1915, and Nov. 30, 1916

### Washington State board of health, 930 Henry bldg., Seattle

- Rural sanitation

### Washington State bureau of labor, Olympia

- Comparative statistics on foodstuffs and fuel for four years, 1914-1917; Same, 1914-1918

### Washington State bureau of statistics and immigration, Olympia

- Dairying, poultry and stock raising in the State of Washington. H. F. Giles

### Washington State college library, Pullman

- Bibliography of food economy for the housewife. (B.—5) (2d ed 25c)

# CHECKLIST

## Washington State college library—Continued

Bibliography of the economics of textiles and clothing. L. M. Clatworthy and S. J. Swenson, comps. (B. 6) (25c)

## Washington State highway commissioner, Olympia

6th biennial report for the period Oct. 1, 1914, to Sept. 30, 1916

## Wilson, The H. W. co., 958-964 University av, N.Y.

Country life and rural problems; a study outline. M. K. Reely

## Winthrop Normal and industrial college, Rock Hill, S.C.

Are the "what" and "how much" the all of nutrition? (Ser. 3, no. 3)

Doing without sugar. (Ser. 3, no. 5)

Food for children from one to six years old (Ser. 3, no. 4)

Food for mother and baby. C. N. South. (Ser. 3, no. 3)

Home poultry production. (Ser. 2, no. 11)

How much shall I eat? (Ser. 3, no. 1)

Meats: place in the diet; curing and preserving; use of substitutes. (Ser. 2, no. 10)

What shall I eat? (Ser. 2, no. 12)

## Wisconsin, University of, Madison

Food conservation through utilization of garbage waste. G. R. Bascom and B. A. Beach. (Ext. B. Serial no. 900, gen. ser. 690)

## Wisconsin Dairy and food commissioner, Madison

Annual report for the period ending June 30, 1917

Cold storage act and rules and regulations governing the licensing of cold storage warehouses

Laws of Wisconsin relating to weights and measures

Supplement to Wisconsin Dairy and food laws of August 1913

## Wisconsin Department of public instruction, Madison

Agriculture in the high school. H: N. Goddard and J: A. James

Organization and management of elementary school libraries in Wisconsin. O. S. Rice and B. Bergold

## Wisconsin State conservation commission, Madison

Biennial report for the years 1915 and 1916

Forest, field and marsh fire laws with instructions to town chairmen, road superintendents, rangers and patrolmen

Forest planting in Wisconsin. W. D. Barnard. (B. 1)

Street and park trees for Wisconsin communities. M. A. Castle. (B. 2)

Suggestions for marketing small timber. B. MacKaye. (B. 4)

Working plan for forest lands of Peninsula state park, Door county, Wisconsin. (B. 3)

## Wisconsin State normal school, Platteville

Potatoes and potato culture. F. T. Ullrich

Suggestions for the study of weeds in agriculture in the elementary schools. (B. v. 15, no. 4)

## Wisconsin State superintendent of public instruction, Madison

Wisconsin first-class rural schools; requirements for special state aid. C. P. Cary

## Woman's land army of America, 32 5th av, N.Y.

Organization of agricultural units

Women on the land. 3d ed

## Women's central committee on food conservation, 905 Locust st, St Louis

Patriotic food show; official recipe book containing all demonstrations given during patriotic food show, St Louis, Feb. 2-10, 1918. (10c)

Suggestions for food conservation

## Women's municipal league of Boston, Nottingham Chambers, Copley Square

Leaflets (5c) and slips (35c per hundred) on food and cookery topics, including menus

## Women's municipal league of Boston bulletin, Boston

Housing of foodstuffs in small provision stores, Boston. (B. v 8 no 4)

## Wyoming Board of sheep commissioners, Cheyenne

18th annual report, 1916

## Wyoming Dairy, food and oil department, Cheyenne

Concentrated feeding stuffs law

Pure seed law, chap. 110, S. L. 1913

13th annual report. (v. 2 no. 8)

## Wyoming State board of horticulture, Laramie

Licensed nurseries; war-time horticulture. (Special B. v. 1, no. 6)

## Wyoming State game warden, Lander

Game, bird and fish laws of Wyoming, 1917-1918

## Wyoming State veterinarian, Cheyenne

Live stock laws of Wyoming and regulations of state veterinarian



# \* Agricultural Index

A Cumulated Subject Index to Agricultural Literature, Including a  
Selected List of Periodicals, Bulletins, Reports and Pamphlets

1916—1918

**Abandoned farms.** See Farms, Worn-out

**Abattoirs.** See Slaughter-houses

## Aberdeen Angus cattle

Aberdeen Angus breeder's message. E. F. Caldwell. *il Breeder's Gaz* 72:1151 D 20 '17  
Aberdeen-Angus cattle and high prices. L. McWhorter. *il Breeder's Gaz* 73:201 Ja 31 '18  
Aberdeen-Angus cattle at the International. *Breeder's Gaz* 70:1112 D 14 '16  
Aberdeen-Angus cattle; the exportations to Australia. J. R. Macdonald. *il J Ag New Zealand* 13:479-81 D '16  
Aberdeen-Angus ideal. W. C. McGavock. *Breeder's Gaz* 72:426 S 20 '17  
Aberdeen-Angus in Britain. *Breeder's Gaz* 70:236 Ag 17 '16  
Aberdeen-Angus in Oklahoma. L. R. Kershaw. *Breeder's Gaz* 74:294 Ag 29 '18  
Aberdeen-Angus in the Canadian Northwest. K. McGregor. *Breeder's Gaz* 74:45 Jl 11 '18  
Aberdeen-Angus in the Northwest. O. V. Battles. *Breeder's Gaz* 73:756 Ap 11 '18  
Aberdeen-Angus in the South's war work. F. H. Higgins. *il Breeder's Gaz* 74:75 Jl 18 '18  
Aberdeen-Angus on their native heath. L. Ogilvy. *Breeder's Gaz* 73:1085 My 23 '18  
Angus breeder's experience and views. L. McWhorter. *il Breeder's Gaz* 72:369 S 13 '17  
Angus breeder's recollections. L. McWhorter. *Breeder's Gaz* 73:424 F 28 '18  
Angus cattle at Iowa state college. W. H. Pew. *Breeders' Gaz* 73:914 My 2 '18  
Angus cattle at the Oklahoma college. W. L. Blizzard. *il Breeder's Gaz* 73:972 My 9 '18  
Angus cattle demand strong in Scotland. A. Mowat. *Breeder's Gaz* 69:610 Mr 16 '16  
Angus cattle in the South. J. O. Rutherford. *Breeder's Gaz* 72:980 N 29 '17  
Angus families and herd management. W. C. McGavock. *Breeder's Gaz* 69:770 Ap 6 '16  
Angus making progress in Illinois. F. H. Higgins. *il O Judd Farmer* 64:567 Je 1 '18  
Angus on an old Scotch farm. L. Ogilvy. *Breeder's Gaz* 73:1198 Je 6 '18  
Angus progress in the Southeast. A. L. French. *Breeder's Gaz* 73:56, 106 Ja 10-17 '18  
Angus shoulders and flesh. L. Ogilvy. *Breeder's Gaz* 72:241 Ag 23 '17  
Angus steer all right. C. L. Taggart. *Nat Stock & F* 41:360 Jl 7 '17  
Background romance of Aberdeen-Angus. R. C. Auld. *Breeder's Gaz* 74:114 Jl 25 '18  
Beef making on eastern farms. *il Rural N Y* 77:271 F 23 '18

Beginnings of Aberdeen-Angus history. *Breeder's Gaz* 71:870 Ap 26 '17  
Breeding and feeding a champion steer. C. L. Taggart. *il Breeder's Gaz* 73:812 Ap 18 '18  
Breeding Angus feedlot stock. E. M. Wilson. *Breeder's Gaz* 73:812 Ap 18 '18  
Career of a noted Angus breeder. J. R. Barclay. *Breeder's Gaz* 74:184 Ag 8 '18  
Do Angus winners breed winners? J. Dvorak. *Breeder's Gaz* 73:654 Mr 28 '18  
Doddies in new-old land. A. L. French. *Breeder's Gaz* 73:374 F 21 '18  
Early Angus days. L. Ogilvy. *Breeder's Gaz* 73:1252 Je 13 '18  
Economic importance of Aberdeen-Angus cattle. W. A. Stewart. *J Bd Ag* 23:756-60 N '16  
Formation period of the Angus breed. L. Ogilvy. *Breeder's Gaz* 74:262 Ag 22 '18  
Hardy doddie. L. Ogilvy. *Breeder's Gaz* 72:1033 D 6 '17  
History-making Angus cow. J. R. Barclay. *il Breeder's Gaz* 71:1155-6 Je 7 '17  
Masculinity in Aberdeen-Angus bulls. L. Ogilvy. *Breeder's Gaz* 74:262 Ag 22 '18  
Master fitter of doddie steers. *il Breeder's Gaz* 73:1139-40 My 30 '18  
Performance record of Angus cattle. J. S. Goodwin. *il Breeder's Gaz* 70:1206 D 21 '16  
Priming the doddies. F. H. Higgins. *il Field* 11 28:495+ Jl '18  
Profit in Mercer Angus herds. O Judd Farmer 62:1 Ap 14 '17  
Recollections of the Aberdeen-Angus cattle trade. W. C. McGavock. *Breeder's Gaz* 69:553-4 Mr 9 '16  
Romance of the polled. R. C. Auld. *il Breeder's Gaz* 70:769-70 O 26 '18  
Shorthorns and Angus in Scotland. A. Mowat. *Breeder's Gaz* 74:222 Ag 15 '18  
Shoulders on Angus bulls. L. Ogilvy. *Breeder's Gaz* 72:548 O 4 '17  
Showing as a business-builder. O. V. Battles. *il Breeder's Gaz* 73:699-700 Ap 4 '18  
Tillyfour Angus victory in Paris. R. C. Auld. *Breeder's Gaz* 70:832, 1102 N 2, D 14 '16  
Two Aberdeen-Angus shrines. W. C. McGavock. *il Breeder's Gaz* 71:771 Ap 12 '17  
Value of good sires among the Angus. J. K. Wright. *il Mo Ag Bd B v* 14:53-9 S '16

See also Iowa Aberdeen Angus breeders' association

## Price lists

Angus sale records broken by Chas. Escher, jr., and Escher & Ryan sales. *Wallaces' F* 42:931 Je 15 '17  
B. C. Dove's Aberdeen Angus auction. *Breeder's Gaz* 71:1127 My 31 '17

\* **Explanation:** Subject headings are in boldface type. The magazine entry proper is formed of items in the following order: The title of the article; the author; the illustrations, plans, maps, etc.; the name of the magazine, abbreviated (the "List of Periodicals indexed" following the editorial page gives full name of magazine); the volume number and the paging, separated by a colon; the date. For example, an entry under Aberdeen Angus cattle, "Two Aberdeen-Angus shrines. W. C. McGavock. *il Breeder's Gaz* 71:771 Ap 12 '17" indicates that the illustrated article entitled "Two Aberdeen-Angus shrines" in *Breeder's Gazette*, Vol. 71, on page 771 of the issue for April 12, 1917, is on the subject of the Aberdeen-Angus breed of cattle.

Entries for occasional material are usually self-explanatory, and are marked with an asterisk when they first appear only. A checklist of the occasional pamphlet literature entered in the current issue will be found immediately preceding the main alphabet.

**Aberdeen Angus cattle—Price lists—Continued**

- Dispersion of Glencarnock Angus herd. Breeder's Gaz 74:162 Ag 1 '18  
 Donohoe's Angus make record average. Breeder's Gaz 73:1147 My 30 '18  
 Escher & Dalgely's Angus dispersion. Breeder's Gaz 71:1251 Je 21 '17  
 Escher & Ryan Angus at \$774. Breeder's Gaz 71:1211 Je 14 '17  
 Escher & Ryan Angus offerings. Breeder's Gaz 73:1263 Je 13 '18; il Field 11 28:584 Ag '18  
 Escher and Ryan Angus sales. Breeder's Gaz 69:877 Ap 20 '16  
 Lakeside Angus auction. Breeder's Gaz 69:435 F 24 '16  
 Rosenfeld's Angus average \$248. Breeder's Gaz 69:379 F 17 '16; Same. Wallaces' F 41:301 F 18 '16  
 South Omaha Angus bull sale. Breeder's Gaz 69:975 My 4 '16  
 Tudor Angus average \$683. Breeder's Gaz 71:1127 My 31 '17  
 Tudor Angus realize \$1,207. Breeder's Gaz 73:1148 My 30 '18

**Ability tests**

- Mind of the negro. J Heredity 8:153-4 Ap '17  
 Test for supermen. J Heredity 9:42-4 Ja '18  
 Testing criminal offenders; laboratory of the N.Y. police department. il J Heredity 7:255-61 Je '16

**Abnormalities (animals)**

- Horned horses. J. E. Miller. il J Heredity 8:303-5 Jl '17

See also Anchylosis; Polydactylism

**Abnormalities (plants)**

- Abnormalities in nicotiana. H. A. Allard. il Bot Gaz 65:175-85 F '18  
 Anomaly of wheat anthers. S. A. Anthony. il J Heredity 9:166-8 Ap '18  
 Avocado monstrosity. R. W. Hodgson. il J Heredity 8:557-8 D '17  
 Botanical paradox. D. F. Higgins. il J Heredity 7:306-8 Jl '16  
 Degenerate plants. B. D. Halsted. il J Heredity 8:270-6 Je '17  
 Explanation of the G-trees. W. R. Mattoon. il Am For 22:740 D '16  
 Freak of nature; *Ilia americana*. il Gard Chron Am 22:46 F '18  
 Further observations on chloranth in *drosera intermedia*. M. Levine. bibliog il Bot Gaz 62:389-99 N '16  
 Natural dwarfing. A. A. Hansen. il J Heredity 8:160-2 Ap '17  
 Note on the abnormality in the stem of *helianthus annuus*. K. Barratt. il Ann Bot 30:481-4 Jl '16  
 Notes on the Californian species of *trillium* L.; teratological variations of *trillium sessile* var. *giganteum* H. & A. T. H. Goodspeed. bibliog Cal Univ Pub Botany v 7, no 4 69-100p. 11-17pl '17 (30c)  
 Observations on the anatomy of teratological seedlings. H. S. Holden and D. Bexon. bibliog il Ann Bot 32:513-30 O '18  
 Odd plant malformations. il J Heredity 8:63-8 F '17

- On the distribution of abnormalities in the inflorescence of *spiraea* Vanhouttei. J. A. Harris. il Am J Bot 4:624-36 D '17

- On the proliferous form of the scape of *plantago lanceolata*. J. Doyle. il Ann Bot 30:353-5 Ap '16

- Some interesting trees of singular growth. il Am For 23:430 Jl '17

- Studies of teratological phenomena in their relation to evolution and the problems of heredity. O. E. White. bibliog il Am J Bot 1:23-36 Ja '14

- Teratology in iris flowers. E. Armitage. Gard Chron (Lond) 60:203 O 28 '16

- Variation of form in iris. A. J. Bliss. Gard Chron (Lond) 62:1 Jl 7 '17

**Aborigines. See Ethnology****Abortion**

- Accidental abortion in dairy cattle. W. F. Beacom. J Dept Ag Victoria 16:308-10 My '18

**Abortion, Infectious**

- Abortion among heifers. Ohio F 137:495 Ap 1 '16  
 Abortion disease. (*In Report*, 1916, p. 79-84) '17 Oregon state live stock sanitary board, Salem  
 Abortion disease in cattle. L. Van Es. N D Ag Exp C 18:1-19 '18  
 Abortion in dairy cattle. W. L. Williams. Am Vet M Assn J 51:348-63 Je '17  
 Abortion in pedigreed cattle. W. L. Williams. Hoard's D 51:540+, 582-3 Ap 21-28 '16  
 Abortion of dairy cattle. Ohio F 139:41 Ja 13 '17  
 Abortion treatment. Kimball's D F 14:512 Ag 15 '16  
 Abortion work in Kansas. Hoard's D 56:678 D 6 '18  
 Agglutination test as a means of studying the presence of bacterium *abortus* in milk. L. H. Cooledge. J Ag Research 5:871-5 F 7 '16  
 Avenue of invasion and the behavior of the infection of contagious abortion in the uterus; with discussion. W. L. Williams. Am Vet M Assn J 52:13-38 O '17  
*Bacillus abortus* (Bang) as an etiological factor in infectious abortion in swine. E. S. Good and W. V. Smith. J Bact 1:415-22 Jl '16  
 Bull as a disseminator of contagious abortion. F. B. Hadley and H. Lothe. Am Vet M Assn J 50:143-56 N '16; Abstract. Hoard's D 53:217 F 23 '17  
 Cause and occurrence of contagious abortion in cattle. E. C. Schroeder. Int Assn Dairy & Milk Inspep Rep 1915:139-45  
 Combating contagious abortion. M. J. Thompson. Kimball's D F 14:824 Ja 1 '17  
 Contagious abortion. Wallaces' F 41:246, 681 F 11, Ap 28 '16  
 Contagious abortion. (*In Report*, 1915-1916, p. 26-9) n.d. Live stock sanitary board, Helena, Mont.  
 Contagious abortion. G: La Grange. il Jersey B 37:388+ Mr 13 '18  
 Contagious abortion. D. F. Luckey. Mo Ag Bd Yearbook 1916:189-92  
 Contagious abortion. F. Torrance. Ag Gaz of Canada 4:463-5 Je '17; Same cond. J Ag (Quebec) 21:45 Ag '17  
 Contagious abortion, an agent in the depletion of dairy herds. W. A. N. Robertson. J Dept Ag Victoria 14:321-8 Je '16  
 Contagious abortion and sterility in cows; with discussion. W. L. Williams. N Y Ag Dept B 80:1566-72 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1566-72 '17  
 Contagious abortion discussion. W. A. Merigold, jr. Hoard's D 54:138 Ag 24 '17  
 Contagious abortion in a practitioner's standpoint. C: E. Cotton. bibliog Am Vet M Assn J 50:12-22 O '16  
 Contagious abortion in cattle. G. H. Conn. Kimball's D F 13:807 Ja 1 '16  
 Contagious abortion in cattle. F. B. Hadley. Breeder's Gaz 69:1206 Je 8 '16  
 Contagious abortion in cattle. H. C. Paine. Purdue Ag Ext Leaflet 67:1-4 '16  
 Contagious abortion in mares and cows. H. J. Frederick. il Utah Ag Exp C 28:1-18 '18  
 Contagious abortion in mares and joint-ill in foals—etiology and serum treatment. J. McFadyean and J. T. Edwards. Ag J of India 13:490-4 Jl '18  
 Contagious abortion infections of animals and man. G. A. Roberts. Am Vet M Assn J 51:81-5 Ap '17  
 Contagious abortion of cattle. Kan Ag Exp C 69:1-16 '18  
 Contagious abortion of cattle. A. Eichhorn and G: M. Potter. Wallaces' F 42:260-1 F 9 '17; Same. Farmers' B 790:1-12 '17  
 Contagious abortion of cattle. C. P. Fitch and W. L. Boyd. il Minn Ag Ext Spec B 28:1-12 '18  
 Contagious abortion of cattle. J. W. Kalkus. Western Wash Ag Exp B v 5:158-60 F '18  
 Contagious abortion of cattle. H. Welch. Mont Ag Exp C 61:41-8 '17; Same. Kimball's D F 16:70 F 1 '18  
 Contagious abortion of cattle. W. L. Williams. il Cornell Reading Course 131:163-84 '17



**Abortion, Infectious—Continued**

- Contagious abortion on the range. W. C. Barnes. *Breeder's Gaz* 72:41 JI 12 '17
- Control of infectious abortion. G. C. White. *Hoard's D* 55:724+ My 17 '18
- Control of tuberculosis and infectious abortion. V. A. Moore. *N Y Ag Dept B* 94:25-33 Ap '17
- Death and expulsion of the immature fetus as a standard for measuring the prevalence of cattle abortion. W. L. Williams. *Am Vet M Assn J* 50:29-40 O '16
- Diagnosis of infectious abortion of cattle with special reference to the intradermal abortin test. J. Reichel and M. J. Harkins. *il Am Vet M Assn J* 50:847-62 Mr '17
- Diet and abortion. P. A. Fish. *Am Vet M Assn J* 50:282-5 D '16
- Diseases interfering with reproduction in cattle and their significance to the state. W. L. Williams. *N Y Farms & Markets Dept Ag B* 105:158-72 Mr '18; Same. *Am Vet M Assn J* 53:697-710 S '18
- Diseases of dairy cattle. K. W. Stouder. *Wallaces' F* 41:583 Ap 7 '16
- Doctors disagree on contagious abortion. *Wallaces' F* 41:1279 S 29 '16
- Douching for contagious abortion. W. L. Williams. *Hoard's D* 51:527 Ap 14 '16
- Dreaded disease, abortion. G. M. Potter. *Jersey B* 37:1901-2, 1944, 1985+ N 13-27 '18
- Economic burden of sterility and abortion in cattle. W. L. Williams. *il Cornell Countryman* 15:393-4+ Ap '18
- Epizootic abortion. G. Moussu. *Am Vet M Assn J* 48:393-8 Ja '16
- Facts about abortion disease. E. C. Schroeder and W. E. Cotton. *J Ag Research* 9:9-16 Ap 2 '17
- Further investigations of the etiology and control of infectious abortion in mares. E. S. Good and W. V. Smith. *bibliog il Ky Ag Exp B* 204:337-96 '16
- Granular venereal disease and abortion in cattle. W. L. Williams. *U S Ag B* 106:1-57 '14
- Hints on contagious abortion in cattle. A. R. Young. *J Ag New Zealand* 16:329-30 Je '18
- Immunity to abortion. *Wallaces' F* 43:1722 N 22 '18
- Infectious abortion in cattle. W. Giltner and E. T. Hallman. *Mich Ag Exp C* 29:1-13 '16; Same. *Mich Ag Bd Rep* 1916:323-33
- Infectious abortion in cattle. L. F. Rettger and G. C. White. *bibliog Conn Storrs Ag Exp B* 93:199-248 '18; Excerpts. *Hoard's D* 56:16 JI 26 '18
- Infectious abortion in cows. F. M. Hayes. *Cal Ag Exp C* 183 4p '17
- Infectious abortion in cows. R. H. Williams. *Ariz Ag Exp Timely Hints* 115:1-8 '16
- Infectious abortion; nature and control. V. A. Moore. *il Field* 11 26:13-14 Ja '16
- Infectious or contagious abortion of cattle. O. L. Eckman. *N H Ag Ext C* 19:1-8 '16; Excerpts. *Hoard's D* 56:61 Ag 2 '18
- Keeping calves born of infected cows free of abortion bacilli. *Ohio F* 137:566 Ap 15 '16
- Large numbers of bact. abortus var. lipolyticus which may be found in milk. A. C. Evans. *J Bact* 2:185-6 Mr '17
- Latest on contagious abortion. O Judd Farmer 62:11 Ja 6 '17
- Mineral matter and abortion. A. T. Peters. *Kimball's D F* 16:389 My 15 '18
- More about bone meal for abortion. *Hoard's D* 51:18 Ja 28 '16
- Outlook for the control of cattle abortion. W. L. Williams. *Am Vet M Assn J* 49:199-217 My '16
- Present status of the abortion question; with discussion. A. Eichhorn and G. M. Potter. *Am Vet M Assn J* 50:295-320 D '16
- Protect buyers of dairy cows. O Judd Farmer 62:3 Ap 28 '17
- Rational and successful method of preventing abortion in cattle. A. T. Peters. *Am Vet M Assn J* 51:211-14 My '17
- Some facts about abortion disease. E. C. Schroeder and W. E. Cotton. *Am Vet M Assn J* 50:321-30 D '16

- Specific and non-specific action of rabbit blood serum in the complement fixation test (*J. Immunology* 2, no. 2 F '17); Summary. *Mich Ag Bd Rep* 1917:275-80
- Stopping a loss of \$20,000,000. R. Graham. *il Country Gent* 81:1470 Ag 5 '16
- Studies in infectious abortion in cattle. W. Giltner and others. *Am Vet M Assn J* 49:320-39 Je '16
- Studies on contagious abortion in mares. L. Cominotti. *Int R Sci & Prac Ag* 8,no 3:395-6 Mr '17
- Study of the milk in bovine infectious abortion. W. Giltner and others. *Am Vet M Assn J* 50:157-67 N '16
- Study of the presence of bacterium abortus (Bang) in milk. L. H. Cooledge. *bibliog Mich Ag Exp Tech B* 33:1-37 '16; Same. *Mich Ag Bd Rep* 1917:626-58
- Transmission of bacterium abortus (Bang) to new born calves through the ingestion of milk. I. F. Huddelson. *Mich Ag Exp Tech B* 32:1-22 '16; Same. *Mich Ag Bd Rep* 1917:607-24
- Treatment of animals affected with abortion. *Hoard's D* 55:1066 JI 19 '18
- Vaccination against infectious arthritis of foals due to b. abortus equi. J. B. Hardenbergh. *bibliog il Am Vet M Assn J* 50:331-49 D '16
- When cows lose calves. R. Graham. *Country Gent* 82:432 Mr 3 '17
- Abrasion (geology).** See Erosion
- Abscission.** See Plant cells and tissues
- Absorption of soils.** See Soil absorption
- Abstracts of title.** See Land titles
- Abutilon theophrasti.** See Velvet leaf
- Acacia arabica.** See Gum arabic trees
- Acacias**
- Acacia modesta, a hedge plant. E. Thompson. *il Ag J of India* 13:347-8 Ap '18
- Acacias. W. A. Pryal. *il Am Bee J* 58:273 Ag '18
- Acacias for cut flowers. *Gard Chron Am* 22:16 Ja '18
- Economic study of acacias. C. H. Shinn. *il U S Ag B* 9:1-38 '13
- Academic freedom**
- Academic freedom in the agricultural college. *il Ag Digest* 1:59 Je '16
- Acceptances**
- How I get cash from credit sales. J. Y. Beaty. *System on the Farm* 3:224-6 D '18
- Accident insurance.** See Insurance, Accident
- Accidents**
- See also First aid in illness and injury
- Accidents, Industrial**
- Serious warehouse accident of Merchants' refrigerating co. *N Y Prod R* 46:73 My 15 '18
- Accounting**
- Accounting and business practice in their relation to the marketing of grain. F. Robertka. *Coop Manager & F* 7:47-8 Ag '18
- Accounts and credit of retailers. W. K. Hardt. *Am Flor* 48:954 My 19 '17
- Cooperative organization business methods. W. H. Kerr and G. A. Nahstoll. *bibliog U S Ag B* 178:1-24 '15
- Extension work thru income tax. *Cornell Countryman* 15:521-2 Je '18
- Farm management club at North Lake. *Banker-F* 5:2-4 Ja '18
- Poultry accounts. Mrs G. R. Shoup. *Western Wash Ag Exp B v* 5:54-6 JI '17
- Review of Wisconsin farm management demonstration. D. H. Otis. *Hoard's D* 54:762-3 D '17
- Why the retail coal dealer should employ a modern accounting system. P. Beck. *Coop Manager & F* 7:94-5 Ag '18
- See also Agriculture—Accounting; Auditing; Cost accounting; Creameries—Accounting; Domestic finance; Farm bookkeeping; Fruit growers' associations—Accounting; Grain elevators—Accounting; Ice cream factories—Accounting; Inventories; Warehouses—Accounting

- Accounts, Collecting of.** See Collecting of accounts
- Acetanilld**  
Report on medicinal plants and drugs. W. O. Emery. Assn Offic Ag Chem J 2,no 1,pt1:59-75 My '16
- Acetic acid**  
Acetic acid and acetone from beets. Scientific Am (233 Broadway, N.Y. 10c) 118:223 Mr 9 '18  
\* Preparation of several useful substances from corn cobs. F. B. LaForge and C. S. Hudson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:925-7 N '18
- Acetylene lighting**  
Cost of acetylene lighting. L. D. Smith. Rural N Y 75:474 Mr 18 '16  
Installed acetylene lights. W: E. Curley. O Judd Farmer 62:3 Mr 31 '17
- Achimenes**  
Achimenes in the shade. Il Country Gent 83: 57 Mr 2 '18
- Achlya**  
Observations on an achlya lacking sexual reproduction. W: H. Weston. bibliog il Am J Bot 4:354-67 Je '17
- Acidosis in animals**  
Acidosis and cottonseed meal injury. C. A. Wells and P. V. Ewing. bibliog il Ga Ag Exp B 119:35-64 '16  
Acidosis (excess of acids) in omnivora and herbivora and its relation to protein storage. Int R Sci & Prac Ag 7,no 2:244 F '16
- Acids**  
Automatic acid elevator. Am Fert 49:70h Jl 6 '18  
See also names of acids, e.g. Amino-acids; Citric acid; Cyanuric acid; Lactic acid; Nitric acid; Phosphoric acid; Phytic acid; Sulfuric acid; Sulfurous acid
- Acids, Fatty**  
Determination of fatty acids in butter fat. E. B. Holland and J. P. Buckley, jr. bibliog J Ag Research 12:719-32 Mr 18 '18  
Flavor of Roquefort cheese. J. N. Currie. bibliog J Ag Research 2:1-14 Ap '14
- Acne**  
Acne. E. Mellen. il O Judd Farmer 63:18 D 15 '17
- Acorns**  
\* Acorn, a possibly neglected source of food. C. H. Merriam. il Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D.C. 25c) 34:129-37 Ag '18  
New method of germinating acorns for forest planting. J: W. Harshberger. il Am For 22:687-8 N '16  
Utilisation of acorns by alcoholic fermentation. Int R Sci & Prac Ag 9,no 1:112 Ja '18  
See also Feeding and feeding stuffs—Acorns
- Actinidia**  
Delicious fruits of actinidia. W. A. Murrill. Sci Am Sup (233 Broadway, N.Y. 10c) 85: 307 My 18 '18
- Actinomycetes**  
Actinomycetes of the soil. S. A. Waksman and R. E. Curtis. bibliog il Soil Sci 1:99-134 F '16  
Possible function of actinomycetes in soil. H. J. Conn. N Y State Ag Exp Tech B 52:1-11 '16; Same. J Bact 1:197-207 Mr '16  
Soil flora studies; actinomycetes in soil. H. J. Conn. N Y State Ag Exp Tech B 60:1-25 '17
- Actions at law**  
They went to law. Nat Stock & F 42:854 D 21 '18
- Adamson act.** See Eight-hour law, Railroad
- Adaptation (biology)**  
Man—an adaptive mechanism, by G: W. Crile. Review. il J Heredity 7:482-92 N '16
- Adkins, Charles, 1863-**  
Directing Illinois farm energies. O Judd Farmer 62:1 My 5 '17  
Portrait. Breeder's Gaz 71:915 My 3 '17
- Adoption**  
When we adopted her. C. Clinton. Country Gent 82:1622 O 20 '17
- Adrenalin**  
Purpura hæmorrhagica in the horse with addenda of allied affections. F: C. Mahon. Am Vet M Assn J 48:742-5 Mr '16
- Adulterations**  
See also Butter—Adulteration; Food adulteration and inspection
- Advertising**  
Ad in your local paper. S. R. Hall. Country Gent 81:50-1 Ja 8 '16  
Advertise to ease period of reconstruction. G: F. Lord. Am Fert 49:31-2 N 23 '18  
Advertising agricultural products. H: K. Hannah. Mass Ag Ed Yearbook 1916,pt2:49-60 '17  
Advertising and merchandising northwestern apples. R. C. Gano. Better Fruit 10:6-8 Je '16  
Advertising and selling baby chicks. J. A. Martin. Prog F 31:103 Ja 15 '16  
Advertising at New England fairs. A. W. Yates. il Am Bee J 56:129 Ap '16  
Advertising benefit to consumers. S. Sosland. Hoard's D 56:586 N 22 '18  
Advertising dairy products. il Creamery 5:15-19 F '17  
Advertising honey. J. Smith. il Am Bee J 58: 89 Mr '18  
Advertising; how the grower can use it as a busy business builder. L. W. C. Tutthill. Market Growers J 20:5-6 Ja 1 '17  
Advertising milk. C. B. Martin. Creamery 7: 38-9 My '18  
Advertising of honey. W. S. Pangburn. Am Bee J 57:340 O '17  
Advertising our products; with discussion. A. W. Brayton. Ill State Hort Soc Trans 1916:417-25 '17  
Advertising that brought 2,000 inquiries. H. C. Sheppard. il System on the Farm 1:292 O '17  
Advertising that must now be classed as dishonest. H. V. Tormohlen. Reliable P J 23: 775 O '16  
Advertising that sells garden truck. W. Covey. Country Gent 81:1750 S 30 '16  
Advertising that sold the apples. R. C. Gano. Fruit-Grower 27:345 Jl 1 '16  
Advertising the apple. F. C. Sears. il Country Gent 83:8 N 30 '18  
Advertising the apple. F. C. Sears. il Mass Ag Ext B 10:1-20 '16  
Advertising the necessity of the hour; how publicity built up large business under war conditions. C: N. Wheeler. Am Flor 51:3 Jl 20 '18  
Advertising your business. J. D. Gustin. il Am Bee J 57:268-9 Ag '17  
Advertising your wares. Market Growers J 22:366 My 15 '18  
Another advertising objection answered. C. Gano. il Am Bee J 58:50 F '18  
Art in advertising. A. F. Bonney. il Am Bee J 57:273 Ag '17  
Attracting the buyer. Jersey B 36:423 Mr 21 '17  
Break the silence and boost for eggs. P. T. Woods. Am P J 48:842-3 Ag '17  
Business through the post office. il Country Gent 81:571 Mr 11 '16  
Creating a demand for honey. T. P. Robinson. il Am Bee J 57:9 Ja '17  
Creating a demand for local produce by advertising. C. J. Cannon. Market Growers J 21:5 Jl 1 '17  
Crops sold by mail. R. Adams. il System on the Farm 2:210 Je '18  
Des Moines, Ia., boosts dairy products. C. M. Kennedy. O Judd Farmer 64:577 Je 1 '18  
Effective stallion advertising. C. M. McConnell. il Breeder's Gaz 70:1289 D 28 '16  
Featuring in the retail store. Am Flor 47:492 S 23 '16  
Finding customers. il System on the Farm 1:380-1 D '17  
Flower sentiment and publicity. E. G. Wilson. Am Flor 48:225 F 17 '17  
How advertising gets parcel post and express orders. M. J. Beall. il System on the Farm 1:331-3 N '17  
How advertising pays farmers; three experiences. R. C. Gano. Prog F 33:1087 O 5 '18



**Advertising —Continued**

- How advertising turned losses to profits. J. E. Cabaniss. *System on the Farm* 1:369 D '17
- How Canadian growers advertised successfully. *Market Growers J* 19:5 JI 1 '16
- How I made 600% a year from one sire. W. S. Corsa. *il System on the Farm* 3:140-2 O '18
- How I plan my advertising. A. E. Vander-vort. *System on the Farm* 1:232 Ag '17
- How to advertise livestock. *Prog F* 31:782 Je '17 '16
- It pays to advertise. E. M. Prewitt. *Hoard's D* 55:854 Je 7 '18
- Just the plain truth. J. O. Southard. *il Country Gent* 83:10 Mr 9 '18
- Live stock advertising. *Hoard's D* 51:505 Ap 14 '16
- Lower distribution costs. J. Comstock. *System on the Farm* 3:133-4 O '18
- Making sales through advertising. *System on the Farm* 1:292 JI '17
- Making sure of orders after the catalog is sent. *System on the Farm* 3:53-4 Ag '18
- Modern idea in milk advertising. J. Kahn. *Jersey B* 36:879 Je 6 '17
- My most successful sale catalog. J. L. Barber. *il System on the Farm* 2:175-6 My '18
- My plan for selling stock before it is born. J. Fisher. *il System on the Farm* 2:212-13 Je '18
- National publicity campaign for honey; suggestions of an advertising specialist. R. C. Gano. *il Am Bee J* 56:79-81 Mr '16
- National publicity for flowers. *Am Flor* 49: 641-4 O 13 '17
- Northwest apples to be advertised. R. C. Gano. *il Fruit-Grower* 27:438 O 1 '16
- One season's selling campaign that built a permanent trade. H. P. Demarest. *System on the Farm* 3:50-1 Ag '18
- Organization publicity. R. P. Eckstrom. *Am Flor* 48:228 F 17 '17
- Poultry advertising. M. G. Stearns. *Ohio F* 138:330 O 7 '16
- Publicity and its influence. J. H. Burdett. *Am Flor* 48:226-7 F 17 '17
- Publicity—good and bad. A. H. Harris. (*In* 8th annual report, 1916, p. 105-14) '17
- Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.
- Selling by poster. R. L. Baird. *System on the Farm* 2:91 Mr '18
- Skookum apple advertising increased. R. C. Gano. *il Green's Am Fruit Grower* 38:13 Ja '18
- Snatching profit from the jaws of waste. Creamery 4:11-13 Mr '16
- Something new about selling fruit. *Green's Fruit Grower* 36:15 JI '16
- Standardization must precede advertising. A. L. Tichane. *Hoard's D* 55:557 Ap 19 '18
- Story of a nationally advertised butter. C. Gano. *Hoard's D* 54:688 D 7 '17
- Successful poultry advertising. H. C. Sheppard. *Reliable P J* 25:719 O '18
- Successful selling plan. C. L. Opperman. *Country Gent* 81:1508 Ag 12 '16
- Tried plans for selling pure bred live stock. *System on the Farm* 3:56 Ag '18
- Wanted—renter for a farm. C. A. Willson. *Country Gent* 82:1485 S 29 '17
- What a dollar did for us. J. Moffett. *Country Gent* 81:1275 Je 24 '16
- When Aladdin rubs his lamp; power of advertising. H. S. K. Wilcox. *Hoard's D* 56:249 S 20 '18
- Why customers understand the value back of my goods. R. H. Whitten. *il System on the Farm* 3:10-12 JI '18
- Why farmers make money at a loss. H. L. Staples. *il Country Gent* 83:10-11+ O 5 '18
- Writing retail ads. *Am Flor* 51:396 S 14 '18
- See also* Billboards; Mail order business
- Advisory board of agriculture, South Australia.** *See* South Australia—Advisory board of agriculture
- Advisory committee of agricultural and live stock producers**
- Advisory committee of farmers.** *Power F* 27: 56 My '18

- Advisory committee reports its recommendations to departments. *Weekly N L* 5:6-7 JI 31 '18
- National agricultural and live stock advisory committee. *Reliable P J* 25:407-8+ Je '18
- Report of advisory committee of producers; regulations adopted regarding food production measures. *Weekly N L* 5:1-5 Ap 17 '18

**Advisory council for scientific and industrial research.** *See* Council for scientific and industrial research

**Adzuki beans.** *See* Beans

**Aegle sepiaria.** *See* Citrus trifoliata

**Aerometers**

- New and quick method of determining the age of eggs. *Int R Sci & Prac Ag* 7,no 11: 1698 N '16

**Aeroplane motors**

- Castor oil for airplanes. E. B. Reid. *il Country Gent* 83:6+ Mr 23 '18

**Aeroplanes**

- Eagles of war and doves of peace. W. B. Stout. *il Country Life* 34:27-39 JI '18
- Flying on wings of spruce. E. A. Sterling. *il Am For* 24:133-9 Mr '18
- Trucks and airplanes for parcel post. J. E. Pickett. *il Country Gent* 83:8-9+ Mr 9 '18
- Wood on the wing. B. Adams. *il Am For* 23: 583-9 O '17

**Aeroscopes**

- Methods of bacterial analyses of air. G. L. A. Ruehle. *bibliog J Ag Research* 4:343-68 JI '15

**Aesculus.** *See* Horse chestnut

**Afforestation.** *See* Forest planting

**Africa**

- See also* subhead Africa under Agriculture; Botany; Cotton; Dairying; Land tenure; Plants

**Africa, West**

- Land question in French West Africa. *Int R Ag Econ* 62:132-4 F '16

**African cherry orange.** *See* Citropsis

**Agar**

- Advantages of a carbohydrate medium in the routine bacterial examination of milk. J. M. Sherman. *il J Bact* 1:481-8 S '16
- Note on the preparation of agar agar culture media. C. L. Williams and H. P. Letton. *J Bact* 1:547-8 S '16
- Some bacteriological studies on agar agar. C. R. Fellers. *bibliog il Soil Sci* 2:255-90 S '16
- Testicular infusion agar—a sterilizable culture medium for the gonococcus. I. C. Hall. *bibliog J Bact* 1:343-52 My '16

**Agaricaceæ.** *See* Mushrooms

**Agarics.** *See* Mushrooms

**Agaves**

- California century plant. D. Cunningham. *il Country Life* 31:80 N '16
- Cultivation of agave sisalina. E. H. Heron. *Ag Gaz of New South Wales* 28:498-504 JI '17
- See also* Sisal hemp

**Aged.** *See* Longevity

**Agglutination test**

- Agglutination test as a means of studying the presence of bacterium abortus in milk. L. H. Cooleedge. *J Ag Research* 5:871-5 F 7 '16
- Studies relative to the apparent close relationship between bact. pertussis and b. bronchisepticus. N. S. Ferry and A. Noble. *J Bact* 3:193-208 My '18

**Agglutinins**

- Note on the preparation and use of agglutinine from beans. M. Dorset and R. R. Henley. *Am Vet M Assn J* 50:699-702 F '17

**Agricultural agents.** *See* County agents

**Agricultural associations.** *See* Agricultural societies

**Agricultural banks.** *See* Agricultural credit; Banks and banking; Federal farm land banks; Mortgage banks

**Agricultural bureau of New South Wales**

Reports and notices from branches. See monthly numbers of Agricultural gazette of New South Wales

**Agricultural bureau of South Australia**

Annual congress of the Agricultural bureau; a backward glance. J Dept Ag S Australia 22:44-5 Ag '18

Conference during 1918. J Dept Ag S Australia 21:646, 705-17, 797-808, 869-96; 22:119-27 Mr-Je, S '18

Reports of bureau meetings. See monthly numbers of the Journal of the Department of agriculture of South Australia

27th annual congress. J Dept Ag S Australia 20:484-91 Ja '17

29th annual congress, Adelaide, Sept. 9-11. J Dept Ag S Australia 22:233-9 O '18

Women's branches of the agricultural bureau. J Dept Ag S Australia 21:416-17 D '17

**Agricultural centers**

Give the farmer a real community. C. J. Galpin. Hoard's D 53:637 My 4 '17

New country community and what it stands for. C. J. Galpin. Ag Digest 1:293-5 F '17

See also Social centers

**Agricultural chemistry**

Chemistry in relationship to crop production. A. Smith. Gard Chron Am 22:211-12, 238-40 Ag-S '18

Free analysis of farm specimens. Rural N Y 77:695 My 18 '18

Limestone tester. C. G. Hopkins. il Ill Ag Exp C 185:1-12 '16

Optical method for the determination of malic and tartaric acids in the same solutions. J. J. Willaman. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:693-704 Ap '18

Report of committees on recommendations of referees. B. B. Ross. Assn Offic Ag Chem J 2,no 1, pt 1:41-57 My '16

Report of committees on the recommendations of referees. Assn Offic Ag Chem J 3: 59-88 My '17

Report of the division of chemistry for the year ending March 31, 1916. (In Experimental farms, 1916, v. 1, p. 101-85) 45c '17 Canada Ag

Report on determination of potash. T. D. Jarrell. Assn Offic Ag Chem J 3:107-21 My '17

Some things the chemist has accomplished for agriculture. F. P. Weaver. Penn State F 10:32-3+ F '17

Study of the sucrose variations in successive cane joints as they attain maturity with special reference to the death of the leaves. T. S. Venkataraman and K. Krishnamurti Row. Ag J of India Sci Congress No 1917: 117-24

Testing the things the nation needs. C. L. Alsberg. il Cornell Countryman 14:465-8 Mr '17; Same. il Purdue Ag 11:10-13 Ap '17; Same. il Penn State F 10:47-8+ Mr '17

Work of Pasteur and its influence; with special reference to its application to agriculture. G. P. Darnell-Smith. Ag Gaz of New South Wales 27:853-9; 28:8-12 D '16, Ja '17

See also Ammonification; Chemical reagents; Fertilization; Fertilizers; Manures; Nitrication; Phosphates; Plants; Chemical analysis of; Soils; Sulfofication; also Association of official agricultural chemists; Journal of association of official agricultural chemists

**Bibliography**

Agricultural chemistry; government publications for sale by superintendent of documents. Washington, D. C. (Price list 40-8th ed) 13p '16 Supt. of doc., Washington, D.C.

**Agricultural clubs**

Advantages of the club work; enlist the boys and girls. T. E. Browne. Prog F 31:539 Ap 15 '16

Age of agricultural club members in West Virginia. C. H. Winkler. School and Soc (Science Press, Garrison, N.Y. 10c) 7:299-300 Mr 9 '18

Agricultural club circular. il N C Ag Ext C 67:1-16 '18

Agricultural club guide. il Ga Ag Coll (Ext) C 73b:1-7 '18

Agricultural club guide. il Ga Ag Coll (Ext) C 73c:1-8 '18

Agricultural club guide. il Ga Ag Coll (Ext) C 74:1-8 '18

Agricultural club movement in rural schools. S. Laird. J Ag (Quebec) 21:17 Ag '17

Agricultural clubs for Filipino boys and girls; organization pamphlet. 32p il '17 Bur. of educ., Manila, Philippine Islands

Agriculture clubs in California. B. H. Crocheron. il Cal Ag Exp C 190:1-24 '18

Banker and livestock club. R. E. Hutton. il Banker-F 5:12 My '18

Bankers: make an investment in the country boy—it will pay. P. H. Mitchell. Banker-F 3:12 N '16

Boys' agricultural clubs. O. Kercher. il Ky Ag Ext C 46:1-51 '17

This circular contains the complete plan of organization, objects, rules, and plan of work for club members, giving directions for the raising of pigs, corn, poultry, dairy calves, baby beef, lambs, potatoes, soy beans, tobacco and cover crops. With this circular is furnished a Boys' agricultural club record book. 40p

Boys' and girls' agricultural and home clubs for Idaho. il Idaho Ag Ext B 15:1-16 '16

Boys' and girls' agricultural clubs. C. W. Clemmer. Prac F 112:341 S 15 '16

Boys' and girls' agricultural clubs; 1916 premium list. il W Va Ag Ext C 104:1-16 '17

Boys' and girls' club circulars. Maine Ag Ext C 32-36 '18

Subjects are: Member's report; Corn instruction; Potato instructions; Garden club instructions; Report form

Boys' and girls' club projects in gardening, home economics, and animal husbandry. C. A. Norcross. il Nev Ag Ext B 5:1-20 '16

Boys' and girls' club work. Ag Gaz of Canada 5:812-13 Ag '18

Boys' and girls' club work. Kimball's D F 16:609 O 15 '18

Boys' and girls' club work in Indiana. H. E. Abbott. il Purdue Ag 12:348-51 Mr '18

Boys and girls club work in Nevada; general plan of club work proposed for 1917. C. A. Norcross. Nev Ag Ext B 10:1-13 '16

Boys' and girls' club work in New Jersey. A. M. Hulbert. N J Ag Ext B v 1,no 16 19p '17

Boys' and girls' club work in the northern and western states. (In Cooperative extension work, 1916, pt. 2, p. 164-71) il '17 U S Ag

Boys' and girls' clubs. Ag Gaz of Canada 3: 826 S '16

Boys' and girls' clubs. Conn Ag Ext C 9:1-5 '16

Boys' and girls' clubs. A. C. Berger. il Penn State F 9:347-8 Mr '16

Boys' and girls' clubs. R. H. Emerson and others. il Mo Ag Ext Project Announcement no 9:1-21 '16

Boys' and girls' clubs. J. H. Kiteley. il Ag Gaz of Canada 4:1079-82 D '17

Boys' and girls' clubs. S. T. Newton. il map Manitoba Ag Coll B 15:1-71 '16

Boys' and girls' clubs and the public school. S. T. Newton. il Ag Gaz of Canada 4:981-3 N '17

Boys' and girls' clubs as community builders. E. C. Lindemann. Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917:634-7

Boys' and girls' clubs in agriculture and home economics in Massachusetts. School Review (Univ. of Chicago Press, Chicago 20c) 24:765-6 D '16

Boys' and girls' clubs in the provinces. Ag Gaz of Canada 5:896-902 S '18

Boys' and girls' clubs instruction sheets. W Va Ag Ext Circulars '18

Subjects are: Corn, Tomatoes, Potatoes, Pigs, Poultry, Stock judging, Buttermaking, Sewing



**Agricultural clubs** --Continued

- Boys' and girls' demonstration work in Arkansas. W. J. Jernigan. il Ark Ag Ext B 1:1-16 n.d.
- Boys and girls garden and canning clubs in Minnesota in 1916. il Minn Hort 45:383-91 O '17
- Boys' and girls' industrial clubs. Ore Ag Ext B 219-280 '17-'18
- Club projects are: Corn growing; Potato growing; Vegetable gardening; Poultry raising; Pork production; Sheep raising; Dairy herd record-keeping; Baking; Canning; Sewing; Food preparation; Farm and home handicrafts; Rural home beautification; Belgian hare
- Boys' clubs in the South. (In Cooperative extension work, 1916, pt. 2, p. 25-8) '17 U S Ag
- Club work as a factor in community development. W. B. Krueck. il Purdue Ag 13:32-3 O '18
- Club work in Indiana. Z. M. Smith. Purdue Ag 12:17-18 O '17
- Club work in Pulaski county. I. J. Mathews. il Purdue Ag 12:423-5 Ap '18
- Corn-growing and pig-raising clubs. G. D. Theelen. Am City (Tribune bldg., N.Y. 35c) 18:349-51 Ap '18
- Correlating agriculture with the public-school subjects in the Southern states. C. H. Lane and E. A. Miller. il plan U S Ag B 132:1-41 '15
- Crop club products in country boy character. C. E. Ackley. il Rural Manhood 9:165-6 Ap '18
- Dairy helps for rural schools and club members: questions and answers. T. W. Moseley. Okla Ag Ext C 56:1-16 '17
- Dairy rally at Martin, Tennessee. Prog F 31:767 Je 10 '16
- Effect of home demonstration work on the community and the county in the South. B. Knapp and M. E. Creswell. il U S Ag Yearbook 1916:251-66; Same. Separate 710
- 800,000 enrolled. Weekly N L 5:4 D 26 '17
- Enlist your boys and girls in club work. T. E. Browne. Prog F 31:607 Ap 29 '16
- Exhibits and contests for boys' and girls' clubs. R. H. Emberson. il Mo Ag Ext C 18:1-20 '17
- Facts about boys agricultural clubs. W. J. Green. Okla Ag Ext C 64:1-7 '17
- Fine work by Arkansas agricultural clubs. Prog F 33:1094 O 5 '18
- Foster interest in livestock by helping to form calf, pig and sheep clubs. il Banker-F 4:6-7 My '17
- Four-H fair at Springfield. R. F. Wilson. il St Nicholas (353 4th av, N.Y. 25c) 45:622-9 My '18
- Girls' and boys' club work—a manual for rural teachers. M. E. Creswell. il Ga Ag Coll (Ext) B 101:1-52 F '16
- Girls' canning clubs, garden clubs and poultry clubs. L. F. Neale. il Tex Ag Ext B B-43:1-8 '18
- Girls' clubs. S. R. Guseman. il W Va Ag Ext C 175:1-15 '18
- Growing citizens on corn stalks. J. Eby. il Country Gent 83:6-7 Je 8 '18
- Guide for leaders of boys' and girls' clubs. L. S. Parke. il Ariz Ag Ext C 7:1-22 '16
- Hand book for boys agricultural clubs. J. E. Swaim. il Okla Ag Ext C 74:1-55 '18 (rev.)
- Hand book for boys' agricultural clubs with suggestions to teachers; and bibliography of bulletins and books. J. E. Swaim. il Okla Ag Ext C 43:1-80 '17
- High school agricultural club. E. G. Brown. il Kimball's D F 15:439 Je 15 '17
- Hog and cattle men have boys' clubs. Am Sheep B & W 37:205-6 Ap '17
- Home makers' clubs. L. A. Jenkins. Hampton Leaflets 7,no 8:1-10 '16
- How the curriculum may better meet present day social needs. W. D. Hurd. Education (120 Boylston st., Boston 35c) 37:548-56 My '17
- Industrial club work; extension bulletins 131-180. Ore Ag Ext B 131-180 '16
- Club project leaflet subjects are: Corn, Potatoes, Gardens, Poultry, Pork, Dairy herd record keeping, Baking, Canning, Sewing, Farm-home handicraft, Rural home beautification
- Industrial club work of Oregon boys and girls, 1917. 48p il '17 Oregon State dept. of educ., Salem
- Instructions to local leaders of boys' and girls' home garden and canning clubs. G. E. Farrell. (Doc. 59) 6p il U.S. States relations service, Washington, D.C.
- Invest in the country boy. P. H. Mitchell. il Ag Digest 1:297 F '17
- Iowa boys' and girls' clubs. il Greater Iowa (Iowa Dept. of agriculture, Des Moines) 10:3-8 F '18
- Includes: Pig club activities in Iowa, by E. C. Bishop; Special features of the boys' and girls' club work at the 1917 Iowa state fair, by E. N. Hopkins; Educational philosophy of the boys' and girls' club work, by O. H. Benson; Baby beef club in Iowa last year; Champion canning club at the 1917 Iowa state fair, by Mrs. A. E. Albert; Iowa's junior food army, by E. C. Bishop; Advice to young market gardeners, by H. Field; How Iowa club winners won prizes, by H. R. O'Brien
- Manitoba inspectors' committee—boys' and girls' clubs. R. Fletcher. Ag Gaz of Canada 5:269-71 Mr '18
- Manual for boys' and girls' club work. il Maine Ag Ext B 116:1-30 '18
- Molding tomorrow's farmers in Indiana. W. B. Krueck. Hoard's D 55:158 F 15 '18
- New system of education for farm boys and girls in Oregon. N. C. Maris. il Breeder's Gaz 70:9-10 Jl 6 '16
- Ohio corn tour. Ohio F 140:446 N 17 '17
- Organization and direction of boys' and girls' clubs. il Ill Ag Ext C 5:1-47 '17
- Organization and working of boys' and girls' agricultural clubs in the United States. Int R Ag Econ 71:1-12 N '16
- Plans for helping boys' and girls' pig, poultry, baby beef, and canning clubs, as worked out for the Jackson board of trade, of Jackson, Mississippi. (In Agricultural extension, p. 75-8) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Plans for 1918 home demonstration clubs and poultry clubs. Okla Ag Ext C 62:1-8 '17
- Plans for 1919 home demonstration clubs and poultry clubs. il Okla Ag Ext C 82:1-8 '18
- Report of agricultural club work for 1917. N C Ag Ext Farm-News v 3,no 51 1p '18
- Reports from a few boys' and girls' farming clubs in the South. il American City—Town and County ed (Tribune bldg., N.Y. 35c) 16:348-9 Ap '17
- Standard requirements for boys' and girls' club work. L. A. Carlisle. il diag N H Ag Ext C 16:1-14 '16
- Step forward in education. G. E. Peabody. N Y State Fruit Growers' Assn Pro 1918: 97-101
- Suggestions for boys' and girls' exhibits. M. Danziger. (Doc. 55) 11p il '17 U.S. States relations service, Washington, D.C.
- 3d annual report on boys' and girls' club work in Massachusetts. W. R. Hart. Mass Ag Bd Yearbook 1916,pt 1:195-205 '17
- Training the head, hand and heart. J. A. Linke. il Breeder's Gaz 70:1194-5 D 21 '16
- Uncle Sam's junior food army in Iowa. H. R. O'Brien. Wallaces' F 43:75+ Ja 18 '18
- Vacation-club work. J. H. Beveridge. (In Pro., Nat. educ. assn., 1916, p. 1060-3) \$2 '16
- D. W. Springer, sec., Ann Arbor, Mich.
- Vegetable-gardening contest. 10 leaflets il Philippine Bur. educ., Manila
- Instructions in garden making
- What boys' and girls' clubs can do to win the war. T. A. Erickson. Wis Hort Soc Rep 48:112-16 '18
- What the banker's cooperation means to club boys and girls. J. H. Greene. il Banker-F 4:14 S '17
- When boys have a chance. L. L. Rummell. il Ohio F 142:289+ S 28 '18

**Agricultural clubs—Continued**

Wonderful Four-H clubs. T. Worthington. il St Nicholas (353 4th av, N.Y. 25c) 45:547-52 Ap '18  
Work of boys in South. Weekly N L 5:8 D 26 '17

Young farmer's country club of Mercer county. C. G. McBride. il Penn State F 9: 295-6+ Ja '16

See also Baby beef clubs; Bee clubs; Calf clubs; Canning clubs; Community clubs; Corn clubs; Cotton clubs; Dairy clubs; Grain clubs; Live stock clubs; Pig clubs; Poultry clubs; Sheep clubs; Sorghum clubs

**Programs**

Program and suggestions for demonstration club day to be observed in Oklahoma rural schools. Nov. 2, 1917. J: E. Swaim. Okla Ag Ext C 57:1-8 '17

**Agricultural college clubs**

Agricultural college clubs. Ag Gaz of Canada 5:587-8 Je '18

**Agricultural college farm gardens**

Second report on the university farm garden. A. L. Dacy. il W Va Ag Exp B 156:1-22 '16

**Agricultural colleges**

Academic freedom in the agricultural college. il Ag Digest 1:59 Je '16

Agricultural colleges in the United States, including only institutions established under the land-grant act of July 2, 1862. (In Agricultural extension, p 54-6) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

American college of agriculture. F. B. Mumford. (In Pan American scientific congress Pro., 1915, v. 5, p. 357-9) '17

Amount of agricultural engineering work offered in agricultural colleges. A. H. Gilbert. Am Soc Ag Eng Trans 10, no 1:101-4 '17

Attendance at the agricultural colleges as affected by the war. Exp Station Rec 37:701-8 D '17

College training for the back-to-the-lander. D. Dean. Rural N Y 76:31 Ja 13 '17

Contemplations on the course in agriculture. Penn State F 9:374 Ap '16

Correlation of the college of agriculture with the other colleges of the state. A. Vivian. Assn Am Ag Coll & Exp Pro 1915:130-4

Departmental organization in agricultural teaching. F: H. Blodgett. School and Soc (Science Press, Garrison, N.Y. 10c) 6:668-72 D 8 '17

Federal laws, regulations, and rulings affecting the land-grant colleges of agriculture and mechanic arts. 19p '16 U. S. Bureau of educ.; 5c Supt. of doc., Washington, D.C.

Field and influence of the agricultural college. il Purdue Ag 10:13-14 Mr '16

Is your boy going to college? W. H. Roberts. Country Gent 81:1572 Ag 26 '16

Ohio idea in cooperative education. A. Vivian. Nat Stock & F 41:460 Ag 11 '17

Place of mechanic arts in land-grant institutions. R. A. Pearson. Assn Am Ag Coll & Exp Pro 1915:135-40

Preparedness. J. H. Skinner. Purdue Ag 11: 11-12 My '17

Qué preparación deberá requerirse para admitir alumnos en los colegios de agricultura nacionales y del estado? B. H. A. Groth. (In Pan American scientific congress Pro., 1915, v. 5, p. 569-74) '17

Relation of the Bureau of education to the agricultural colleges. S. P. Capen. Assn Am Ag Coll & Exp Pro 1915:140-50

Student labor on New York farms; with discussion. A. C. King. N Y State Fruit Growers' Assn Pro 1916:298-310

Teaching of rural sociology; particularly in the land-grant colleges and universities. D. Sanderson. Am J Sociology (Univ. of Chicago Press, Chicago 50c) 22:433-60 Ja '17

To the Penn State farmers. R. L. Watts. Penn State F 10:137 O '17

Work of state universities and colleges and the free educational advantages they offer to the farmer. H. A. Morgan. (In Agricultural extension, p 60-4) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

See also names of state colleges; also Alberta university—College of agriculture; British Columbia college of agriculture; Hampton normal and agricultural institute; Longerenong agricultural college; Macdonald college; Ontario agricultural college; Roseworthy agricultural college; also Association of American agricultural colleges and experiment stations

**Administration**

Report of the committee on college organization and policy, including tentative outlines of a plan for study, and a bibliography. Assn Am Ag Coll & Exp Pro 1915:104-23

**Courses of study**

Coordination of courses in animal husbandry. C: S. Plumb. Am Soc Animal Production Pro 1915-1916:70-6 '17

Curriculum. W. C. Coffey. Am Soc Animal Production Pro 1915-1916:82-93 '17

Education for the baccalaureate degree as administered in agricultural colleges. A. C. True. (In Pan American scientific congress Pro., 1915, v. 4, p. 80-8) '17

Teaching breed history to advanced students. H. W. Mumford. Am Soc Animal Production Pro 1915-1916:252-9 '17

Teaching drawing to agricultural students. F. W. Ives. Am Soc Ag Eng Trans 11:159-63 '18

Teaching the value of the fundamental sciences to students in animal husbandry. E. S. Savage and L. A. Maynard. Am Soc Animal Production Pro 1915-1916:174-7 '17

Value of the fundamental sciences in teaching and in investigation in animal husbandry. E. S. Savage. Am Soc Animal Production Pro 1915-1916:77-81 '17

Vocational teachers for secondary schools. C. D. Jarvis. (B. 1917, no. 38) 85p '17 U.S. Bur. of educ., Washington, D.C.

**Directories**

Agricultural colleges in the United States. See Yearbooks of the Department of agriculture  
List of workers in subjects pertaining to agriculture and home economics, 1917-1918; pt. 1, United States department of agriculture; pt. 2, State agricultural colleges and experiment stations. 68,89p '18 U S Ag

**Laws**

Federal legislation, regulations, and rulings affecting agricultural colleges and experiment stations. 56p '17 U.S. States relations service, Washington, D.C.

**Length of course**

Attention, Iowa boys and girls. F. W. Beckman. Hoard's D 54:386 O 12 '17

**Short courses**

Does education pay? Hoard's D 56:549 N 15 '18

How the short course helps. C: L. Hill. Hoard's D 54:455 O 26 '17

Short course instruction in gas engines and tractors. L. F. Seaton. Am Soc Ag Eng Trans 10,no 2:146-9 '17

Short courses for farmers and farm women January 2-12, 1918. il Ga Ag Coll B 143:1-20 '17

Summer courses at Georgia state college of agriculture, 1916. Ga Ag Coll (Ext) C 26 6p '16

Winter short courses in agriculture, Jan. 7 to March 8, 1918. W Va Univ (Morgantown) B 18, no 3:1-11 Ja '18

**Agricultural colonies**

Giving the new settler a lift; an analysis of the proposed state aid to model colonization in California. D: P. Barrows. Sunset (San Francisco 15c) 38:20-1 Mr '17

Hand-me-down farms. Sunset (San Francisco 15c) 38:16 Mr '17



**Agricultural colonies—Continued**

- Italy; care of children of peasants killed in the war. *Int R Ag Econ* 63:53-7 Mr '16
- Land for Britain's fighting men. *Breeder's Gaz* 70:144 Jl 27 '16
- Land settlement for sailors and soldiers. *Gard Chron (Lond)* 59:111-12, 116 F 26 '16
- Land settlement for sailors and soldiers. *J Bd Ag* 22:1166-72 F '16
- New land settlement policy. *Independent* (119 W. 40th st., N.Y. 10c) 89:435-6 Mr 12 '17
- Redistribution of the labor now employed in producing war supplies. *H. H. Lund, Am Econ Review* (Ithaca, N.Y. \$1.25) 5:sup238-50 Mr '17
- Salvation army holdings at Boxed. *J Bd Ag* 23:136-9 My '16; Same. *Int R Ag Econ* 71:132-5 N '16
- Settlements for British soldiers. *plan Survey* (112 E. 19th st., N.Y. 10c) 38:171 My 19 '17
- See also Military agricultural colonies

**Bibliography**

- Brief list of references on state and municipal farm colonies. *U. S. Library of congress*. 3p '16
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)
- Agricultural colonies (correctional)**
- Establishing penal farm colonies as a business proposition. *L. A. Halbert, Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:601-3
- Industrial farm system in Nova Scotia. *E. M. Armstrong, Ag Gaz of Canada* 3:434 My '16
- Industrial farm system in Quebec. *H. Nagant, il Ag Gaz of Canada* 3:623-7 Jl '16
- Industrial farm system in the provinces. *il Ag Gaz of Canada* 3:341-5 Ap '16
- Loi concernant les colonies pénitenciaires agricoles au Canada. *Int Yearbook Ag Leg* 1916:832-3 '17
- Municipal correction farms. *E. L. Scott, il Am City (Tribune bldg., N.Y. 35c) 15:623-30 D '16*
- Prison walls without a prison; a plan for restraining and reforming offenders in farm villages. *W. R. George, plan Survey* (112 E. 19th st. N.Y. 25c) 39:120-3 N 3 '17
- \* Recodification of the laws of Illinois on public welfare. *E. C. Dudley, J Criminal Law* (819 Land Title bldg., Philadelphia 75c) 9:123-8 My '18
- Time to deal with vagrancy. *A. Cleland, il Survey* (112 E. 19th st., N.Y. 10c) 37:268-9 D 9 '16
- What penal farm colonies can contribute toward the solution of the prison labor problem; with discussion. *C. E. Talkington, Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:603-7
- See also State farms

**Agricultural colonization**

- Acquisition of small holdings by military pensioners in France. *Ag Gaz of Canada* 5:1195 D '18
- After-war settlement and employment of ex-service men in the oversea dominions. *Review, Ag J of India* 12:174-6 Ja '17
- Agrarian reorganization. *New Republic* (421 W. 21st st, N.Y. 10c) 13:333-4 Ja 19 '18
- \* Colonization by ex-service men in England. *S. Zimand, Public* (122 E. 37th st, N.Y. 10c) 21:1429-31 N 23 '18
- Colonization of canal lands in the Punjab. *H. L. Van Burren, Int R Ag Econ* 76:101-3 Ap '17
- Colonisation of the region at the mouth of the Amur. *Int R Ag Econ* 64:128-9 Ap '16
- Colonization operations of the Canadian Pacific railway company. *A. Cameron, (In T. Adams, Rural planning and development, p. 261-2) '17 Comm. of conservation, Ottawa, Canada*
- Co-operative colonization in Palestine; Zionist movement. *Int R Ag Econ* 70:83-7 O '16
- Credit for colonization in Algeria. *Int R Ag Econ* 75:57-62 Mr '17
- Cut-over lands. *J. T. Liegel, Rural N Y* 77:1347 D 7 '18

- Dawn of a new constructive era, being the full and complete report of the Cut-over land conference of the South held at New Orleans, La., April 11-13, 1917. 244p \$2.50 '17
- Southern pine assn., New Orleans, La.
- Distribution of landed property and home colonisation in Germany. *Int R Ag Econ* 63:124-5 Mr '16
- \* Economics of land settlement. *A. Johnson, New Repub* (421 W. 21st st, N.Y. 10c) 16:306-8 O 12 '18
- Empire settlement committee's report. *J Bd Ag* 24:641-6 S '17
- Erythrea; land tenure and colonization. *bibliog Int R Ag Econ* 74:67-88 F '17
- Extending agriculture after the war. *Wallaces' F* 43:1036 Jl 12 '18
- \* Farm allotments and farm laborers' allotments in the Durham state land settlement. *7p il plans '18 Cal. State land settlement bd., Sacramento*
- Farming his own. *E. Mead, il Sunset (San Francisco 15c) 39:26-7 S '17*
- \* Farms for returned soldiers. *F. K. Lane, il map Sci Am* (233 Broadway, N.Y. 10c) 119:372-3 N 9 '18
- \* Farms for the soldiers when they come back. *E. Mead, il plans World's Work* (Garden City, N.Y. 35c) 37:61-7 N '18
- Formation of agricultural colonies for the Indians. *Int R Ag Econ* 73:123-4 Ja '17
- How finance settlers on farm lands? *World's Work* (Garden City, N.Y. 25c) 35:361-2 F '18
- \* Information for landowners. *(C. 1) 4p '17 Cal. State land settlement bd., Berkeley*
- Interior colonization and the progress of agriculture in Korea. *Int R Ag Econ* 78:75-9 Je '17
- Interior colonization in California. *Ag Gaz of Canada* 5:209-12 F '18
- \* Land for the returned soldier. *A. Johnson, New Republic* (421 W. 21st st, N.Y. 10c) 16:218-20 S 21 '18
- Land settlement and reconstruction. *Survey* (112 E. 19th st, N.Y. 25c) 40:405-6 Jl 6 '18
- Land settlement board. *M. Smith, Ag Gaz of Canada* 5:893-4 S '18
- \* Land settlement community. *A. Johnson, New Republic* (421 W. 21st st, N.Y. 15c) 17:11-13 N 2 '18
- \* Land settlement for ex-service men. *S. Zimand, Current History M—N Y Times* (Times Square, N.Y. 25c) 9,pt 1:318-21 N '18
- Land settlement for returned soldiers in Ontario. *Ag Gaz of Canada* 4:306 Ap '17
- \* Land settlement for soldiers in Australia. *Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:691-4 O '17*
- Land tenure and colonization. *bibliog Int R Ag Econ* 75:94-115 Mr '17
- Lesson from Australia; her systems of land settlement for the returning soldier. *B. Lasker, Survey* (112 E. 19th st, N.Y. 10c) 40:313-15 Je 15 '18
- Libya (Tripoli and Cirenaica) land system and colonization. *Int R Ag Econ* 80:66-78 Ag '17
- Loi concernant l'acquisition et l'administration de terres par l'Etat en vue de créer des colonies expérimentales de petites tenures; visant à étendre les pouvoirs d'acquisition et d'administration des terres par certains départements gouvernementaux en vertu de la loi de 1909 relative au fonds pour le développement économique et l'amélioration des routes, et visant aussi d'autres fins s'y référant en Grande Bretagne et en Irlande. *Int Yearbook Ag Leg* 1916:1107-11 '17
- Loi concernant la colonisation par les combattants blessés en Allemagne. *Int Yearbook Ag Leg* 1916:1104-6 '17
- Loi modifiant la loi de 1915 concernant la colonisation des terres de la couronne en Australie par les soldats congédiés. *Int Yearbook Ag Leg* 1916:1111-12 '17
- Loi n. 16 portant amendement aux lois n. 15 de 1912 et n. 26 de 1915 sur la colonisation dans les états libres du Transvaal et de la République de l'Orange. *Int Yearbook Ag Leg* 1916:1122-5 '17

**Agricultural colonization—Continued**

- Loi n. 21 portant des dispositions pour la colonisation des terres domaniales ou de terres acquises en vertu des lois sur la colonisation intérieure par des soldats congédiés en Australie. *Int Yearbook Ag Leg* 1916:1112-16 '17
- Million farms for soldiers. J: R. McMahon. *il Country Gent* 83:7-8 N 9 '18
- New colonization scheme; the Crosser bill. *Country Gent* 81:1841 O 14 '16
- \* Other countries busy with farms for soldiers plan. *Business Digest* (241 W. 37th st, N.Y. 15c) 22:92 O 15 '18
- Planning for the future; land settlements for the returned soldier. Bellman (118 S. 6th st, Minneapolis, Minn. 10c) 24:679-80 Je 22 '18
- Post-war settlement of soldiers and imperial migration. C. G. Wade. *19th Century* (249 W. 13th st, N.Y. 50c) 82:1156-7 D '17
- Private agricultural colonisation in Paraguay. *Int R Ag Econ* 62:135-7 F '16
- Private colonization of the land. R: T. Elv. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:522-48 S '18
- \* Putting two and two together. F. K. Lane. *Independent* (119 W. 40th st, N.Y. 10c) 96:121 O 26 '18
- Ready-made farms; California is putting settlers on raw land and helping them to make good. R. E. Jones. *il plans Country Gent* 83:12-13 J1 6 '18
- Redistribution of the labor now employed in producing war supplies. H. H. Lund. *Am Econ Review* (Ithaca, N.Y. \$1.25) 7:sup238-50 Mr '17
- \* Rejuvenation of rural life. B. Greenall. *Contemporary R* (249 W. 13th st, N.Y. 50c) 114:453-6 O '18
- \* Report of the Commission on land colonization and rural credits of the state of California, 1916. 120p '16 The commission, Sacramento, Cal.
- Returned soldiers and land settlement; Land settlement and after-war employment problems, by J. H. T. Falk. (*In* T: Adams. *Rural planning and development*, p. 207-16, 268-70) '17 *Comm. of conservation*, Ottawa, Canada
- \* Secretary Lane's program. *Public* (122 E. 37th st, N.Y. 10c) 21:1287-9 O 12 '18
- Securing settlers for private irrigation projects. H. G. Shedd. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 518-24) '17
- Settlement of ex-service men on the land. A. D. Hall. *J Bd Ag* 25:375-7 O '18
- Settlement of ex-soldiers in Canada. *J For* 15:1070-1 D '17
- Settlements that do not settle. *Public* (122 E. 37th st, N.Y. 10c) 21:849-51 J1 6 '18
- \* Soldier, the worker, and the land's resources. B. Mackaye. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:48-56 Ja '18
- \* Soldiers' settlement in Canada. *New Statesman* (10 Great Queen st, Kingsway, London, W.C. 6d) 11:447-9 S 7 '18
- Supervising commercial colonization. M. Loeb. (*In* Nat. conf. on marketing and farm credits, 1916, p. 146-54) \$2 '17 C. W. Holman, sec., Madison, Wis.
- What should be done for the settler. I. D. O'Donnell. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 466-8) '17
- When the boys come home; Queensland points to the way to solve some problems. E. Shirley. *il Sunset* (Sunset bldg., San Francisco 15c) 41:28 Ag '18
- Work of the Royal colonisation commission for the provinces of West Prussia and Posen. *Int R Ag Econ* 64:118-23 Ap '16
- Would have guidance for settlement of idle lands. *Weekly N L* 6:1 D 18 '18
- See also California—Land settlement board, State; Washington state land settlement association
- Agricultural conference, St Louis, 1917**  
Conference on agricultural situation, St Louis, April 10-11, 1917. *Hoard's D* 53:568+ Ap 20 '17
- Houston confers with editors. *Kimball's D F* 15:313 My 1 '17
- Plans for increasing and conserving the nation's food supply. J. F. Duggar. *Prog F* 32:585 Ap 28 '17
- Program for food production and conservation. *Weekly N L* 4:1-4 Ap 25 '17
- Question of food supply. *N Y Prod R* 43:1016 Ap 18 '17
- St Louis war conference. *Breeder's Gaz* 71:829 Ap 19 '17
- Agricultural contests**  
Acre profit competitions; feeding hogs for profit competitions. C. F. Bailey. *il Ag Gaz of Canada* 4:136-9 F '17
- Acre profit competitions in 1915. C. F. Bailey. *Ag Gaz of Canada* 3:141-4 F '16
- Agricultural merit competition, 1917. *J Ag* (Quebec) 21:50 O '17
- Be fair with the boys. *Wallaces' F* 41:209 F 11 '16
- Be fair with the boys; comment. W. E. Vapelon. *Wallaces' F* 41:449 Mr 17 '16
- Boys' and girls' club contests. *Ag Gaz of Canada* 4:476-83 Je '17
- Boys' and girls' competitions. J: G. Rayner. *Ag Gaz of Canada* 5:507 My '18
- Boys' and girls' contests. *Ohio F* 137:511 Ap 1 '16
- Boys' steer feeding contest. M. C. Thomas. *il Ohio F* 138:382 O 21 '16
- Development of the farm contest work in Wisconsin. D. H. Otis. *Hoard's D* 51:804 Je 9 '16
- Exhibits and contests for boys' and girls' clubs. R. H. Emberson. *il Mo Ag Ext C* 18:1-20 '17
- Rural education associations. *Ag Gaz of Canada* 3:462-5 My '16
- Waldo Thomas again champion. *O Judd Farmer* 61:12 O 7 '16
- See also Agricultural clubs; Bread-making contests; Cheese contests; Corn contests; Cow contests; Milk contests; Pig contests; Plowing contests; School fairs; Standing crop competitions; Swine marketing contests; Turnip contests
- Agricultural cooperative credit associations**  
Recent tendencies in co-operation. J. C. Covajee. *Ag J of India* 12:484-90 J1 '17
- Success talk for farm boys—about Raiffeisen. *Prog F* 32:327 Mr 10 '17
- Suggestions for an act providing for cooperative credit associations or credit unions. (Service and regulatory announcements—Markets 30) 9p '18 U S Ag
- See also Credit unions, Agricultural; National farm loan associations
- Austria**  
Agricultural co-operation in Silesia. *Int R Ag Econ* 61:1-22 Ja '16
- Belgium**  
Transactions of the Raiffeisen banks from 1897 to 1912 in Belgium. *Int R Ag Econ* 63:6 Mr '16
- Ceylon**  
Co-operative credit in Ceylon. *Int R Ag Econ* 69:21-5 S '16
- Denmark**  
Associations for advances on rural landed property. *Int R Ag Econ* 65:74-80 My '16
- Information relating to credit. *Int R Ag Econ* 64:65-8; 68:70-8 Ap, '16
- Position of Danish land credit associations in 1915. *Int R Ag Econ* 61:74 Ja '16
- Germany**  
Landschaft of Posen from 1 January, 1914 to 1 January, 1916. *Int R Ag Econ* 84:1-8 D '17
- India**  
Indebtedness of members of co-operative societies in Mysore. *Int R Ag Econ* 9,no 2:152 F '18
- Model village co-operative society. *Ag J of India* 13:178-82 Ja '18
- Primary societies according to the report of the committee on cooperation. *Int R Ag Econ* 64:1-9 Ap '16
- Report of the committee on co-operation in India. *Int R Ag Econ* 61:23-5 Ja '16



**Agricultural cooperative credit assns.—India—Cont.**  
Spread of co-operation in the Punjab. C. F. Strickland. Ag J of India 13:260-71 Ap '18 (to be cont)

**Italy**

National bank of Italian rural credit societies and its first results. Int R Ag Econ 66:19-23 Je '16  
Steps recently taken by the Italian federation of Catholic rural banks. Int R Ag Econ 64:30-1 Ap '16

**Portugal**

Work of agricultural mutual credit societies. Int R Ag Econ 69:26-37 S '16

**Russia**

Mutual credit societies in Russia on 1 July 1915. Int R Ag Econ 73:29-31 Ja '17  
Popular co-operative credit from 1914 to 1916. Int R Ag Econ 76:19-27 Ap '17  
Popular cooperative credit institutions. bibliog Int R Ag Econ 65:31-45; 66:24-39; 67:14-23 My-Jl '16

**Servia**

Rural co-operative societies. Int R Ag Econ 67:24-36 Jl '16

**Agricultural credit**

Address at convention of National agricultural society. L. G. Robinson. Ag Digest 1: 420 My 1 '17  
\* Agricultural credit. Living Age (41 Mt Vernon st, Boston, 15c) 298:570-2 Ag 31 '18  
Amortization methods for farm mortgage loans. L. E. Truesdell and C. W. Thompson. U S Ag C 60:1-12 '16; Same. Fla Ag Dept Quar B v 26:32-52 Jl '16  
Banking the fruit crop. J. J. Rouse. Better Fruit 12:5-7 F '18  
Borrowing money at the bank. C. O. Carpenter. Prog F 31:1398 D 2 '16  
Borrowing to buy a farm. System on the Farm 1:195 Jl '17  
Buying machinery for cash? Power F 25:19 My '16  
Cash or credit. Wallaces' F 41:4 Ja 7 '16  
Cheaper money for the farmer. L. M. Frederick. Farm Eng 3:222 Ap '16  
Crédit agricole. Int Yearbook Ag Leg 1916: 955-1019 '17  
Credit conditions in the cattle loan business. by F. T. Ransom; Bank in an agricultural center, by M. Weil; Proper financing of livestock industry in Georgia, by D. H. Kirkland. Nat Assn Credit Men (103 Main st., Cooperstown, N.Y.) B 17:953-6, 963-7 O '17  
Credit statement for farmers. Banker-F 4:16 Ag '17  
Credits and collections. W. W. Orr. Am Fert 49:42-3+ S 14 '18  
Do we want amortization loans? Wallaces' F 41:117 Ja 28 '16  
Farm credits. Wallaces' F 41:45 Ja 14 '16  
Farm loan act and credit in other countries. C. Powell. Ohio F 138:491 N 18 '16  
Farm loan question; symposium. Wallaces' F 41:284+, 318, 372, 512 F 18-Mr 3, Ap 7 '16  
Farm-loan situation. J Political Econ (Univ. of Chicago Press 35c) 26:202-3 F '18  
\* Farm mortgages if peace comes soon. C. M. Harger. Financial World (29 Broadway, N.Y. 15c) 31:19 N 4 '18  
Farm values rising. C. M. Harger. Financial World (29 Broadway, N.Y. 15c) 29:22 N 10 '17  
Farmers' credit rate sheet means safe farming and safe banking. Banker-F 4:2-5 D '16  
Finance problems of farming. H. Quick. Country Gent 81:1113 My 27 '16  
Fundamental principles in farm credits. R. D. Kent. (In Nat. conf. on marketing and farm credits, 1916, p. 73-7) \$2 '17 C. W. Holman, sec., Madison, Wis.  
Game and a gamble. B. W. Currie. Country Gent 81:48-9, 148-9, 254-5, 384-5, 502-3 Ja 8, 22, F 5, 19, Mr 4 '16  
Helps in borrowing. G. M. Utz. System on the Farm 1:252-3 S '17  
How banker and farmer may cooperate. Prog F 31:1330 N 18 '16  
How the agricultural credit rate sheet aids farmers and bankers. C. W. Thompson. Banker-F 3:5 N '16; Same cond. Ag Digest 1:215 D '16

How to borrow more from us. System on the Farm 1:24-7 Mr '17  
Killing off mortgages. (C. no. 7) 16p '17 Federal farm loan board, Washington, D.C.  
Land credit problem. G. E. Putnam. (Humanistic studies, v. 2, no. 2) Kansas Univ (Lawrence 75c) B 17:1-107 D 1 '16  
Land credits and land settlements. T. F. Hunt. (In Am. farm management assn. Record of pro., 1915, p 10-17) '16 G. A. Billings, sec., Washington, D.C.  
Marketing and farm credits; a collection of papers and documents read at the fourth annual session of the National conference on marketing and farm credits, Chicago. Dec. 4-9, 1916. 546p \$2 '17 C. W. Holman, sec., 340 Washington bldg., Madison, Wis.  
Contours: Federal farm loan act and personal credit; Land settlement and immigration; Marketing of livestock; Marketing of grain and cheese; Organization of agriculture  
Minnesota farmers' institute annual, 1916. 318p Il '16 Extension division, University Farm, St Paul  
Following articles are included: Amortization as a method for paying off mortgage debt, by J. F. Ebersole; Costs and sources of farm-mortgage loans in the United States, by C. W. Thompson; Credit for the landless man, by E. D. Durand; Debenture bond system, by E. D. Durand; Factors affecting interest rates and other charges on short-time farm loans, by C. W. Thompson; Farm loan act, by W. W. Flannagan; Federal farm loan act; text; How farmers may improve their personal credit, by C. W. Thompson; How to use farm credit, by T. N. Carver; Land as security for loans, by E. D. Durand and J. F. Ebersole; Land owning farmer of the North and his need for personal credit, by C. L. Stewart; Minnesota farmer and the new rural credit system, by A. F. Woods; Outline for farmers' club programs or for individual reading; Plan for a co-operative system of rural credits, by R. D. Kent; Policy of organized farm mortgage bankers, by F. W. Thompson; Providing credit during production, by C. W. Thompson; Questions asked from the point of view of the borrower, and answers by the federal farm loan board; Raiffeisen system of co-operative personal credit, by J. P. Jensen; Rural credit, by A. D. Wilson; Rural credit system needed in western development, by E. Mead; Suggestions for rural credits legislation, by M. T. Herrick  
Miscellaneous information relating to credit in various countries. See monthly numbers of International review of agricultural economics  
Mobilizing the acres. J. N. Rosenberg. Nation (20 Vesey st, N.Y. 10c) 106:374-5 Mr 28 '18  
Model farm management and credit system. A. R. Foote. 59p 50c '17 American progress pub. co., 332 C st., N.W., Washington, D.C.  
Need of rural credit and improved market conditions. Va Ag Dept B 109:162-5 '16  
Non-co-operative agricultural banks versus co-operative credit institutions. J. C. Coyajee. Ag J of India 12:95-108 Ja '17  
Orchard land as loan security. G. T. Powell. Rural N Y 76:1149 O 6 '17  
Problem of rural credits. M. T. Herrick. Field Il 26:111-12 F '16  
Rate sheet essential in long and short time farm loans. R. L. Bennett. Il Tex Ag Ext B B-28:1-8 '16  
Report of the Commission on land colonization and rural credits of the state of California. 87p '16 Co-operative land settlement investigations, Univ. of Cal.  
Retailer and the farmer. G. C. Roy. Better Business (605 Ashdown blk., Winnipeg, Manitoba 15c) 1:22-3+ O '17  
Rural cooperative credit. A. Desjardins. (In Nat. conf. on marketing and farm credits, 1916, p. 78-98) \$2 '17 C. W. Holman, sec., Madison, Wis.  
Rural credit and land registration. Hoard's D 51:581 Ap 28 '16  
Rural credits. E. Mead. Cal State Comm Hort B v 6:213-15 My '17

**Agricultural credit—Continued**

- Rural credits or how to finance the farmer. H. G. McMillan. 18p '16 Farmer and Breeder, Sioux City, Ia.
- \* Short-term rural credits. Bankers M (253 Broadway, N.Y. 50c) 96:662-4 Je '18
- Short-time credit for farmers. C: P. Holland. Mass Ag Bd C 78:1-7 '18
- State farm loans v. the law. W: G. Boatright. Case & Comment (Rochester, N.Y. 15c) 23: 831-4 Mr '17
- Tractors for cash. P. S. Rose. il Country Gent 83:13-14 Mr 2 '18
- What other nations have done for rural credits. Prog F 31:120 Ja 22 '16
- When and how to borrow. E. G. Nourse. il Banker-F 5:6-7 F '18
- When you ask your banker for a loan. Ag Digest 2:867-8 Mr '18
- When you must borrow. System on the Farm 2:230 D '18
- When you must borrow. H. Wendland. System on the Farm 1:268 S '17
- See also Agricultural cooperative credit associations; Banks and agricultural development; Credit unions, Agricultural; Federal farm land banks; Loans; Mortgage banks; Mortgages; National farm loan associations
- Bibliography**
- Farm management; publications relating to farm accounts, credits, marketing, homes, and statistics. (Price list 68) 24p '16 Supt. of doc., Washington, D. C.
- \* List of recent references on agricultural credit. 8p '18 U.S. Lib. of Congress, Division of bibliography, Washington, D.C.
- Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew. 40c)

**Statistics**

- \* Financial condition of the federal land banks on Oct. 31, 1918. Econ World (128 Water st, N.Y. 25c) 16:775 N 30 '18

**Algeria**

- Credit for colonization in Algeria. Int R Ag Econ 75:57-62 Mr '17

**Argentina**

- Argentine land credit in 1915-1916. Int R Ag Econ 80:46-9 Ag '17

**Australia**

- Land settlement and the provision of credit in western Australia. J. W. Paterson. Int R Ag Econ 73:79-89 Ja '17

**Austria**

- Provincial institutions for mortgage advances at the 31st December, 1913. Int R Ag Econ 65:65-73 My '16

**Belgium**

- Boerenbond in 1916. Int R Ag Econ 9,no 3: 202-3 Mr '18

**Bosnia**

- Agricultural credit in Bosnia and Herzegovina. Int R Ag Econ 74:55-65 F '17

**California**

- Orland experiment to be tried in June. E. Mead. Irr Age 31:84 Ap '16

**Canada**

- Application of the agricultural act in British Columbia. Int R Ag Econ 76:70-3 Ap '17
- Distribution of seed to settlers in the western provinces. Ag Gaz of Canada 5:1037-8 N '18
- Farm loans and land settlement. Ag Gaz of Canada 4:956-9 N '17
- Rural credits in the provinces. Ag Gaz of Canada 5:778-86 Ag '18
- Scheme for the organization of rural mortgage credit in Manitoba, Saskatchewan and Alberta. Int R Ag Econ 75:63-7 Mr '17
- Speech on moving the second reading of the bill to constitute the Manitoba farm loans association in the Manitoba legislature, Feb. 21, 1917. E. Brown. 8p '17 Provincial treasurer, Winnipeg, Manitoba

**Law**

- Agricultural credit act. A. Lucas. (In 16th Report, Farmers' institutes of British Columbia, p. 88-92) '16
- British Columbia agricultural credit act. Int R Ag Econ 69:94-6 S '16
- Loi modifiant la loi des banques. Int Yearbook Ag Leg 1916:1004-5 '17
- Provincial farm loan legislation. Ag Gaz of Canada 4:545-6 Jl '17
- Short term rural credit act of Manitoba. Int R Ag Econ 84:44-6 D '17

**China**

- Règlement les banques agricoles et industrielles. Int Yearbook Ag Leg 1916:956-63 '17

**Connecticut**

- Plan for short term farm loans in Connecticut. G. C. Smith. Conn Ag Coll Ext B 10:1-8 '17; Same cond. Banker-F 5:6-7 Ap '18

**Dutch East Indies**

- Evolution of popular credit. Int R Ag Econ 62:81-91 F '16

**Egypt**

- Activity of the agricultural bank of Egypt in 1916. Int R Ag Econ 9,no 3:230-2 Mr '18
- Agricultural banks. H: Wolff. Ag J of India 12:466-70 Jl '17
- Crédit foncier Égyptien (Egyptian land credit) in 1915-1916. Int R Ag Econ 82:51-3 O '17
- Crédit foncier Égyptien in 1914-1915. Int R Ag Econ 66:102-5 Je '16
- Operations of the crédit foncier d'orient, 1914-1915. Int R Ag Econ 65:80-1 My '16

**Europe**

- European methods of financing the farmer. W. J. Tiffendorfer. Va Ag Dept B 109:40-5 '16

**Finland**

- New function of the co-operative funds in Finland. G. Hannes. Int R Ag Econ 70:28-9 O '16

**France**

- Agricultural mutual credit and the war. Int R Ag Econ 62:47-8 F '16
- Agricultural mutual credit in France and the war. Ag J of India 11:221-2 Jl '16
- Companies engaged in making advances on real properties and the war. Int R Ag Econ 65:82-3 My '16
- Crédit foncier de France in 1915. Int R Ag Econ 66:105-7 Je '16
- Décret relatif à la constitution de l'inspection générale du crédit et des associations agricoles subventionnées. Int Yearbook Ag Leg 1916:798-9 '17
- Décret relatif à la réorganisation des services de l'inspection du crédit et de la coopération agricoles et de ceux de l'inspection des assurances mutuelles sous la dénomination de service de l'inspection du crédit, de la coopération et de la mutualité agricoles, suivi d'un arrêté nommant l'inspecteur général chef de ce service. Int Yearbook Ag Leg 1916:793-6 '17
- Inspection of the subsidized funds of agricultural credit and agricultural associations. Int R Ag Econ 9,no 1:13-15 Ja '18

**Germany**

- Compulsory sales by auction of rural estates in Prussia in 1912. Int R Ag Econ 68:69-70 Ag '16
- Consolidation of property in Prussia. A. Dietrich. Int R Ag Econ 81:52-5 S '17
- Landwirtschaftlicher kreditverein of the kingdom of Saxony in 1916. Int R Ag Econ 82: 53-5 O '17
- Loi concernant la colonisation par les combattants blessés. Int Yearbook Ag Leg 1916: 1104-6 '17

**Great Britain**

- Credit for farmers. J Bd Ag 24:668-70 S '17

**Herzegovina**

- Agricultural credit in Bosnia and Herzegovina. Int R Ag Econ 74:55-65 F '17



**Agricultural credit—Continued**

**India**

- Agricultural banking in the delta of Burma. L. Dawson. Ag J of India 13:71-81 Ja '18  
Agricultural banks. H: Wolff. Ag J of India 12:466-70 Jl '17  
Agricultural banks in India: a rejoinder. A. C. Chatterjee. Ag J of India 12:599-613 O '17  
Co-operation in Travancore. Int R Ag Econ 74:31-4 F '17  
Development of banking and thrift in India. A. C. Chatterjee. Ag J of India 13:305-18 Ap '18  
Progress of agricultural cooperation in 1914-1915. Int R Ag Econ 76:1-6 Ap '17  
Rural work in India. S. Eddy. Rural Manhood 7:92-3 Jl '16

**Indo-China**

- Land credit in Indo-China. Int R Ag Econ 67:63-78 Jl '16

**Italy**

- Action of L'istituto di credito per le cooperative in 1915. Int R Ag Econ 70:26-8 O '16  
Activity of institutions of land credit in 1916. Int R Ag Econ 83:49-53 N '17  
Activity of the institutions of land credit in 1915. bibliog Int R Ag Econ 72:71-7 D '16  
Agrarian and land credit in Italy during the five years 1910-14. Int R Ag Econ 67:79-86 Jl '16  
Agricultural credit department of the bank of Sicily in 1915. Int R Ag Econ 68:63-8 Ag '16  
Agricultural credit of the savings bank of the Banco di Napoli and the agricultural credit department of the Banco di Sicilia in 1916. Int R Ag Econ 81:39-50 S '17  
Agricultural credit of the savings' bank of the Banco di Napoli, and the institutions for agricultural credit in Latium, Liguria and Basilicata in 1915. Int R Ag Econ 70:57-67 O '16  
Catholic rural funds and their federal organization. Int R Ag Econ 9,no 3:191-201 Mr '18  
Credito agrario per il Lazio in 1916. Int R Ag Econ 80:50-2 Ag '17  
Décret de la lieutenantance n. 913 portant des dispositions pour le crédit agricole et l'agriculture dans les zones atteintes par l'invasion des campagnols; Décret-loi n. 1336 de la lieutenantance concernant des mesures pour faciliter le crédit aux associations agricoles. Int Yearbook Ag Leg 1916:1009-13, 1014-15 '17  
Facts as to the development and organization of Catholic rural banks in the district of Lodi. Int R Ag Econ 72:30-7 D '16  
Information relating to co-operation and association in Italy. Int R Ag Econ 66:53-60 Je '16  
Institute of credit for co-operative societies and the National bank of Italian rural credits in 1916. Int R Ag Econ 79:8-13 Jl '17  
Institution of a system of current accounts and postal orders. Int R Ag Econ 84:46-8 D '17  
Recent provisions as to agricultural credit. Int R Ag Econ 84:37-43 D '17  
Regulation and development of agricultural credit in Sardinia. Int R Ag Econ 9,no 1:44-52 Ja '18  
*See also* National bank of Italian rural credit societies

**Kansas**

- Part played by banks in agricultural economy in Kansas. Int R Ag Econ 69:75-80 S '16

**Martinique**

- Bank of Martinique. Int R Ag Econ 66:81-94 Je '16

**Massachusetts**

- Borrowing money in Massachusetts. Rural N Y 76:611 Ap 28 '17

**Mexico**

- Division of mortgaged lands. Int R Ag Econ 9,no 2:153-4 F '18

**New Hampshire**

- Farm mortgage credit in New Hampshire. G. C. Smith. maps N H Coll Arts & Sci Research B 2:1-16 '16

**New York**

- Progress of the land bank; with discussion. B. G. Parker. N Y Ag Dept B 81:1836-44 Mr '16; Same. N Y Ag Dept Rep 1916,pt 3:1836-44 '17  
Some farm problems in New York. M. C. Burritt. il Banker-F 5:10 Mr '18

**North Carolina**

- North Carolina rural credits. S. R. Winters. Country Gent 81:108 Ja 15 '16

**Ohio**

- Interview with Ohio's governor, F. A. Koenig. Kimball's D F 16:291 Ap 15 '18  
Rural credits; what kind of a rural credit law does Ohio want? J. M. Bergold. Nat Stock & F 40:100+ Ap 22 '16

**Oregon**

- Constitutional amendment and rural credits law of Oregon. 7p n.d. Sec. of state, Salem, Ore.  
Rural credits bill prepared for Oregon voters. Irr Age 31:101 My '16

**Peru**

- Agricultural loan law in Peru. (Commerce Reports 50) p 807 (Mr 1) '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.

**Philippine Islands**

- Associations provide credit for Philippine farmers. J. F. Boomer. (Commerce Reports no. 267) p 616-17 (N 14) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Rural credit in the Philippines. M. Cretcher. Philippine Ag R 10,no 4:306-14 '17

**Rumania**

- Agricultural credit in Rumania. Int R Ag Econ 77:49-62 My '17

**Russia**

- Décision du conseil des ministres, confirmée par l'empereur, fixant les règles pour le remboursement ou la restitution par les cultivateurs des avances ou des semences qui leur ont été accordées ou distribuées. Int Yearbook Ag Leg 1916:562-4 '17  
Non-co-operative popular credit in Russia. Int R Ag Econ 64:51-63 Ap '16  
Operations of the state land bank for the nobility in 1914. Int R Ag Econ 65:84-8 My '16  
Work of the Russian credit institutions in 1914. Int R Ag Econ 63:94-6 Mr '16  
*See also* Agricultural credit—Finland; Peasants' land bank

**Servia**

- Agricultural credit in the kingdom of Servia. Int R Ag Econ 69:81-92 S '16

**South Africa**

- Loi n. 28 accordant des secours aux individus ayant souffert, dans certains districts, de la sécheresse et des inondations. Int Yearbook Ag Leg 1916:628-9 '17  
Loi n. 30 portant amendement à la loi n. 18 de 1912 sur la banque foncière. Int Yearbook Ag Leg 1916:1005-8 '17

**South Dakota**

- Act establishing and maintaining by the state of South Dakota a system of rural credits. (H. B. 414 approved F 26 '17) p 124-33 '17 S. D. Secretary of state, Pierre  
Laws of South Dakota establishing a system of rural credits. (C. 1) 12p '17 South Dakota Rural credit bd., Pierre

**Agricultural credit—South Dakota—Continued**  
 South Dakota rural credit law. C: McCaffree.  
 Breeder's Gaz 71:726 Ap 5 '17

#### Southern states

Credit problems of the southern plantation system. L: C. Gray. (*In* Nat. conf. on marketing and farm credits, 1916, p. 59-72) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Rate sheet for credit means safe farming for the South. B. Knapp. Banker-F 3:5 Mr '16

#### Spain

Organization of agricultural credit by the formation of a central fund. *Int R Ag Econ* 83:37-48 N '17

#### Sweden

Co-operative agricultural credit. *Int R Ag Econ* 70:17-25 O '16

#### Texas

Farming credit in Texas. *Texas Ag Ext B* b-34:1-86 '17  
 Red Springs credit plan. C. Ousley. *Prog F* 31:289 F 26 '16  
 Rural credits in Texas. S. P. Etheredge. *Country Gent* 81:932 Ap 29 '16

#### Tunis

Native thrift societies in 1915. *Int R Ag Econ* 74:25-30 F '17  
 Native thrift societies in 1916. *Int R Ag Econ* 9,no 3:210-14 Mr '18  
 Regency of Tunis; revictualling account and its operation. *Int R Ag Econ* 66:113-18 Je '16

#### United States

Address before National agricultural society. H. Quick. *Ag Digest* 1:416-18 My 1 '17  
 Agricultural credit legislation and the tenancy problem. *Int R Ag Econ* 62:93-7 F '16  
 Aid to rural-credits system. P. D. Norton. *Congressional Record* (Washington, D.C.) 56:774-5 Ja 9 '18  
 Attacking federal farm loans. Public (122 E. 37th st, N.Y. 10c) 21:559-60 My 4 '18  
 Bank with a heart. G: K. Turner. *il Country Gent* 82:1903-4+ D 8 '17  
 Bankers and the rural credits bill. *Prog F* 31:751 Je 10 '16  
 Borrowing from Uncle Sam. J: R. McMahon. *Country Gent* 83:17+ Mr 2 '18  
 Congressman Lever explains rural credits bill. *Prog F* 31:713 My 27 '16  
 Costs and sources of farm-mortgage loans in the United States. C. W. Thompson. map U S Ag B 384:1-16 '16  
 County agent as mortgage broker. E. L. D. Seymour. *Country Life* 30:12 O '16  
 Credit rate sheet essential in long time and short time farm loans. R. L. Bennett. Banker-F 4:14 Mr '17  
 Death of the mortgage; the American farmer aided by his government. J. L. Hill. *il Review of Reviews* (30 Irving Place, N.Y. 25c) 58:305 S '18  
 Disadvantages of the federal farm loan system to the borrowing farmer. N. Lombard. 15p '16 Agricultural credit corporation of California, San Francisco  
 Education, cooperation, legislation; rural credits bill. C. Poe. *Prog F* 31:121 Ja 22 '16  
 Elwood Mead outlines his rural credit experiment. *Irr Age* 31:102 My '16  
 Farm credit on a business basis. E. L. D. Seymour. *Country Life* 29:59 Mr '16  
 Farm loans. S. Ferris. *Congressional Record* (Washington, D.C.) 56:1264-5 Ja 22 '18  
 Farm loans. H: B. Steagall. *Congressional Record* (Washington, D.C.) 56:938-9 Ja 15 '18  
 Farm loans on irrigation projects. *Congressional Record* (Washington, D.C.) 56:1273-87 Ja 23 '18  
 Farmers and the government. M. T. Herrick. *Nation* (20 Vesey st., N.Y. 10c) 105:49-51 Jl 12 '17  
 Farmers and their bankers. H. Quick. *Country Gent* 82:1403-4+ S 15 '17  
 Farmers' battle in Congress; Hollis-Moss plan. O Judd Farmer 60:14 Ap 1 '16

Farmers' money on easy terms. O Judd Farmer 61:2 Jl 1 '16  
 Federal farm loan progress. D. P. Hogan. Wallaces' F 42:1713 D 21 '17  
 Federal farm loan system faces a hard winter. H. J. Dodge. *Am Bankers Assn J* (5 Nassau st, N.Y. \$2 per yr.) 10:505-8 Ja '18  
 Federal farm loans. map Mo Ag Ed B v 15:1-81 Ja '17  
 Federal farm loans. H. Quick. *Am Assn Farmers' Inst Workers Pro* 1917:90-7 '18  
 Federal farm loans. J: T. Watkins. *Congressional Record* (Washington, D.C.) 56:841-3 Ja 10 '18  
 Federal farm loans bill. *Rural N Y* 75:1075 Ag 12 '16  
 Federal farm loans increasing. Hoard's D 54:534 N 9 '17  
 Federal land banks are working. F. R. Wilson. *Farm Eng* 5:5 My '17  
 Financial report; form used by the federal bank of Dallas, Texas, in making farm loans. Wallaces' F 42:525+ Mr 23 '17  
 Financing the insolvent farmer. L. G. Robinson. (*In* Nat. conf. on marketing and farm credits, 1916, p. 177-87) \$2 '17 C. W. Holman, sec., Madison, Wis.; Same abr. N Y Ag Dept B 92:74-83 F '17; Same cond. Ag Digest 1:256-7 Ja '17  
 First year of the United States federal farm loan act. Ag Gaz of Canada 5:426-7 Ap '18  
 Fruit lands and the land banks. H. S. Stabler. *Country Gent* 83:13+ My 11 '18  
 "Grange" in 1915. *Int R Ag Econ* 63:40-1 Mr '16  
 Has the Kansas farmer all the productive credit he requires? P. W. Goebel. Banker-F 3:3-4 Mr '16  
 How will you use the loan? G: W. Eads. *Country Gent* 82:1768 N 17 '17  
 Interesting letter concerning recent hearings before the House committee on irrigated lands. F. D. Catlin. *Irr Age* 32:136-8 Jl '17  
 Life insurance companies loan 654 millions on farms. Banker-F 3:15 Ja '16  
 Loans to drought-hit farmers described in treasury and agriculture circular. *Weekly N L* 6:4 S 4 '18  
 Make a start toward rural credit. C. Poe. *Prog F* 31:261 F 19 '16  
 Making it profitable to be in debt; how some New York farmers used the farm loan system. E. W. Gage. *il Ohio F* 142:25-6 Jl 13 '18  
 Market freedom through federal loans. J. H. Collins. *Country Gent* 83:36 Ja 5 '18  
 Marketing of farm mortgage loans. C. W. Thompson. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 603-12) '17  
 Modified rural credit system for America. E. L. D. Seymour. *Country Life* 29:59 Mr '16  
 Money to help farmers. Hoard's D 53:650 My 4 '17  
 New rural credits bill; summary of provisions. *Prog F* 31:62 Ja 8 '16  
 Practical supervision by reclamation agents. N. Hibbs. *Irr Age* 31:38 Ja '16  
 President makes available \$5,000,000 to aid farmers. *Weekly N L* 6:1 Ag 7 '18  
 Problem of rural credits. L. G. Robinson. *il Ag Digest* 1:56-8 Je '16  
 Profits from debts; results of first year's work in making loans to farmers by federal land bank of St Louis. H. W. Danforth. map O Judd Farmer 64:641 Je 22 '18  
 Progress of the farm loan financing. H. J. Dodge. *Am Bankers Assn J* (5 Nassau st, N.Y. \$2 per yr.) 10:198 S '17  
 Providing credit during production. C. W. Thompson. *Int R Ag Econ* 71:65-77 N '16  
 \* Relationship of life insurance to the development of our agricultural resources. M. Cumming. *Economic World* (128 Water st, N.Y. 25c) 16:381-4 S 14 '18  
 Report of farm credits committee, American fertilizer association. H. H. Merrick. *Am Fert* 45:58+ Jl 22 '16  
 Rural credit bills before Congress. *Int R Ag Econ* 66:121-2 Je '16  
 Rural credits. D: F. Houston. *Penn State F* 9:406-7 Je '16  
 Rural credits. R. W. Moss. *Pa Ag Dept B* 278:95-104 '16



**Agricultural credit—United States—Continued**

- Rural credits discussed at bankers' meeting. J. F. Duggar. Prog F 32:662 Je 2 '17
- Rural credits: how to borrow money under the federal farm loan act. Prog F 33:210 F 16 '18
- Rural credits legislation. M. T. Herrick. Ohio F 137:735 My 27 '16
- Rural credits problem again. Prog F 31:295 F 26 '16
- Secretary Houston visits sections hit by drought; provisions made for loans to help wartime agriculture. Weekly N L 6:1 O 2 '18
- Seed grain loans planned in drought regions to help next spring planting. Coop Manager & F 8:49 D '18
- Self-help for rural credits. Prog F 31:381 Mr 11 '16
- Short-term farm credit. D. T. Morgan. Congressional Record (Washington, D.C.) 56: 1360-7 Ja 25 '18
- State managed rural credits at cost. Non-partisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:5 N 22 '17
- Thinks better defeat rural credits bill. H. Q. Alexander. Prog F 31:148 Ja 29 '16
- Want a farm loan? Coop Manager & F 6:58 Ag '17
- War finance corporation will make advances on loans to farmers. Weekly N L 6:14 Ag 7 '18
- What the federal land bank does for the American farmer. Current Opinion (63 W. 36th st, N.Y. 25c) 64:63-4 Ja '18
- What the present banking system is doing—and can do—for farm loans. B. F. Harris. Banker-F 3:14 Ja '16
- What the rural-credits bill provides. Country Gent 81:630 Mr 18 '16
- What the rural credits bill provides. Prog F 31:631 My 6 '16
- Why not the landschaft? O Judd Farmer 60:13 Ja 1 '16
- Women should know about credit unions. Prog F 31:932 Jl 29 '16
- Work of the Jewish agricultural and industrial aid society. Int R Ag Econ 69:1-14 S '16
- Would alter method of carrying irrigators. Irr Age 33:78-9 My '18
- See also* Federal farm land banks; Federal farm loan board; National farm loan associations
- Law**
- Amendment of the federal farm-loan act. Congressional Record (Washington, D.C.) 56: 750-5 Ja 10 '18
- Bankers and the farm loan act. H. Quick. Banker-F 4:14-15 Ap '17
- Cheap money for farmers. Kimball's D F 14: 571 S 15 '16
- Digest of the federal farm loan act (rural credits bill). 16p '16 Guaranty trust co., N. Y.
- Every farmer his own banker. F. Wilson. Am Coop J 12:202 N '16
- Farm loan act. Breeder's Gaz 70:169 Ag 3 '16
- Farm loan act. Fla Ag Dept Quar B 26:21-32 Jl '16
- Farm loan act. Fruit-Grower 28:128 F 15 '17
- Farm loan act again. H. Quick. Wallaces' F 42:726 Ap 27 '17
- Farm loan act and its liability clause. X. W. Putnam. Nat Stock & F 41:380 Jl 14 '17
- Farm loan act; outline. Better Fruit 11:5-6 S; 25 O '16
- Farm loan banks in action. C. R. Michael. map Country Gent 82:795-6 Ap 28 '17
- Farm loan primer, with definitions, rulings and regulations to June 1, 1917; here you will find in brief form answers to questions most frequently asked about federal farm loan act. (C. 5) 22p 5th ed '18 U.S. federal farm loan bd., Washington, D.C.; Same cond. Green's Fruit Grower 37:8 Ja '17
- Farm loan questions answered. W. W. Flanagan. Ohio F 139:304 F 24 '17
- Farmers' land loan law. Va Ag Dept B 115: 17-26 '17
- Federal farm loan act. Am Coop J 11:571-3 F '16

- Federal farm loan act; text. (C 4) 29p '16
- U. S. Federal farm loan board, Washington, D. C.; Same. (*In* Minnesota farmers' institute annual, 1916, p 136-54) '16 Extension division, University Farm, St Paul; Same. Mo Ag Bd B v 15:55-78 Ja '17; Same (in French). Int Yearbook Ag Leg 1916:971-1003 '17
- Federal farm loan act. Int R Ag Econ 72:65-70 D '16
- Federal farm-loan act. R. J. Bulkley. J Political Economy (Univ. of Chicago Press 35c) 25:129-47 F '17
- Federal farm loan act. W: R. Camp. N C Ag Ext C 14:1-6 '16
- Federal farm loan act. H. W. Danforth. Ill Farmers Inst Rep 1917:64-8 '17
- Federal farm loan act. M. T. Herrick. Atlantic (3 Park st., Boston 35c) 119:222-32 F '17
- Federal farm loan act. D: S. Kennedy. Forum (286 5th ave., N.Y. 25c) 58:345-54 S '17
- Federal farm loan act. H. C. Price. Rural N Y 75:512 Mr 25 '16
- Federal farm loan act. G: E. Putnam. Kansas Univ (Lawrence 75c) B 17:92-107 D 1 '16
- Federal farm loan act; with discussion. C. W. Thompson. Am Econ Review (Ithaca, N.Y. \$1.25) 7:supl15-43 Mr '17
- Federal farm loan law of 1916. O Judd Farmer 60:6 Je 10 '16
- Federal farm loans. E. D. Chassell. Wallaces' F 43:1263 S 6 '18
- Federal farm loans at 5 per cent. map O Judd Farmer 62:27 Mr 31 '17
- How the federal farm loan act benefits the farmer. C. W. Thompson. Farmers' B 792: 1-12 '17
- How the new federal law will revolutionize farm finance. R. W. Babson. Country Gent 81:1682-3 S 16 '16
- Increasing operating equipment. F. R. Wilson. Farm Eng 5:8 Ap '17
- Injustice of the federal farm loan law. A. R. Foote. 26p 25c '16 A. R. Foote, 63 Home insurance bldg., Washington, D.C.
- Killing off mortgages. Ag Digest 2:563-4 Ag '17
- Laws relating to rural credits and land registration; uniform state laws relating to same. S. R. Child. (U.S. 64th cong., 1st sess. Senate doc. 351) 43p '16 U.S. Congress, Washington, D.C.
- Letter from the secretary of the Belle Fourche water users association. O. E. Farnham. Irr Age 32:105 My '17
- Millions for agriculture. Country Gent 81:1571 Ag 26 '16; Same. J Ag New Zealand 13:420-2 N '16
- More about the new rural credits law. Prog F 31:964 Ag 5 '16
- More about the new rural credits law. F. R. Wilson. Prog F 31:1243 O 21 '16
- National farm loan associations; what they are—how they may be formed, the benefits to be derived. A. E. Cance and R. M. Rutledge. Mass Ag Ext B 13:1-15 '17
- New federal farm loan system; a simple statement of the plan and purpose of the federal farm loan act, passed by Congress and approved by the President July 17, 1916. A. L. Gilliom. 16p 25c '16 Legal dept. of Success co., Danville, Ill.
- New mortgages for old; a story illustrating the practical application of the federal farm loan act. (C 3) 13p '16 U.S. Federal farm loan board, Washington, D.C.
- New rural credit law. J. M. Bergold. Nat Stock & F 40:1264 F 24 '17
- New rural credits law explained. B. L. Moss. Prog F 31:877 Jl 15 '16
- Operation of the federal farm loan act. E. G. Quamme. 15p '17 Federal land bank, St Paul, Minn.
- Opinions of a banker in a great agricultural state on the federal farm loan act. R. C. Rothfuss. Econ World (128 Water st, N.Y. 25c) n s 13:322-3 Mr 10 '17
- Oregon rural credits primer. H. Macpherson. Ore Ag Ext B 20:1-15 '17
- Outline of farm loan act. Jersey B 35:1242 Ag 9 '16

- Agricultural credit—United States—Law—Cont.**  
 Path to agricultural preparedness. World's Work (Doubleday, Page & Co., Garden City, N.Y. 25c) 33:670-2 Ap '17  
 Provisions and workings of the rural credit law. F. C. Gaylord. *Purdue Ag* 11:38-40 Mr '17  
 Questions from the farm loan primer. *Purdue Ag* 11:14-15+ N '16  
 Rural credit law. R. W. Moss. *Farmers' Nat Congress Pro* 1916:68-74  
 Rural credits. F. M. Loomis. *Farm Eng* 4:43 S '16  
 Rural credits bill signed by President. *il Ag Digest* 1:94-5 S '16  
 Rural credits law important to farmer. *Purdue Ag* 11:12 O '16  
 Rural credits on trial. C. M. Harger. *Nation* (20 Vesey st., N.Y. 10c) 104:290-2 Mr 8 '17  
 Some questions which are being asked about the Federal farm loan act and their answers. 13p n.d. Federal land bank, St Paul, Minn.  
 Summary of farm loan act. Wallaces' F 41:1030 Jl 28 '16  
 Turning your land into money. J. A. Johnston. *map Am Coop J* 12:618 My '17  
 U.S. farm loan act. *Rural N Y* 75:1035, 1055 Jl 29-Ag 5 '16  
 Working of the federal farm loan act; with discussion. J. B. Morman. (*In Nat. conf. on marketing and farm credits*, 1916, p. 7-50) §2 '17 C. W. Holman, sec., Madison, Wis.
- Uruguay**  
 Information relating to credit. *Int R Ag Econ* 68:78-83 Ag '16
- Vermont**  
 Buying farms on easy terms. *Rural N Y* 76:613 Ap 28 '17
- West Indies**  
 Agricultural credit in the British West Indies. *Int R Ag Econ* 71:78-83 N '16
- Agricultural credit unions.** See Credit unions, Agricultural
- Agricultural departments**  
 Information relating to the establishment and administration of county agricultural schools and agricultural departments. (B. 23) 80p '16 Mass. Bd. of educ., Boston  
 State's part in agricultural activities. C. P. Norgord. *Ia Ag Bd Yearbook* 1916:105-12  
 See also names of states, subhead name of dept., e.g., Delaware—Agriculture, State board of; Illinois—Agriculture, Department of; Iowa—Agriculture, Department of; Michigan—Agriculture, State board of; Missouri—Agriculture, State board of; New York—Agriculture, Department of
- Directories**  
 State officials in charge of agriculture. See Yearbooks of Department of agriculture
- Agricultural development and banks.** See Banks and agricultural development
- Agricultural development and railroads.** See Railroads and agricultural development
- Agricultural education**  
 Address at the dedication of the new dairy building at the University of Nebraska. R. A. Pearson. *J Dairy Sci* 1:4-18 My '17  
 Same. 12p n.d. Univ. of Nebraska, Lincoln  
 Advisability of collegiate courses on marketing and distribution. T. N. Carver. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 396-9) '17  
 Agricultural education. E. Davenport. (*In Pan American scientific congress Pro.*, 1915, v. 5, p. 360-3) '17  
 Agricultural education. L. S. Klinck. *il (In 16th Report, Farmers' institutes of British Columbia, p. 65-74)* '16  
 Agricultural education. A. C. Monahan and C. H. Lane. (*In Report, U.S. Comm. of educ.*, 1916, v. 1, p. 237-58) '16 U.S. Bur. of educ., Washington, D.C.  
 Agricultural education in rural schools. W. H. Rothenberger. *Prac F* 112:251 Je 15 '16
- \* Agricultural education in South Africa and Australia. *Nature* (St Martin's st, London, W.C. 6d) 101:467-8 Ag 15 '18  
 Agricultural education, what is it? A. D. Cromwell. *School and Soc* (Science Press, Garrison, N.Y. 10c) 7:170-2 F 9 '18  
 Agricultural education—what is it? D. Snedden. *School and Soc* (Science Press, Garrison, N.Y. 10c) 7:66-71 Ja 19 '18  
 Agricultural equipment in public schools. *il Ag Gaz of Canada* 4:699-705 Ag '17  
 Agricultural training for city high school boys. W. J. Bogan. *il Manual Training* (Manual Arts Press, Peoria, Ill. 25c) 19:297-301 My '18  
 Agricultural training for returned soldiers. W. J. Black. *Ag Gaz of Canada* 5:1123-6 D '18  
 Agriculture as a school subject. C. H. Edgett. *Ag Gaz of Canada* 5:903-6 S '18  
 Agriculture in high and special schools. J. McCaig. *Ag Gaz of Canada* 5:719-21 Jl '18  
 Better farming day March 16, 1917. (B. 50) 16p '17 Ala. Dept. of educ., Montgomery  
 Boys who got a chance. C. E. Gapen. *Country Gent* 83:8-9 Ja 19 '18  
 Bulletin Bill. *Country Gent* 81:685 Mr 25 '16  
 City bred agricultural student talks. *Rural N Y* 75:465 Mr 18 '16  
 College and rural leadership. J. B. Reynolds. *Ag Gaz of Canada* 4:713-14 Ag '17  
 College education for the farmer. *Rural N Y* 76:1173 O 13 '17  
 College goes to the farmer. J. Wilson. *il Ag Digest* 1:91-3 S '16  
 College teaching in agriculture with particular reference to the improvement of methods. *School and Soc* (Science Press, Garrison, N.Y. 10c) 7:595-7 My 18 '18  
 Collegiate farming. W. E. Stone. *Farmers' Nat Congress Pro* 1916:84-8  
 Coming range in college work. L. H. Bailey. *School and Society* (Science Press, Garrison, N.Y. 10c) 5:91-7 Ja 27 '17  
 Consolidated schools and agricultural education. *il Ag Gaz of Canada* 5:511-13 My '18  
 Corn in the classroom. B. Ostrolenk. *Country Gent* 81:629 Mr 18 '16  
 Correspondence courses in agriculture. *W Va Ag Ext C* 85:1-15 '16  
 Education in its relation to agriculture. B. Coventry. *Ag J of India* 11:1-13 Ja '16;  
 Same. *Ag J of India Sci Congress* no 1916:1-13  
 Educational agriculture—a community enterprise. E. R. Powers. *Social Service R* (Woodward bldg., Washington, D. C. 10c) 4:7-9 D '16  
 Enseignement agricole. *Int Yearbook Ag Leg* 1916:847-51 '17  
 Essentials of an agricultural education. H. C. Taylor. *Hoard's D* 53:4 Ja 26 '17  
 Exhibit in agricultural education at the Panama-Pacific international exposition. A. C. True. *Assn Am Ag Coll & Exp Pro* 1915:91-4  
 Experiment in rural bias in a secondary school. *Ag J of India* 13:162-3 Ja '18  
 Farmer a student. W. H. Rothenberger. *il Prac F* 113:382 N 15 '17  
 Farmer and self-improvement. *J Bd Ag* 23:760-7 N '16  
 Farmers and college education. R. V. Gunn. *Rural N Y* 77:33 Ja 12 '18  
 Farming their way through college. P. C. Harvey. *il Country Gent* 82:2008-9 D 22 '17  
 Field of endeavor for agricultural graduates. M. L. Fisher. *Purdue Ag* 11:9-11 Mr '17  
 Home project as a phase of vocational agricultural education. (B. 21; *Ag. ser.* 3) 41p '18 U. S. Federal bd. for vocational educ., Washington, D. C.  
 Home projects in secondary courses in agriculture; with project study outlines. H. P. Barrows. *U S Ag B* 346:1-20 '16  
 How may the state university and the horticultural society best co-operate? G. E. Vincent. *Minn Hort* 44:375-8 O '16  
 How the curriculum may better meet present day social needs. W. D. Hurd. *Education* (120 Boylston st., Boston 35c) 7:548-56 My '17  
 How to regenerate agriculture. J. H. Lavoie. *il Ag Gaz of Canada* 4:961-4 N '17



**Agricultural education —Continued**

- How to vitalize the teaching of agriculture. P. G. Holden. *Coop Manager* & F 6:31 Ap '17
- How to vitalize the teaching of agriculture in the rural schools. 21p il '17 International harvester co., Agricultural extension dept., Harvester bldg., Chicago
- Increasing production on the farm; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 73) 12p '17 U.S. States relations service, Washington, D.C.
- Inheritance of the farm-raised boy. Rural N Y 75:952 Jl 8 '16
- National system of agricultural education. H. J. Waters. (*In* Pan American scientific congress Pro., 1915, v. 4, p. 226-9) '17
- Old dogs and new tricks. H. Quick. *Country Gent* 81:1191 Je 10 '16
- Opportunities in vocational agricultural education. F. L. Kem. il *Purdue Ag* 12:496-8 My '18
- Place of graduate study in agricultural education. H: P. Armsby. *Penn State F* 9:470-1+ D '16; Same. *Purdue Ag* 11:12-14 D '16; Same. *Cornell Countryman* 14:657-9 My '17
- Possible core for a program in agricultural education. T. H. Eaton. *School and Soc* (Science Press, Garrison, N.Y. 10c) 6:755-61 D 29 '17
- Questions relating to agricultural education. (*In* B. 1, Statement of policies, p. 36-41) '17
- Federal board of vocational education, Washington, D.C.
- Report of the committee on instruction in agriculture. *Assn Am Ag Coll & Exp Pro* 1915:45-70
- Rural and agricultural education at the Panama-Pacific international exposition. H. W. Foght. (B. 1916, 2) 112p il maps plans '17 U.S. Bur. of educ., Washington, D.C.
- Rural education the base of agriculture. C. J. Galpin. il *Field* 11 27:359 My '17
- School credit for home practice in agriculture. F. E. Heald. *U S Ag B* 385:1-27 '16
- Shall I attend college this fall? A. Vivian. *Ohio F* 140:132 Ag 25 '17
- Snap courses in college: agriculture vs. engineering. F. H. Blodgett. *School and Society* (Science Press, Garrison, N.Y. 10c) 6:31-6 Jl 28 '17
- Teaching of elementary agriculture. *Ag Gaz of Canada* 3:471 My '16
- "That farmers' university," and comments. *Wallaces' F* 43:1677-8 N 15 '18
- Training and research illustrated from the agricultural viewpoint. A. J. Perkins. *J Dept Ag S Australia* 21:7-26 Ag '17
- Tutored farmer. W. O. Hedrick. *Sci Monthly* (Science Press, Garrison, N.Y. 30c) 7:158-65 Ag '18
- Value and influence of education in farming. J. Q. Emery. il *Hoards' D* 54:145+ Ag 31 '17
- What is a college course in agriculture? D. A. Vivian. il *Ohio F* 138:81 Jl 29 '16
- What should the city do for training in home gardening and elementary agriculture? (*In* Vocational education survey of Minneapolis; B. 199, Vocational educ. ser. 1) p 469-88 '17 U.S. Bureau of labor statistics, Washington, D.C.
- What they say about it; "that farmer's university." *Wallaces' F* 43:1778 D 6 '18
- Why boys should know the basic facts of agriculture. T. Butler. *Prog F* 31:6 Ja 1 '16
- Why teach agriculture in our public schools? C. R. Hoffer. *Purdue Ag* 11:19 D '16
- See also Agricultural clubs; Agricultural colleges; Agricultural extension work; Agricultural high schools; Agricultural museums; Agricultural schools; Dairy schools; Farm cadet camps; Farm tours; Graduate school of agriculture; Home project work; Horticultural education; Rural schools; School fairs; Special trains, Educational; also subhead Study and teaching under special subjects; also American association for the advancement of agricultural teaching; Association of American agricultural colleges and experiment stations

**Argentina**

- Agricultural education in Argentina. W: Dawson, jr. (Commerce Reports no 13) p 201-4 (Ja 16) '17 U. S. Bureau of foreign and domestic commerce, Washington, D. C.

**Australia**

- Agricultural teaching at the university. J Dept Ag Victoria 15:358-66 Je '17
- Teachers' farm school. il *J Dept Ag Victoria* 15:129-39 Mr '17

**Belgium**

- Belgium; agricultural training for partially disabled soldiers. *Int R Ag Econ* 75:116-17 Mr '17

**Bulgaria**

- Agricultural education in Bulgaria. D. I. Murphy. (Commerce Reports 110) p 554-5 (My 11) '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.

**California**

- Account of the methods of work of the agricultural institutions in California. T. F. Hunt. *Assn Am Ag Coll & Exp Pro* 1915:83-90
- American agriculture; report on agricultural education methods and agricultural research work in the state of California. A. E. V. Richardson. il *J Dept Ag Victoria* 16:257-75, 339-54 My-Je '18
- Wage-earning occupations for students in agriculture. F. T. Bioletti. *School and Soc* (Science Press, Garrison, N.Y. 10c) 7:261-3 Mr 2 '18

**Canada**

- Agricultural instruction activity. J. G. Archibald. *Ag Gaz of Canada* 5:273-4 Mr '18
- Agricultural instruction in Canada. 36p '17 Canada Ag
- Agricultural instruction in Canada. C. C. James. *Int R Sci & Prac Ag* 8,no 5:687-90 My '17
- Agricultural schools in Alberta. A. Galbraith. *Breeder's Gaz* 69:427 F 24 '16
- Agriculture and agricultural education in Canada. A. E. V. Richardson. il *J Dept Ag Victoria* 16:577-91 O '18 (to be cont)
- Allotment of agricultural education and research. *Ag Gaz of Canada* 5:267-72 Mr '18
- Demonstration field, Brandon normal school. T. J. Harrison. *plan Ag Gaz of Canada* 5: 616-17 Je '18
- Elementary agricultural instruction: a review and forecast. *Ag Gaz of Canada* 3:60-77 Ja '16
- Grants for teaching in agriculture. *Ag Gaz of Canada* 5:509-11 My '18
- Junior farmers' improvement associations. R. S. Duncan. *Ag Gaz of Canada* 5:362-4 Ap '18
- Returned soldiers' agricultural course. W. J. Elliott. *Ag Gaz of Canada* 4:599-600 Jl '17
- School inspector and rural science. *Ag Gaz of Canada* 4:499-507 Je '17
- Short courses in agriculture and home economics in the provinces. il *Ag Gaz of Canada* 4:363-86 My '17
- Short courses in provinces. il *Ag Gaz of Canada* 3:310-24 Ap '16
- Summer courses in agriculture for teachers. il *Ag Gaz of Canada* 4:887-900 O '17
- Summer school for teachers. il *Ag Gaz of Canada* 3:925-32 O '16
- Training of teachers for agricultural instruction in the provinces. *Ag Gaz of Canada* 3: 916-24 O '16
- Variation in elementary courses in agriculture. *Ag Gaz of Canada* 5:375-81 Ap '18
- Variation in elementary courses in agriculture. J. McCaig. *Ag Gaz of Canada* 5:286-7 Mr '18
- \* What the motion picture bureau hopes to do in Ontario agriculture. S. C. Johnston. (*In* Report, Ontario ag. & exp. union, 1917, p. 46-8) '18 Ontario ag. dept., Toronto
- Work of the University of British Columbia. F. F. Westbrook. (*In* 16th Report, Farmers' institutes of British Columbia, p. 48-56) '16
- See also Agricultural instruction act; Rural education associations

## Agricultural education—Continued

## Chile

Agricultural education in Chile. U. Valdivia. Int R Sci & Prac Ag 7, no 9:1245-7 S '16

## China

Agricultural education and research in China. Science (Science Press, Garrison, N.Y. 15c) n s 46:54-5 J1 20 '17

Chinese enthusiastic "ag" students. S. H. Taam. Penn state F 11:266+ F '18

## Cuba

Instrucción agrícola. J. Comallonga y Mena. (In Pan American scientific congress Pro., 1915, v. 4, p. 305-44) '17

## France

Agricultural training for men injured in the war. Int R Ag Econ 69:120-2 S '16

- \* Creation of an agricultural school by city of Lyon. G. Corbitt. (Commerce Reports no. 260) p 483 (N 5) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Technical re-education in establishments depending on the ministry of agriculture of men mutilated in the war. Int R Ag Econ 82:56-66 O '17

## Great Britain

Agricultural education and live stock improvement in Wales. J Bd Ag 23:260-3 Je '16

Agricultural research and education in England and Wales. J Bd Ag 23:1272-4; 24:1097-8 Mr '17, Ja '18

Education of city boys on the land. J. J. Findlay. J Bd Ag 24:21-32 Ap '17

Instruction in light farm work and milking for women and children. J Bd Ag 23:264-71 Je '16

Regulations for grants in aid of agricultural education and research in England and Wales. 21p '17 Gt. Britain Bd. of ag. and fisheries, London

Not available for general distribution

Report of the education branch for the year 1915-16. J Bd Ag 24:385-94 J1 '17

## Indiana

Agricultural education at Purdue since 1913. Purdue Ag 12:570-1 Je '18

Agricultural education in Indiana. Z. M. Smith. il Purdue Ag 10:13-15 Je '16

## Italy

Décret de la lieutenance n. 1204 portant approbation du règlement y annexé, relatif au fonctionnement des chaires ambulantes d'agriculture et des consortiums respectifs. Int Yearbook Ag Leg 1916:848-50 '17

## Maryland

Maryland—Gov. Harrington expresses his willingness to cooperate in every and any way that will aid in the agricultural development of the state and urges that the state college of agriculture be assisted as liberally as possible

## Massachusetts

Agricultural education; paraphrase of the report of a special commission authorized by the Massachusetts legislature of 1916. School and Soc (Science Press, Garrison, N.Y. 10c) 8:51-2 J1 13 '18

- \* New work at Massachusetts agricultural college: two-year course in agriculture begins Dec. 2. Vocational Summary (Washington, D.C.) 1:1 N '18

Report of the Commission on the investigation of agricultural education. 61p '18 Wright & Potter ptr. co., 32 Derne st, Boston

State-aided vocational agricultural education in 1916. (B. 1917, no. 5) 17p '17 Mass. Bd. of educ., Boston

## Minnesota

Agriculture in secondary schools with special reference to the state of Minnesota. A. V. Storm. (In Pan American scientific congress Pro., 1915, v. 5, p. 345-53) '17

## New York

Agricultural education in the high schools and common schools of the state. L. S. Hawkins. il N Y Ag Dept B 81:1844-53 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1844-53 '17

Agricultural education in the high schools of New York state. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 16:134-8 F '17

Organization of the teacher-training work under the Smith-Hughes law in the New York state college of agriculture. G. A. Works. School and Soc (Science Press, Garrison, N.Y. 10c) 7:666-9 Je 8 '18

Rural school extension work by the New York state college of agriculture. E. M. Tuttle. (In Pro., Nat. educ. assn., 1916, p. 632-6) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich

Smith-Hughes act and the College of agriculture of Cornell university. School and Soc (Science Press, Garrison, N.Y. 10c) 6:558-9 N 10 '17

## New Zealand

Agricultural bursaries. J Ag New Zealand 14:157-8 F '17

Agricultural improvement through education and experiment. J. Brown. J Ag New Zealand 13:105-13 Ag '16

Agricultural instruction; the central development farm, Weraroa. F. S. Pope. J Ag New Zealand 14:83-8 F '17

Teachers' farm school at Ruakura. il J Ag New Zealand 16:150-5 Mr '18

## Oklahoma

- \* Application for state and federal aid in vocational agriculture under the provisions of the Smith-Hughes law. (Form 1) 9p '18 Okla. Bd. of vocational educ., Oklahoma City

Carrying the college to the farm; a week with the Oklahoma demonstrators. H. R. O'Brien. il Country Gent 81:1187 Je 10 '16

## Russia

Secondary agricultural schools in Russia. W. S. Jesien. (B.4) 22p il '17 U.S. Bur. of educ., Washington, D.C.

## South Africa

Agricultural education in South Africa. J. W. Dye. (Commerce Reports no. 79) p 52 (Ap 5) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

## South America

Progress in agricultural instruction in Latin America. Exp Sta Record 38:199-200 F '18

## Southern states

Rural education of the negro. 97-114p '17 U.S. Bur. of educ., Washington, D.C.

Reprint from Bulletin, 1916, no. 38. Not available for general distribution

Suggested course of study for county training schools for negroes in the South. (Trustees J: F. Slater Fund Occas. Papers, no. 18 73p. '17). Exp Sta Record 38:397-8 Mr '18

- \* Vocational agricultural education for negroes in the southern region. H. O. Sargent. Vocational Summary (Washington, D.C.) 1:12 N '18

## Texas

Federal aid for vocational agriculture in Texas, under the Smith-Hughes law. W. F. Doughty and J. D. Blackwell. (B. 68) 14p '17 Tex. Dept. of educ., State bd. for vocational educ., Austin

## United States

Accredited farms and state farm management contest in the United States. A. W. Ashby. J Bd Ag 24:943-9 D '17

Agricultural and horticultural courses for women in the Middle Atlantic states; tables. 2p '17 Woman's nat. farm and garden assn., 600 Lexington av., N.Y.



- Agricultural education—United States—Cont.**  
 Agricultural education in secondary schools. L. S. Hawkins. il map Univ. of the state of N Y (Albany) B 624 87p O 1 '16  
 Agricultural education in the United States. E. Porritt. Quarterly Review (249 W. 13th st, N.Y. 52) 228:315-32 O '17: Same cond. Int R Sci & Prac Ag 9,no 2:132-9 F '18  
 Agricultural education, organization and administration. (B. 13, Agric. Series no. 1) 42p '18 Federal bd. for vocational educ., Washington, D.C.  
 \* Agricultural education; some problems in state supervision. (B. 26; Ag. ser. no. 4) 31p '18 U.S. Federal bd. for vocational educ., Washington, D.C.  
 Agriculture in America. A. E. V. Richardson. il J Dept Ag Victoria 16:555-68 S '18  
 American system of agricultural education and research and its rôle in helping to win the war. D. F. Houston. Weekly N L 6:2 Ag 23 '18  
 Federal aid for vocational education. I. L. Kandel (Carnegie Found. Advanc. Teaching B. 10 127p. '17). Exp Sta Record 38:395-6 Mr '18  
 Future of agricultural education and research in the United States. W. H. Jordan. Science (Science Press, Garrison, N. Y. 15c) n s 47: 125-34 F 8 '18  
 General rules and regulations concerning the establishment and maintenance of agricultural departments or schools under the Smith-Hughes and Tufts laws. (Vocational educ. B. no. 202) 12p '17 State bd. of control for vocational educ., Lansing, Mich.  
 Hoosier hike for better farming. O. E. Behmyer. il Country Gent 81:885 Ap 22 '16  
 Institutions in the United States giving instruction in agriculture, 1915-1916. A. C. Monahan and C. H. Dye, comps. (B. 1917, no. 34) 115p '17 U. S. Bur. of educ., Washington, D.C.  
 Morrisville state agricultural school. W. H. Jenkins. Hoard's D 51:1004 Jl 21 '16  
 Poultry course in city high school. L. Y. Parker. O Judd Farmer 60:23 Ap 1 '16  
 Relation of Smith-Hughes to Smith-Lever act. School and Soc (Science Press, Garrison, N.Y. 10c) 7:674-5 Je 8 '18  
 Smith-Hughes bill and its relation to vocational education. Purdue Ag 11:14-16 Je '17  
 Some defects in our agricultural instruction. H. Ness. Science (Science Press, Garrison, N.Y. 15c) n s 47:240-1 Mr 8 '18  
 Student creamery at Duluth central high school. E. P. Gibson. Hoard's D 51:698 My 19 '16  
 31st annual convention of the Association of American agricultural colleges and experiment stations, held at Washington, D.C. Nov. 14-16, 1917. Assn Am Ag Coll & Exp Pro 1917:1-328 '18  
 Training for women in agriculture. Woman Citizen (171 Madison av, N.Y. 10c) 2:294 Mr 9 '18  
 University farm and the Minnesota state horticultural society helpful in developing the farms and homes of the northwest. A. F. Woods. il Minn Hort 44:297-302 Ag '16  
 Vocational agricultural education. L. H. Dennis. Pa Ag Dept B 278:81-95 '16  
 Vocational training in agriculture; means adopted in the United States compared with the objects aimed at by the agricultural instruction act in Canada. Ag Gaz of Canada 5:289-91 Mr '18  
 See also names of agricultural colleges

# Uruguay

President of Uruguay has recommended to the General assembly that foreign scholarships be granted each year to fourteen students of agricultural and veterinary colleges. These scholarships would be competitive based on a year's work at a Uruguayan college. The proposed law specifies that some of the scholarships shall carry provision for special work in the United States, and others for training in Australia, France, Germany, and Argentina. (Commerce Reports, Ap 5 '17)

- Agricultural efficiency.** See Efficiency, Agricultural
- Agricultural engineering**  
 Agricultural engineering in the land-grant colleges. Assn Am Ag Coll & Exp Pro 1917: 241-55 '18  
 Agricultural engineering work in other countries. D. Scoates. bibliog Am Soc Ag Eng Trans 9:181-6 '16  
 Agriculture and the engineer. J. B. Davidson. Am Soc Ag Eng Trans 9:266-74 '16  
 Amount of work offered in agricultural engineering. A. H. Gilbert. Am Soc Ag Eng Trans 9:187-9 '16  
 Business records and committee reports presented at the 10th annual meeting, Chicago, December, 1916. Am Soc Ag Eng Trans 10, no 1:1-122 '17  
 Field of the agricultural engineer. Nat Stock & F 41:1093 F 2 '18  
 Papers presented at the 10th annual meeting, Chicago, December, 1916. il Am Soc Ag Eng Trans 10,no 2:1-160 '17  
 Report of the committee on research; work being done in the agricultural colleges. Am Soc Ag Eng Trans 9:245-55 '16  
 Transactions of the American society of agricultural engineers; report of the ninth annual meeting, Chicago, December, 1915; with business records. il Am Soc Ag Eng Trans 9:1-289 '16  
 See also Drainage; Farm engineering; Irrigation; Surveying
- Study and teaching**  
 Recommendations concerning agricultural engineering instruction for agricultural students. J. B. Davidson. Am Soc Ag Eng Trans 9:197-8 '16
- Agricultural engineers, American society of.** See American society of agricultural engineers
- Agricultural executive committees**  
 Organisation of sub-committees to the agricultural executive committees. A. Lee. J Bd Ag 24:344-9 Je '17  
 Work of agricultural executive committees. J Bd Ag 24:315-21 Je '17
- Agricultural exhibitions**  
 Agricultural exhibits and contests. H. P. Barrows. (Doc. 42) 8p '17 U.S. States relations service, Washington, D.C.  
 Agricultural exhibits and farmers' institutes. S. M. Jordan. il Mo Ag Bd B 14:1-68 Ja '16  
 Educational exhibits at fall fairs. Ag Gaz of Canada 3:812-14 S '16  
 Exhibits and contests for boys' and girls' clubs. R. H. Emberson. il Mo Ag Ext C 18: 1-20 '17  
 Exhibits at fairs and exhibitions. T. J. Harrison. il Ag Gaz of Canada 5:497-501 My '18  
 Expositions et concours. Int Yearbook Ag Leg 1916:843-6 '17  
 Fall fairs and festivals. T. L. Bewick. Hoard's D 54:106 Ag 17 '17  
 Guayaquil, Ecuador—Municipal board passed an ordinance providing for an annual agricultural exposition beginning Oct. 9, 1920. An important result expected is the compilation of a list of all persons engaged in any pursuit related to agriculture and of the products raised  
 \* Labelling of fair exhibits as an aid to agricultural production. H. I. Smith. Science (Science Press, Garrison, N.Y. 15c) n s 47: 603-4 Je 21 '18  
 Macdonald college exhibit at Sherbrooke fair. J. Murray. Ag Gaz of Canada 3:995-6 N '16  
 Magnificent exhibit of Northern Pacific Ry. at St Paul. Irr Age 31:118 Je '16  
 Preparation of agricultural exhibits. J. D. Marshall. il Colo Ag Ext Ser 103:1-16 n.d.  
 Provincial exhibition work. Ag Gaz of Canada 4:1049-55 D '17  
 Raipur divisional show and conference. D. Clouston. il Ag J of India 12:331-3 Ap '17

**Agricultural exhibitions—Continued**

Suggestions for boys' and girls' exhibits. M. Danziger. (Doc. 55) 11p il '17 U.S. States relations service, Washington, D.C.

Teaching of agriculture at fairs and exhibitions. H. Nagant. *Ag Gaz of Canada* 3:890-2 O '16

Use the bank lobby; agricultural displays succeed. il R. A. Blanchard. *Banker-F* 5:14 S '18

See also Agricultural museums; Bee culture—Exhibits; Butter—Exhibits; Corn shows; Dairy shows; Egg shows; Fairs; Fruit—Exhibits and references under that subject; Grain—Exhibits; Live stock shows and references under that subject; Potatoes—Exhibits; Seed fairs; Wool—Exhibits; also names of fairs, shows and exhibitions, e.g., Eastern states agricultural and industrial exposition; National farm and live stock show; National vegetable show; Northwest land products exposition

**Judging**

Judging farm fair exhibits. *Prog F* 33:602 My 11 '18

**Agricultural experiment station literature**

Bulletins. H. G. Knight. *Assn Am Ag Coll & Exp Pro* 1915:182-5

Key to subject index of experiment station literature. (Doc. 37) 5p '17 U.S. States relations service, Washington, D.C.

Report of the committee on experiment station organization and policy; publishing the work of the experiment stations. *Assn Am Ag Coll & Exp Pro* 1917:37-43 '18

**Agricultural experiment stations**

Agricultural experiment station in Santo Domingo has been established by the military government of Santo Domingo. A site has been selected about ten miles west of the capital, and preparations for building are under way

Arkansas farmers demand another experiment station. C. O. Carpenter. *Prog F* 32:25 Ja 6 '17

Decade of development of the insular experiment stations. *Exp Sta Record* 38:601-10 My '18

Experiment station directors. C: D. Woods. *Am Fert* 46:30 Mr 31 '17

Experiment stations; their purposes, and how assistance for the farmers may be obtained therefrom. E. R. Lloyd. (*In* *Agricultural extension*, p 65-6) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

Get acquainted with the experiment stations and their work. W. F. Massey. *Prog F* 31:1028 Ag 26 '16

Institute of tropical agriculture of the Pacific coast. H. J. Webber. (*In* *Pan American scientific congress Pro.*, 1915, v. 3, p. 599-602) '17

Mississippi farmers must save their experiment stations. *Prog F* 31:1215 O 14 '16

State stations active. *Weekly N L* 5:4 Ag 15 '17

Why we should support our experiment stations. *Prog F* 31:1373 N 25 '16

Work and expenditures of the agricultural experiment stations, 1916; pt. 1 of report on experiment stations and extension work in the United States, 1916. 334p il '18 U S Ag

See also Demonstration work in agriculture; Experiment farms; also names of U.S. experiment stations; also Association of American agricultural colleges and experiment stations; Monteith demonstration farm; Royal institute for agricultural experiments, Tripoli

**Administration**

Report of committee on experiment station organization and policy. *Assn Am Ag Coll & Exp Pro* 1915:123-5

**Directories**

Agricultural experiment stations and directories. See Yearbooks of Department of agriculture

List of workers in subjects pertaining to agriculture and home economics, 1917-1918; pt. 1, United States department of agriculture; pt. 2, State agricultural colleges and experiment stations. 68,89p '18 U S Ag

**Laws**

Federal legislation, regulations, and rulings affecting agricultural colleges and experiment stations. 56p '17 U.S. States relations service, Washington, D.C.

**Agricultural experimentation**

Agricultural experiments: report for year 1916-1917. W. J. Spafford. *J Dept Ag S Australia* 20:550-6, 602-13; 21:294-8 F-Mr, N '17

Agricultural experiments—report for years 1917-1918. W. J. Spafford. *J Dept Ag S Australia* 21:576-82 F '18

Agricultural improvement through education and experiment. J. Brown. *J Ag New Zealand* 13:105-13 Ag '16

Barn and field experiments in 1916. C: D. Woods. *Maine Ag Exp B* 260:85-120 '17; Same. *Maine Ag Exp Rep* 1917:85-120

Co-operative experiments at Matamata; manurial and root-variety trials. J. W. Hadfield. *J Ag New Zealand* 13:214-24 S '16

Crop rotation investigations; field T experiments. A. C. Arny. il *Minn Ag Exp B* 170:1-55 '17

Experimental projects of the division of pomology, University of California. W. L. Howard. *Cal State Comm Hort B v* 7:62-4 Ja '18

Experiments in the cultivation of potatoes, 1915-16. J. T. Ramsay. *J Dept Ag Victoria* 14:461-70 Ag '16

Experiments with Sudan grass. E. Breakwell. *Ag Gaz of New South Wales* 29:559-67 Ag '18

Farmers' experiment plots. *Ag Gaz of New South Wales* 27:1-14, 153-200, 479-88, 579-85, 615-20, 698-700, 779-82, 793-8; 28:39-40, 178-80, 247-80, 307-9, 401-4, 773-92; 29:13-30, 101-4, 167-74, 199-203, 235-58, 282-3, 639-40, 705-25, 786-94, 812-16 Ja, Mr, Jl-N '16, Ja, Mr-Je, N '17, Ja-Apr, S-N '18

Feeding and other experiments; work of N. J. Fjord. J. Wilson. *J Dept Ag Ireland* 17,no 3:451-60 '17

Field experiments, 1917; potatoes. *J Dept Ag Ireland* 18,no 2:158-68 '18

Flax growing experiments, 1914 and 1915. *J Dept Ag Ireland* 17,no 1:3-19 '16

Fourth annual field day, Longerenong agricultural college. il *J Dept Ag Victoria* 16:1-9 Ja '18

Lucerne manurial trials at research farm, Werribee; the value of winter top-dressing and renovation. H. A. Mullett. *J Dept Ag Victoria* 16:497-9 Ag '18

Maize and broom millet experiments, 1916-17. H. Wenzholz. *Ag Gaz of New South Wales* 28:645-9 S '17

Marton experimental plots. *J Ag New Zealand* 13:145-8, 276-8 Ag, O '16

Miscellaneous experimentation; from the director's report 1916-17. il *Pa Ag Exp B* 147:1-42 '17

Need of experiment station work on cut-over lands, by W. R. Dodson; Demonstration work on cut-over lands, by G. E. Nesom. (*In* *Cut-over land conf. of the South*, 1917, p. 103-6, 157-68) \$2.50 '17 Southern pine assn., New Orleans, La.

Nitrogen fixation, nitrification, denitrification and the production of sulphuretted hydrogen by bacteria in the Arctic ocean. B. L. Issatchenko. *Int R Sci & Prac Ag* 7,no 12:1753-5 D '16

Potato experimental fields, 1915-16. J. T. Ramsay. *J Dept Ag Victoria* 14:107-15 F '16

Progress of agricultural science in Cuba. J. T. Crawley. (*In* *Pan American scientific congress Pro.*, 1915, v. 3, p. 374-82) '17

Rate of seeding maize; experiments at Grafton farm, 1915-16. H. Wenzholz. *Ag Gaz of New South Wales* 27:783-6 N '16

Recent investigations at the Imperial institute. London. *Int R Sci & Prac Ag* 7,no 11:1583-7; 8,no 2:188-91 N '16, F '17



**Agricultural experimentation—Continued**

- Report of the committee on standardization of field experiments, American society of agronomy. bibliog Am Soc Agron J 9:402-19 D '17
- Results of co-operative experiments with farm crops, sources of seed and production of food materials; advance bulletin giving partial report of annual meeting of experimental union held in Jan. 1918. C. A. Zavitz and others. Ontario Ag Dept B 260:1-55 '18
- Resumé of work of plant industry division, 1916. A. M. Burton. il Philippine Ag R 10, no 4:361-409 '17
- Roseworthy agricultural college; harvest report, 1916-17. W. J. Colebatch. J Dept Ag S Australia 20:623-48 Mr '17
- Roseworthy agricultural college harvest report—1917-1918. W. J. Colebatch. J Dept Ag S Australia 21:623-34, 686-91, 759-66 Mr-May '18
- Scheme of agricultural experiments. J Dept Ag Ireland 17, no 1:132-41 '16
- Scientific agricultural experiments in Burma. L. P. Briggs. (Commerce Reports no. 225) p 1149-50 (S 25) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Scientific methods in agricultural experiments. A. C. Dobbs. Ag J of India Sci Congress No 1916:40-5 '16
- Shaping results of research work for extension work, by R. L. Watts and others; Relation of the experiment station to regulatory work, by A. F. Woods; Correlation of the work of experiment stations in regions with similar conditions. J. C. Kendall; W. M. Jardine. Assn Am Ag Coll & Exp Pro 1916: 264-73, 273-80, 280-91 '17
- Studies and investigations of the Imperial institute, London. Int R Sci & Prac Ag 9, no 3:273-6 Mr '18
- Trabajos fitotécnicos y de experimentación agrícola en la Estanzuela, República oriental del Uruguay. A. Boerger. il (In Pan American scientific congress Pro., 1915, v. 3, p. 361-73) '17
- Triangle system for fertilizer experiments. O. Schreiner and J. J. Skinner. il Am Soc Agron J 10:225-46 S '18
- Value of experimental work. R. W. Thatcher. Minn Hort 46:84-7 Mr '18
- Value of limestone of different degrees of fineness. J. W. White. il Pa Ag Exp B 149: 1-24 '17; Same cond. Pa Ag Exp B 152:1-16 '18
- Wheat experimental plots in the Mallee, 1917 season. H. A. Mullett. il J Dept Ag Victoria 16:89-93 F '18
- See also Agricultural experiment stations; Agricultural research; Demonstration work in agriculture; Experiment farms; Field experiments; Forest experimentation; Variety tests; also Arnold arboretum; Iowa agricultural experiment association
- Agricultural exploration**
- Economic botanical explorations in China. F. N. Meyer. Mass Hort Soc Trans 1916, pt 1:125-30 '16
- Flora of Mount Kenia, British East Africa. il Gard Chron (Lond) 59:125 Mr 4 '16
- Flowers of Japan. E. H. Wilson. Gard Chron Am 20:21 Ja '16
- Mosses collected by the Smithsonian African expedition, 1909-10. H. N. Dixon. (Misc. coll. v. 69, no. 2: Pub. 2494) 28p bibliog il '18 Smithsonian inst., Washington, D. C.
- Notes on the flora of north-western Yunnan. G. Forrest. il Royal Hort Soc J 42, pt 1:39-46 O '16
- Plant collecting in China. il Gard Chron (Lond) 62:165-6 O 27 '17
- Plant collecting in China. G. Forrest. Gard Chron (Lond) 63:31-3 Ja 26 '18
- Plants from China. Wallaces' F 41:235 F 11 '16
- Reginald Farrer's explorations in China. R. Farrer. il Gard Chron (Lond) 59:17, 29, 45, 59, 72, 86, 100, 127, 139 Ja 8-F 19, Mr 4-11 '16
- Report of work in 1914 in Kansu and Tibet. R. Farrer. il map Royal Hort Soc J 42, pt 1:47-114 O '16
- Some new plants at home and abroad. N. E. Hansen. il Minn Hort 46:229-34 Je '18

**Agricultural extension work**

- Agricultural and educational leaders in the South. Prog F 33:188 F 16 '18
- Agricultural and rural extension schools in Ireland. A. C. Monahan. (B. 41) 38p il '16 U. S. Bur. of educ., Washington, D. C.
- Agricultural colleges and the working farmer. K. L. Butterfield. (In Pan American scientific congress Pro., 1915, v. 3, p. 382-9) '17
- Agricultural education. H. L. Russell. Wallaces' F 41:324 F 25 '16
- Agricultural extension act. D. F. Houston. Philadelphia Chamber of Commerce Journal (1226-44 Widener bldg., Philadelphia 25c) 5:21+ N '16
- Agricultural extension as related to business interests; something of its meaning, the forces engaged in the work, and of the results obtained. 128p '16 Agricultural extension committee, National implement & vehicle assn., 76 W. Monroe st., Chicago
- Agricultural extension in Ohio. F. C. Dean. Ohio F 138:319 O 7 '16
- Agricultural extension report of director, 1916; North Dakota agricultural college. il map N D Ag Ext B 6:1-23 '16
- Agricultural extension work. G. I. Christie. (In Pan American scientific congress Pro., 1915, v. 5, p. 363-9) '17
- Agricultural extension work in the United States. C. B. Smith. Ag Gaz of Canada 5: 907-10 S '18
- Agricultural instruction by correspondence in France. Int R Sci & Prac Ag 7, no 12:1738-9 D '16
- Annual report of the Maine agricultural extension service for the fiscal year ending June 30, 1916. Maine Ag Ext B 109:1-48 '17
- Biennial report; agricultural extension work in Iowa, July 1, 1914-June 30, 1916. 47p il maps n.d. Ag. extension dept., Ia. college of ag., Ames
- Biennial report of the Connecticut extension service for the two years ended September 30, 1916. Conn Ag Ext B 3:1-46 '17
- Boys attend school at state fair. F. M. White. il O Judd Farmer 65:175 S 7 '18
- Busy tarheels; North Carolina extension workers perform 12,000,000 farm services in a year. S. G. Rubinow. il Country Gent 83: 13 S 7 '18
- Carrying the college to the farm; a week with the Oklahoma demonstrators. H. R. O'Brien. il Country Gent 81:1187 Je 10 '16
- Coöperation in the South. R. B. Shapinsky. Country Gent 81:1798 O 7 '16
- Cooperation of the extension service with state councils of defense and other public and private organizations. R. A. Pearson; A. C. True; Relationship of agricultural extension work to farmers' cooperative buying and selling organizations; with discussion. B. Knapp. Assn Am Ag Coll & Exp Pro 1917:267-74, 305-11 '18
- Cooperative agricultural extension work. (Doc. 40) 31p '17 U. S. States relations service, Washington, D. C.
- Cooperative demonstration work in agriculture and home economics; second annual report for the year ending Nov. 30, 1916. 44p il Division of ag. extension, Univ. of Arizona, Tucson
- Cooperative extension work in agriculture and home economics, 1916; part II of report on experiment stations and extension work in the United States. 406p '17 U S Ag
- Second report on the receipts, expenditures, and results of cooperative agricultural extension work in the 48 states under the provisions of the act of Congress of May 8, 1914 (agricultural extension act), and of similar work conducted in connection therewith under cooperative agreements between the United States department of agriculture, the state agricultural colleges, and county governments and organizations
- Cooperative work with Columbia university. il N Y Ag Dept B 86:2539-657 Ag '16
- County agent proves his worth. W. E. Hanger. maps Ohio F 142:133-4 Ag 17 '18
- County with community clubs. il Wallaces' F 41:839 Je 9 '16

**Agricultural extension work—Continued**

- Decade in agricultural education. A. M. Soule. (*In* Pan American scientific congress Pro., 1915, v. 4, p. 229-42) '17
- Directors of agriculture; regulations governing appointment and duties. Univ of the State of N Y (Albany) B 654:1-11 Ja 1 '18
- Distribution of eggs to the school pupils. Ag Gaz of Canada 4:674-80 Ag '17
- Extension activities of Pennsylvania state college during 1916. Prac F 113:127 Mr 15 '17
- Extension News is the name of a farm news bulletin of extension work in Massachusetts, the first number being issued June 15; published bi-monthly by the Extension service of the Massachusetts agricultural college
- Extension schools in agriculture. W. H. Hargrove. Mo Ag Ext Project announcement 11:1-16 '17
- Extension service in agriculture is the state's answer to the farmer's request for help in his business and his home. il map Ohio Ag Ext C v 1, no 2:1-15 '15-'16
- Extension service report for Georgia 1917-1918. J. P. Campbell. maps Ga Ag Coll (Ext) B 157:1-63 '18
- Extension work in Linn county, Iowa. Wallaces' F 41:1497 N 17 '16
- Extension work in Purdue agricultural society. E. G. Byers. Purdue Ag 11:17 Ja '17
- Farmers' field days and excursions. il Ag Gaz of Canada 3:944-6 N '16
- Farmers' institute and agricultural extension work in the United States in 1913. J. Hamilton. U S Ag B 83:1-41 '14
- Farmers' institute work in the United States in 1914, and notes on agricultural extension work in foreign countries. J. M. Stedman. U S Ag B 269:1-21 '15
- Farmers' summer school at Auburn, Ala. Prog F 31:936 Jl 29 '16
- Farmers visit stock yards. O Judd Farmer 62:12 F 24 '17
- Federal and state aid for demonstration work. Banker-F 4:5 F '17
- Here's the latest Wisconsin idea—the banker-farmer excursion. L. M. Tobin. Banker-F 3:6-7 My '16
- How extension service aided in war; plans peace tasks. Weekly N L 6:1-4 D 4 '18
- How the agent came—the farmer and the banker shook hands on it. L. M. Tobin. il Banker-F 4:10-11 F '17
- How the bankers' state associations are co-operating with the farmers. il Banker-F 4:2-4 Ag '17
- More county agents; extension workers in agriculture and home economics in more counties and in cities. Weekly N L 5:4 Ag 22 '17
- Negro farmers of Alabama; a phase of Tuskegee's extension work. C. Richardson. il Southern Workman (Hampton normal and industrial institute, Hampton, Va. 10c) 46:383-90 Jl '17
- New agriculture. G. I. Christie. Am Fert 45:81-2+ Jl 22 '16
- New Jersey state agricultural college; 3d annual report of division of extension for year ending October 31, 1916. N J Ag Ext B v 1, no 10 71p '16
- North Carolina college of agriculture, agricultural extension service; second annual report for the year ended June 30, 1916. 77p '17 Extension service, N. C. college of ag., Raleigh
- Organization of agricultural propaganda in the United States. Int R Ag Econ 71:135-9 N '16
- Planning a state extension project in entomology. T. H. Parks. J Econ Entom 11:157-63 Ap '18
- Pontiac county demonstrator's work. J Ag (Quebec) 21:9 Jl '17
- Purdue university; 5th annual report of the dept. of agricultural extension for year ending June 30, 1916. 68p '16 Dept. of ag. extension, Purdue univ., Lafayette, Ind.
- Push the demonstration work in Arkansas. C. O. Carpenter. Prog F 31:1245 O 21 '16
- Redirected laziness of Andy Jones. R. Howard. Country Gent 82:1676 N 3 '17
- Report, Nebraska agricultural extension service, 1916. Neb Ag Exp Rep 1916:xxxi-xlix '17
- Report of committee on extension organization and policy; Shaping results of research work for extension uses, by R. L. Watts and others; Written project system as affecting cooperative relationships, by W. R. Dodson; A. J. Meyer; Written project system as affecting the work of county agents, by B. Knapp; R. K. Bliss; Economic factors to be considered in connection with the project for extension work among farm women, by E. Merritt; National conferences on extension work; their advisability and necessity, by C. B. Smith; National conferences on extension projects; a plan for reducing their numbers and retaining their value, by M. S. McDowell. Assn Am Ag Coll & Exp Pro 1916:134-9, 264-73, 323-31, 331-9, 339-46, 346-50, 350-3 '17
- Report of general activities of Florida university for 1917 with financial statement for the fiscal year ending June 30, 1917. il map Fla Ag Ext Rep 1917:1-95 '18
- Report of the bibliographer; and bills relating to agricultural extension introduced in Congress Dec. 15, 1909 to Dec. 12, 1913, by A. C. True; Report of the committee on instruction of agriculture; County organization of extension work in agriculture and home economics, by C. A. Kaffer; Organization of cooperative extension work, machinery and method, by B. T. Galloway; Shall extension service include the social, recreational and educational improvement of rural and urban districts? by W. D. Hurd. Assn Am Ag Coll & Exp Pro 1915:32-44, 45-70, 214-20, 220-4, 232-41
- Report of the committee on cooperation of farmers' institutes with other educational agencies. E. L. Luther. Am Assn Farmers' Inst Workers Pro 1916:54-9 '17
- Results of farm management demonstration work in U.S.A. L. H. Goddard. Int R Sci & Prac Ag 7, no 9:1337-40 S '16
- Short course schools in Manitoba. S. T. Newton. Ag Gaz of Canada 5:717-18 Jl '18
- Shows growth in war time of extension service work. Weekly N Y 6:6 D 11 '18
- Sixteenth Iowa dairy special. E. S. Estel. il Kimball's D F 14:428 Jl 1 '16
- State and the farmer. A. F. Woods. Ag Digest 1:173-4 N '16
- State's part in agricultural activities. C. P. Norgord. Ia Ag Bd Yearbook 1916:105-12
- Taking the university to the farmer. A. J. Meyer. Mo Ag Bd B v 14:69-77 Ap '16
- 3d annual report of the Arizona agricultural extension service for the year ending December 1, 1917. Ariz Ag Ext Rep 1917:1-51 n.d.
- 3d annual report of the North Carolina agricultural extension service for the year ended June 30, 1917. il N C Ag Ext Rep 1917:1-119 '18
- Three West Virginia counties show service extension workers can give. Weekly N L 6:10 N 27 '18
- University farm and the Minnesota state horticultural society helpful in developing the farms and homes of the northwest. A. F. Woods. il Minn Hort 44:297-302 Ag '16
- Work of the soil improvement committee of the Southern fertilizer association. H. Hodgson. Am Fert 46:24-5 F 17 '17

*See also* Agricultural clubs; Agricultural colleges—Short courses; Agricultural instruction act; Banks and agricultural development; County agents; Dairy extension conference; Dairy extension work; Demonstration work in agriculture; Extension education; Farm bureaus; Farm home demonstration work; Farm tours; Farmers' institutes; Home economics extension work; Horticultural extension work; Moving pictures in extension work; Poultry extension work; Railroads and agricultural development; Special trains, Educational; United States boys' working reserve; Women's institutes



**Agriculture extension work —Continued**

**Bibliography**

Publications issued by the New York state college of agriculture at Cornell university. 16p '17 N.Y. State college of agriculture, Cornell university, Ithaca

**Directories**

State officers in charge of cooperative agricultural extension work. See Yearbooks of United States Department of agriculture

**Statistics**

Agricultural extension publications for the fiscal year ended June 30, 1916; tabulation. (*In* Cooperative extension work, 1916, pt. 2, p. 400) '17 U S Ag

Expenditures for cooperative agricultural extension for the year ended June 30, 1916; tabulation. (*In* Cooperative extension work, 1916, pt. 2, p. 378-96) '17 U S Ag

**Agricultural fairs.** See Fairs

**Agricultural forecasts.** See Forecasts; Prophecies

**Agricultural high schools**

Agricultural high schools in Ontario, Manitoba and Saskatchewan. Ag Gaz of Canada 3:1002-5 N '16

County agricultural high school. A. W. Beatty. Wallaces' F 41:268 F 18 '16

County agricultural high schools. (*In* Agricultural extension, p 83-8) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

Frontier high school; Flathead high school. Kalispell, Mont. F. L. Clark. *il Country Gent* 81:467 F 26 '16

School question. G: S. Banta. Wallaces' F 41: 531 Mr 31 '16

School that became a business factor; Lake City state agricultural high school. E. J. Trospen. *il Ohio F* 137:125-6 Ja 29 '16

What the county agricultural high school is doing for Mississippi boys and girls. W. H. Smith. *Prog F* 31:816 Je 24 '16

**Agricultural implements.** See Farm machinery; Tools

**Agricultural instruction act**

Agricultural instruction act. Ag Gaz of Canada 3:776-80; 4:442-4 S '16, Je '17

Grants under the agricultural instruction act. Ag Gaz of Canada 5:849-53 S '18

Teaching of agriculture in the schools of the maritime provinces. J. W. Mitchell. Ag Gaz of Canada 5:122-4 F '18

Vocational training in agriculture; means adopted in the United States compared with the objects aimed at by the agricultural instruction act in Canada. Ag Gaz of Canada 5:289-91 Mr '18

Work of the Agricultural instruction act. Ag Gaz of Canada 4:647-55 Ag '17

**Agricultural insurance.** See Insurance, Agricultural

**Agricultural investigation commission, Canada**  
Appointment of an Agricultural investigation commission. *Int R Ag Econ* 62:126 F '16

**Agricultural labor.** See Farm labor

**Agricultural labor office, National.** See National agricultural labor office, France

**Agricultural law**

Acts relating to agriculture; drainage in all its phases. Ag Gaz of Canada 4:1097-103 D '17

Acts relating to agriculture; legislation for weed control. Ag Gaz of Canada 4:508-13 Je '17

Acts relating to agriculture; list. Ag Gaz of Canada 4:78-83 Ja '17

Acts relating to the management and control of the State agricultural society. *Cal Ag Bd Rep* 1917:373-89 '18

Acts relating to the management and control of the State agricultural society. (*In* Statistical report, 1916, p. ix-xx) '17 Cal. State bd. of ag., Sacramento

Agricultural law, 1916. N Y Ag Dept B 83: 1959-2145 My '16; Same. N Y Ag Dept Rep 1916,pt 3:1959-2145 '17

Agricultural legislation. Ag Gaz of Canada 4: 408-11 My '17

Agricultural legislation in Canada. Ag Gaz of Canada 3:551-9 Je '16

Agricultural legislation, 1916 (Mass.). Mass Ag Bd Yearbook 1916,pt 2:268-79 '17

Agricultural legislation, 1917. Mass Ag Bd Yearbook 1917,pt 2:155-73 '18

Annuaire international de législation agricole, 1916: International yearbook of agricultural legislation (text in French, analytical introduction and index in English); with

Table chronologique des pays. *Int Yearbook Ag Leg* 1916:supi-81, 1-1458 '17

Application of the agricultural act in British Columbia. *Int R Ag Econ* 76:70-3 Ap '17

Bills at Albany. N Y Prod R 45:527, 868 F 20, Ap 10 '18

Corn production act, 1917 in England and Wales. J Bd Ag 24:621-8 S '17; Same cond. *Int R Ag Econ* 82:67-71 O '17

Corn production bill, 1917. J Dept Ag Ireland 17,no 3:490-8 '17; Same cond. *Int R Ag Econ* 84:74-8 D '17

Farm interests in Congress. O Judd Farmer 60:14 Ja 15 '16

Farms and markets law. Greater New York (Merchants' Association, Woolworth bldg., N.Y.) 6:13-14 Je 25 '17

Federal agricultural legislation. Ag Gaz of Canada 4:848-50; 5:654-8 O '17, Ji '18

\* France—Chamber of deputies has passed a bill permitting neighboring farmers to till

land neglected by the war. Wherever owners, holding land for speculation, or thru indifference, interfere with the national food

supply by allowing the land held by them to lie fallow, adjoining farmers, upon application to proper officials, will be authorized

to plant and harvest it

General information and laws effective July 1, 1917; Illinois. 121p '17 Ill. dept. of ag., Springfield

Grain standards act provides for establishment of official standards and licensing of grain inspectors. *Am Coop J* 12:17 S '16

Horticultural problems and laws. U. S. Webb. *Cal State Comm Hort B v* 7:157-60 Mr '18

Kentucky statutes, Carroll's edition, 1915; chapter 4 (Act, April 2, 1892) agriculture, labor and statistics. *Ky Ag Dept Rep* 1916-1917:384-93 '18

Laws of Maine relating to agriculture. Maine Ag Dept B v 16:1-103 D '17

Manual of agricultural laws (Mass.). 1916. comp. and ed. by R. E. Annin, jr. 195p '16

Mass. State bd. of ag., Boston

Manual of laws pertaining to the Department of farms and markets. N Y Farms & Markets Dept Ag B 108:1-269 Je '18

\* Nationalizing agriculture. New Statesman (10 Great Queen st. Kingsway, London, W.C. 6d) 11:265-7, 286-7 Ji 6-13 '18

New Wyoming dip law; text. *Am Sheep B & W* 37:88 F '17

New York farm legislation. G. W. Harrison. *Kimball's D F* 15:240 Ap 1 '17

Ohio's new lime law. F. E. Bear. *Ohio F* 141: 285 F 23 '18

Organized farmer at Washington. J. W. Short-hill. *Am Coop J* 13:107-8 N '17

Prince Edward Island passes important agricultural legislation. *Int R Ag Econ* 70:114-15 O '16

Quebec: agricultural legislation. Ag Gaz of Canada 4:131 F '17

Recent agricultural legislation. Ag Gaz of Canada 5:475-8, 578-84 My-Je '18

Recent agricultural legislation in Ontario and Manitoba. Ag Gaz of Canada 4:484-9 Je '17

Recent agricultural legislation in the provinces. Ag Gaz of Canada 4:563-71 Ji '17

Recent agricultural legislation in the United States. J Bd Ag 24:880-1 N '17

Recent national legislation as it concerns the interests of the farmer. H. Smith. *Farmers' Nat Congress Pro* 1916:60-4

Report of committee on legislation of the New York state agricultural society. C. F. Boshart. N Y Farms & Markets Dept Ag B 105:19-30 Mr '18

**Agricultural law—Continued**

- Report of the solicitor of the United States Department of agriculture for the fiscal year ended June 30, 1917. 29p '17 U S Ag  
Rural community and its legislation. C. O. Carpenter. Prog F 32:170 F 10 '17  
Stray animals acts. Ag Gaz of Canada 4:318-20 Ap '17  
Taxation and the crop lien. Prog F 31:87 Ja 15 '16  
Three governors speak for agriculture. Ag Digest 1:299 F '17  
Three measures affecting agriculture of British Columbia. Ag Gaz of Canada 3:831-3 S '16

*See also* Agricultural credit—United States—Law; Bee culture—Laws; Dairy inspection; Dairy law; Desert land laws; Dogs—Law; Drainage laws; Fish laws; Game laws; Homestead law; Horticultural inspection; Irrigation laws; Legislation; Live stock laws; Stallion law; also American association for agricultural legislation; International yearbook of agricultural legislation; also subhead Law under special subjects

**Agricultural legislation, Conference on.** See Conference on agricultural legislation

**Agricultural legislation, International yearbook of.** See International yearbook of agricultural legislation

**Agricultural liens**

- Bill to regulate crop lien usury. Prog F 32:257 F 24 '17  
Crop lien bill; full text of important new bill. Prog F 32:366 Mr 17 '17  
Gov. Bickett denounces crop lien evil. Prog F 32:78 Ja 20 '17

**Agricultural literature**

- Editing the agricultural bulletin; stylebook of the American association of agricultural college editors. F. C. Dean and others. 39p '18 American assn. of ag. college editors, Manhattan, Kansas

*See also* Agricultural experiment station literature; Agricultural periodicals

**Agricultural, live stock, irrigation and engineering societies of Idaho, Conference of.** See Conference of agricultural, live stock, irrigation and engineering societies of Idaho

**Agricultural machinery.** See Farm machinery

**Agricultural museums**

- Agricultural school museums. J. C. Magnan. Ag Gaz of Canada 3:886-7 O '16

**Agricultural organisation society**

- Agricultural organization society in England and Wales. Int R Ag Econ 77:15-24 My '17  
Agricultural organisation society's report, 1915-1916. J Bd Ag 23:915-17 D '16  
Policy of the Agricultural organisation society. L. Scott. J Bd Ag 24:1232-8 F '18

**Agricultural pageants.** See Pageants

**Agricultural periodicals**

- Beginnings of live stock journalism; the story of how the founder of the Gazette came to engage in this work. A. H. Sanders. Il Breeder's Gaz 70:1176-7 D 21 '16  
Circulation and subscription problem. Wallaces' F 41:118 Ja 28 '16  
Contents of some farm papers. J. W. Chamberlain. Hoard's D 51:244 Mr 3 '16  
Farm bureau news. G. A. Starring. (Sup. to B. vol. 10, no. 3) 12p '18 S.D. state college, Brookings

General principles governing editorial work given briefly and simply as a help in editing farm bureau publications and in submitting copy for publication

- Forty-five years in farm journalism. M. J. Lawrence. Ohio F 141:6 Ja 5 '18

How the farm paper helps the implement dealer. J. P. Wallace. Wallaces' F 41:234 F 11 '16

- Postal law will kill national publications. Kimball's D F 16:106 F 15 '18

Preparation for editorial work on farm papers. N. A. Crawford. Kan Ag Coll B (Manhattan) v 1, no 5 35p Mr 15 '17

- Value of a good poultry paper. W. H. Hood. Am P J 49:822-3 O '18

*See also* Banker-farmer; Gardeners' chronicle (London); Journal of agricultural research; Journal of dairy science; National stockman and farmer; Ohio farmer; Swine world; Wallaces' farmer

**Agricultural pests**

- Animal pests on cultivated plants observed by the entomological bureau of Stravropol in 1914. B. Uvarov. Int R Sci & Prac Ag 7, no 11:1715-17 N '16

- Blackberry nuisance and destruction. J Ag New Zealand 14:52-4 Ja '17

- Calendar of insect pests and plant diseases. E. J. Vosler. Il Cal State Comm Hort B v 5: 37-43 Ja '16

- Control of domestic animals. E. S. Scholl and J. W. Neill. Tex Ag Dept B n s 13p F '16

- \* Damage to agriculture by vermin and birds. W. E. Collinge. Nature (St Martin's st, London, W.C. 6d) 101:48 Mr 21 '18

- Destruction of farm vermin. J Bd Ag 22:1162-5; 23:866-9 F, D '16

- \* Economic toxicology. G. P. Gray. Science (Science Press, Garrison, N.Y. 15c) n s 48: 329-32 O 4 '18

- Friends and foes of the fruit grower. F. C. Pellett. Il Wallaces' F 41:703 My 5 '16

- Good in it; farmers' pests. H. Quick. Country Gent 81:55 Ja 8 '16

- Grandmother's bugs—and mine. P. S. Lovejoy. Il Country Gent 83:5+ Ja 12 '18

- How to combat rabbits, gophers, prairie dogs, coyotes, ants and grasshoppers. A. L. Paschall. bibliog Il Ariz Ag Exp B 81:320-38 '17

- Muskrat (fiber zibethicus) injurious to fish and aquatic birds in Bavaria and Bohemia. G. Koff and H. N. Maier. Int R Sci & Prac Ag 8, no 4:628-30 Ap '17

- Observations on animal pests of cultivated plants, made in Sweden from 1912 to 1916. A. Tullgren. Int R Sci & Prac Ag 9, no 2: 255-8 F '18

- Orchard and garden pests. J. G. Sanders. Prac F 114:188 My 15 '18

- Some aliens we do not want; why we do not want them, and how they may arrive; the flying fox. D. B. Mackie. Il Cal State Comm Hort B v 7:466-70 Jl '18

- Some pests we do not want, why we do not want them, and how they may arrive; the banana root borer. D. B. Mackie. Il Cal State Comm Hort B v 7:498-502 Ag '18

- State crop pest law and rules and regulations of the commissioner. W Va Ag Dept B 24:1-13 '17

- Summary of the work of the pest control section for the year 1916. D. B. Mackie. Il Philippine Ag R 10, no 2:128-45 '17

- To kill or not to kill; bounty question. F. C. Pellett. Il Country Gent 81:380 F 19 '16

- Tree and plant pests. C. L. Marlatt. Il Scientific Am Sup (233 Broadway, N.Y. 10c) 84: 40-2 Jl 21 '17

*See also* Birds, Injurious and beneficial; Fruit—Diseases and pests; Fungi; Grain—Diseases and pests; Hessian flies; Insects, Injurious and beneficial; Rodents; Trees—Diseases and pests; Vegetables—Diseases and pests; Weeds; Weevils; also names of crops, subhead Diseases and pests

**Agricultural plants.** See Plants, Food

**Agricultural power users' associations.** See Syndicats de mécanique agricole

**Agricultural products**

- Import embargo on agricultural products. Am Flor 50:605 Ap 6 '18

*See also* Crops; Dairy products; Farm produce; Fibers; Forest products; Fruit; Liquors; Marketing; Root crops; Vegetables; also names of crops and products

**Analysis**

- Analysis of soils, manures, fodders, etc.; preparation of samples. Ag Gaz of New South Wales 29:56-8 Ja '18



**Agricultural products—Continued**

**Costs**

Method of determining the cost of production of agricultural products. E. Marengli. Int R Sci & Prac Ag 8, no 1:147-8 Ja '17

**Inspection**

Nomination of inspectors of agricultural products in trade of the agricultural associations. Int R Ag Econ 9, no 2:127-8 F '18

**Laws**

Restrictions imposées à l'exportation ou facilités accordées à l'importation dans les différents pays. Int Yearbook Ag Leg 1916: 321-60 '17

**Marketing**

See Marketing

**Prices**

Italy—yearly average prices of the principal agricultural products. Doc Leaflets 1, no 1: 11 J1 '17

**Statistics**

China—production, exports, prices and freights, 1913-1916. Doc Leaflets 1, no 5:71-80 N '17

Foreign trade of the United States in agricultural products. Monthly Crop Rep 4:36-7 Ap '18

Imports and exports of agricultural products. United States. See Yearbooks of the United States Department of agriculture, also published as Separates

**Laws**

Décret de la lieutenance n. 1127, donnant faculté au ministre de l'agriculture d'ordonner des recensements de produits agricoles et des industries agricoles en Italie. Int Yearbook Ag Leg 1916:22 '17

**China**

Production, exports, prices and freights, 1913-1916. Doc Leaflets 1, no 5:71-80 N '17

**Madagascar**

Principal exports, 1914-1915. Doc Leaflets 1, no 5:68-71 N '17

**Portuguese Guinea**

Agricultural products of Portuguese Guinea. J. Machado da Fonseca. Int R Sci & Prac Ag 7, no 9:1242-4 S '16

**United States**

Crop yields and prices and future food supply in the United States. G. F. Warren. Int R Sci & Prac Ag 7, no 9:1341-3 S '16

**Agricultural quarantine.** See Quarantine, Agricultural

**Agricultural representatives.** See County agents

**Agricultural research**

Agricultural education and research in China. Science (Science Press, Garrison, N.Y. 15c) n s 46:54-5 J1 20 '17

Agricultural research and education in England and Wales. J Bd Ag 23:1272-4; 24:1097-8 Mr '17, Ja '18

Agricultural research in Canada. Ag Gaz of Canada 3:648-50 J1 '16

Agricultural research in the Virgin Islands is provided for in the appropriations for the U. S. Department of agriculture, for the current fiscal year. The Danish authorities established an agricultural experiment station near Christiansted, St Croix, in 1910, which ultimately included a tract of 225 acres. This station is to be taken over by the States relations service of the Department of agriculture and the staff will be increased. Besides continuing experiments on sugar cane, cotton, vegetables, etc., the department is likely to investigate the live stock possibilities of the islands. Dairying is now almost unknown there. The leading crops are sugar cane and Sea Island cotton. An agricultural survey of the islands has been made by D. W. May, agronomist in charge of the Porto Rico experimental station.—Sci Am

Agriculture's debt to science. J. G. Lipman. N J Ag Dept B 5:152-9 '17

Allotment of agricultural education and research. Ag Gaz of Canada 5:267-72 Mr '18

American agriculture; report on agricultural education methods and agricultural research work in the state of California. A. E. V. Richardson. il J Dept Ag Victoria 16:257-75, 339-54 My-Je '18

American system of agricultural education and research and its rôle in helping to win the war. D. F. Houston. Weekly N L 6:2 Ag 28 '18

Application of botanical science to agriculture. A. Howard. Ag J of India Sci Congress No 1916:14-26 '16; Abstract. Int R Sci & Prac Ag 7, no 10:1423-6 O '16

Chuck wagon scientist again. C. M. O'Donel. Breeder's Gaz 70:408 S 14 '16

Chuck wagon scientist again. C. M. O'Donel. Breeder's Gaz 70:954 N 16 '16

Contribution of science to agricultural efficiency and development. A. McTaggart. J Ag New Zealand 16:156-61 Mr '18

Cotton research. D. T. Chadwick. Ag J of India 13:721-3 O '18

Development of agricultural research in Australia. Exp Sta Record 39:1-7 J1 '18

Employment of research assistants who may register as graduate students at the college, by J. G. Lipman; Graduate teaching and its relation to the work of the agricultural experiment station, by L. R. Jones. Assn Am Ag Coll & Exp Pro 1916:169-72, 172-6 '17

Future of agricultural education and research in the United States. W. H. Jordan. Science (Science Press, Garrison, N.Y. 15c) n s 47: 125-34 F 8 '18

Green manuring; a review of the American experiment station literature. A. J. Pieters. bibliog Am Soc Agron J 9:62-82, 109-26, 162-90 F-Ap '17

Improvement of cotton cultivation in the Central Provinces studied from an economic point of view. D. Clouston. Ag J of India Sci Congress No 1917:29-37

Inter-state conference of agricultural scientists. Ag Gaz of New South Wales 29:59-60 Ja '18

Mutual indebtedness of science and agriculture. J. M. Coulter. Cal State Comm Hort B v 5:128-33 Ap '16

Organization of agricultural research in India. H. M. Leake. Ag J of India 13:583-607 O '18

\* Organisation of research in agriculture. Nature (St Martin's st, London, W. C. 6d) 100: 507-8 F 28 '18

Outlook for agricultural science. E. Davenport. Science (Science Press, Garrison, N.Y. 15c) n s 45:149-60 F 16 '17

Preparation required for research work in agriculture, by T. F. Hunt; Publication of the results of investigations made in experiment stations in technical scientific journals, including the Journal of agricultural research, by R. Pearl, with discussion. Assn Am Ag Coll & Exp Pro 1915:159-61, 186-98

Recent investigations and observations made at the Imperial institute (London). Int R Sci & Prac Ag 9, no 1:16-22 Ja '18

Regulations for grants in aid of agricultural education and research in England and Wales. 21p '17 Gt. Britain Bd. of ag. and fisheries. London

Not available for general distribution  
Research and application in agriculture. T. F. Hunt. Cal Commonwealth Club Transac (San Francisco 13c) 12:85-90 Ap '17

Research in market gardening. Gard Chron (Lond) 61:126 Mr 24 '17

Science and production. A. E. V. Richardson. J Dept Ag Victoria 15:102-10 F '17

Scientific research in agriculture. il Ag Gaz of Canada 5:151-62 F '18

Some problems in agronomy. C. R. Ball. Am Soc Agron J 8:337-47 N '16

Training in field observations. W. Burns. Ag J of India 12:79-83 Ja '17

Value of experimental work for truck farmers; with discussion. T. C. Johnson. Mass Ag Bd B 5:34-51 '18 (3d ed rev.)

**Agricultural research —Continued**

Vital importance and real ultimate significance. *Exp Sta Record* 39:101-6 Ag '18  
What science has done and will do for floriculture. E: A. White. *Gard Chron Am* 21: 11-14 Ja '17

*See also* Agricultural experiment stations; Agricultural experimentation; Forestry research; Horticultural research; Plant breeding; also Conference of agricultural scientists; Journal of agricultural research

**Agricultural school of Ste.-Anne de la Pocatiere.**  
See Ste.-Anne de la Pocatiere agricultural school

**Agricultural schools**

Back to the farm! School of horticulture at Ambler, Pennsylvania. Illustrated World (Drexel av & 58th st, Chicago 15c) 28:613 D '17

Municipal agricultural school. A. Kennedy. *Ag Gaz of Canada* 5:82-4, 385-8 Ja, Ap '18; Discussion. 5:608-12 Je '18

Original agricultural school commencement. J. M. Drew. *il Rural N Y* 76:575 Ap 21 '17

Report of the standing committee on movable schools of agriculture; with discussion. C. S. Wheeler. *Am Assn Farmers' Inst Workers Pro* 1916:68-72 '17

Schools of agriculture, mechanic arts and homemaking. L. S. Hawkins. *il Univ of the State of N Y (Albany)* B 626 27p N 1 '16

Vocational agricultural schools. C. R. Hoffer. *Purdue Ag* 12:212-13 Ja '18

*See also* Agricultural colleges; Agricultural high schools; Rural schools; also Agronomic institute of Moscow, National farm school, Oka agricultural institute, Riggs school, Lakeville, Conn.; Ste.-Anne de la Pocatiere agricultural school

**Courses of study**

Civic and social training in the agricultural schools. J. McCaig. *Ag Gaz of Canada* 5:618-20 Je '18

**California**

Purpose of the University of California farm school at Davis. H. E. Van Norman. *Cal State Comm Hort B v* 7:67-9 Ja '18

**Canada**

Agricultural schools in Quebec. *J Ag (Quebec)* 20:201 Ap '17

Provincial schools of agriculture. W. J. Elliott. (*In* Report, United farmers of Alberta, 1917, p. 255+) '18

**Georgia**

District agricultural schools of Georgia. C. H. Lane and D. J. Crosby. (*B.* 44) 32p '16 U.S. Bureau of education, Washington, D. C.

Seventh annual report of the eleven district agricultural schools of Georgia. J. S. Stewart. *Ga Ag Coll B* 109:1-36 Je '16

Eighth annual report of the eleven district agricultural schools of Georgia. J. S. Stewart. *Ga Ag Coll B* 138:1-28 '17

**Ireland**

Agricultural and rural extension schools in Ireland. A. C. Monahan. (*B.* 41) 38p il '16 U. S. Bur. of educ., Washington, D.C.

**Massachusetts**

Information relating to the establishment and administration of county agricultural schools and agricultural departments. (*B.* 23) 80p '16 Mass. Bd. of educ., Boston

**Agricultural schools, County**

Agricultural education in county schools. H. L. Russell. (*In* Pan American scientific congress Pro., 1915, v. 5, p. 353-7) '17

**Agricultural sciences.** Publications in; Index. 1912-1917. *Cal Univ Pub Ag Sci* 589-95p '17

**Agricultural societies**

Activities of mutual co-operative agricultural associations. *Int R Ag Econ* 70:30-6 O '16

Agricultural association formed in Guadeloupe. H: T. Wilcox. (*Commerce Reports* no. 243) p 217 (O 16) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

Appendix to annual report of the province of Ontario 1917; results of competitions in standing field crops and prize-winning grain at winter fairs. 126p '18 Ontario ag. dept., Toronto

18th annual report of the Agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions, for the year 1918. 112p il '18 Ontario ag. dept., Toronto

Législation visant les organisations publiques locales. *Int Yearbook Ag Leg* 1916:830-6 '17

Miscellaneous information relating to co-operation and association in various countries. See monthly numbers of International review of agricultural economics

Sixteenth annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1916. 120p il '16 Ontario Dept. of agriculture, Toronto

17th annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1917. 120p il '17 Ontario ag. dept., Toronto

Suggestions for a state cooperative law designed to conform to section 6 of the Clayton act. (Service and regulatory announcements—Markets 20) Sp '17 U S Ag

*See also* Agricultural cooperative credit associations; Agriculture, Cooperative; also names of societies, e.g. Agricultural organization society, Association of the agriculturists of Spain, Catholic agricultural confederation of old Castile and Leon, Catholic social federation of Navarre, Hawke's Bay farming development association, Heatherland association of Denmark, Irish agricultural organisation society, Jewish agricultural and industrial aid society, National agricultural organization society, National agricultural society, Ontario agricultural and experimental union, Peasants' league of Belgium, Royal society of Danish agriculture, Russian agricultural congress, Secretariat of Swiss peasants, Swiss peasants' union, Syndicats de mécanique agricole, Women's national farm and garden association; also names of state associations

**Directories**

Agricultural and live stock associations of Kentucky. *Ky Ag Dept Rep* 1916-1917:373-6 '18

County and local agricultural societies. *Pa Ag Dept B* 296:1-8 '17

Directory of the agricultural and similar organizations of Massachusetts. 31p '16 Mass. State bd. of agriculture, Boston

Directory of the agricultural and similar organizations of Massachusetts, 1917. *Mass Ag Bd Yearbook* 1916, pt 1:223-39 '17

List of county and local agricultural societies (in Pennsylvania). *Pa Ag Dept B* 281:1-8 '16

**Agricultural surveys**

Brief economic and social survey of Putnam county, Ga. (Farm life conditions in the South) 5p n.d. Georgia State normal school, Athens

Observations on the recent agricultural inquiry in California. T: F. Hunt. *Cal Ag Exp* 20p n. d.

\* Preliminary report into the agricultural resources of the state, 1916. 30p '16 Comm. of ag. inquiry, State of Rhode Island and Providence plantations, Providence

Webster county, Ga.; a brief economic and social survey. A. Kidd and E. C. Branson. 10p n.d. Georgia State normal school, Athens

*See also* Dairy farm surveys; Farm surveys; Social surveys

**Laws**

Recensements de la population, des propriétés foncières; des machines agricoles et du bétail; évaluation des récoltes. *Int Yearbook Ag Leg* 1916:26-31 '17

**Agricultural tools.** See Farm machinery; Tools  
**Agricultural tractors.** See Tractors



**Agricultural war book for 1916**

Descriptive note. *Ag Gaz* of Canada 3:397-9 My '16

Production and thrift, 1916. 250p '16 Canada Ag

**Agriculture**

Adjustment of production to demand. C. K. Knight. *Penn State F* 9:341+ Mr '16

After the war. G: D. Black. *Ohio F* 141:374 Mr 9 '18

Agricultural problems, American and European. J. G. Schurman. *N Y Ag Dept B* 92: 89-97 F '17

Agriculture for beginners. W. I. Chamberlain. *Nat Stock & F* 40:4, 38, 70, 100, 132, 180, 205, 228, 252 Ap 1-29, My 13-Je 3 '16

American farmer's opportunity. A. W. Blair. *il Hoard's D* 53:785+ Je 1 '17

Botany and better agriculture. E. J. Petry. *Purdue Ag* 11:21-2 Je '17

Can the boy without much capital buy a farm of high priced land? A. J. Bill. *Banker-F* 3:14 N '16

Country versus city. W. H. Wilson. (*In Am. sociological soc.*, Pub. v. 11, p. 12-20)

Don't sell your breeding stock. F. R. Marshall. *il Am Sheep B & W* 37:329-30 Je '17

Effect of climate and soil upon agriculture. R. R. Spafford. *maps University Studies* (Nebraska Univ., Lincoln) v 16, nos 1, 2:91-113 Ja-Apr '16

Effect of wars on trade and national industry. J: B. C. Kershaw. *Industrial Management* (6 E. 39th st, N.Y. 25c) 54:94-9 O '17

Eugenics and agriculture. O. F. Cook. *J Heredity* 7:249-54 Je '16

Failures at farming. B. Howard. *il Country Gent* 83:14 F 16 '18

Farmer and the new conditions. G: D. Black. *Ohio F* 142:579 D 14 '18

Farming—a science, a business and a life. H: Wallace. *Wallaces' F* 41:1656 D 22 '16

Farming: industry, business, profession. C. Poe. *Prog F* 31:407 Mr 18 '16

Farms that came back. H. W. Collingwood. *il Country Life* 29:36-7 Ja; 40-1 F; 50-1 Mr; 40-1 Ap; 30:44-5 My; 50-1 Je; 40-1 JI; 40-1 Ag; 38-9 S; 40-1 O '16

Geography of the world's agriculture. V. C. Finch and O. E. Baker. 143p bibliog maps '17 U S Ag

Graphic summary of world agriculture; maps. V. C. Finch and others. *U S Ag Yearbook* 1916:531-53; Same. Separate 713

Greater acreage or more per acre? F. M. Lutts. *Ohio F* 139:672 My 12 '17

Greater agriculture; a sequel. W. J. Malden. 19th Century (249 W. 13th st., N.Y. 50c) 81: 171-92 Ja '17

Home of their own. E. Davenport. *Country Gent* 83:7+ Ag 10 '18

How John and Mary may start farming. C. E. Ladd. *Country Gent* 83:12 Je 29 '18

Importance of continued cultivation. *Coop Manager & F* 6:83 JI '17

Labor hears farmers' side. A. C. Townley. *Non-Partisan Leader* (Box 575, St Paul, Minn. \$2.50 per yr.) 5:6-7+ D 10 '17

Laying the foundation. A. H. Shaver. *Wallaces' F* 42:500 Mr 16 '17

Letters to a young farmer. W: H. Dean. *il Country Gent* 81:1929, 1998, 2071; 82:11, 97 N 4, 18, D 2 '16, Ja 6, 20 '17

Man and his relation to the soil. G. F. Jordan. *Coop Manager & F* 6:77 Ja '17

More per acre vs. more acres. F. M. Lutts. *Ohio F* 141:614 My 4 '18

More soup stones. B. Howard. *Country Gent* 81:1969 N 11 '16

New business of farming. F. D. Coburn. See monthly numbers of *Country Life* in America from April to October 1916

Organization of agriculture. (*In Nat. conf. on marketing and farm credits*, 1916, p. 435-504) \$2 '17 C. W. Holman, sec., Madison, Wis.

Includes: Cost of living and the remedy, by C: McCarthy; Basis of National agricultural organization, by K. L. Butterfield; Organization and price making, by J. N. McBride; Unification of American agriculture, by C. S. Vrooman; National service institution for farmers, by C: A. Lyman; First aid to farming business, by C: W. Holman; An-

nouncement of National agricultural organization society

Outstanding achievements in agriculture. L. H. Bailey. *J Ag* (Quebec) 19:205 Mr '16

Palate of civilized man and its influence on agriculture. D: Fairchild. *il J Fr Inst* (Franklin Inst., Philadelphia 50c) 185:299-316 Mr '18

Picture of the world's basic resources of rehabilitation. *maps Americas* (55 Wall st, N.Y.) 4:24-8 JI '18

Plain tale of a back to the lander; he reviews his first year. *Rural N Y* 77:693, 718 My 18-25 '18

Plant ecology and its relation to agriculture. W. G. Waterman. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:223-8 S 7 '17

Practical pointers for increasing production. *il Ohio F* 139:633-4 My 5 '17

Preserve and produce. *Purdue Ag* 12:30-4 O '17

Relationship between the use of fertilizer and labor efficiency. *Coop Manager & F* 6:72-3 Je '17

Rhythm of civilization and agriculture. *Wallaces' F* 41:1656-7 D 22 '16

School and farm of the future. B. T. Galloway. *J Ag* (Quebec) 19:250 My '16

\* Seven barrels on democracy. W: Haller. *Columbia Univ Quar* (Columbia Univ. Press, N.Y. 30c) 20:170-5 Ap '18

Soil feeding or crop feeding. M. Ryder. *Coop Manager & F* 7:78 N '17

Some observations on agricultural work in Egypt, America, and Japan. W. Roberts. *Ag J of India* 12:583-7; 13:272-80 O '17, Ap '18 (to be cont)

Soup stones in agriculture. B. Howard. *Country Gent* 81:1871 O 21 '16

Story of John and Mary; they want to farm, but how can they afford it? E. Davenport. *Country Gent* 83:15 Ap 13 '18

Those good old days. M. E. Townsend. *Nat Stock & F* 41:138 Ap 28 '17

Value of agriculture in time of war. E. M. K. Geiling. *Scientific Am* (233 Broadway, N.Y. 10c) 116:391 Ap 21 '17

Veteran's memories. H. W. Phelps. *Nat Stock & F* 40:958 D 23 '16

Visit to Optimistic farm, N.J., in the good year 1940. O. W. Mapes. *Rural N Y* 75:1229, 1254 S 23-30 '16

War time profits. P. T. Maw. *J Bd Ag* 24: 63-6 Ap '17

Waste and the high cost of living. H. C. Campbell. *Hoard's D* 53:969 JI 13 '17

What is coming to farming? G: A. Cosgrove. *Rural N Y* 77:743 Je 1 '18

What poor seed, plant or stock diseases and boarder cows cost farmers. H. L. Russell. *Banker-F* 4:12-13 N '17

What the railroads are doing in the development of farm and rural communities. J: H. Peyton. (*In Agricultural extension*, p 103-6) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

Will our farmers become tenant class? T. Roosevelt. *Ohio F* 140:314 O 13 '17

Window box farmers; a caustic commentary on this class of farmer advisors. S. W. Charles. *Farm Eng* 6:12 F '18

See also Animals, Predatory; Bacteriology; Banks and agricultural development; Bee culture; Bees; Birds, Injurious and beneficial; Clearing of land; Cover crops; Crops; Dairying; Diversified farming; Drainage; Drug farming; Dry farming; Electricity on the farm; Farmers; Farmers' institutes; Farms; Feeding and feeding stuffs; Fertilizers; Floriculture; Forage plants; Forests and forestry; Frost protection; Fruit culture; Gardening; Greenhouses; Insects, Injurious and beneficial; Irrigation; Irrigation farming; Land; Land tenure; Live stock; Manures; Market gardening; Marketing; Pastures and meadows; Peasantry; Plant breeding; Plants; Poultry; Ranges; Reclamation of land; Rotation of crops; Seeds; Silage; Silos; Standing crop competitions; Threshing; Tillage; Trees; Truck farming; Vegetable gardening; also headings beginning Agricultural, Agriculture, Farm, Soil, Soils, and names of special products

## Agriculture—Continued

## Accounting

- Lessons in field management. M. Champlin. 50c '17 Agronomy dept., South Dakota state college, Brookings  
State finances; farm number. (v. 1, no. 11) p 3-5 F '18 N.Y. State comptroller's office, Albany

## Bibliography

- Agriculture; Cotton and cottonseed; Tobacco: 1912-1916; Forest products. (*In* Circular of information concerning census publications, 1790-1916, p 37-42, 73-80) '17 U. S. Census bur., Washington, D. C.  
Best books—new and old; authoritative books and publications; with list. E. R. MacIntyre and C. S. Hean. *Ag Digest* 1:198-9, 238-40 N-D '16  
Bibliographical work, special indexes, directories and lists of publications in progress in the Department of agriculture. (Lib. notes, no. 6) 8p mim '18 U S Ag  
Books on agriculture and household science. O. J. Stevenson. *Ontario Ag Dept B* 259: 1-14 '18  
Books on the farm and garden. 4p '18 Public library, South Bend, Ind.  
Economic biology; literature relating to entomology, botany, floriculture, horticulture, agriculture, forestry. (Catalog no. 37) 64p '17 Franklin bookshop, 920 Walnut st., Philadelphia  
Farmers' bulletins you ought to have. *Prog F* 31:218 F 12 '16  
Helpful books for farmers and agricultural workers. *N C Ag Ext Farm-News v* 4 1p F 23 '18  
Libraries and the food campaign. H. W. Sewall. *Minn Lib Notes and News* (Pub. lib. comm., St Paul) 5:112-15 D '17  
List of agricultural publications in India. See *Agricultural journal of India*, issues of April and October of each year  
Practical books on agriculture which everyone should read. 24p map '17 International harvester co., Agricultural extension dept., Chicago  
Publications of the Imperial department of agriculture in India. See quarterly issues of *Agricultural journal of India*  
Successful farm life; a suggestive list of books. 37p '17 Brumback library of Van Wert county, Van Wert, Ohio  
United States Department of agriculture; list of publications issued since July 1, 1913, (revised to Dec. 31, 1916). 114p '17 U S Ag

## Classification

- A detailed classification of agriculture now printing will be sent to all libraries of agricultural colleges or experiment stations on the printed lists of the U S Dept of Agriculture, and, on request, to other agricultural libraries having enuf interest to test or examine the skeme critically and send the editor notes of faults or suggestions for improvement. This classification is for incorporation in the 10th edition of the *Decimal Classification* by Melvil Dewey, to be publisht next winter. Address Forest Press, Lake Placid, N. Y.

## Demonstration work

- See Agricultural experiment stations; Demonstration work in agriculture; Farm home demonstration work

## Dictionaries

- Agricultural dictionary. *Prog F* 32:222 F 17 '17

## Directories

- List of workers in subjects pertaining to agriculture and home economics, 1917-1918; pt. 1, United States Department of agriculture; pt. 2, State agricultural colleges and experiment stations. 68, 89p '18 U S Ag

## Economic aspects

- Agrarian movement in the Northwest. J. E. Boyle. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:505-21 S '18

- Agrarian question in Spain. *Int R Ag Econ* 61:128-30 Ja '16

- Agricultural mobilization. *Cornell Countryman* 14:565 Ap '17

- Agricultural reconstruction. *J Bd Ag* 24:1-11 Ap '17

- Agriculture in New England. K. L. Butterfield. *il Breeder's Gaz* 72:1154 D 20 '17

- Biggest wheat farm in the world; 200,000 acres of Indian land backed by millions of dollars. P. S. Rose. *il Country Gent* 83:6-7+ O 26 '18

- British agriculture as a business proposition. J. H. Guy. *J Bd Ag* 25:402-16 J1 '18

- Business organization as related to agriculture. M. L. Urann. *Mass Ag Bd Yearbook* 1916, pt 2:141-51 '17

- Consolidation of agricultural holdings in the United Provinces. H. S. Jevons. *Ag J of India* 13:222-30 Ap '18 (to be cont)

- Corporate farming. W. W. Reynolds. *il Ohio F* 141:394 Mr 16 '18

- Cost of agricultural production. Wallaces' F 43:1741 N 29 '18

- Countryside and nation. G. E. Vincent. (*In* *Am. sociological soc.*, Pub. v. 11, p. 1-11)

- Crisis in production; how shall we meet it? W. W. Reynolds. *Rural N Y* 75:1535 D 16 '16

- \* Economics and the new agricultural policy. C. F. Bickerdike. *Econ J* (St Martin's st, London, W. C. 5s) 27:471-85 D '17

- Economics of a Deccan village. H. H. Mann. *Ag J of India* 12:446-65 J1 '17

- Everything ties back to the farm. H. I. Dodge. *il Country Gent* 82:1762-3 N 17 '17

- Examination and interpretation of data in investigations on agricultural economics. E. Marengli. *Int R Sci & Prac Ag* 7, no 12: 1827-35 D '16

- Facing food facts and the future—the opportunity of the banker. M. A. Traylor. *il Banker-F* 4:2-5 J1 '17

- Factory system in farming; what it would mean to America. *Rural N Y* 76:1315 N 17 '17

- Facts for the farmer. 94p (Ap) '18 National nonpartisan league, St. Paul, Minn.

- Farm problems in Congress. H. W. Sumners. *N Y Ag Dept B* 81:1726-34 Mr '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1726-34 '17

- Farm tenantry in the United States. W. J. Spillman and E. A. Goldenweiser. maps U S Ag Yearbook 1916:321-46; Same. Separate 715

- Farmer and foreign trade. *Ag Digest* 1:332-3 Mr '17

- Farmer and prices. Wallaces' F 42:1176 Ag 31 '17

- Farmer and the high cost of living. *Jersey B* 35:1952 D 13 '16; Same. *Hoard's D* 52:736 D 15 '16

- Farmer must produce more—banker must cooperate. *Banker-F* 4:9 Mr '17

- Farmer says forward—march! *Rural N Y* 76:1147 O 6 '17

- Farmers must do it themselves. *Rural N Y* 76:839 Je 30 '17

- Farmer's response to economic forces. W. J. Spillman. (*In* *Am. farm management assn. Record of pro.*, 1915, p. 61-9) '16 G. A. Billings, sec., Washington, D.C.; Abstract. *Int R Sci & Prac Ag* 7, no 1:121-5 Ja '16

- Farmers should have an active interest in the development of foreign trade. B. F. Harris. *Banker-F* 4:10-11 Mr '17

- Farming business needs attention. A. H. Williams. *Nat Stock & F* 42:508 Ag 31 '18

- Farm's greatest asset: boys and girls. W. L. Houser. *Breeder's Gaz* 73:1298 Je 20 '18

- Food and the people; the problem of the high cost of living in the New York legislature. L. Waldman. 45p '18 Rand school of social science, 7 E. 15th st, N.Y.

- Food situation. D. F. Houston. *Weekly N L* 4:1-3 Mr 7 '17

- For sale—terms cash; the auction uncovers the revolution in farming. J. C. Marquis. *il Country Gent* 83:3-4+ Ap 20 '18

- High cost of living and the farmer. *Ag Digest* 1:255 Ja '17

- \* High cost of war-time farming. H. J. Hughes. *Review of Reviews* (30 Irving Place, N.Y. 25c) 58:407-10 O '18



**Agriculture—Economic aspects—Continued**

- How to make food abundant and cheap. T: F. Hunt. Country Gent 83:15 Je 29 '18
- Importance of crops (from bulletin issued by the National city bank of New York). Am Fert 46:26 Mr 17 '17
- Increased crop production. Ag Gaz of Canada 4:268-74 Ap '17
- Increasing agricultural production. A. Trudel. J Ag (Quebec) 20:139 Ja '17
- Investigation? W. A. Paxson. Nat Stock & F 40:1080 Ja 20 '17
- Irish agriculture. Wallaces' F 43:1254 S 6 '18
- Is increased production the big problem? F. Nelson. il Ohio F 141:813 Je 29 '18
- Land tenure in the Panjab in their original form and as affected by British rule. J. M. Douie. Int R Ag Econ 79:51-60 Jl '17
- Lands of the state domain. Int R Ag Econ 79:78-9 Jl '17
- Legitimate price fixing. Wallaces' F 42:1128 Ag 17 '17
- Lessons in solving labor, credit and other production problems. A. E. Grantham. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:210-23 N '17
- Marxian economics. M. E. Marcy. Int Socialist Review (341 E. Ohio st., Chicago 10c) 17:621-4 Ap '17
- Meeting the farmer halfway. C. Vrooman. U S Ag Yearbook 1916:63-75; Same. Separate 698
- \* Mercantile and agricultural economics. C. S. Duncan. J Political Econ (Univ. of Chicago Press, Chicago 35c) 26:769-806 O '18
- Miscellaneous information relating to agricultural economy in general in various countries. See monthly numbers of International review of agricultural economics
- Nation is paying for neglect of agriculture. C. S. Barrett. Prog F 32:594 My 12 '17
- Net output from agriculture and its distribution. C. S. Orwin. J Bd Ag 24:158-61 My '17
- New phases of agriculture. J: Fletcher. Coop Manager & F 7:53 D '17
- Organization and price making. J. N. McBride. (In Nat. conf. on marketing and farm credits, 1916, p. 449-61) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Organized agriculture as a business. Am Industries (30 Church st, N.Y. 10c) 18:7 D '17
- Plan to increase farm production. A. Lindley. Breeder's Gaz 72:280 Ag 30 '17
- Plea for the farmer. A. F. Thomas. 24p 10c '16 Union Star pub. co., Brookneal, Va.
- Policy of that'll do. W. A. N. Robertson. J Dept Ag Victoria 15:421-7 Jl '17
- Price control as the farmer sees it. E. Davenport. Country Gent 82:1219-20 Ag 4 '17
- Price maintenance of agricultural products. E. S. Clark. Wallaces' F 42:502 Mr 16 '17
- Problem of the sale of agricultural products in the United States in connection with economy in farming. Int R Sci & Prac Ag 7:no 2:280-2 F '16
- Real food problem. S. W. Charles. Farm Eng 5:3-4 D '17
- Recent measures for developing the growing of cereals. Int R Ag Econ 79:80-2 Jl '17
- State and agriculture. L. Smith-Gordon. Quarterly Review (249 W. 13th st., N.Y. \$2) 227: 178-93 Ja '17
- Stop food-crop wastes by improving methods. D. F. Houston. Weekly N L 4:1 Ap 4 '17
- Trend of Indian agricultural exports. A. C. Dobbs. Ag J of India 13:249-53 Ap '18
- Two dimensions of productivity; with discussion. H: C. Taylor. Am Econ Review (Ithaca, N.Y. \$1.25) 7:sup 49-61 Mr '17
- Unification of American agriculture. C. S. Vrooman. (In Nat. conf. on marketing and farm credits, 1916, p. 462-70) \$2 '17 C. W. Holman, sec., Madison, Wis.
- War after the war. W. W. Swanson. (In Report, United farmers of Alberta, 1917, p. 221+) '18
- What an eastern farmer thinks of the food shortage. J. L. Dean. Outlook (381 4th av, N.Y. 10c) 118:532-4 Ap 3 '18
- What is to be the future of the American countryside? G: E. Vincent. Banker-F 4:12 Mr '17

- \* Wheat farmers' dilemma. T: P. Gore. Forum (118 E. 28th st. N.Y. 25c) 60:257-66 S '18
- When is the world safe for democracy? A. W. Littlefield. Rural N Y 76:1391 D 8 '17
- Where the trouble begins. Wallaces' F 42: 965 Je 29 '17
- Why American farmers must get more for their crops. C. Poe. Prog F 33:913 Ag 17 '18
- Yield and profit; farmers must ask how much they can afford to raise. E. Davenport. Country Gent 83:11-12 D 14 '18

See also Agriculture and the war; Banks and agricultural development; Farm management; Income; Railroads and agricultural development

**History**

See Agriculture, Ancient; Agriculture, Medieval; Agriculture, Primitive

**Statistics**

- Agricultural returns, 1918; preliminary statement. J Ed Ag 25:763-7 S '18
- Agricultural returns of Great Britain. A. Nutting. (Commerce Reports no. 231) p 22-3 (O 2) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Agricultural statistics for 1917. W. F. Callander. maps Wis Ag Dept B 14:1-55 '18
- British agricultural report for August. R. P. Skinner. (Commerce Reports no. 235) p 90-1 (O 7) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Cooperative crop reporting service for Nebraska. E. R. Danielson. Neb Ag Bd B 267:1-55 '18
- Documentary Leaflets is the title of a new publication of the International institute of agriculture Bureau of statistics. It is inaugurated to include various items which are outside the scope of information hitherto furnished in the Monthly Bulletin. The data published will deal especially with yield, trade, stocks, prices, rates of freight, etc. All information will be from official sources. References to the important articles in these pamphlets will be included in the Agricultural Index
- Farm survey of Montana. E. L. Currier. Mont Ag Ext Pub no 25 19p '18
- Food production outlook. D: F. Houston. Weekly N L 5:7-8 F 27 '18; Same. Hoard's D 55:372 Mr 22 '18
- Graphic summary of American agriculture. M. Smith and others. maps U S Ag Yearbook 1915:329-403
- Iowa's agricultural greatness. Wallaces' F 43: 1816 D 13 '18
- Ohio agricultural statistics, 1916-17. 78p '17 Ohio Dept. of ag., Columbus
- Productivity per acre and per person dependent upon agriculture in countries named. Monthly Crop Rep 4:78 Jl '18
- Statistical tables relating to fisheries, crops, live stock, farm produce, etc. J Dept Ag Ireland 18,no 1:102-27 '18
- Statistics of Ohio farms: faults of the present system. F. M. Lutts. Ohio Ag Exp B 1:91-5 Mr '16
- \* Summer fallow, pasture, orchard, small fruits, vineyard and garden in Ontario; Farm property, implements and live stock in Ontario. (In Report, Bur. of industries, 1917, p. 37, 45) '18 Ontario ag. dept., Toronto

**Bibliography**

Statistical references. (In Geography of the world's agriculture, p. 148-9) '17 U S Ag

**Study and teaching**

- Agricultural and farm mechanics. Ag Gaz of Canada 5:1088-9 N '18
- Agricultural education in secondary schools. L. S. Hawkins. il map Univ of the State of N Y (Albany) B 624 87p O 1 '16
- Agricultural instruction in the high schools of six eastern states. C. H. Lane. (B. 1918, no. 3) 73p map '18 U.S. Bur. of educ., Washington, D. C.
- \* Agricultural text-books for our public schools. H. Ness. Science (Science Press, Garrison, N.Y. 15c) n s 48:484-6 N 15 '18

**Agriculture—Study and teaching—Continued**

- Agriculture correlated with manual training. W: Giese, il plans Industrial Arts Magazine (129 Michigan st., Milwaukee, Wis. 25c) 6: 477-9 D '17
- Agriculture in the high school. H: N. Goddard and J: A. James. 191p il '17 Wis. Dept. of public instruction, Madison
- Agronomist of the future. W. M. Jardine. Am Soc Agron J 9:385-90 D '17
- Best plan for teaching agriculture in rural schools. 5p '17 Agricultural extension dept., Int. harvester co., Chicago
- Collection and preservation of insects and other material for use in the study of agriculture. C. H. Lane and N. Banks. il Farmers' B 606:1-22 '17 (rev.)
- College teaching in agriculture. R. A. Dutcher. School and Soc (Science Press, Garrison, N.Y. 10c) 7:353-6 Mr 23 '18
- College teaching in agriculture. F. A. Waugh. School and Soc (Science Press, Garrison, N.Y. 10c) 7:130-2 F 2 '18
- Collegiate farmers. W. E. Stone. Ind Ag Ext B 53:1-7 '16
- Correlating agriculture with the public school subjects in the Southern states. C. H. Lane and E. A. Miller. il plan U S Ag B 132:1-41 '15
- Departmental organization in agricultural teaching. F: H. Blodgett. School and Soc (Science Press, Garrison, N.Y. 10c) 6:668-72 D 8 '17
- Fabricating farmers. C. Vrooman. il Review of Reviews (30 Irving Place, N.Y. 25c) 58: 265-8 S '18
- Farm craft lessons for reserve volunteers: lessons 1-7. 4 pamphlets '18 B. D. Butler, dir., U.S. Boys' working reserve, Room 47, 120 W. Adams st., Chicago
- Titles follow: American boy and the war, by E. Davenport; When the city boy goes to the farm, by E. Davenport; The horse, by J. L. Edmonds; The cow; Swine
- Farm crops: study course for boys' agricultural clubs. E. J. Kinney. Ky Ag Ext C 56: 1-48 '18
- Field exercises in their relation to agricultural teaching. K. C. Davis. (In Pro. Nat. educ. assn., 1916, p. 619-22) 2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Home project in secondary-school agriculture. L. H. Dennis. (In Pro. Nat. educ. assn., 1916, p. 622-6) 2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- How shall a city man start farming? Prog F 33:4 Ja 5 '18
- How teachers of agriculture are trained in the United States. C. D. Jarvis. Ag Gaz of Canada 5:622-3 Je '18
- Illinois bulletins 1-5. '18 B. D. Butler, dir., U. S. Boys' working reserve, Room 47, 120 W. Adams st., Chicago, Ill.
- Titles follow: U.S. reserve volunteer, by B. D. Butler; U.S. Boys' working reserve; Loyal farm boy and the war, by E. Davenport; Training city boys to be farm helpers, by W: J. Bogan; Call of the war to the loyal farmer, by E. Davenport
- Illinois schoolboys and the farms. School and Soc (Science Press, Garrison, N.Y. 10c) 7: 73-4 Ja 19 '18
- Khaki university for Canadian soldiers. Ag Gaz of Canada 5:183 F '18
- Reference material for vocational agricultural instruction. (B. 14, Ag. Ser. 2) 26p '18 Federal bd. for vocational education, Ouray bldg., Washington, D.C.
- Stencils vitalize school work. 9p il '17 Int. harvester co., Chicago
- \* Suggestions for teachers giving practical instruction to city boys in: (a) Care and handling of work horses; (b) Care, adjustment, and use of farm machinery; (c) Care and handling of dairy cows and milk. W. M. Jardine. (C. 7) 30p il '18 Kansas State council of defense, State House, Topeka
- Teaching agriculture. G. A. Bricker. Ohio F 142:248, 281, 300, 462, 489, 510, 534, 560 S 14-28, N 9-D 7 '18
- Training boys for farm work. Ia Ag Ext Emergency Leaflet 35:1-4 '18
- Use of land in teaching agriculture in secondary schools. E. Merritt. U S Ag B 213: 1-12 '15
- Vitalizing the teaching of agriculture in rural schools. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:325-8 O '17
- See also Agricultural education and references under that subject; Nature study; Plants—Diseases and pests—Study and teaching; also American association for the advancement of agricultural teaching

**Bibliography**

- \* Publications of Department of agriculture classified for the use of teachers under following subjects: Agricultural education; Birds and other animals; Animal husbandry; Agronomy; Rural engineering; Dairying; Farm management and rural economy; Horticulture; Home economics. Prepared in Office of Agricultural instruction, U.S. States relations service, Washington, D.C.

**Terminology**

- Contributions to agronomic terminology; with list of definitions. C. R. Ball and C: V. Piper. Am Soc Agron J 8:1-9, 197-204, 228-37, 310-15 Ja, My, Jl S '16
- Standardize farm terms. F. M. Lutts. Ohio F 142:578 D 14 '18
- Strange terms or big words. Prog F 31:35 Ja 8 '16

**Africa**

- Man with the hoe in Africa. H. N. Howard. il World Outlook (150 5th av., N.Y. 15c) 3:19 Ja '17

See also Agriculture—Morocco; Agriculture—Rhodesia; Agriculture—South Africa; Agriculture—Tunis

**Alabama**

- Alabama land book: a detailed description of the agricultural and business conditions. L. W. Statler, comp. and ed. 161p il map 25c '16 Trustees Alabama development fund, Montgomery, Ala.
- Annual report of the director of the Alabama agricultural experiment station on work done under the local experiment law in 1917. J. F. Duggar. Ala Ag Exp C 38:13-52 '18
- Black belt of Alabama. G: E. Brown. Hoard's D 56:590 N 22 '18
- How one state is increasing its food and feed crops. J. F. Duggar. Prog F 32:843 Ag 4 '17
- Increasing the production of food crops in Alabama. J. F. Duggar. Ala Ag Ext C 10: 14-19 '17
- Report on extension work, 1916. (In Co-operative extension work, 1916, pt. 2, p. 33-41) '17 U S Ag
- Seen in Talladega county, Alabama. Prog F 32:683 Je 9 '17
- 29th annual report of the agricultural experiment station, 1916. Ala Ag Exp Rep 1916:1-28 '17
- 30th annual report of the agricultural experiment station, 1917. Ala Ag Exp Rep 1917:1-28 '18
- What will the South plant? W: P. Redd. Am Fert 48:68 F 16 '18

**Alaska**

- Agricultural development tributary to government railroad in Alaska. A. Christensen. Alaska Railroad Record (Anchorage) 2:2-3, 12-13 N 13-20 '17
- Possible agricultural development in Alaska. L. Chubbuck. il U S Ag B 50:1-31 '14

**Algeria**

- Décret relatif aux services administratifs et techniques de l'agriculture de l'Algérie. Int Yearbook Ag Leg 1916:799-801 '17

**Argentina**

- Markets for agricultural implements and machinery in Argentina. F. H. von Motz. (Special agents ser. no. 125) 86p '16 U.S. Bureau of foreign and domestic commerce, Washington, D. C.; 5c Supt. of doc.



**Agriculture—Argentina—Continued**

- Production and handling of grain in Argentina. L. Duval. il maps U S Ag Yearbook 1915:281-98  
 Proposed colonization law in Argentina. Wallaces' F 42:355 F 23 '17  
 Trip to the Argentine. C. F. Curtiss. Ia Ag Bd Yearbook 1916:96-105  
 Viticultural industry of Mendoza and the Argentine agricultural crisis. Int R Ag Econ 9,no 1:53-9 Ja '18

**Arizona**

- Carrying capacity of grazing ranges in southern Arizona. E. O. Wooton. bibliog il U S Ag B 367:1-40 '16  
 Development in the Salt River valley. R. Murphy. Breeder's Gaz 70:386 S 7 '16  
 Farm organization in the irrigated valleys of southern Arizona. R. W. Clothier. il map U S Ag B 654:1-58 '18  
 How to improve standard farm crops in Cochise county. A. L. Paschall. il Ariz Ag Ext C 15 10p '17  
 Recommendations on ways and means to improve the food supply in Arizona. R. H. Forbes. Ariz Ag Exp Timely Hints 126:1-4 '17  
 Relation of weather to crops and varieties adapted to Arizona conditions. A. J. McClatchie and others. il Ariz Ag Exp B 78:45-118 '16  
 Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 173-8) '17 U S Ag  
 27th annual report of the Arizona agricultural experiment station for the year ending June 30, 1916. il Ariz Ag Exp Rep 1916:239-320 '16

See also Arizona—Agriculture and horticulture, Commission of

**Arkansas**

- Agricultural work on the Prescott and Northwestern railroad. E. J. Watson. Prog F 32:1298 D 8 '17  
 Crop systems for Arkansas. A. D. McNair. il Farmers' B 1000:1-24 '18  
 Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 41-51) '17 U S Ag

See also Agriculture and the war—Arkansas

**Australia**

- \* Agricultural and pastoral industries. (In Executive com. Report, 1918, p. 15-25) '18 Australia Advisory council of science and industry, Melbourne  
 Agricultural development and extension on Kangaroo island. H. C. Williams. J Dept Ag S Australia 20:842-4 My '17  
 Agriculture in Queensland in 1915-1916. Int R Sci & Prac Ag 8,no 8:1089-91 Ag '17  
 Development of agricultural research in Australia. Exp Sta Record 39:1-7 Jl '18  
 Eyre's peninsula; its agricultural development and the work of the Department of agriculture. A. J. Perkins. J Dept Ag S Australia 20:684-90 Ap '17  
 Increasing primary production. A. E. V. Richardson. J Dept Ag Victoria 15:237-46 Ap '17  
 Land settlement and the provision of credit in Western Australia. J. W. Paterson. Int R Ag Econ 72:93-103; 73:79-81 D '16-Ja '17  
 Nhill agricultural society annual crop and fallow competitions, 1917. H. A. Mullett. il J Dept Ag Victoria 16:65-79 F '18  
 Report on the statistics of vineyards, orchards, and gardens, for the season 1916-17. W. L. Johnston. J Dept Ag S Australia 21:474-7 Ja '18  
 Side-lights on Australian agriculture. Wallaces' F 43:713 Ap 26 '18  
 Summary of Australian conditions. R. H. Harrowell. Am Sheep B & W 38:273 Ap '18

See also Agricultural bureau of New South Wales; Agricultural bureau of South Australia

**Austria-Hungary**

- Agricultural problems in Dalmatia. Int R Ag Econ 76:84-9 Ap '17

Décret impérial réglant les conditions des propriétés foncières aux environs des places fortifiées. Int Yearbook Ag Leg 1916:1172-5 '17

**Belgium**

- Agriculture in Belgium, 1914-1915. il Wallaces' F 41:115 Ja 28 '16  
 Belgian farmers under Germany. Review of Reviews (30 Irving place, N.Y. 25c) 56:650 D '17

See also Peasants' league of Belgium

**Bosnia**

- Agrarian question in Bosnia and Herzegovina. Int R Ag Econ 70:69-82 O '16  
 Austria and Hungary; agrarian taxes in Bosnia and Herzegovina. Int R Ag Econ 75:75-85 Mr '17  
 New way to solve the agrarian question in Bosnia. Int R Ag Econ 78:80-6 Je '17

**Brazil**

- Agricultura científica ou ensino agricola no Brasil. L. F. S. Carpenter. (In Pan American scientific congress Pro., 1915, v. 5, p. 341-5) '17  
 Agriculture and live stock in Brazil. J Bd Ag 22:1294-5 Mr '16  
 Brazil agriculture. Wallaces' F 42:940 Je 22 '17  
 Labour conditions in Brazilian agriculture. Int R Ag Econ 9,no 3:250-2 Mr '18  
 Markets for agricultural implements and machinery in Brazil. F. H. von Motz. (Special agents ser. no. 140) 59p il '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.; 10c Supt. of doc.  
 \* War and Brazilian foodstuffs. (Commerce Reports no. 256) p 419-25 (O 31) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.

**British Guiana**

- Agricultural development of British Guiana. R. O. H. Spence. Int R Sci & Prac Ag 9,no 5:535-6 My '18  
 Field and forest resources of British Guiana. J. B. Harrison and C. K. Bancroft. Int R Sci & Prac Ag 7,no 3:333-6 Mr '16

**California**

- Agriculture in the Imperial valley; a manual for settlers. W. E. Packard. il Cal Ag Exp C 159:1-70 '17  
 American agriculture; report on agricultural education methods and agricultural research work in the state of California. A. E. V. Richardson. il J Dept Ag Victoria 16:257-75, 339-54 My-Je '18  
 California. W. I. Raymond. Hoard's D 54:854 Ja 4 '18  
 California agriculture as an occupation for city-bred boys. (School pub. no. 5) 12p '17  
 Los Angeles city school district, Los Angeles, Cal.  
 California farmer and the College of agriculture. T. F. Hunt. Cal State Comm Hort B v 6:183-92 My '17  
 Farming in California. J. T. Brooks. Wallaces' F 42:1720 D 21 '17  
 From San Francisco to Siskiyou. W. C. Barnes. Breeder's Gaz 70:234 Ag 17 '16  
 Glimpses of the Sacramento valley. W. Dinsmore. Breeder's Gaz 74:189 Ag 8 '18  
 In California. W. C. Barnes. Breeder's Gaz 70:196 Ag 10 '16  
 In the San Joaquin valley of California. W. Dinsmore. Breeder's Gaz 74:226 Ag 15 '18  
 Interior colonization in California. Ag Gaz of Canada 5:209-12 F '18  
 Land settlement in California. Cal. Commonwealth Club Transac (San Francisco 19c) 11:369-465 D '16  
 Localization of truck crops in California. R. G. Risser. Market Growers J 23:163 N 1 '18  
 Mark Bennitt writes about Chowchilla. Irr Age 33:208-9 N '18  
 Observations on the recent agricultural inquiry in California. T. F. Hunt. Cal Ag Exp 20p n. d.

**Agriculture—California—Continued**

- Opportunities for achievement in agriculture. E. Grubb. *Cal State Comm Hort B* v 7:481-4 Ag '18
- Ready-made farms; California is putting settlers on raw land and helping them to make good. R. E. Jones. *il plans Country Gent* 83: 12-13 J1 6 '18
- Report of the college of agriculture and the agricultural experiment station of the University of California from July 1, 1916, to June 30, 1917. 95p '17 College of agriculture, Univ. of Cal., Berkeley
- Report of the Commission on land colonization and rural credits. 87p '16 Co-operative land settlement investigations, Univ. of Cal.; Abstract. *Int R Ag Econ* 76:118-20 Ap '17
- \* Report of the Commission on land colonization and rural credits, 1916. 120p '16 The commission, Sacramento
- Report on extension work, 1916. (*In Cooperative extension work, 1916, pt. 2, p. 178-83*) '17 U S Ag
- Seeing the light in the sunset country. W. S. Guilford. *il Field* 11 27:938+ D '17
- Sizing up the California problem. D. Stratton. *il Ohio F* 137:809 Je 17 '16
- Work and purpose of the Agricultural commission of the American bankers association. *Banker-F* 4:15 Je '17
- See also Agriculture and the war—California; California—Market director, State

**Canada**

- \* Address at meeting of Dairymen's association of western Ontario. W. Hearst. (*In Report, Dairymen's assns., 1917, p. 86-98*) '18 Ontario ag. dept., Toronto
- Agricultural progress in the province of Quebec, Canada, in 1915-1916. *Int R Sci & Prac Ag* 8,no 5:682-6 My '17
- Agriculture and agricultural education in Canada. A. E. V. Richardson. *il J Dept Ag Victoria* 16:577-91 O '18 (to be cont)
- Agriculture in Canada. *Ag Gaz of Canada* 3:414-18, 518-24, 609-14, 700-8, 799-806, 870-9, 958-63, 1061-82 My-D '16; Same (Reprint). 77p il '17 Canada Ag
- Agriculture in Canada; Ontario. W. B. Roadhouse. *il Ag Gaz of Canada* 3:799-806 S '16: Excerpt. *Int R Sci & Prac Ag* 8,no 2:186-8 F '17
- Among the Huntingdon farmers. *il J Ag (Quebec)* 22:91 D '18
- Annual report of the Bureau of industries for the province of Ontario 1916; pt 1, Agricultural statistics; pt 2, Chattel mortgages. 47p '17 Ontario ag. dept., Toronto
- Canada's manifest duty. *J Ag (Quebec)* 21:17 Ag '17
- Classification of the crown lands of New Brunswick, by P. Z. Caverhill; Report of the committee on lands, by F. C. Nunnick. (*In Report, 1917, p. 81-91, 209-26*) il '17 Canada Comm. of conservation, Ottawa
- Co-operative marketing of agricultural produce. *Int R Ag Econ* 82:1-9 O '17
- Establishment of boards of agriculture. *Ag Gaz of Canada* 3:439-40 My '16
- Experimental farms; reports from the director; division of chemistry, division of field husbandry, division of animal husbandry for the year ending March 31, 1916. (7 George V. Sessional paper no. 16) v 1 598p 45c '17 Canada Ag
- Experimental farms, reports from the division of horticulture, division of cereals, for the year ending March 31, 1916. (7 George V. Sessional paper no. 16) v 2 601-1093p 35c '17 Canada Ag
- Fertilizers and increased production. F. T. Shutt. *Am Fert* 46:44+ My 12 '17
- Greater production on Indian reserves. *Ag Gaz of Canada* 5:814-15 Ag '18
- Impressions of a journey in central Quebec. *il J Ag (Quebec)* 21:54 O '17
- Impressions of Pontiac agriculture. *il J Ag (Quebec)* 21:35-6 S '17
- Increased production and after the war problems for dairy farmers. A. A. Ayer. (*In Reports, Dairymen's assns., 1916, p. 25-8*) '17 Ontario ag. dept., Toronto

- Increasing agricultural production. A. Trudel. *J Ag (Quebec)* 20:ix Mr '17
- Nineteen seventeen in retrospect. J. Murray. *J Ag (Quebec)* 21:87 D '17
- 1918 agriculture. J. A. Grenier. *J Ag (Quebec)* 21:97 Ja '18
- Now for the hired man. C. H. J. Snider. *Canadian Magazine* (200 Adelaide st. West, Toronto, Canada 25c) 50:55-64 N '17
- Production and preservation of food supplies. P. H. Bryce. (*In Report, 1917, p. 123-54*) '17 Canada Comm. of conservation, Ottawa
- Production and thrift; agricultural war book, 1916. 250p '16 Canada Ag
- Quebec agriculture in 1916. *J Ag (Quebec)* 20:164 F '17
- Report of conference on urban and rural development in Canada, held at Winnipeg, May 28-30, 1917. 98p Canada Comm. of conservation, Ottawa
- Includes: Rural production and development, by Jas. W. Robertson; Civic efficiency and social welfare in planning of land, by W. F. Burditt
- Rural population and production in Canada. (*In T. Adams. Rural planning and development, p. 15-44*) il '17 Canada Comm. of conservation, Ottawa
- 16th annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1916. 120p il '16 Ontario ag. dept., Toronto
- 17th annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1917. 120p il '17 Ontario ag. dept., Toronto
- 18th annual report of the Agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions, 1918. 112p il '18 Ontario ag. dept., Toronto
- \* Summer fallow, pasture, orchard, small fruits, vineyard and garden in Ontario; Farm property, implements and live stock in Ontario. (*In Report, Bur. of industries, 1917, p. 37, 45*) '18 Ontario ag. dept., Toronto
- Townward migration of the rural population and its possible remedies. *Int R Ag Econ* 66:119-21 Je '16
- See also Agricultural instruction act; Agricultural investigation commission, Canada; Agriculture and the war—Canada; Canada—Agriculture, Department of; Farmers' institutes of British Columbia; Ontario agricultural and experimental union

**Central Europe**

- Farming in enemy countries. *Swine World* 6:52 O '18

**Ceylon**

- Production, exports and prices (tea, rubber, cocoa, coconut, cinnamon, rice, tobacco, timber). *Doc Leaflets* 1, no 3:33-7 S '17

**Chile**

- Markets for agricultural implements and machinery in Chile and Peru. F. H. von Motz. (Special agents ser. no. 142) 48p '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.; 5c Supt. of doc.

**China**

- Agricultural education and research in China. Science (Science Press, Garrison, N.Y. 15c) n s 46:54-5 J1 20 '17
- Agricultural fair in China. C. O. Levine. *il Breeder's Gaz* 72:275 Ag '30 '17; Same. *Hoard's D* 54:253 S 21 '17
- Agriculture and forestry in China. J. Bailie. *J For* 15:1014-16 D '17
- South China's agriculture. J. T. Nichols. *il Wallace's F* 42:643 Ap 13 '17
- To study the soy-bean for Uncle Sam. *Literary Digest* (354 4th av., N.Y. 10c) 55:52 J1 14 '17

**Colorado**

- Dry farming in Colorado. A. Kezer. *il Colo Ag Exp B* 227:1-40 '17; Same (pt. 1). 18p n.d. Colorado state board of immigration, Capitol bldg., Denver.



**Agriculture—Colorado—Continued**

- Effect of different times of plowing small-grain stubble in eastern Colorado. O. J. Grace. U S Ag B 253:1-15 '15  
Farmers of Colorado respond loyally to the nation's food call with agricultural crop of \$145,000,000. Commercial (Denver civic and commercial assn. 5c) 9:11 Ja 24 '18  
**Irrigated farming in Colorado.** A. Kezer. 19p n.d. Colorado state board of immigration, Capitol bldg., Denver  
Native vegetation and climate of Colorado in their relation to agriculture. W. W. Robbins. il maps Colo Ag Exp B 224:1-56 '17  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 183-7) '17 U S Ag

**Connecticut**

- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 187-92) '17 U S Ag

See also Hartford county league

**Corn belt**

See Corn belt

**Crete**

- Agriculture in Crete. L. Franchet. Int R Sci & Prac Ag 9, no 4:403-5 Ap '18

**Cuba**

- Commercializing a Cuban jungle. P. Shive. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:359 Je 9 '17; Same cond. Pan Am Union B (17th and B sts., N. W., Washington, D.C. 25c) 44:768-72 Je '17  
Progress of agricultural science in Cuba. J. T. Crawley. (In Pan American scientific congress Pro., 1915, v. 3, p. 374-82) '17

**Cyprus**

- Agriculture and forestry in Cyprus. J. P. Middleton. Int R Sci & Prac Ag 9, no 4:406-7 Ap '18

**Delaware**

- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 192-5) '17 U S Ag

**Denmark**

- Danish farm management. Field II 28:604 Ag '18  
Heather-land association of Denmark. O. Molgaard. il Kimball's D F 15:48+ F 1 '17  
How little Denmark became the model agricultural nation of the world. Banker-F 4: 11 Ja '17  
How neutral Denmark suffers. O. Molgaard. Kimball's D F 16:532 Jl 1 '18  
Loi n. 108 concernant les prêts à concéder par l'état sur le fonds spécial pour faciliter le morcellement des propriétés rurales et des terres. Int Yearbook Ag Leg 1916:1024-7 '17  
See also Royal society of Danish agriculture

**Dominican Republic**

- Agriculture in the Dominican Republic. C. M. J. Zielinski. Int R Sci & Prac Ag 8, no 10: 1339-40 O '17

**Eastern states**

- Future of farming on the upper Atlantic coast. H. Collingwood. Am Fert 49:52+ S 28; 29-31+ N 9 '18  
Outlook for farmers in the East. B. T. Gallo-way. N Y Ag Dept B 86:2649-57 Ag '16

**Egypt**

- \* Agriculture on the Nile delta. V. C. Finch. maps J Geography (Appleton, Wis. 15c) 16: 241-4 Mr '18  
Farming in Egypt. L. S. Sofianos. Penn State F 9:342 Mr '16  
Some observations on agricultural work in Egypt, America, and Japan. W. Roberts. Ag J of India 12:583-7 O '17

**Europe**

- Farming in Europe. Rural N Y 75:82, 115, 154, 189, 241, 283, 348 Ja 15-F 26 '16

- What the European war means to the dairy and cattle farmer. A. H. Kolbe. Hoard's D 52:69 Ag 11 '16

**Florida**

- Report of condition and prospective yield of crops, fruit and fruit trees, and condition of live stock, for quarter ending June 30, 1917, as compared with same period for 1916. Florida Ag Dept Quar B v 27:42-55 Jl '17  
Report of condition and prospective yield of crops, fruit and fruit trees for quarter ending June 30th, 1918; also condition of live stock, as compared with same period for 1917. Fla Ag Dept Quar B v 28:39-53 Jl '18  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 51-9) '17 U S Ag

**France**

- Agriculture in Brittany. Int R Sci & Prac Ag 7, no 10:1405-8 O '16  
Best farmer in France; Henry Girard. W: H. Dean. il Country Gent 83:11-12+ N 23 '18  
Conditions of rural life in France. Int R Ag Econ 79:68-78 Jl '17  
Conditions of rural life in 1913-1914. Int R Ag Econ 83:64-74 N '17  
Corn belt farm boy in France. il O Judd Farmer 63:3 N 10 '17  
Décret relatif à l'organisation de l'inspection générale de l'agriculture. Int Yearbook Ag Leg 1916:796-8 '17  
France—Government of the Loire department has appropriated 600,000 francs to be used to encourage agricultural enterprises and the repopulation of the farming districts. To encourage large families a part of the loan of 2,000 francs will be cancelled for each child born after the farmer has taken possession of his allotment. N 16 '18  
Rural prosperity of France. R. F. Spedding. Quarterly Review (249 W. 13th st., N.Y. \$2) 227:314-30 Ap '17; Abstract. Rural Manhood 8:446-8 D '17  
\* La terre pendant l'épreuve; la vocation paysanne. E. Labat. Revue Deux Mondes (15 rue de l'Université, Paris 3fr) 6 per 46:426-50 Jl 15 '18  
Versailles a national nursery for France. il Touchstone (118 E. 30th st., N.Y. 35c) 2:170-5 N '17  
Will forests be planted on the old battle fields? il Am For 24:548-50 S '18  
See also Agriculture and the war—France

**Georgia**

- Brief social and economic survey of Muscogee county. E. Jones. (B. v. 4, no. 3) 12p '17  
Ga. State normal school, Athens  
Economic study of farming in Sumter county. Ga. H. M. Dixon and H. W. Hawthorne. U S Ag B 492:1-64 '17  
Empire state of the South; what she is and will be. 95p il map '16 Ga. State dept. of ag., Atlanta  
Farm-management survey in Brooks county, Georgia. E. S. Haskell. il U S Ag B 648:1-59 '18  
Georgian agriculture and education. R. L. Case. Purdue Ag 12:71-2 N '17  
Long cotton makes a long purse. J: R. McMahon. il Country Gent 83:14-15 Ja 5 '18  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 59-67) '17 U S Ag  
Reports of what Georgia farmers are doing. C. Poe. Prog F 33:389 Mr 23 '18  
When and what to plant to meet present conditions. A. M. Soule. Ga Ag Coll (Ext) B 123:1-16 '17

**Germany**

- Enemy countryside; home food production in Germany. E. G. Montgomery. il Cornell Countryman 14:721-3 Je '17  
German agricultural problems. H: A. Wallace. Wallaces' F 41:1504 N 17 '16  
German challenge to British agriculture. A. E. V. Richardson. il J Dept Ag Victoria 15: 198-223 Ap '17

**Agriculture—Germany—Continued**

- German nitrogen industry and the future of German agriculture. *J Industrial and Engineering Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:405-6 Ap '17
- Influence of sugar beet cultivation on German agriculture. *Ag J of India* 12:302-7 Ap '17
- National manure pile of Germany as the decisive factor in the war. *Current Opinion* (63 W. 36th st., N.Y. 25c) 62:104-5 F '17
- Recent development of German agriculture. *J Bd Ag* 23:426-30 Ag '16; Same. *Ag J of India* 12:109-14 Ja '17
- Study of a small holding at Kirberg, district of Wiesbaden, Germany. E. Bender. *Int R Sci & Prac Ag* 7, no 10:1524-8 O '16
- Why the Germans will not starve. E. K. Parkinson. *il Country Life* 33:60-1 F '18
- Women agricultural workers in Germany. *J Dept Ag Ireland* 17, no 2:225-41 '17

**Great Britain**

- Agricultural education and live stock improvement in Wales. *J Bd Ag* 23:260-3 Je '16
- Agricultural production. A. W. Ashby. *Edinburgh Review* (249 W. 13th st., N.Y. \$2) 225:343-63 Ap '17
- Agricultural reconstruction. *J Bd Ag* 24:1-11; 25:385-402 Ap '17, Jl '18
- \* Agricultural reconstruction after the war. E. J. Russell. *Nature* (St Martin's st, London, W. C. 6d) 101:426-8 Ag 1 '18
- Agricultural returns, 1918: preliminary statement. *J Bd Ag* 25:763-7 S '18
- Agricultural returns of Great Britain. A. Nutting. (Commerce Reports no. 231) p 22-3 (O 2) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Agricultural revolution. J. B. Firth. *Fortnightly Review* (249 W. 13th st., N.Y. 50c) 107:595-605 Ap '17
- Agriculture after the war. E. Lipson. *Fortnightly Review* (249 W. 13th st., N.Y. 50c) 107:100-13; 109:618-26 Ja '17, Ap '18 (to be cont)
- Agriculture and the minimum wage. F. E. Green. *19th Century* (249 W. 13th st., N.Y. 50c) 82:596-608 S '17
- Agriculture: wanted a policy. C: A. Hindlip. *19th Century* (249 W. 13th st., N.Y. 50c) 80:1173-85 D '16
- Allotments in England with special reference to Oxfordshire. *Int R Ag Econ* 9: no 2:153-65 F '18
- Breaking up the grass land. *J Bd Ag* 24:605-14 S '17
- British agricultural policies. *J Ag* (Quebec) 22:ix D '18
- British agricultural policies. Wallaces' F 43: 1518 O 18 '18
- British agricultural report for August. R. P. Skinner. (Commerce Reports no. 235) p 90-1 (O 7) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- British agriculture as a business proposition. J. H. Guy. *J Bd Ag* 25:402-16 Jl '18
- Cropping of grass land broken up for 1918 harvest. *J Bd Ag* 25:847-50 O '18
- Development of agriculture in England. D. Clouston. *Ag J of India* 12:362-7 Jl '17
- \* Development of British agriculture and fisheries. *Nature* (St Martin's st, London, W. C. 6d) 100:375-7 Ja 10 '18
- Economic war foods and war-food production. S. Morgan. *Fortnightly Review* (249 W. 13th st., N.Y. 50c) 109:270-7 F '18
- England in war time. *Breeder's Gaz* 72:126 Jl 26 '17
- English land cataclysm. C. Mackenzie. *il Country Gent* 83:3-4+ Je 1; 10-11 Je 8 '18
- Farming in England. D. Lumsden. *il Cornell Countryman* 15:463-5 My '18
- German challenge to British agriculture. A. E. V. Richardson. *il J Dept Ag Victoria* 15:198-223 Ap '17
- \* Grassland and food supplies. *Nature* (St Martin's st, London, W. C. 6d) 101:449-50 Ag 8 '18
- Improvement of allotments. *J Bd Ag* 22:958-63 Ja '16
- Ireland as a food supplier of Great Britain. *J Bd Ag* 25:444-3 Jl '18

- \* Milky way. R. H. Tetley. *English R* (19 Garrick st, London, W. C. 18s per yr.) 26:347-55 Ap '18
- \* Nationalising agriculture. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 11:265-7, 286-7 Jl 6-13 '18
- \* Our agrarians. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 10:586-8 Mr 23 '18
- Poverty Bottom: an experiment in increased food production. W. Somerville. *il J Bd Ag* 24:1186-1202 F '18
- \* Reaping the tares. R. H. Tetley. *English R* (19 Garrick st, London, W. C. 18s per yr.) 26:267-74 Mr '18
- \* Rejuvenation of rural life. B. Greenall. *Contemporary R* (249 W. 13th st., N.Y. 50c) 114: 453-6 O '18
- \* Shipping and agriculture. K. F. Doughty. *Blackwood's* (249 W. 13th st, N.Y. 35c) 203: 223-38 F '18
- Stock-carrying capacity of grass and tillage land. *J Bd Ag* 25:144-9 My '18
- Suggestions to dairy farmers on the breaking and cropping of grass land. *J Bd Ag* 24: 1228-31 F '18
- See also Agricultural executive committees; Agricultural organisation society; Agriculture and the war—Great Britain; Great Britain—Development commission; Soil fertility—Great Britain

**Guatemala**

- Agriculture in Guatemala. M. Lemus. *Int R Sci & Prac Ag* 8, no 1:10-14 Ja '17

**Hawaiian Islands**

- Agricultural conditions in Hawaiian Islands. H. L. Russell. *Penn State F* 9:408-9 Je '16
- How Hawaii helps her farmers to market their produce. E. V. Wilcox. *il U S Ag Year-book* 1915:131-46
- Report of the Hawaii agricultural experiment station, 1916, 46p. *il '17 Hawaii ag. exp. station, Honolulu*

**Herzegovina**

- Agrarian question in Bosnia and Herzegovina. *Int R Ag Econ* 70:69-82 O '16
- Austria and Hungary: agrarian taxes in Bosnia and Herzegovina. *Int R Ag Econ* 75: 75-85 Mr '17

**Idaho**

- Homestead in Idaho. *Rural N Y* 75:843, 867 Je 3-10 '16
- Power farming in Idaho. J: C. Wooley. *il Idaho Ag Exp B* 111:1-11 '18
- Report on extension work, 1916. (*In Cooperative extension work, 1916, pt. 2, p. 196-200*) '17 U S Ag
- See also Idaho—Farm markets, Department of

**Illinois**

- All in one day's drive. O Judd Farmer 63:1 O 6 '17
- All's well in Illinois. A. C. Page. O Judd Farmer 65:201 S 14 '18
- Best farmer in Illinois. J: R. McMahon. *il Country Gent* 83:1+ Ag 31 '18
- Central Illinois at threshing time. O Judd Farmer 63:3 S 1 '17
- Eckhardt's of Rock Island county. A. R. Weed. *il O Judd Farmer* 65:141 Ag 24 '18
- Good farming examples in Grundy county, *il. il O Judd Farmer* 63:3 Ag 11 '17
- Hold steady on plans. O Judd Farmer 64:17 F 2 '18
- Illinois farm boy in 1871. J. W. Kirkton. O Judd Farmer 61:3 N 25 '16
- Land tenure in the United States with special reference to Illinois. C: L. Stewart. (Studies in the social sciences, v. 5, no. 3) 135p bibliog maps 75c (S) '16 Univ. of Illinois, Urbana
- Making sandy land produce: Mason county has reclaimed 3500 acres of sand dunes. O Judd Farmer 65:229 S 21 '18
- Planning ahead for farm labor. F. M. White. *il O Judd Farmer* 65:21+ Jl 13 '18
- Preparing a community: how John Collier made Kankakee county a model community. J. L. Long. *il Farm Eng* 7:8-10 Mr '18



**Agriculture—Illinois—Continued**

- Program for food production. il Banker-F 5: 2-3 Mr '18; Same cond. Swine World 5:6 Mr '18; Summary. O Judd Farmer 64:16 F 16 '18
- Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 200-5) '17 U S Ag
- Signs of progress seen in Saline. A. R. Weed. O Judd Farmer 65:25 JI 13 '18
- Wanted: a southern Illinois farm. C. G. Hopkins. O Judd Farmer 65:174 S 7 '18
- Why Illinois produces only half a crop. C. G. Hopkins. Ill Ag Exp C 193:1-16 '17
- See also* Agriculture and the war—Illinois; Illinois—Agriculture, Department of; Illinois agricultural association; Soil fertility—Illinois

**India**

- Agricultural development of North-west India. A. Howard and G. L. C. Howard. Ag J of India Sci Congress No 1917:67-76; Summary. Int R Sci & Prac Ag 8,no 9:1214-15 S '17
- Agricultural progress. C. Hill. Ag J of India 12:supi-ix JI '17
- Agricultural progress in India. A. C. Chatterjee. Ag J of India 13:139-44 Ja '18
- Agricultural sayings of the United Provinces. V. N. Mehta. Ag J of India 11:301-7; 12:90-4 JI '16, Ja '17
- Agriculture in India. J. Mackenna. Int R Sci & Prac Ag 7,no 5:638-44 My '16
- Agriculture of India. O. O. Stanchfield. Rural Manhood 8:201-4 My '17; Same. Wallaces' F 42:1321 S 28 '17
- Consolidation of agricultural holdings in the United Provinces. H. S. Jevons. Ag J of India 13:222-30 Ap '18 (to be cont)
- Constructive policy for India. E. A. R. Haigh. 19th Century (249 W. 13th st, N.Y. 50c) 83: 1249-63 Je '18
- Correlation of rainfall and the succeeding crops with special reference to the Punjab. S. M. Jacob. Ag J of India Sci Congress No 1916:86-102 '16
- Dry-farming and its possibilities in India. C. V. Sane. Ag J of India 11:263-87 JI '16
- Dry-farming methods in Mysore. A. K. Yegna Narayan Aiyer. Ag J of India 12: 425-35 JI '17
- Economics of a Deccan village. H. H. Mann. Ag J of India 12:446-65 JI '17
- Expenses and profits of cultivators in the Punjab. W. S. Hamilton. Ag J of India 12: 691-2 O '17
- Factors in agricultural progress. G. F. Keatinge. Ag J of India 13:298-304 Ap '18
- Farming in India. il Nat Stock & F 42:134 Ap 27 '18
- Food production: considerable increase possible. Ag J of India 13:495-9 JI '18
- Good farming in India. S. Higginbottom. il Nat Stock & F 41:940 D 29 '17
- Improvement of the seed supply in the Central Provinces. G. Evans. Ag J of India 12:58-64 Ja '17
- Indian hemp fibre: with statistics of quantity and value exported from India, 1904-1914. C. D'Lima. Ag J of India 11:31-41 Ja '16
- India's greatest industry: scope for agricultural machinery. D. Clouston. Ag J of India 13:325-32 Ap '18
- Land and labour in a Deccan village, by H. H. Mann and others. Review. G. F. Keatinge. Ag J of India 13:471-8 JI '18
- Leguminous crops in desert agriculture. A. Howard and G. L. C. Howard. Ag J of India 12:27-43 Ja '17; Abstract. Int R Sci & Prac Ag 8,no 8:1120-3 Ag '17
- Madras agriculture—a brief survey. Ag J of India 12:689-90 O '17
- Phosphate depletion of the soils of Bihar: its effect on the quality and yield of crops and the contingent risks of malnutrition and endemic disease in cattle and man. W. A. Davis. Ag J of India Sci Congress No 1917: 77-89
- Planting industries of southern India. R. D. Anstead. Ag J of India 12:413-18 JI '17

- Private farms in Oudh. H. R. C. Hailey. Ag J of India 12:519-24 O '17
- Putting pep into India's agriculture. il World Outlook (150 5th av., N.Y. 15c) 3:12-13 Ag '17
- Re-alignment of agricultural holdings. B. C. Burt. Ag J of India Sci Congress No 1916: 33-9 '16
- Recent investigations on soil-aeration; with special reference to agriculture. A. Howard. il Ag J of India 13:416-29 JI '18
- Some experiments in manuring for double cropping (do-fasli). B. C. Burt. Ag J of India 12:536-42 O '17
- \* Stiffening the backbone of the Indian church. M. Olcott. il Missionary R (156 5th av, N.Y. 25c) 41:731-40 O '18
- Trend of Indian agricultural exports. A. C. Dobbs. Ag J of India 13:249-53 Ap '18

**Indiana**

- Best farmer in Indiana; Warren T. McCray, breeder of \$10,000 Herefords. J: R. McMahon. il Country Gent 83:10-11 S 28 '18
- Increasing crop yields for war needs. A. T. Wiancko. il Ind Ag Exp C 76:1-7 '18
- Lake County agricultural advisor, Lake county, Indiana, 1914-1915-1916. S. J. Craig. 112p il '16 S. J. Craig, sec., Lake County ag. assn., Crown Point, Ind.
- Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 205-15) '17 U S Ag
- See also* Agriculture and the war—Indiana; Soil fertility—Indiana

**Indo-China**

- Agricultural resources of Indo-China. H. Brenier. Int R Sci & Prac Ag 7,no 11:1571-3 N '16

**Statistics**

- Exports in 1915. Doc Leaflets 1, no 3:41-3 S '17

**Iowa**

- Getting together in Iowa. F. Crissey. il Country Gent 82:1910-11+, 1974-5, 2025 D 8-22 '17
- How one agent made nearly a million dollars and a half for the farmers. A. F. Dawson. Banker-F 4:7 F '17
- Iowa's agricultural greatness. Wallaces' F 43:1816 D 13 '18
- Norwegians in Iowa. Wallaces' F 43:671 Ap 19 '18
- Pioneer days and now. G. H. Campbell. Hoard's D 54:825 Ja 4 '18
- Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 215-23) '17 U S Ag
- Social surveys of three rural townships in Iowa. P. S. Peirce. (Univ. of Iowa monographs, 1st ser., no. 12; Studies in the social sciences, v. 5, no. 2) 88p 50c '17 Univ. of Iowa, Iowa City
- Soil surveys, field experiments and soil management in Iowa. W. H. Stevenson and P. E. Brown. Ia Ag Exp C 51:1-21 '18
- Why is Io-way! E. Howe. il Country Gent 83: 5+- N 23 '18
- See also* Agriculture and the war—Iowa; Iowa—Agriculture, Department of

**Ireland**

- Irish agriculture. Wallaces' F 43:1254 S 6 '18
- See also* Agriculture and the war—Great Britain

**Italy**

- Agricultural development in the Roman campaign: state of the work on June 30, 1915. Int R Sci & Prac Ag 7,no 1:34-5 Ja '16
- Agricultural population of Italy. Int R Ag Econ 68:124 Ag '16
- Agricultural week of Rome. Int R Ag Econ 64:26-8 Ap '16
- Climatic change and agricultural exhaustion as elements in the fall of Rome. E. Huntington. Quarterly J Economics (Harvard Univ. Press, Cambridge, Mass. 75c) 31:173-208 F '17

**Agriculture—Italy—Continued**

Décret-loi de la lieutenantance n. 1316 créant à Sanluri un institut autonome pour l'amélioration agricole et pour la colonisation de la Sardaigne. *Int Yearbook Ag Leg* 1916:630-2 '17

Italy establishes rules governing agriculture. D: F. Wilber. (Commerce Reports no. 181) p 460-3 (Ag 4) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.

Miscellaneous information relating to agricultural economy in general. *Int R Ag Econ* 74:117-24 F '17

Recent measures for developing the growing of cereals. *Int R Ag Econ* 79:80-2 J1 '17

Special measures in relation to agriculture. *Int R Ag Econ* 70:118-20 O '16

**Japan**

Address before the 54th annual convention of the National wool growers' association. I. Tanimura. *Nat Wool Grower* 8:19-24 Ja '18

Agricultural development of Japan. W: B. Varley. *Ag Gaz of Canada* 3:1013-14 N '16

Outlook of the Japanese farmer. S. S. McClure. *Rural Manhood* 9:18-20 Ja '18

**Kansas**

Director's report, 1915-1916, Kansas agricultural experiment station. *Kan Ag Exp Rep* 1915-1916:1-49 '17

Kansas as viewed by a New Yorker. F. B. Nichols. *Rural N Y* 76:1131 S 29 '17

Kansas is at it again. J. Eby. *il Country Gent* 82:1339-40 S 1 '17

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 223-33) '17 U S Ag

Season's outlook; Kansas takes stock of what has been done. W. M. Jardine. *Banker-F* 5:4 Je '18

Will Kansas turn from wheat? C: Dillon. *il Country Gent* 81:1463 Ag 5 '16

See also Kansas—Irrigation commissioner, State

**Kentucky**

Blue grass region farm notes. G: D. Korsner. *Wallaces' F* 43:442 Mr 8 '18

Farming in Lincoln's county. J. R. Munson. *il Country Gent* 83:2+ O 19 '18

Farming in the bluegrass region. J. H. Arnold and F. Montgomery. *il map U S Ag B* 482:1-29 '17

Important factors for successful farming in the bluegrass region of Kentucky. J. H. Arnold and W. D. Nicholls. *il Ky Ag Exp B* 210:171-206 '17

In the county that is all hills. M. E. Bacon. *il Country Gent* 81:1927 N 4 '16

Influence of a city on farming. J. H. Arnold and F. Montgomery. *map U S Ag B* 678:1-24 '18

Killing frost and length of the growing season in various sections of Kentucky. F. J. Walz. *maps Ky Ag Exp C* 19:120-32 '17

Live stock and other factors for profitable farming in northern Kentucky. J. B. Hutson. *Ky Ag Exp C* 21:1-20 '18

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 67-74) '17 U S Ag

Study of farming in southwestern Kentucky. J. H. Arnold. *U S Ag B* 713:1-19 '18

See also Kentucky—Agriculture, labor and statistics, Bureau of

**Korea**

Interior colonization and the progress of agriculture in Korea. *Int R Ag Econ* 78:75-9 Je '17

**Louisiana**

Call for a general conference of all agricultural and allied interests of Louisiana, Mar. 4th to discuss matters of vital importance. 8p n.d. La. swine breeders' assn., O. P. Geren, pres., Baton Rouge

List of Louisiana lands for sale. *La Ag Bd* 40p '17

Louisiana hits the trail. J: R. McMahon. *il Country Gent* 83:12-13 Ja 19 '18

Louisiana's invitation; the queen state of the South. *il La Ag Bd* 208p n.d.

Map of Louisiana. *La Ag Bd* n.p. '16

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 74-82) '17 U S Ag

**Maine**

Annual conference of the Maine state seed improvement, breeders' and dairy associations, Newport, Dec. 4-7. *Jersey B* 36:1983 D 19 '17; *Hoard's D* 54:803 D 28 '17

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 234-40) '17 U S Ag

**Manchuria**

Farming in eastern Asia. J. T. Nichols. *Wallaces' F* 42:972 Je 29 '17

**Maryland**

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 82-8) '17 U S Ag

See also Maryland agricultural society

**Massachusetts**

Massachusetts awakening. H. H. Bloss. *Country Gent* 81:932 Ap 29 '16

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 240-9) '17 U S Ag

See also Agriculture and the war—Massachusetts; Hampden county improvement league; Massachusetts—Agriculture, State board of

**Mesopotamia**

Irrigation in Mesopotamia. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:21 J1 13 '18

**Mexico**

Production (sugar beet, rape, olive oil, hops, flax, hemp, tea, jute). *Doc Leaflets* 1, no 3: 46-8 S '17

**Michigan**

Farming outlook in Michigan. E. E. Rockwood. *Hoard's D* 55:470 Ap 5 '18

Michigan; the land of plenty. (Immigration pub.) 52p il maps '18 Mich. Public domain comm., Lansing

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 249-57) '17 U S Ag

Study of farm management problems in Lenawee county. H. M. Dixon and J. A. Drake. *il map U S Ag B* 694:1-36 '18

Why Michigan farmers lose millions of dollars every year. F. H. Williams. *Banker-F* 4:6 Ag '17

See also Michigan—Agriculture, State board of

**Minnesota**

Cost of living on Minnesota farms—1905-1914. F. W. Peck. *il map Minn Ag Exp B* 162:1-31 '16

Farm management study in southeastern Minnesota; factors influencing profits. A. Boss and others. *il map Minn Ag Exp B* 172:1-51 '17

Report of Northeast demonstration farm and experiment station Duluth 1916. *Minn Ag Exp Rep* (Duluth) 1916:1-12 '17

Report of the superintendent of the Northwest experiment station, 1910-1916. *Minn Ag Exp Rep* (Crookston ser., v. 10, no. 1) 102p '17

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 258-63) '17 U S Ag

**Mississippi**

Mississippi advancing. *Hoard's D* 51:110 F 11 '16

Mississippi plantation that needs tractors. J. F. Hobart. *il Power F* 27:11 S '18

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 89-97) '17 U S Ag

Southeast Mississippi impressions. D. N. Barrow. *Prog F* 32:954 S 8 '17



**Agriculture—Continued**

**Missouri**

- Factors influencing crop yields in Missouri. W. L. Nelson. Mo Ag Ed B v 15:1-34 Mr '17  
Factors of successful farming near Monett. Mo. W. J. Spillman. U S Ag B 633:1-26 '18  
Farming on a war basis. O. R. Johnson. Mo Ag Ext C 31:1-20 '17  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 264-8) '17 U S Ag  
Soils of Missouri. M. F. Miller and H. H. Krusekopf. il maps Mo Ag Exp B 153:1-130 '18

*See also* Agriculture and the war—Missouri; Missouri—Agriculture, State board of

**Montana**

- Farm survey of Montana. E. L. Currier. Mont Ag Ext Pub no 25 19p '18  
How a banker-farmer put sheep on the farms of all-wheat farmers. A. T. Packard. Banker-F 3:14 Mr '16  
Profits in farming on irrigated areas in the Gallatin valley, Montana. E. L. Currier. Mont Ag Exp B 111:1-52 '16  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 268-72) '17 U S Ag  
Resources and opportunities of Montana, 1916 and 1917 eds. 2pts il map Mont Ag Dept 140:191p '16-17  
Work of the Huntley reclamation project experiment farm in 1917. D. Hansen. (W. I. A. C.—22) 29p '18 U S Ag

**Morocco**

- Agrarian policy of the Sherifian government during the war. Int R Ag Econ 68:104-9 Ag '16  
Agriculture and livestock in the Spanish Gharb (Morocco). J. Vasquez. Int R Sci & Prac Ag 7,no 6:789-91 Je '16

**Nebraska**

- Agricultural statistics 1917. Neb Ag Bd B 245:106-51 '18  
Cooperative crop reporting service for Nebraska. E. R. Danielson. Neb Ag Bd B 267:1-55 '18  
Nebraska agricultural organizations meet. Wallaces' F 41:141 Ja 28 '16  
Nebraska hall of agricultural achievement; with discussion. S. C. Bassett. (*In* Nebraska Horticulture v. 6, no. 12, p. 97-102) (F) '17 Neb. state hort. soc., Lincoln  
Nebraska produced enough grain, livestock and butter last year to give each family \$2,759. G. W. Wattles. Coop Manager & F 7:102 Mr '18  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 273-80) '17 U S Ag  
30th annual report of the Nebraska agricultural experiment station, 1916. Neb Ag Exp Rep 1916:i-iii '17  
Work of the Scottsbluff reclamation project experiment farm in 1916. F. Knorr. (W. I. A.—18) 18p '18 U S Ag

*See also* Nebraska—Agriculture, State board of; Soil fertility—Nebraska

**Statistics**

- Census of farms, stock and crops, 1917. Neb Ag Bd B 242:106-49 '17

**Nevada**

- Field crops for late planting. C. S. Knight. il Nev Ag Exp B 88:1-15 '17  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 280-4) '17 U S Ag

**New England**

- Agriculture in New England. K. L. Butterfield. il Breeder's Gaz 72:1154 D 20 '17  
In the Green Mountain state. W. C. Barnes. il Breeder's Gaz 70:1064 D 7 '16  
Mobilizing New England farmers. H. W. Olney. Public (122 E. 37th st, N.Y. 10c) 21:668-70 My 25 '18

- New farming for old New England. F. A. Waugh. il Country Gent 83:1+ S 7; 24 O 19 '18  
Problems of New England. A. B. Daggett, jr. Kimball's D F 16:39 Ja 15 '18  
What of New England? E. L. Qualfe. Breeder's Gaz 71:1066 My 24 '17

**New Hampshire**

- Agricultural conditions in New Hampshire. J. E. Ladd. Purdue Ag 10:21+ My '16  
New Hampshire farms. 42p il map '16 N. H. state dept. of ag., Concord  
Opportunity offered by New Hampshire for agricultural progress. il N H Ag Dept n.p. n.d.  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 284-8) '17 U S Ag

*See also* New Hampshire—Agriculture, Department of

**New Jersey**

- Best farmer in New Jersey; Minch brothers use 1800 acres in fifteen farms. J. R. McMahon. il Country Gent 83:10-11 S 14 '18  
County boards of agriculture and list of granges. N J Ag Dept C 8:1-62 '17  
Farms for sale in New Jersey. map N J Ag Dept C 1:1-29 '16  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 288-93) '17 U S Ag  
37th annual report of the New Jersey state agricultural experiment station and the 29th annual report of the New Jersey agricultural college experiment station for the year ending October 31, 1916. il N J Ag Exp Rep 1916:1-625 '17

*See also* New Jersey—Agriculture, Department of; New Jersey state agricultural society

**New Mexico**

- Climate in relation to crop adaptation in New Mexico. C. E. Linney and F. Garcia. maps N M Ag Exp B 113:1-132 '18  
Report on extension work, 1916. (*In* Cooperative extension work, 1916, pt. 2, p. 293-7) '17 U S Ag  
28th annual report of the agricultural experiment station of the New Mexico college of agriculture, 1916-1917. il N M Ag Exp Rep 1916-1917:1-92 '17

**New York**

- Abandoned farms and the city man's opportunities in farming. E. Van Alstyne. il N Y Ag Dept B 86:2543-61 Ag '16  
Agricultural resources of New York. G. F. Warren. Cornell Countryman 14:717-18 Je '17  
Back to the hills; how the hill farms are coming back. M. B. Dean. il Rural N Y 77:1017, 1155 Ag 31, O 12 '18  
Bankers state associations rally forces to cooperate for more production. Banker-F 4:13 My '17  
Chemung county: an account of its agriculture and of its farm bureau. M. E. Chubbuck and G. P. Scoville. il maps Cornell Ag Exp Rep 1916, v 2:1347-82 '17  
Conservation in relation to agriculture. G. E. Pratt. N Y Ag Dept B 92:30-9 F '17  
Duty of our state legislators to our agricultural institutions. W. H. Jordan. N Y Ag Dept B 92:127-34 F '17  
Duty of the state to the farmer. C: S. Whitman. N Y Farms & Markets Dept Ag B 105:93-101 Mr '18  
Farm census of New York state taken by the children in the rural schools. N Y Ag Dept B 89:1-32 N '16  
Farmer's response. A. R. Mann. Cornell Countryman 14:729 Je '17  
Farming in a war year. A. C. Weed. Rural N Y 77:765 Je 8 '18  
Farms for sale or rent in New York, 1916 (B. 78). il map N Y Ag Dept Rep 1916,pt 2:429-624 '17  
Farms for sale or rent in New York, 1917. il map N Y Ag Dept B 90:1-179 D '16

**Agriculture—New York—Continued**

- Farms for sale or rent in New York, 1918. il map N Y Farms & Markets Dept Ag B 103: 1-214 Ja '18
- Gov. Whitman comments on the fact that the farmers of the state have increased the cultivated acreage 30 per cent and hopes that the legislature will encourage the work
- More about those hill farms; conditions and requirements for success. G: W. Dell. Rural N Y 77:1183 O 19 '18
- New England agriculture. C: H. Tuck. N H Ag Dept Rep v 34:29-40 '16
- Orcharding in connection with mixed farming. E: van Alstyne. il N Y Farms & Markets Dept Ag B 97:232-42 Jl '17
- Preliminary report of the census of the agricultural resources of New York State. (B. 2) 18p (My 22) '17 New York state food supply commission, Albany
- Report of the conference called by the N.Y. state food supply commission at Syracuse, July 5-6, 1917, for consideration of the problems incidental to the present food crisis. (B. 4) 39p '17 N. Y. State food supply commission, Albany
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 297-305) '17 U S Ag
- Should he go West? W. I. Chamberlain. Nat Stock & F 42:672 O 26 '18
- State finances; farm number. (v. 1, no. 11) 7p F '18 N.Y. State comptroller's office, Albany
- Why the bankers of New York state should work for agriculture. Banker-F 3:7 Je '16
- See also New York (state)—Agriculture, Department of; New York agricultural conference; New York state agricultural society; New York state federation of agriculture; Patriotic agricultural service commission

**New Zealand**

- Occupation and cultivation of land in New Zealand; tabulation. J Ag New Zealand 14: 79 Ja '17

**North Carolina**

- Busy tarheels; North Carolina extension workers perform 12,000,000 farm services in a year. S. G. Rubinow. il Country Gent 83: 13 S 7 '18
- Farm prosperity and the local market problem in Mecklenburg. E. C. Branson. 18p 10c '17 Univ. of N.C., Dept. of rural economics and sociology, Chapel Hill
- Farm prosperity in Forsyth; the city and the country end of the problem. E. C. Branson. 29p 10c '17 Univ. of N.C., Dept. of rural economics and sociology, Chapel Hill
- 40th annual report of the agricultural experiment station for the year ended June 30, 1917. il N C Ag Exp Rep 1917 various paging
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 97-105) '17 U S Ag

**North Dakota**

- Getting together to save a state. W. A. Dyer. Country Life 29:58+ F '16
- North Dakota farm problems. P. E. Clement. il Banker-F 5:15 Mr '18
- Notes from an agricultural field trip across North Dakota. J. E. Boyle. Quarterly Journal (University, N. D.) 7:177-83 Ja '17
- Prairie fire; the Non-partisan league's seed-bond act scares timid capital from North Dakota. J. E. Pickett. Country Gent 83:13-14 My 25 '18
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 306-11) '17 U S Ag

See also Soil fertility—North Dakota

**Norway**

- \* Increase of agricultural production in Norway. H. F. A. Schoenfeld. (Commerce Reports no. 266) p 583 (N 12) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

- \* Norwegian agriculture for the next year. E. W. Thompson. (Commerce Reports no. 267) p 598 (N 13) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Ohio**

- Best farmer in Ohio; Homer C. Price. J: R. McMahon. il Country Gent 83:12+ O 19 '18
- County experiment farms in Ohio; annual reports for 1916 and 1917. il Ohio Ag Exp B 323:243-486 '18
- Five-year farm management survey in Palmer township, Washington county, Ohio, 1912-1916. H. W. Hawthorne. il map U S Ag B 716:1-53 '18
- Ohio agricultural statistics, 1916-17. 78p '17 Ohio Dept. of ag., Columbus
- Ohio plans for more wheat and meat. il Breeder's Gaz 72:5-6 Jl 5 '17
- Possible Wayne County farm. C: E. Thorne. il Ohio Ag Exp B 304:211-25 '16; Abstract. Ohio Ag Exp B v 2:96-8 Mr '17
- Problems of the southeastern Ohio farmer. C. W. Montgomery. il Ohio Ag Exp B v 1: 340-3 N '16; Same cond. Ohio F 138:614 D 16 '16
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 311-19) '17 U S Ag
- Some extremes in Ohio soils. C. E. Thorne. il Ohio Ag Exp B v 1:77-85 Mr '16
- Some features of the agriculture of Ohio. C: E. Thorne. il maps Ohio F 142:159 Ag 24 '18
- Trading productive farms for fuel. J: Marsh. il Ohio F 141:37 Ja 12 '18

See also Agriculture and the war—Ohio; Ohio—Agriculture, State board of; Soil fertility—Ohio

**Oklahoma**

- Best farmer in Oklahoma; Charles Haxton. W. Stemmons. il Country Gent 83:6-8 Mr 30 '18
- Farm children in Oklahoma. C: E. Gibbons. Child Labor B (105 E. 22d st, N.Y. 50c) 7: 32-53 My '18
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 105-13) '17 U S Ag
- 26th annual report of the Oklahoma agricultural experiment station, year ending June 30, 1917. Okla Ag Exp Rep 1917:1-40 '18

See also Oklahoma—Agriculture, State board of

**Oregon**

- Experiments with spring cereals at the eastern Oregon dry-farming substation, Moro, Ore. D: E. Stephens. il maps U S Ag B 498:1-37 '17; Abstract. Int R Sci & Prac Ag 8, no 6:860-3 Je '17
- Inland empire. W. C. Barnes. Breeder's Gaz 70:272 Ag 24 '16
- Profitable management of general farms in the Willamette valley. B. Hunter and S. O. Jayne. U S Ag B 705:1-23 '18
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 319-26) '17 U S Ag

**Pennsylvania**

- Farm management practice of Chester county. Pa. W. J. Spillman and others. il maps U S Ag B 341:1-99 '16; Abstract. Prac F 114:301 S 15 '18
- Handling barnyard manure in eastern Pennsylvania. D. A. Brodie. il Farmers' B 978:1-24 '18
- Penn state agricultural guard. R. L. Watts. Penn State F 10:111-12 Je '17
- Pennsylvania meetings. Ohio F 137:342 Mr 4 '16
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 327-31) '17 U S Ag
- Saving souls and soils. T: J. Murphy. il Country Gent 83:10-11+ Mr 23 '18
- Statement to the farmers of Pennsylvania. E. K. Hibschan. Penn State F 10:113 Je '17

See also Agriculture and the war—Pennsylvania; Pennsylvania—Agriculture, State board of



**Agriculture—Continued**

**Peru**

- Ancient agriculture. Wallaces' F 42:1216 S 7 '17  
Markets for agricultural implements and machinery in Chile and Peru. F. H. von Motz. (Special agents ser. no. 142) 48p '17  
U. S. Bureau of foreign and domestic commerce, Washington, D.C.; 5c Supt. of doc. Peru—areas under cultivation, yield, export. Doc Leaflets 1, no 4:61-3 O '17  
\* War and Peruvian foodstuffs. (Commerce Reports no. 249) p 305-13 (O 23) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.

**Philippine Islands**

- Agricultural situation in the Philippine Islands. H. T. Edwards. Philippine Ag R 9, no 2:60-73 '16  
Agriculture and other industries as honorable vocations. P. A. Hill. (Civico-Educ. Lectures no. 11) 9p '17 Philippine Islands Bur. of educ., Manila  
Agriculture in the Philippines. (Commerce Reports no. 154) p 28-31 (Jl 3) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.; Abstract. Int R Sci & Prac Ag 8, no 10:1341-2 O '17  
Masterpieces of primitive engineering. il Scientific Am (233 Broadway, N.Y. 10c) 118: 225 Mr 16 '18  
Rubber culture in the Philippines. P. J. Wester. il Philippine Ag R 10, no 3:201-20 '17

**Porto Rico**

- Cover crops for Porto Rico. C. F. Kinman. il Porto Rico Ag Exp B 19:1-32 '16  
See also Porto Rico—Agriculture and labor, Commissioner of

**Rhode Island**

- \* Preliminary report into the agricultural resources of the state, 1916. 30p '16 Comm. of ag. inquiry, State of Rhode Island and Providence plantations, Providence  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 331-5) '17 U S Ag

**Rhodesia**

- Rhodesia—areas cultivated, and yields. Doc Leaflets 1, no 4:57-60 O '17

**Rumania**

- Agriculture and its allied industries in Rumania. N. Xenopol. Int R Sci & Prac Ag 7, no 12:1734-7 D '16

**Russia**

- Agricultural improvements in Russia. Int R Ag Econ 64:126-7 Ap '16  
Agriculture in Russia. Breeder's Gaz 69:1338 Je 29 '16  
Bureau of applied botany of the Russian ministry of agriculture and its first 20 years of work (1894-1914). R. Reghel. Int R Sci & Prac Ag 7, no 6:794-5 Je '16  
Country life and agriculture in Russia. J: P. Andreanoff. Rural Manhood 8:437-9 D '17  
Eight-field system of farming in Russia. Russian Review (31 E. 7th st., N.Y. 75c) 3:45-9 Ja '17  
Reclamation of arid steppe soil and of shifting sands in the province of Astrakan, Russia. G. Vysoztkiff. Int R Sci & Prac Ag 7, no 11:1588-96 N '16  
Results of the new agrarian reform. Int R Ag Econ 72:116-31; 74:89-107 D '16, F '17  
Russia as a farming country. Wallaces' F 43: 445 Mr 8 '18  
Russian land and Russian peasants; measures to relieve agricultural poverty. M. J. Olgin. Asia (627 Lexington av, N.Y. 25c) 18:166-9 F '18  
\* Russia's agriculture and the repayment of foreign loans. E. Hermonius. Econ J (St Martin's st, London, W. C. 5s) 28:333-6 S '18  
Soil hunger in Russia. E. A. Ross. Century (353 4th av, N.Y. 35c) 95:874-80 Ap '18

- United States and Russia. il Wallaces' F 41: 1065 Ag 11 '16  
See also Russian agricultural congress

**South Africa**

- Agricultural development in South Africa. Int R Sci & Prac Ag 8, no 12:1180-1 D '17

**South America**

- Call for foods: South America's answer. W: A. Reid. il Pan Am Union B (17th and B sts, N. W., Washington, D.C. 25c) 45:561-78 N '17  
See also subheads Argentina, Brazil, British Guiana, Chile, Peru, Uruguay, Venezuela under Agriculture

**South Carolina**

- County that feeds itself. H. S. Stabler. il Country Gent 82:1137-8 Jl 14 '17  
Farm-management study in Anderson county South Carolina. A. G. Smith. map U S Ag B 65:1-32 '18  
Marlboro skimpings; county which pays its income tax with fertilizer. J: E. Pickett. Country Gent 83:13 O 5 '18  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 113-23) '17 U S Ag  
30th annual report of the South Carolina experiment station of Clemson agricultural college for the year ending June 30, 1917. S C Ag Exp Rep 1917:1-32  
When good farmers get together. J: E. Pickett. il Country Gent 83:1+ S 14 '18  
See also Agriculture and the war—South Carolina; South Carolina—Agriculture, commerce and fisheries, Commissioner of

**South Dakota**

- Annual report of the agricultural experiment station for fiscal year ending June 30, 1917. S D Ag Exp Rep 1917:1-38 n.d.  
Experiments with wheat, oats, and barley in South Dakota. M. Champlin. il U S Ag B 39:1-37 '14  
Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 335-41) '17 U S Ag  
See also South Dakota—Agriculture, Board of

**Southern states**

- Aberdeen-Angus in the South's war work. F. H. Higgins. il Breeder's Gaz 74:75 Jl 18 '18  
Address before National agricultural society. Mrs G. H. Mathis. Ag Digest 1:414-16 My 1 '17  
Agricultural awakening of the southern states. F. Harrison. il Breeder's Gaz 70: 1180-1 D 21 '16  
Agricultural revolution in the South. O. R. Geyer. Scientific Am (233 Broadway, N.Y. 10c) 118:378 Ap 27 '18  
Agricultural somersault. H. S. Stabler. il Country Gent 82:1550-1+ O 13 '17  
Agriculture and horticulture in the South. J. A. Hearn. (In Proceedings, 10th annual meeting, Railway development association, p. 64-7) '16 D. C. Welty, sec., St Louis, Iron Mountain & Southern ry., St. Louis, Mo.  
Animal industry of the South—past, present, future. W. H. Dalrymple. La Ag Ed 10p '17  
Best climate in America. A. L. French. Prog F 31:1227 O 21 '16  
Boll weevil problem. B. L. Moss. Prog F 32: 530 Ap 28 '17  
Building of a new South. C. S. Ucker. Breeder's Gaz 70:237 Ag 17 '16  
Calendar of farm work. map Prog F 33:187 F 16 '18  
Cropping plan for a farm in the coastal plain. J. F. Duggar. Prog F 33:1266 N 16 '18  
Dawn of a new constructive era, being the full and complete report of the Cut-over land conference of the South held at New Orleans, La., April 11-13, 1917. 244p \$2.50 '17  
Southern pine assn., New Orleans, La.  
Draining the South of labor. H. S. Stabler. il Country Gent 82:1371-2 S 8 '17  
Factors influencing the efficiency of fertilizers. J. N. Harper. Am Fert 49:60+ D 7 '18

**Agriculture—Southern states—Continued**

Farm practices that increase crop yields in the Gulf Coast region. M. A. Crosby. *il map Farmers' B* 986:1-28 '18

Farm work for December. J. F. Duggar. *Prog F* 33:1330 D 7 '18

\$500 more a year for the average southern farmer. W. F. Massey. See weekly numbers of *Progressive farmer*

Fostering food production in the South. C. A. Whittle. *Am Fert* 46:63 Ap 28 '17

How safe farming won a billion dollar cotton crop for the South. J. Hirsch. *Banker-F* 3:6 N '16; Same cond. *Ag Digest* 1:221-2 D '16

How the success of a woman farmer is inspiring the South. *Banker-F* 3:11 Ja '16

If the South fed herself. P. G. Holden. *il Wallaces' F* 41:1662 D 22 '16

Intensive farming the solution of South's problem. D. B. Osborne. *Am Fert* 49:46-8 JI 6 '18

Is cotton a slacker crop? H: L. Staples. *il Country Gent* 82:1587-8+ O 20 '17

Labor-saving farm implements and farm machinery, a factor in the solution of the farm labor problem. G. R. James. 8p '17

Georgia state ag. soc., Statesboro

Long cotton belt broadens. J: R. McMahon. *il Country Gent* 83:6-7 F 2 '18

Morgan warns against curtailed cotton crop. S. T. Morgan. *Am Fert* 46:24 Ap 28 '17

Nation's garden spot. 33p *il map n.d.* Atlantic coast line, Agricultural dept., Wilmington, N.C.

New beginning in the nation's garden spot, south Georgia and Alabama. A. Maull. 16p *il n.d.* Atlantic coast line, Agricultural dept., Wilmington, N.C.

Proceedings of the Southeastern food conference held at Atlanta, April 5, 1917. 14p '17 Atlanta Chamber of commerce, Atlanta, Ga.

Producing the maximum of food per man. J. F. Duggar. *Prog F* 33:1370 D 14 '18

Secret of successful farming; rich lands, gotten through legumes, livestock and good pastures, the way to success. *Prog F* 33:931 Ag 24 '18

Seven things every southern farmer should aim at. B. Knapp. *Prog F* 33:175 F 9 '18

Sky-high cotton. B. W. Currie. *il map Country Gent* 82:91-2, 138-9, 182-3, 242-3, 310-11, 364-5 Ja 20-F 24 '17

South as it is. S. L. Meyers. *Hoards D* 54:721 D 14 '17

South as the coming stock land of America. J: E. Pickett. *il Country Gent* 83:6-7 O 19; 9-10 O 26; 13+ N 2; 6+ N 9 '18

South, growing more food, now begins to feed itself. *Weekly N L* 5:1 JI 17 '18

South—her problems and accomplishments as seen by a southerner. F. B. Kirkland. *N Y State Fruit Growers' Assn* Pr 1918:90-3

To bankers of the South-west. B. Knapp. *Banker-F* 5:4 Ap '18

Twelve ways to meet the new economic conditions here in the South. G. W. Carver. *Tuskegee Exp B* 33:1-7 '17

Vanished plantation system. E. Damer. *il Country Life* 34:90 My '18

War duty of the South. B. Knapp. *il Banker-F* 5:6 Mr '18

Way out for the southern farmer. *Ag Digest* 2:695 N '17

Ways of making southern mountain farms more productive. J. H. Arnold. *il Farmers' B* 905:1-27 '18

What safe farming is doing for southern agriculture—the banker's part. B. Knapp. *Banker-F* 4:4-5 N '17

When the stock-farmer moves into the South. J. B. Woods. *il Breeder's Gaz* 71:1270 Je 28 '17

Why a big cotton acreage means low prices. C. Poe. *Prog F* 31:189 F 5 '16

See also Agriculture and the war—Southern states; Diversified farming; Negroes as farmers; Soil fertility—Southern states

**Spain**

See also Association of the agriculturists of Spain

**Sweden**

Lulea branch of the Svalöf station, north Sweden. H. Tedin. *Int R Sci & Prac Ag* 9,no 3:302-4 Mr '18

Ordonnance royale concernant la contribution de l'état pour encourager une comptabilité bien ordonnée chez les petits propriétaires agricoles. *Int Yearbook Ag Leg* 1916:834-6 '17

Present state of agriculture in Sweden. H. Juhlin-Dannfelt. *Int R Sci & Prac Ag* 7, no 7:921-32 JI '16

**Switzerland**

Agriculture in Switzerland. *Int R Sci & Prac Ag* 7,no 11:1573-7 N '16

Federal aid to Swiss agriculture. *Int R Ag Econ* 79:83-6 JI '17

Investigations into the returns of Swiss agriculture during the year 1913-1914. *Int R Sci & Prac Ag* 7,no 1:126-30 Ja '16

Utilisation of the profits made by Swiss peasants. E. Laur. *Int R Sci & Prac Ag* 8,no 9:1285-91 S '17

See also Secretariat of Swiss peasants; Swiss peasants' union

**Tennessee**

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 123-30) '17 U S Ag

Tennessee fertilizer results. C. A. Mooers. *Prog F* 33:1269 N 16 '18

See also Tennessee—Agriculture, Department of

**Texas**

East Texas, the land of profitable products. R. G. Culberson. *il Green's Am Fruit Grower* 38:11 Mr '18

Farm management study of cotton farms of Ellis county, Texas. R. E. Willard. *il maps U S Ag B* 659:1-53 '18

Farmer on wheels. G: F: Stratton. *il Country Gent* 83:2 Ag 24 '18

Report on extension work, 1916. (*In Cooperative extension work*, 1916, pt. 2, p. 130-7) '17 U S Ag

Social and economic survey of southern Travis county. L: H. Haney and G: S. Wehrwein, eds. *il maps Texas Univ (Austin)* B 65:1-149 N 20 '16

Status of farming in the lower Rio Grande irrigated district of Texas. R. E. Willard. *il map U S Ag B* 665:1-24 '18

Statutes of Texas as they apply to farmers. C. M. Cureton. *Tex Ag Dept B* 52:61-9 '16

Work of the San Antonio experiment farm in 1917. C. R. Letteer. (*W. I. A. C.* 21) 27p *il '18 U S Ag*

See also Texas—Agriculture, Commissioner of

**Tropical zone**

Possibilities of intensive agriculture in tropical America. O. F. Cook. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 573-7) '17

**Tunis**

Activity, during the agricultural season 1914-1915, of the various technical branches of the agricultural administration of Tunis. *Int R Sci & Prac Ag* 8,no 3:337-9 Mr '17

Society of the French farms of Tunisia during the war. *Int R Ag Econ* 81:84-5 S '17

**United States**

Agricultural achievements of the century; symposium. *Ohio F* 137:2, 30, 63 Ja 1-15 '16

Agricultural production for 1918; with special reference to spring planting and to live stock. U S Ag C 103:1-22 '18

Agricultural reorganization. *New Republic* (421 W. 21st st., N.Y. 10c) 10:364 Ap 28 '17

Agriculture. J. C. Linthicum. *Congressional Record (Washington, D.C.)* 56:1468-70 Ja 28 '18

Agriculture Americanized. F. M. White. *il Field* 11 27:175-7 Mr '17

Agriculture in America. A. E. V. Richardson. *J Dept Ag Victoria* 16:385-96, 463-8, 555-68 JI-S '18



**Agriculture—United States —Continued**

- All kinds of farmers. E. Davenport. *il Country Gent* 83:3-4+ Je 22 '18
- American agriculture after the war. O. F. Boucke. *Penn State F* 11:159-61 My '18
- Appropriations for agriculture. W. L. Nelson. *Breeder's Gaz* 70:536 S 28 '16
- Approximate center of agricultural production, 1917, according to value of crops and animal products; map. *Weekly N L* 5:16 J1 24 '18
- Are we declining agriculturally? S. C. Webster. *Jersey B* 36:1944 D 12 '17
- Army for agricultural restoration. Survey (112 E. 19th st. N.Y. 10c) 40:671-2 S 14 '18
- Back to the land. *North Am Review* (171 Madison av., N.Y. 35c) 205:655-61 My '17
- Basis of national agricultural organization. K. L. Butterfield. (*In Nat. conf. on marketing and farm credits*, 1916, p 445-8) \$2 '17
- C. W. Holman, sec., Madison, Wis.
- Big crops—small prices. *Wallaces' F* 41:126 Ja 28 '16
- Cheapest source of increased food supplies. E. G. Nourse. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 6:116-23 F '18
- Commerce and our farms. A. W. Douglas. *Independent* (119 W. 40th st., N.Y. 10c) 89:186-7 Ja 29 '17
- Compulsory production and fixed prices. L. K. Cogswell. *Breeder's Gaz* 72:172 Ag 9 '17
- Conference on farms and food. P. V. Collins. *Outlook* (381 4th av., N.Y. 10c) 114:854+ D 20 '16
- Connecticut farmers and war profits. *Rural N Y* 76:1414 D 15 '17
- Course in estate management for women in war time. E. Loines. *il Country Life* 34:66-7 My; 61-3 Je; 56-8 Ag '18
- Crop centers of the United States. A. E. Waller. *bibliog maps Am Soc Agron J* 10:49-83 F '18
- Crop season in full swing. B. W. Snow. *O Judd Farmer* 64:2 Ap 13 '18
- Decay of agriculture. F. C. Howe. *Public* (122 E. 37th st. N.Y. 5c) 20:1035-6 O 26 '17
- Demand for drought loans found less than expected. *Weekly N L* 6:3 D 18 '18
- Development of our agriculture is our chief national problem. G. E. Roberts. *Banker-F* 4:10 D '16
- Digging at the root of the food problem. *Outlook* (381 4th av., N.Y. 10c) 117:560-4 D 5 '17
- Discussion of ways of increasing agricultural productivity. *Railway Age Gazette* (Woolworth bldg., N.Y. 15c) 62:1059-61 My 18 '17
- Disloyalty to live stock interests and federal appropriations. E. O. Cowan. *Breeder's Gaz* 69:494 Mr 2 '16
- Duty and its fulfillment. D. F. Houston. *Ag Digest* 2:779-81 Ja '18
- Economy of production. *Wallaces' F* 41:116 Ja 28 '16
- Extending agriculture after the war. *Wallaces' F* 43:1036 J1 12 '18
- Factory system for the farm. R. B. Henschen. *Penn State F* 11:88+ Mr '18
- Family partners on the farm. A. C. Laut. *Country Gent* 82:1753+ N 10 '17
- Farmer and railroad as partners in industry. W. B. Storey. *Railway Age* (Woolworth bldg., N.Y. 15c) 63:635-8 O 19 '17
- Farmer must plan for a maximum crop in 1918—why it will pay. H. A. Bereman. *Banker-F* 4:5 Ag '17
- Farmer's duty. W. W. Reynolds. *Nat Stock & F* 40:990 D 30 '16
- Farming on the cut-over lands of Michigan. Wisconsin, and Minnesota. J. C. McDowell and W. B. Walker. *il map U S Ag B* 425:1-24 '16
- Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; fall-sown wheat and rye. *U S Ag C* 108:1-8 '18
- Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; live-stock production for 1919. *U S Ag C* 123:1-14 '18
- Food-production act, 1919; hearings before the House committee on agriculture on estimates of appropriations required to carry out, during the fiscal year ending June 30, 1919, the purposes of the act approved Aug. 10, 1917, entitled An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products. 230p '18
- Apply to congressmen
- Food production outlook. D. F. Houston. *Weekly N L* 5:7-8 F 27 '18; Same. *Hoards' D* 55:372 Mr 22 '18
- For a temple to the new ideals of agriculture. *Creamery* 7:29-30 D '18
- Function of live stock in agriculture. G. M. Rommel. *U S Ag Yearbook* 1916:467-75; Same. *Separate* 694; Summary. *Nat Wool Grower* 7:44 Ap '17; Summary. *Irr Age* 32:121 Je '17
- General farm topics. See weekly numbers of *Rural New-Yorker*
- Good farming for 1918. *Banker-F* 5:12 D '17
- Good talk on better farming. K. S. Hatton. *il Va Ag Dept B* 109:178-86 '16
- Grain farming in the corn belt; with live stock as a side line. C. Vrooman. *Farmers' B* 704:1-47 '16
- Graphic summary of American agriculture. M. Smith and others. maps *U S Ag Yearbook* 1915:329-403
- \* Historical farmer in America. A. J. Morrison. *S Atlantic Quar* (Durham, N.C. 50c) 17:222-30 J1 '18
- How can the entomologist assist in increasing food production; discussion. *J Econ Entom* 11:106-18 F '18
- How he is spending his money. C. M. Harger. *il Country Gent* 82:1721 N 10 '17
- Increase of food production and of wool. *Lenroot and others. Congressional Record* (Washington, D.C.) 56:1318-23 Ja 24 '18
- Increasing of yields a patriotic duty. R. J. H. DeLoach. *Am Fert* 46:24-5 My 12 '17
- Indians as gardeners. E. P. Powell. *Country Life* 29:130 Ap '16
- Land tenure and the organization of agriculture on Indian reservations in the United States. *Int R Ag Econ* 77:63-76 My '17
- Leveling our agricultural progress. E. N. Wentworth. *il Field* 11:26:31-13 Ap '16
- Living within our income. H. J. Waters. *Mo Ag Bd Yearbook* 1917:70-9
- Looking forward in farming operations. *Weekly N L* 4:1-2 J1 11; 3-8 Ag 1; 5:1+ S 5; 1-2 O 3 '17; 1-2 F 6; 1-2+ Ap 10; 3-4 Je 5; 4 J1 31; 6:4-5 O 9; 10-11 N 6; 14-16 D 4 '18
- Lure of the Southwest; advantages and disadvantages the settler will find. S. F. Morse. *il Country Gent* 81:1444 J1 29 '16
- Must we Prussianize production? H. L. Staples. *il Country Gent* 83:12-13+ My 4 '18
- Need of co-operation between manufacturers and bankers. F. C. Schwedtmann. *Am Fert* 45:66-8+ J1 22 '16
- New agriculture. G. I. Christie. (Soil improvement com. pamph. 20) 15p '16 *Nat. fertilizer assn., Chicago*; Same. *Am Fert* 45:81-2+ J1 22 '16; Same. *Coop Manager & F* 6:52-6 F '17; Same cond. *Jersey B* 35:1356 Ag 30 '16
- Newspaper—its relationship and duties toward the development of farm and rural communities. C. P. J. Mooney. (*In Agricultural extension*, p 93-6) '16 *National implement & vehicle assn., 76 W. Monroe st., Chicago*
- Our food supply. *Weekly N L* 4:1-3 Ja 10 '17
- Pork production for 1918. *Weekly N L* 5:1-2 D 5 '17; Same. *Swine World* 5:11 Ja '18; Same abr. *Ag Digest* 2:789-90 Ja '18
- Present obligation and golden opportunity of the farmer. H. L. Russell. *il Banker-F* 4:6 Ap '17
- President and the farmers. *New Republic* (421 W. 21st st. N.Y. 10c) 14:340-1 Ap 20 '18
- Problem of the American farmer. F. C. Howe. *il Century* (353 4th av., N.Y. 35c) 94:625-32 Ag '17
- Program for food production and conservation. *Weekly N L* 4:1-4 Ap 25 '17
- Progress of agriculture. C. Vrooman. *Farmers' Nat Congress Pro* 1916:100-5
- Question of food supply. *N Y Prod R* 43:1016 Ap 18 '17
- Report of the Bureau of plant industry for the fiscal year ended June 30, 1917. 32p '17
- U S Ag

**Agriculture—United States—Continued**

- Report on experiment stations and extension work in the United States, 1916. pts 1-2 334p/406p '17-'18 U S Ag
- Revolution in farming. E. G. Nourse. Yale Review (120 High st, New Haven, Conn. 75c) n s 8:90-105 O '18
- School and farm of the future. B. T. Gallo-way. Wallaces' F 41:15 Ja 7 '16
- Secretary Houston urges further organization for 1919 production. Weekly N L 6:1 N 13 '18; Same. Power F 27:51 D '18
- Secretary Houston's plan to stimulate food production and regulate distribution. N Y Prod R 43:1041 Ap 25 '17
- Secretary tells farming results; agriculture's after-the-war tasks. Weekly N L 6:1+ D 4 '18
- \* Should we have an annual census of agriculture and manufactures? O. P. Austin. Am Statistical Assn (491 Boylston st, Boston \$1) 15:786-93 S '17
- Some jobs for Uncle Sam; good roads, credit unions, land settlement, farm ownership, rural health. D. F. Houston. Banker-F 6:3 D '18
- Some observations on agricultural work in Egypt, America, and Japan. W. Roberts. Ag J of India 13:272-80 Ap '18
- Sound finance means sound farming. J. Fletcher. Ag Digest 1:255 Ja '17
- Stimulation of agriculture. W. E. Borah. Congressional Record (Washington, D.C.) 56:9603 Jl 8 '18
- Stimulation of agriculture. Boies Penrose and others. Congressional Record (Washington, D.C.) 56:9646-50 Jl 9 '18
- Stop food crop wastes by improving methods. D. F. Houston. Banker-F 4:4 Ap '17; Same. Jersey B 36:530 Ap 4 '17
- Subsoiling, deep tilling, and soil dynamiting in the Great Plains. E. C. Chilcott and J. S. Cole. bibliog map J Ag Research 14: 481-521 S 9 '18
- Third obligation. New Republic (421 W. 21st st. N.Y. 10c) 13:363-4 Ja 26 '18
- War found agriculture prepared to meet emergency tasks. Weekly N L 6:1 Ag 14 '18
- War's influence on farming. H. Sage. Hoard's D 54:872 Ja 11 '18
- We must feed ourselves. C. M. Carroll. 23p il maps n. d. Agricultural extension dept., International harvester company, Harvester bldg., Chicago
- What an agricultural engineer thinks of our farming system. E. Mead. Outlook (381 4th av, N.Y. 10c) 118:534-5 Ap 3 '18
- When bankers and farmers get together. il Banker-F 5:13 D '17
- Wherewith shall we be fed? Prac F 113:178 My 1 '17
- Wisconsin way and other ways. C. A. Whittle. Hoard's D 53:569 Ap 20 '17
- Work of the United States department of agriculture. D. F. Houston. (In Agricultural extension, p 22-51) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Would protect farmer and consumer even if old systems go under. W. B. Thompson. Yonkers Daily News (Yonkers, N.Y.) 12:1 Je 4 '18
- See also Agricultural conference, St Louis, 1917; Agriculture and the war—United States; Corn belt; Reclamation service (United States); United States—Agriculture, Department of; also names of products, e.g., Wheat

**Uruguay**

- Agricultural activity in Uruguay. (Commerce Reports 129) p 856-7 (Je 4) '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.
- Agriculture and stock breeding in Uruguay. E. J. Rovira. Int R Sci & Prac Ag 8,no 6:826-33 Je '17
- Trabajos fitotécnicos y de experimentación agrícola en la Estanzuela, República oriental del Uruguay. A. Boerger. il (In Pan American scientific congress Pro., 1915, v. 3, p. 361-73) '17

**Utah**

- Cooperation among Utah farmers. W. C. Barnes. il Breeder's Gaz 72:885-6 N 15 '17
- Dry-farming in Utah. F. S. Harris and A. D. Ellison. il map Utah Ag Exp C 21:1-35 '16
- Profits in farming on irrigated areas in Utah Lake valley. E. H. Thomson and H. M. Dixon. il map U S Ag B 117:1-21 '14
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 341-7) '17 U S Ag

**Venezuela**

- Agricultural and economical development of Venezuela. Int R Sci & Prac Ag 8,no 8:1085-9 Ag '17

**Vermont**

- Best farmer in Vermont; Elbert S. Brigham. F. Tilden. il Country Gent 83:6-7 N 30 '18
- Northern Vermont. Rural N Y 75:1158, 1182, 1237 S 2-9, 23 '16
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 347-52) '17 U S Ag

**Virginia**

- Best farmer in Virginia, Governor Stuart. T. J. Murphy. il Country Gent 83:5-6+ Ag 17 '18
- Farmers, what shall the harvest be? il Va Ag Dept B 126:122-6 '18
- New Bohemia, Virginia; colony of alien farmers. R. G. Carroll. il map Country Gent 81: 1290-1 Jl 1 '16
- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 138-45) '17 U S Ag
- Speaking of preparedness. W. H. Dean. il Country Gent 82:922 My 26 '17
- The Virginias. Nat Stock & F 41:48-9 Ap 7 '17
- See also Virginia—Agriculture and immigration, Department of

**Washington**

- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 352-8) '17 U S Ag
- See also Agriculture and the war—Washington; Washington (state)—Farm markets, Office of

**West Virginia**

- Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 145-50) '17 U S Ag

**Western states**

- Crop production in the Great Plains area: relation of cultural methods to yields. E. C. Chilcott and others. map U S Ag B 268:1-28 '15
- Farm home for you; with list of farms and lands for sale. 40p il n.d. Inland empire development league, Harold Hooker, sec., Spokane, Wash.
- Glimpses of the Pacific Northwest. Breeder's Gaz 74:118 Jl 25 '18
- Homesteading in the Northwest. V. King. il Country Gent 83:44 F 2 '18
- Land of sunshine and grief. H. L. James. il Wallaces' F 43:1811 D 13 '18
- Seed grain loans planned in drought regions to help next spring planting. Coop Manager & F 8:49 D '18
- Use new lands. Weekly N L 4:1 My 9 '17

**Wisconsin**

- Agricultural statistics for 1917. W. F. Callander. maps Wis Ag Dept B 14:1-55 '18
- Agricultural statistics for Wisconsin, 1915 and 1916. Wis Ag Dept B 10:145-92 '16; Same. Wis Ag Dept B 11 '17
- Farm making in upper Wisconsin; hints for the settler. B. G. Packer and E. J. Delwiche. il maps Wis Ag Exp B 290:1-71 '18
- In a dairy country. R. A. Hayne. il Nat Stock & F 42:447 Ag 10 '18
- One-crop farming versus dairying in Wisconsin. Int R Sci & Prac Ag 7,no 1:125-6 Ja '16



**Agriculture—Wisconsin—Continued**

Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 358-67) '17 U S Ag  
Serving Wisconsin farmers in war time. H. L. Russell and K. L. Hatch. il Wis Ag Exp B 294:1-32 '18  
Wisconsin's hemp industry. A. H. Wright. il Wis Ag Exp B 293:1-46 '18; Summary. Hoard's D 56:383 O 11 '18  
See also Wisconsin—Agriculture, Department of

**Wyoming**

Report on extension work, 1916. (In Cooperative extension work, 1916, pt. 2, p. 367-71) '17 U S Ag  
Study of land settlement in Wyoming. Cal Commonwealth Club Transac (San Francisco 19c) 11:461-5 D '16

**Agriculture, Ancient**

Ancient agriculture. Wallaces' F 42:1216 S 7 '17  
Beginning of farming. Wallaces' F 42:64 Ja 12 '17  
Farms and farmers in ancient Rome. J. W. Thompson. Breeder's Gaz 69:698, 803 Mr 23, Ap 6 '16  
History of ancient irrigation in various countries. C. S. Kinney. Irr Age 33:86-9 My '18  
Masterpieces of primitive engineering. il Scientific Am (233 Broadway, N.Y. 10c) 118: 225 Mr 16 '18  
Upon Cato and the Latin agronomes. Rural Manhood 8:340-1 O '17

**Agriculture, Cooperative**

About cooperative farming. Prog F 33:4 Ja 5 '18  
Agricultural cooperation. B. H. Hibbard. Wis Ag Exp B 238:1-45 '17  
Community co-operation. E. H. Thomson. Wallaces' F 43:830 My 17 '18  
Community cooperation in stock breeding. C. M. McConnell. Breeder's Gaz 71:388 F 22 '17  
Community liming club. G. G. Hayes. Coop Manager & F 7:71 D '17  
Community organization for promoting the production of swine. C. G. Starr. il Ind Ag Exp C 54:1-11 '16  
Concrete mixers for community use—elevator should handle. Am Coop J 11:516 Ja '16  
Confidence and economy in rural work. T. N. Carver. Kimball's D F 14:796 D 15 '16  
Co-operate to buy machinery. A. Pickford. O Judd Farmer 61:10 Jl 15 '16  
Coopération agricole; autres formes d'association agricole. Int Yearbook Ag Leg 1916: 891-919 '17  
Co-operation among farmers. J. L. Coulter. Mo Ag Bd B v 16:1-15 O '18  
Co-operation and a new agriculture. E. R. Eastman. Hoard's D 56:437 O 25 '18  
Co-operation has come to stay. E. G. McCollum. Am Coop J 12:204 N '16  
Coöperation in buying and using machinery. C. Poe. Prog F 31:189 F 5 '16  
Coöperation in buying machinery. J. Z. Green. Prog F 31:194 F 5 '16  
Co-operation in farm sheep husbandry. G. H. Dacy. il Nat Wool Grower 7:13-14 N '17  
Cooperation in land-clearing. E. R. McIntyre. Breeder's Gaz 70:91 Jl 20 '16  
Cooperation in the purchase and use of silo-filling machinery. T. Butler. Prog F 33:683 Je 8 '18  
Cooperation to overcome labor shortage. J. E. Muncaster. Nat Stock & F 41:1350 Mr 23 '18  
Cooperative drainage. H. B. Cobb. il Nat Stock & F 41:692 O 20 '17  
Co-operative ownership of potato machinery. C. L. Fitch. Wallaces' F 41:543 Mr 31 '16  
Co-operative possibilities in labor and advertising. C. W. Adams. Rural N Y 76:223 F 17 '17  
Co-operative potato growing. (B. 3) p 11-12 (Je 9) '17 New York State food supply commission, Albany  
Direct dealing in grain and feed. Rural N Y 76:809 Je 23 '17  
Extent and possibilities of cooperation. C. E. Bassett. (In Pan American scientific congress Pro., 1915, v. 3, p. 456-9) '17

Farmers and the feed dealers. H. H. Lyon. Rural N Y 75:1465 N 25 '16  
Farmers cut meat cost by cooperative butcher shop. Weekly N L 6:15 S 11 '18  
Forty reasons why. Am Coop J 11:523 Ja '16  
Get-together; incorporate on the right basis. J. H. Collins. Country Gent 81:1253 Je 24 '16  
How farm women are building up a dairying community. Banker-F 3:12 Ja '16  
How to organize a farm gas engine ring. D. R. A. Drummond. Power F 26:8 My '17  
How we made eight farms pay by buying a tractor together. R. Heaney. il System on the Farm 2:207-9 Je '18  
Joining with neighbors in doing farm work. Prog F 33:444 Ap 6 '18  
Let's coöperate with neighbors and avoid speculative crops. W. F. Massey. Prog F 31:900 Jl 22 '16  
Miscellaneous information relating to co-operation and association in various countries. See monthly numbers of International review of agricultural economics  
Necessity the mother of co-operation. S. G. Rubinow. Hoard's D 53:134 F 16 '17  
Neighborhood cooperation to save labor. V. A. Place. il Ohio F 139:781 Je 16 '17  
Organization and price making. J. N. McBride. (In Nat. conf. on marketing and farm credits, 1916, p 449-61) \$2 '17 C. W. Holman, sec., Madison, Wis.  
Organizing cooperative associations. J. E. Boyle. N D Ag Exp C 16:1-24 '17  
Organizing for feed defense. S. Sosland. Hoard's D 55:948, 983 Je 28-Jl 5 '18  
Our Bungtown mill. J. A. King. il Farm Eng 5:6 Jl '17  
Plan of organization for the rural community. C. Poe. Prog F 31:227 F 12 '16  
Practical co-operation among farmers. J. W. Shorthill. Mo Ag Bd Yearbook 1917:44-54  
Pulled up by its own bootstraps. W. H. Dean. il Country Gent 82:1407 S 15 '17  
Report of progress on animal husbandry investigations in 1916. R. Pearl. Maine Ag Exp B 261:121-44 '17  
Saving the thirty-six million dollars. Am Coop J 12:564 Ap '17  
Silo filling club. C. H. Sapp. il Ohio F 139: 767 Je 9 '17  
Some lessons from cooperation. W. H. Main. Rural N Y 75:1489 D 2 '16  
Spreading yourself too thin. H. Quick. Country Gent 81:387 F 19 '16  
System of accounting for cooperative fruit associations. G. A. Nahstoll and W. H. Kerr. U S Ag B 225:1-25 '15  
Triumph for cooperative farming. Field 11 28: 250 Ap '18  
Working with other folks: eight suggestions for April. C. Poe. Prog F 33:451 Ap 6 '18  
Working with other folks: suggestions for May. Prog F 32:563 My 5 '17

See also Agricultural cooperative credit associations; Canneries, Cooperative; Cheese factories, Cooperative; Cooperation; Co-operative buying; Cooperative stores; Creameries, Cooperative; Dairies, Cooperative; Dairying, Cooperative; Farmers' co-operative associations; Farmers' grain dealers' associations; Feed buying associations; Fruit growers' associations; Grain improvement associations; Live stock breeders' associations; Live stock shipping associations; Marketing, Cooperative; Meat clubs; Olive oil mills, Cooperative; Packing houses, Cooperative; Slaughter-houses, Cooperative; Threshing, Cooperative; also Benton (N.Y.) cooperative company; Hampden county improvement league; Heather-land association of Denmark; Milwaukee milk and cream shippers' association; National agricultural organization society; National agricultural society; Tempe cotton exchange

**Argentina**

Formation of the wine-growers' centre at Mendoza; and of the national society of producers. Int R Ag Econ 65:46-9 My '16

**Agriculture, Cooperative—Continued****Austria**

Agricultural co-operation in Silesia. Int R Ag Econ 61:1-22; 62:1-11 Ja-F '16

**Belgium**

Trade unions and co-operative and mutual societies. Int R Ag Econ 63:5-6 Mr '16

**Canada**

Co-operation among the farmers on Manitoulin island. Int R Ag Econ 63:36-7 Mr '16  
Co-operation movement. Ag Gaz of Canada 4:784-7 S '17  
General survey of cooperation in Canada. map Am Coop J 13:279-80+ Mr '18  
Grain growers' organization. G. F. Chipman. Ag Gaz of Canada 5:1175-6 D '18  
Greater farmers' business union. J. R. McMahon. il Country Gent 83:1-2 D 21 '18  
Progress of the co-operative movement. W. E. H. Stokes. Ag Gaz of Canada 5:48-50 Ja '18

**Denmark**

Agricultural cooperation in Denmark. Ill Ag Dept C 259:1-7 '18  
Co-operation in Denmark. E. W. Gage. Kimball's D F 16:392 My 15 '18  
Denmark's remedies: education and co-operation. (Farm life conditions in the South, ch. 4) 10p n.d. Georgia State normal school, Athens  
How the Danes began in dairying. Wallaces' F 43:1825 D 13 '18  
Results of co-operation in Denmark. J Ag (Quebec) 22:66 O '18

**France**

Décret relatif à la constitution de l'inspection générale du crédit et des associations agricoles subventionnées. Int Yearbook Ag Leg 1916:798-9 '17  
Décret relatif à la réorganisation des services de l'inspection du crédit et de la coopération agricoles et de ceux de l'inspection des assurances mutuelles sous la dénomination de service de l'inspection du crédit, de la coopération et de la mutualité agricoles, suivi d'un arrêté nommant l'inspecteur général chef de ce service. Int Yearbook Ag Leg 1916:793-6 '17

**Germany**

Agricultural cooperation in Germany. L. Smith-Gordon. Quarterly Review (249 W. 13th st., N.Y. \$2) 227:424-39 Ap '17  
Agricultural co-operation in the kingdom of Saxony 1 July 1914 to 30 June 1915. Int R Ag Econ 73:1-5 Ja '17  
General Raiffeisen federation in 1914-1915. Int R Ag Econ 74:1-13; 75:1-10 F-Mr '17  
German agricultural co-operative societies in 1915. Int R Ag Econ 70:1-8 O '16

**Great Britain**

Co-operation in agriculture in 1914. Int R Ag Econ 69:15-20 S '16  
Co-operation in agriculture in 1915. Int R Ag Econ 9,no 1:15-18 Ja '18  
Co-operative farm implement societies. T. Wibberley. il J Bd Ag 23:52-8 Ap '16  
Co-operative horse insurance societies in Great Britain. Int R Ag Econ 69:49-65; 70:39-48 S-O '16; Same (pt 2). J Bd Ag 23:279-86 Je '16  
Co-operative use of motor plough by Pinvin agricultural co-operative society. J Bd Ag 23:258-9 Je '16

**India**

Co-operative distribution in northern India. A. C. Chatterjee. Int R Ag Econ 74:35-6 F '17  
Progress of agricultural cooperation, 1914-1915. Int R Ag Econ 76:1-6 Ap '17  
Sale of manures by co-operative societies. H. R. C. Hailey. Ag J of India 11:210-13 Ap '18  
Supply of agricultural implements by co-operative societies. B. C. Burt. Ag J of India 11:205-9 Ap '16

**Ireland**

Irish cooperative society for growing wheat. Int R Ag Econ 79:24-5 Jl '17  
See also Irish agricultural organization society; Irish farmers' union

**Italy**

Agricultural co-operation and social assistance of peasants. Int R Ag Econ 73:21-3 Ja '17  
Collective farms in the province of Parma. Int R Ag Econ 84:14-16 D '17  
Development of the co-operative movement in Italy according to recent statistical data as to the Lega nazionale delle cooperative. Int R Ag Econ 78:6-12 Je '17  
Principal Catholic agricultural organizations. Int R Ag Econ 9,no 2:116-18 F '18

**Japan**

Imperial Japanese co-operators in America. map Am Coop J 13:197 Ja '18

**Kentucky**

See also Associated cooperators of Kentucky

**Morocco**

Spanish protectorate of Morocco; agricultural partnership of Europeans and natives. Int R Ag Econ 71:13-17 N '16

**Netherlands**

Cooperation among Dutch farmers. F. W. Mahin. (Commerce Reports no 251) p 328 (O 25) '16 U. S. Bureau of foreign and domestic commerce, Washington, D. C.

**New Zealand**

Co-operative movement in New Zealand agriculture. Int R Ag Econ 71:18-34 N '16

**Norway**

Agricultural cooperative movement. Int R Ag Econ 79:25 Jl '17  
Brief survey of agricultural co-operation in Norway. Int R Ag Econ 68:16-32 Ag '16

**Philippine Islands**

Loi n. 2566 portant modification de la loi n. 2508 intitulée loi réglementant la création et le fonctionnement des associations coopératives agricoles et visant aussi d'autres fins. Int Yearbook Ag Leg 1916:892-4 '17

**Rhodesia**

Co-operative transport for light produce in Rhodesia. Int R Ag Econ 69:39-40 S '16

**Russia**

Central co-operative union of flax growers. Int R Ag Econ 79:14-21 Jl '17  
Peasant co-operation in Russia. E. A. Brayley Hodgetts. J Bd Ag 24:637-41 S '17

**Siberia**

Agricultural co-operation in Siberia. (dairy artels). Int R Ag Econ 68:33-8 Ag '16

**Spain**

Activities of mutual co-operative agricultural associations. Int R Ag Econ 70:30-6 O '16  
Nomination of inspectors of agricultural products in trade by the agricultural associations. Int R Ag Econ 9,no 2:127-8 F '18  
See also Association of the agriculturists of Spain

**Switzerland**

Agricultural co-operative societies for the cultivation of grain. Int R Ag Econ 9,no 2:131-3 F '18  
Swiss peasants' union and the Swiss peasants' secretariate during 1915. Int R Ag Econ 66:40-50 Je '16

**Tunis**

Décret instituant des associations facultatives de propriétaires d'olivettes. Int Yearbook Ag Leg 1916:894-6 '17



**Agriculture, Cooperative—Continued**

**United States**

Calling the roll in Illinois. T: Lamb. Am Coop J 12:725 J1 '17  
Community cooperation that proved profitable. Prog F 31:1468 D 23 '16  
Cooperation among Utah farmers. W. C. Barnes. il Breeder's Gaz 72:385-6 N 15 '17  
Cooperation 50 years ago. D. N. Barrow. Prog F 31:1481 D 23 '16  
Co-operation in the state of Washington. R. Metcalf. il Am Coop J 11:853-4 Ap '16  
Co-operation making great strides in Northwest. C: E. Eckerle. Am Coop J 11:1235-7 Ag '16  
Co-operative history of Mitchell county, Kansas. il Am Coop J 11:822-3 Ap '16  
Cooperative organizations on our projects. Reclamation Record (Reclamation service, Washington, D.C. 50c per yr.) 8:290-2 Je '17  
County that feeds itself. H. S. Stabler. il Country Gent 82:1137-8 J1 '17  
Danish ideas at work in the South. C. Davis. Prog F 32:778 J1 '14 '17  
Development of a Danish settlement. il Wallaces' F 41:207 F 11 '16  
Distrust busting in Canby. B. Ostrolenk. il Country Gent 81:143-4 Ja 22 '16  
Farmers own prosperous Iowa town. il O Judd Farmer 60:3 Ja 15 '16  
Getting together in Iowa. F. Crissey. il Country Gent 82:1910-11+, 1974-5, 2025 D 8-22 '17  
Hampden county (Mass.) improvement league. Ag Gaz of Canada 3:181 F '16  
How farmers are working together. Rural N Y 75:1470, 1508, 1519 N 25-D 9 '16  
Man who made a valley prosper; berry growing in the Puyallup valley, Washington. R. D. Penney. Am Magazine (381 4th av., N.Y. 15c) 83:49-50 F '17  
Manual of laws pertaining to the Department of farms and markets; provisions of membership corporation law, relating to co-operative agricultural, dairy or horticultural associations. N Y Farms & Markets Dept Ag B 108:259-69 Je '18  
Message to the one-horse farmer. L. A. Markham. il Prog F 31:175 F 5 '16  
Nebraska farmers to be united; Omaha convention. F. S. Betz. Am Coop J 12:299-305 D '16  
New job for the bank roll; Virginia potato growers buy supplies with surplus. J. H. Collins. il Country Gent 82:759-60 Ap 21 '17  
Organizing the county. W. A. Dyer. Country Life 29:98+ Mr '16  
Outlook for 1916. Am Coop J 11:462-5 Ja '16  
Plan for a definite community program and examples of work done by rural communities. (Sup. to Extension service news, v. 1, no. 4) 4p maps (O) '18 N. Y. State coll. of ag., Ext. dept., Ithaca  
Report of managers' meeting. Grand Forks, North Dakota, July 19-21, 1916. Am Coop J 11:1211 Ag '16  
Review of co-operative work in New York. Rural N Y 76:203 F 10 '17  
School that became a business factor; Lake City state agricultural high school. E. J. Trospier. il Ohio F 137:125-6 Ja 29 '16  
Sheep demonstration flocks in Indiana; co-operative livestock feeding demonstrations. P. S. Richey. il Purdue Ag Ext B 67:1-8 '18  
Some defects in the New York laws of co-operative associations. R. Ingalls. N Y Farms & Markets Dept Ag B 105:30-6 Mr '18  
Suggestions for a state cooperative law designed to conform to section 6 of the Clayton act. (Service and regulatory announcements—Markets 20) 8p '17 U S Ag  
3d annual meeting of National council of farmers' co-operative associations. Am Coop J 11:1002-3 Je '16  
Vermont—the Denmark of America. Hoard's D 53:284 Mr 9 '17  
Volunteer cooperators of the U.S. Department of agriculture for the advancement of farming. Int R Sci & Prac Ag 8,no 1: 16-18 Ja '17

Where farmers co-operate; Boyden, Iowa. il Wallaces' F 42:235 F 9 '17  
Where farmers work together. Am Coop J 12:594; 13:122-3 Ap, N '17

**West Indies**

Co-operation in Antigua; an object lesson. W. R. Dunlop. Int R Ag Econ 73:13-16 Ja '17

**Agriculture, Graduate school of.** See Graduate school of agriculture

**Agriculture, Medieval**

Charlemagne as a farmer. J. W. Thompson. Breeder's Gaz 70:32 J1 6 '16  
Farming in England in early times. W. J. Harte. J Dept Ag Victoria 16:25-36 Ja '18  
Mediaeval women as wage-earning farm hands. B. E. Hazard. Cornell Countryman 14:306-9, 572-3 Ja, Ap '17  
Sheep in Spain in the middle ages. J. W. Thompson. Breeder's Gaz 70:90 J1 20 '16

**Agriculture, Primitive**

Agriculture of the Hidatsa Indians; an Indian interpretation. G. L. Wilson. (Studies in the social sciences no. 9) 129p il 75c '17 Univ. of Minn., Minneapolis

**Agriculture and the war**

After the war, what of agriculture? il Ag Digest 1:7-8 My '16

Agricultural phase of the war; with discussion. W. R. Beattie. (In Pro. Railway development assn., 1917, p. 5-17) '17 D. C. Welty, sec., Comr. of ag., Missouri Pacific railroad co., St. Louis

Agricultural problem. L. H. Bailey. Am Soc Mechanical Eng J (29 W. 39th st, N.Y. 35c) 40:25-7 Ja '18

Agricultural reconstruction after the war. W. L. Houser. Hoard's D 56:513 N 8 '18

Agricultural situation after the war. O. Erf. il Ohio F 142:547 D 7 '18

Agriculture after the war. E. Davenport. Hoard's D 54:755 D 21 '17

American farmers and the war. G. Pinchot. Ohio F 142:523 N 30 '18; Same. Rural N Y 77:1335 N 30 '18

Army cultivation in France. Gard Chron (Lond) 64:203 N 23 '18

Battle of the farmers. Wallaces' F 42:1712 D 21 '17

Bread bullets. R. S. MacElwee. (Columbia war papers, ser. 1, no. 11) 34p '17 Division of intelligence and publicity, Columbia University, N.Y.

Conditions that will prevail after the war. A. Agee. Nat Stock & F 42:36 Ap 6 '18

Crushing the kaiser with crops. R. J. Roberts. il Field il 28:487-9 J1 '18

Farmer and the war. Mo Ag Bd B v 16:1-47 Ja '18

Feeding the world. B. W. Currie. Country Gent 82:891-2, 924-5, 954-5, 990-1, 1022-3, 1054 My 19-Je 23 '17

Food after the war; we must have more of it. C. W. Ackerman. il Country Gent 83:5-6 Ag 31 '18

Food preparedness. H: R. Seager and R. E. Chaddock. (Columbia war papers, ser. 1, no. 6) 23p '17 Division of intelligence and publicity, Columbia university, N.Y.

Growing their own food; Alaska, Hawaii, Porto Rico, and Guam less dependent upon mainland. Weekly N L 5:3 Ja 2 '18

Hands across the border. J. A. McLean. il Field il 27:532 J1 '17

Helping people to help themselves. J. E. Carbery. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2493+ D 15 '17

Job we have. W: A. Martin. Ohio F 142:191 Ag 31 '18

\* Liberty book. 92p il maps '18 Agricultural extension dept., Int. harvester co., Harvester bldg., Chicago

Live stock in war-time. C. F. Curtiss. Mo Ag Bd B v 16:1-19 S '18

Live stock interests in wartime. E. Davenport. il Breeder's Gaz 73:55 Ja 10 '18

National insurance for food production. L. Ogilvy. Breeder's Gaz 73:706 Ap 4 '18

Outlook for agriculture. C. Ousley. Banker-F 6:2 D '18

**Agriculture and the war—Continued**

- Program and regulation of food production in United States and England. Exp Sta Record 38:101-9 F '18  
 Shall the world starve? J. R. Smith. maps Country Gent 82:987-8+ Je 9 '17  
 To take the flag to Berlin. Banker-F 5:10 Ap '18  
 We will lose the war unless every American realizes his responsibility and makes sacrifices. E. Davenport. Banker-F 5:4 My '18  
 What is the estate owner's bit? E. L. Smith. Country Life 32:48a-48b My '17  
 What patriotism requires of us. E. Davenport. il O Judd Farmer 65:1 Jl 6 '18  
 What the war is doing for agriculture in Europe. Review of Reviews (30 Irving Place, N.Y. 25c) 58:99-100 Jl '18  
 When is the world safe for democracy? A. W. Littlefield. Rural N Y 76:1391 D 8 '17  
 Where farming fits in the war program. A. E. Taylor. Country Gent 83:13 Jl 27 '18  
 Win the next war now. C. L. Pack. il Am For 24:343-6 Je '18

See also Farm cadet camps; Federal milk investigation; Food control; Forestry and the war; War emergency food associations; also Agricultural conference, St Louis, 1917

**Bibliography**

- List of federal documents especially useful to librarians and citizens at the present time. 3p mim '17 U. S. Library of Congress, Washington, D.C.  
 These documents deal chiefly with agricultural subjects, including the food supply, food conservation and preservation  
 War gardens. F. W. Jenkins, comp. (no. 28) 4p '18 Russell Sage foundation lib., 130 E. 22d st, N.Y.

**Factory gardens**

- American corporations and food production. W. H. Lloyd. Purdue Ag 12:546-7 Je '18  
 Co-operative shop gardening. C. E. Hildreth. il Industrial Management (6 E. 39th st, N.Y. 25c) 55:204-5 Mr '18  
 Industry's help through war gardening. C. L. Pack. il Am Industries (30 Church st, N.Y. 10c) 18:20-1 Mr '18  
 Shop gardening as a war measure; gardens of the Brown and Sharpe manufacturing company, Providence, R.I. L. D. Burlingame. il Industrial Management (6 E. 39th st, N.Y. 25c) 55:205-9 Mr '18  
 War gardens for company employees and cities. J. R. Sandige. il Ariz Ag Ext C 20: 1-4 '18

**Farm labor**

- Agricultural wages during the war. Int R Ag Econ 76:104-6 Ap '17  
 Agriculture. T. L. Rubey. Congressional Record (Washington, D.C.) 56:3050-4 F 28 '18  
 Agriculture and recruiting in England. A. Lee. J Bd Ag 24:339-41 Je '17  
 Agriculture and the war. J Bd Ag 23:721-33 N '16  
 Analyzing serious labor shortage. O Judd Farmer 64:7 Ap 20 '18  
 Army of farm tractor operators needed. Power F 26:8 Je '17  
 Assistant secretary Ousley discusses farm labor complaints, suggestions. Weekly N L 5:3 Jl 10 '18  
 Boy patriotism in farm labor. A. A. Heald. il Rural Manhood 8:434-6 D '17  
 Boy, the war and the harrow. H. D. Fisher. il Survey (112 E. 19th st, N.Y. 10c) 39:704-6 Mr 30 '18  
 Boys and farms. W. D. Winthrop. il Survey (112 E. 19th st, N.Y. 25c) 38:386-91 Ag 4 '17  
 Calls upon cities to help with the crop harvests. Weekly N L 5:1 Jl 3 '18  
 Canada answers the labor riddle. J. R. McMahon. il Country Gent 83:6-7 My 4 '18  
 Canada's farm labor problem. J. B. Reynold. Kimball's D F 16:168+ Mr 1 '18  
 Canadian boys as famine fighters. F. Yeigh. Rural Manhood 8:334-7 O '17  
 \* Child labor on English farms during the war. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:31-2 Jl '17

- Children in food production: a summary of the results of the use of children in food production in the United States in 1917 with suggestions for the coming year. (Pamph. 277 rev.) 8p 5c '17 Nat. child labor com., 105 E. 22d st, N.Y.  
 Children's part in food production. Child Labor B (105 E. 22d st., N.Y. 50c) 6:114-21 Ag '17  
 Chronicles of Woodcock farm; a glimpse of woman's labor on the farms of 1917. H. Geithmann. il Overland Monthly (259 Minna st, San Francisco 10c) n s 71:478-84 Je '18  
 City boys as farm workers. J. D. Pearmain. Rural N Y 77:577 Ap 20 '18  
 City boys on the farm. R. S. Dunham. Farm Eng 7:14 Mr '18  
 City's part in solving farm-labor problem. D. F. Houston. Weekly N L 5:1 Mr 13 '18  
 Conscientious objectors in camps are to work at food production. Weekly N L 6:13 S 11 '18  
 Corn production act, 1917. J Bd Ag 24:621-8 S '17  
 Cornell farm unit. A. H. Bellows. Rural N Y 77:998 Ag 24 '18  
 Department of agriculture names agriculture advisers for district draft boards. Weekly N L 6:14+ O 9 '18  
 Digging at the root of the food problem. Outlook. (381 4th av, N.Y. 10c) 117:560-4 D 5 '17  
 Doing my level best. C. Du Bose. J Home Econ 10:133-4 Mr '18  
 Draft working hardship on farmers. E. Davenport. O Judd Farmer 64:3 Ap 20 '18  
 Drafting farm workers. Jersey B 37:348 Mr 6 '18  
 Effect of the war on farm labor. J. Lennox. Field 11 26:242 Mr '16  
 Employment of ex-service men in agriculture. J Bd Ag 23:378-82 Jl '16  
 England's farmerettes. C. Mackenzie. il Country Gent 83:6-8 Mr 2 '18  
 Fabricating farmers. C. Vrooman. il Review of Reviews (30 Irving Place, N.Y. 25c) 58: 265-8 S '18  
 Farm boys' camps of one state. Rural Manhood 9:8-11 Ja '18  
 Farm furloughs for enlisted men. Ag Digest 2:957 My '18  
 Farm help from enlisted labor. O Judd Farmer 62:14 Ap 21 '17  
 Farm labor and boy camps. Country Life 32: 68 Ag '17  
 Farm labor and the draft. Breeder's Gaz 72: 604 O 11 '17  
 Farm labor at home. Weekly N L 5:7 Ap 17 '18  
 Farm labor for the period of the war. T. Veblen. Public (122 E. 37th st, N.Y. 10c) 21: 882-5, 918-22, 947-52, 981-5 Jl 13-Ag 3 '18  
 Farm labor organization plans. Better Fruit 12:19 Ag '17  
 Farm labor problem. Fruit-Grower 28:254 My 1 '17  
 Farm labor problem. Wallaces' F 42:1378 O 12 '17  
 Farm labor problem. Weekly N L 4:1 My 23 '17  
 Farm labor problem. G. D. Black. Ohio F 139: 438 Mr 24 '17  
 Farm labor problem. D. F. Houston. Weekly N L 5:1-2 Ja 2 '18; Same. Am Coop J 13: 193+ Ja '18; Same. Gard Chron Am 22:9-10 Ja '18; Same. Jersey B 37:11+ Ja 2 '18; Same. Hoard's D 54:865 Ja 11 '18; Same. Rural Manhood 9:47-9 F '18; Same. Am Sheep B & W 38:170-1 Mr '18; Same cond. Breeder's Gaz 73:21 Ja 3 '18; Excerpt. J Ag (Quebec) 21:113 F '18  
 Farm labor problem. C. H. Werkman. Purdue Ag 12:550 Je '18  
 Farm labor problem; man-power sufficient if properly mobilized by cooperation and community action. C. Ousley. U S Ag C 112:1-10 '18  
 Farm labor problems. Ag Digest 2:521-2 Jl '17  
 Farm labor registration. O Judd Farmer 64: 574 Je 1 '18  
 Farm labor situation. Nat Stock & F 41:908 D 22 '17  
 Farm labor situation. Power F 27:56 My '18  
 Farm-labor specialists are designated to aid farmers in securing needed help. Official B (Washington, D.C.) 2:3 Ja 10 '18



**Agriculture and the war—Farm labor—Cont.**

- Farm labor; use of tractors, high school boys, the parole of soldiers, etc. E. H. Fulton. *il Penn State F* 11:168-9 My '18
- Farmer and the vacation girl. *il Touchstone* (118 E. 30th st., N.Y. 35c) 1:464-72 S '17
- Farmer-soldiers to get furloughs. *Ag Digest* 2:917 Ap '18
- Farmer's labor problem. E. V. Wilcox. *Am Labor Legislation R* (131 E. 23d st., N.Y. \$1) 8:38-51 Mr '18; Same. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:sup158-70 Mr '18
- Farmer's response. D: F. Houston. *Purdue Ag* 12:339-40 Mr '18
- Feeding the world. B. W. Currie. *il Country Gent* 82:954-5 Je 2 '17
- Finding labor for harvest. W: B. Wilson. *Country Gent* 82:1193-4 J1 28 '17
- Finding labor to harvest the food crops. G. I. Christie. *map U S Ag C* 115:1-8 '18
- Food production and farming situation. Rams-eyer and others. *Congressional Record* (Washington, D.C.) 56:1350-4 Ja 25 '18
- French agricultural labour problem. *J Bd Ag* 23:1-16 Ap '16
- Give us help—not advice. *Cornell Countryman* 15:23-6 O '17
- Government plans for organization of farm labor. *Ag Digest* 2:525 J1 '17
- Handling the farm labour situation in Ontario. *Ag Gaz of Canada* 5:1080-1 N '18
- Handling the 1918 wheat harvest in Kansas. E: C. Johnson. *U S Ag C* 121:1-7 '18
- Help wanted! J: E. Pickett. *il Country Gent* 83:3-4+ Ja 12 '18
- High school boy and agricultural production; with discussion. L. H. Dennis. *Pa Ag Dept B v* 1:136-42 Ap '18
- How Department helped to meet farm labor need. *Weekly N L* 6:7 D 11 '18
- How farm labor shortage is now being met in the South. *Weekly N L* 6:5 S 4 '18
- How the army draft affects the farm labor situation; with discussion. A. L. Wiskef. *Cal State Comm Hort B v* 7:79-88 Ja '18
- How the farm labor problem is handled by the government. *Power F* 27:57 J1 '18
- \* How the soldier becomes a farmer at harvest time in Europe. *il Touchstone* (118 E. 30th st., N.Y. 35c) 4:91-7 N '18
- How to produce more with less help. C: K. Warren. *il System on the Farm* 1:139-41 Je '17
- Illinois farm labor plans; Roy C. Bishop is administrator. *O Judd Farmer* 64:24 Mr 2 '18
- Implements or munitions, farmers or soldiers. *Prac F* 113:270 Ag 1 '17
- \* Industrial and agricultural labor and the next army draft. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:833-5 Ap '18
- Iron men for the farm. P. S. Rose. *il Country Gent* 82:1863-4 D 1 '17
- Junior farm recruits of New Jersey. G. H. Folks. *School and Society* (Science Press, Garrison, N.Y. 10c) 6:195-9 Ag 18 '17
- Labour for the harvest. *J Bd Ag* 25:465-71 J1 '18
- Labour on tractors. *J Bd Ag* 25:734-6 S '18
- Lumbermen pledged to assist in saving crops. *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2242:51 My 4 '18
- Making bricks without straw. *Ag Digest* 2:955-6 My '18
- Man power on the farm. A. A. Macmillan. *J Ag* (Quebec) 22:7 J1 '18
- Many farm problems. *Weekly N L* 5:1-3 My 1 '18
- Means for relieving the farm-labor shortage in Kentucky. W. D. Nicholls. *Ky Ag Ext C* 58:1-12 '18
- Milk cows and pitch hay to back the nation's guns. *Weekly N L* 6:1 O 9 '18
- Missouri farmers insisted on being shown; they were. *Weekly N L* 5:1 J1 24 '18
- Mobilization for food production—a plan for a civil-military service. *Banker-F* 4:16 My '17; Same. *Hoard's D* 53:667 My 4 '17; Same. *Creamery* 5:30 Je '17
- Mobilization of labor and machinery. W. Hayward. *il Field* 11 27:533-5 J1 '17
- \* Mobilizing and distributing farm labor in Ohio. W. M. Leiserson. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:781-91 Ap '18
- Mobilizing boys for farm labor. W. I. Hamilton. *School and Soc* (Science Press, Garrison, N.Y. 10c) 5:714-17 Je 16 '17
- Mobilizing the workers of America. W. F. French. *il Illustrated World* (Drexel av. & 58th st., Chicago 15c) 28:206-9 O '17
- More agricultural advisors named to tell draft boards of farming needs. *Weekly N L* 6:6 O 16 '18
- Nation's farm labor problem. D: F. Houston. *Power F* 27:52 F '18
- New Jersey—Gov. Edge recommends that the federal-state-municipal employment bureau be expanded and an additional office to the one at Newark be established at Camden. He also suggests that men of military age assist the farmers between the time they are notified to hold themselves ready for selective service and the time of their actual mobilization
- Notice to farmers: military service. *J Bd Ag* 23:187-93 My '16
- Ohio and the hired hand. F. Crissey. *il Country Gent* 83:12-13+ Ap 13 '18
- On farm labor. *Ag Digest* 2:536 J1 '17
- Organize farm labor. *Weekly N L* 4:2 Je 13 '17
- Other side of boy labor. I. B. Squire. *il Rural N Y* 77:761 Je 8 '18
- Our crop-production line is very thinly held. J: E. Pickett. *il Country Gent* 83:5-6+ J1 13 '18
- Plan for handling the farm-labor problem. *U S Ag Farm Management C* 2:1-31 '17
- Post office as farm labor exchange. *Power F* 27:40 Mr '18; Same. *Hoard's D* 55:291 Mr 8 '18
- Power farming solves crop production problems. R. Olney. *il Power F* 26:9 My '17
- Preparing for crop of 1918. *Ohio F* 141:343 Mr 9 '18
- Problem of farm help. *Nat Stock & F* 41:1298 Mr 9 '18
- Question of farm labor. *Ag Digest* 2:691 N '17
- Question of the need of farm labor. S. D. Fess and others. *Congressional Record* (Washington, D.C.) 56:3102-9 Mr 1 '18
- Release of soldiers for agricultural work. *J Bd Ag* 23:289-91 Je '16
- Report of the Committee on mobilization of high school boys for farm service. 60p '17
- Mass. Com. on pub. safety, Boston
- Rural education in war. W. H. Wilson. (Columbia war papers, ser. 1, no. 12) 8p '17
- Division of intelligence and publicity, Columbia university, N.Y.
- Saving man power. *Weekly N L* 4:3 My 30 '17
- School boys to help labor shortage. *O Judd Farmer* 63:1 D 1 '17
- Securing labor for farmer. *Hoard's D* 55:454 Mr 29 '18
- Shall the farmer's wife pitch hay? E. Davenport. *il Country Gent* 83:15+ F 23 '18
- Skilled farm labor to be in deferred draft classes. *Weekly N L* 6:1 S 18 '18; Excerpts. *O Judd Farmer* 65:229 S 21 '18; Excerpts. *Frog F* 33:1031 S 21 '18
- Soldier farm furloughs; with general orders and form of application. *Kimball's D F* 16: 352 My 1 '18; Same (general orders). *Weekly N L* 5:9 Ap 17 '18; Same (form of application). *O Judd Farmer* 64:6 Ap 20 '18
- Soldiers for agricultural work. A. Lee. *J Bd Ag* 24:97-9 Ap '17
- \* Solving crisis in farm labor. *O Judd Farmer* 64:1 Ap 20 '18
- Solving war problems. D. G. Ruby. *Wallaces' F* 43:304 F 15 '18
- Some possibilities of the development of new labor during the war. M. F. Tarpey. *Cal State Comm Hort B v* 7:74-9 Ja '18
- Successful employment of women on the land. *J Bd Ag* 23:75-6 Ap '16
- Suggestions to farmers regarding farm labor shortage in time of war. J. C. Scott. *Wash Ag Ext Ser* 1, no 33 4p '18
- Supplying of farm labour in the provinces. *Ag Gaz of Canada* 5:864-7 S '18
- Supplying the farm labor need. G. I. Christie and C. DuBose. 8p *map* '18 *U S Ag*
- Swords and plowshares; who shall grow crops to win the war and feed a hungry world? B. Lasker. *Survey* (112 E. 19th st, N.Y. 10c) 39:513-16 F 9 '18

**Agriculture and the war—Farm labor—Cont.**

- Swords or plowshares? J. C. Marquis. Country Gent 82:827-8 My 5 '17
- Those city boys. Nat Stock & F 42:384 J1 20 '18
- Town boys as farm laborers. J. J. James. Hoard's D 55:302 Mr 8 '18
- Tractor operators for agricultural army. Power F 26:9 J1 '17
- Training recruits for the farm game. A. C. Laut. il Country Gent 82:1670-1 N 3 '17
- Twilight labor crews are great help harvesting Kansas wheat. Weekly N L 6:16 O 2 '18
- United forces are seeking labor with farm experience. Weekly N L 5:13 Je 19 '18
- Virginia's farm problem. Review of Reviews (30 Irving place, N.Y. 25c) 57:299-300 Mr '18
- Wartime farm efficiency. J. C. Marquis. il Country Gent 82:859-60 My 12 '17
- What Illinois farmers say. E. L. Hill. O Judd Farmer 62:8 My 5 '17
- What will Washington do? E. W. Gage. Breeder's Gaz 72:372 S 13 '17
- Wheat crop and farm labor. J. M. Baer. Review of Reviews (30 Irving place, N.Y. 25c) 57:298-9 Mr '18
- \* Women harvesters in Great Britain: how they save the crops. il Touchstone (118 E. 30th st, N.Y. 35c) 4:138-43 N '18
- Women in agriculture during war-time. M. L. Talbot. il J Bd Ag 25:796-805 O '18
- Women of Wales and agriculture. Mrs M. S. Roberts. il J Bd Ag 25:817-26 O '18
- Women succeed as fruit pickers. A. H. Pulver. il Rural N Y 77:1039 S 7 '18
- Women's land army. Mrs A. Lyttelton. J Bd Ag 25:806-10 O '18
- Workers from non-essentials on our farms. Ag Digest 2:869 Mr '18

*See also* Camps, Agricultural; Farm cadet camps; United States boys' working reserve; Woman's land army of America

**Bibliography**

- List of references on the mobilization of farm labor for war service. 9p typew '18 U. S. Library of Congress, Division of bibliography, Washington, D.C.

**Home gardens**

- Again, the war garden. J. W. E. Lawrence. il Nation's Business (Riggs bldg., Washington, D.C. 25c) 6:21-2 Ap '18
- Agricultural patriotism: the need of minute men of the soil. V. Burnett. il Touchstone (118 E. 30th st., N.Y. 35c) 1:133-43 Je '17
- Better war gardens. W. E. Lommel. Purdue Ag 12:405-6 Ap '18
- Biggest victory gardens year ahead. C: L. Pack. il Gard M 28:140-1 D '18
- Cashing-in the war gardens. F. F. Rockwell. il Gard M 26:11-12 Ag '17
- City gardening as a conservation measure. C. E. Durst. Ill State Hort Soc Trans 1917: 91-102 '18
- City gardens. H: G. Parsons. (Columbia war papers, ser. 1, no. 10) 10p '17 Division of intelligence and publicity, Columbia university, N.Y.
- Community war garden campaign. W. B. Holiday. Rural Manhood 9:243-4 Je '18
- Enlisting soldiers of the soil. il Am For 23: 334-9 Je '17
- Every bank a garden daddy. C: L. Pack. Banker-F 5:15 Ja '18
- Future of war gardening. C: L. Pack. il Am For 24:665-73 N '18
- Gardens add \$100,000,000 to nation's wealth. O. R. Geyer. il Gard M 26:93-4 O '17
- Have a backyard garden. J. G. Moore and J. R. Hepler. il Wis Ag Ext C 72:1-8 '17
- Help home gardens. Banker-F 5:11 F '18
- How florists can help garden movement. A. H. Smith. Am Flor 50:401 Mr 16 '18
- How the war gardeners answered. C: L. Pack. il Am For 24:515-22 S '18
- How was your war garden? n.p. il map '17 Mayor's advisory war committee, 226 City Hall, Cleveland, O.
- Indiana war gardens. Purdue Ag 13:40 O '18
- Liberty gardens. R. S. Mackintosh. il Minn Hort 46:118-22 Mr '18

- Many more war gardens, movement comes to stay. Weekly N L 6:8 S 13 '18
- Million and more food gardens. il Am For 23: 263-8 My '17
- Mobilize the country-home garden. R. C. E. Brown. (Columbia war papers, ser. 1, no. 3) 6p '17 Division of intelligence and publicity, Columbia university, N.Y.
- One successful war garden effort. il Gard M 26:91-2 O '17
- Patriotic garden. il Gard M 25:275-9 Je '17
- Planting one million food gardens. il Am For 23:197-204 Ap '17
- Practical suggestions on combining spring war gardens. M. Schling. Gard Chron Am 22:17 Ja '18
- Ready for the next year. il Gard M 28:114-15 N '18
- Returns from the war garden campaign. Gard M 27:266-7 J1 '18
- Slacker land and food facts. C: L. Pack. Am For 24:178-9 Mr '18
- Tells how Tennessee grew much food in home gardens. Weekly N L 6:13 N 27 '18
- Ten million home gardens. J: R. McMahon. il Country Gent 83:3-4+ Mr 30 '18
- Uncle Sam's gardening. Gard M 28:150 D '18
- War garden campaign of 1917. J: R. McMahon. il Country Gent 82:1722-3 N 10 '17
- War garden work in Oshkosh. A. A. Ihrig. Wis Hort Soc Rep 48:59-62 '18
- War gardens. il Ag Digest 2:875-6 Mr '18
- War gardens. P. G. Niesley. il Penn State F 10:141+ O '17
- War gardens as city assets. C: L. Pack. il Am City (Tribune bldg., N.Y. 35c) 18:144-8 F '18
- War gardens in Indianapolis. C. H. Libbert. Purdue Ag 12:547 Je '18
- War gardens in Lafayette. R. W. Gregory. il Purdue Ag 12:73-4 N '17
- War gardens of Milwaukee and vicinity. C. V. Holsinger; Mrs Kroening. Wis Hort Soc Rep 48:166-70, 203-12 '18
- War service gardens in South Carolina. G: P. Hoffmann and W. G. Crandall. S C Ag Ext B 39:14p '18

*See also* West Bridgford allotment-holders' association

**Laws**

- Législation concernant les cultures pendant la guerre. Int Yearbook Ag Leg 1916: 553-64 '17

**School gardens**

- Enlistment for the farm. J. Dewey. (Columbia war papers, ser. 1, no. 1) 10p '17 Division of intelligence and publicity, Columbia university, N.Y.

**Arkansas**

- Community war clubs win out. E. Lloyd. il Banker-F 5:10-11 Ag '18

**Australia**

- Farmers, win the war! H. A. Mullett. il J Dept Ag Victoria 15:228-37 Ap '17

**California**

- California strips for action. B. H. Crocheron. il Banker-F 5:5 Ap '18
- Emergency irrigation rate for garden farming at Alhambra, Cal. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:459 My 8 '18
- How California organized forces for 1918 food production drive. Weekly N L 5:4-5 My 15 '18
- Observations on the recent agricultural inquiry in California. T: F. Hunt. Cal Ag Exp 20p n.d.
- Practical patriotism: what southern California fruit growers have done. J: B. Wallace. Country Gent 82:1698 N 3 '17

**Canada**

- Address at meeting of the dairymen's association of western Ontario. N. W. Rowell. (In Reports, Dairymen's assns., 1916, p. 97-102) '17 Ontario ag. dept., Toronto
- Canada answers the labor riddle. J: R. McMahon. il Country Gent 83:6-7 My 4 '18



**Agriculture and the war—Canada—Continued**

- Canada now gardens officially. J: R. McMahon. *il Country Gent* 83:10-11 My '18  
Canada's farm labor problem. J. B. Reynold. *Kimball's D F* 16:168+ Mr 1 '18  
\* Dairy farmers and the war. A. A. Ayer. (*In Report, Dairymen's assns.*, 1917, p. 51-5) '18  
Ontario ag. dept., Toronto  
Feeding the world. B. W. Currie. *Country Gent* 82:1022-3, 1054 Je 16-23 '17  
Handling the farm labour situation in Ontario. *Ag Gaz of Canada* 5:1080-1 N '18  
How Canada met the food crisis. J. B. Spencer. *il Country Gent* 82:921 My 26 '17  
Letter from the minister of agriculture of Quebec. J. E. Caron. *J Ag (Quebec)* 21:114 F '18  
Organization of resources committee in Ontario. *Ag Gaz of Canada* 4:715-17 Ag '17  
Production and thrift. J. E. Caron. *J Ag (Quebec)* 20:181 Mr '17  
Special production efforts in the provinces. *Ag Gaz of Canada* 5:673-9 Jl '18  
War and its effect on the dairying industry. J. A. Ruddick. (*In Reports, Dairymen's assns.*, 1916, p. 122-3) '17 Ontario ag. dept., Toronto

**Europe**

- Our part in restoring the farming of Europe. E: Brown. *il Country Gent* 83:6-7 N 2 '18

**France**

- Agricultural reconstruction in France. M. Ryder. *il Breeder's Gaz* 73:545 Mr 14 '18; Excerpts. *Ag Digest* 2:980 My '18  
Agricultural relief fund for the farmers in the devastated regions. *J Ag (Quebec)* 21:33 S '17  
Agricultural restoration of France—North African aid. Review of Reviews (30 Irving place, N.Y. 25c) 56:310-12 S '17  
\* L'agriculture en 1917 et la guerre. A. Haller. *Revue Scientifique* (41 rue de Châteaudun, Paris 90c) 56:195-8 Mr 30 '18  
Agriculture on the French front. Wallaces' *F* 43:1681 N 15 '18  
American tractors reclaim France. W: H. Dean. *il Country Gent* 83:3-4 F 23; 5+ Mr 9; 17+ Mr 16 '18  
Cultivation of abandoned lands. *Int R Ag Econ* 71:123-7 N '16  
Décret constituant un comité d'action agricole dans chaque commune rurale et des comités cantonaux d'organisation agricole. *Int Yearbook Ag Leg* 1916:830-1 '17  
Department for civil and military vegetable gardens in France. *Int R Ag Econ* 75:118-19 Mr '17  
Departmental committees of agricultural action. *Int R Ag Econ* 9,no 2:166-7 F '18  
Fertilizer famine in France. W: H. Dean. *il Country Gent* 83:5+ Mr 23 '18  
French agricultural labour problem. *J Bd Ag* 23:1-16 Ap '16  
French agriculture and the war. *J Bd Ag* 23: 817-32 D '16  
Gardens behind the trenches. W: H. Dean. *il Country Gent* 83:15 Mr 30 '18  
Growing vegetables for the French army. *il Gard Chron Am* 22:11 Ja '18  
Loi sur la mise en culture des terres abandonnées et l'organisation du travail agricole pendant la guerre. *Int Yearbook Ag Leg* 1916:556-8 '17  
Outlook in French agriculture. Science (Science Press, Garrison, N.Y. 15c) n 47:232-3 Mr 8 '18  
Rebuilding rural France. M. Ryder. *il Field Il* 28:229-31 Ap '18  
Recent measures for the organisation of agriculture. *Int R Ag Econ* 64:87-91 Ap '16  
Restoration of agriculture in the invaded departments. *Int R Ag Econ* 81:79-81 S '17  
Soil of France. E. S. Sergeant. *New Republic* (421 W. 21st st, N.Y. 10c) 14:134-7 Mr 2 '18  
Some aspects of the allotments movement in France. *J Dept Ag Ireland* 17,no 4:611-18 '17

**Germany**

- Learning from the enemy. R. S. MacElwee. *il Independent* (119 W. 40th st., N.Y. 10c) 91: 95-6 Jl 21 '17

Loi concernant la détermination des dommages occasionnés par la guerre dans le territoire de l'Empire. *Int Yearbook Ag Leg* 1916:1141-5 '17

Ordonnance sur le remaniement de certaines propriétés foncières dans la province de Prusse orientale. *Int Yearbook Ag Leg* 1916: 1145-62 '17

**Great Britain**

- Agricultural policy; report of agricultural sub-committee. *J Dept Ag Ireland* 17, no 3:486-98 '17  
Agriculture and the war. *J Bd Ag* 23:721-33, 929-40, 1169-76 N '16, Ja, Mr '17; Same cond. (pt. 1). *Int R Ag Econ* 75:86-93 Mr '17  
Agriculture and the war, Great Britain. *Int R Ag Econ* 80:79-84 Ag '17  
Allotments in 1918. *J Bd Ag* 24:1257-62 F '18; Abstract. *Int R Ag Econ* 9,no 3:256-8 Mr '18  
Baynard's estate, Cranleigh: an example of a war committee's efforts to increase food production. *il J Bd Ag* 25:17-21 Ap '18  
Board of agriculture and fisheries and increased food production. *J Bd Ag* 25:521-40 Ag '18  
Changes in English agriculture. *Breeder's Gaz* 71:118 Ja 18 '17  
Compulsory land laws for England. *Rural N Y* 77:33 Ja 12 '18  
Corn production act, 1917. *J Bd Ag* 24:621-8 S '17  
Cultivation of lands order, 1918 (no. 2). *J Bd Ag* 25:718-24 S '18  
Effect of the war on farm labor. J: Lennox. *Field Il* 26:242 Mr '16  
Employment of ex-service men in agriculture. *J Bd Ag* 23:378-82 Jl '16  
England's farmerettes. C. Mackenzie. *il Country Gent* 83:6-8 Mr 2 '18  
Farmer and the war. L. Amy. *Canadian Magazine* (200 Adelaide st. West, Toronto, Canada 25c) 49:111-18 Je '17  
Food production conference, 1918; with discussion. *J Dept Ag Ireland* 18,no 2:171-9 '18  
Food production, 1917. *J Dept Ag Ireland* 17, no 2:290-303 '17  
Food production programme for 1919. *J Bd Ag* 25:841-6 O '18  
Food production programme for 1919 and the corn production (amendment) act, 1918. *J Bd Ag* 25:725-9 S '18  
Further provisions of the corn production act, 1917. *Int R Ag Econ* 84:74-8 D '17  
Garden of England in war time. *Gard Chron (Lond)* 62:6 Jl 7 '17  
How England farms for war. C. Mackenzie. *il Country Gent* 83:8-9 My 4; 8-9 My 11 '18  
How to increase the production of food during the war. *J Bd Ag* 22:1262-7 Mr '16  
Labour on tractors. *J Bd Ag* 25:734-6 S '18  
\* Municipal farming—the latest enterprise of British local authorities. J: Cabburn. *Nat Municipal R* (North American bldg., Philadelphia 1) 7:288-9 My '18  
Nation's food: the revised agricultural programme for 1918. *J Bd Ag* 24:564-6 Ag '17  
New cultivation of lands order for England and Wales. *Int R Ag Econ* 9,no 3:254-6 Mr '18  
Night farming by women in England. *il Scientific Am* (233 Broadway, N.Y. 10c) 118: 341 Ap 13 '18  
Notice to farmers: military service. *J Bd Ag* 23:187-93 My '16  
Organisation and working of the food production scheme, 1917. *J Dept Ag Ireland* 17, no 3:499-510 '17  
Proposals for increasing the home production of food. *Int R Ag Econ* 62:101-12; 63:97-105 F-Mr '16  
Putting England's acres to work. C. Mackenzie. *il Country Gent* 83:3-4 Ja 26; 14-15 F 2; 15 F 16 '18  
Release of soldiers for agricultural work. *J Bd Ag* 23:289-91 Je '16  
Report of the agricultural policy sub-committee of the reconstruction committee. F. D. Acland. *Contemporary Review* (249 W. 13th st., N.Y. 50c) 111:570-8 My '17  
Successful employment of women on the land. *J Bd Ag* 23:75-6 Ap '16

**Agriculture and the war—Great Britain—Cont.**

Suggestions for doubling the home production of food. J. Blyth. 19th Century (249 W. 13th st., N.Y. 50c) 81:748-57 Ap '17; Same. Living Age (6 Beacon st., Boston 15c) 293:515-22 Je 2 '17

Tractor and the U-boat. W: H. Dean. il Country Gent 83:3-4 Je 15; 9-10 Je 22 '18

Wartime farming in England. J. P. Whitney. il Country Gent 82:1727 N 10 '17

War-time farming problems. A. W. Oldershaw. J Bd Ag 25:417-35 Jl '18

War time food-production effort in Lancashire. T: Milburn. il J Bd Ag 25:576-9 Ag '18

Women in agriculture during war-time. M. L. Talbot. il J Bd Ag 25:796-805 O '18

Women of Wales and agriculture. Mrs M. S. Roberts. il J Bd Ag 25:817-26 O '18

Women's land army. Mrs A. Lyttelton. J Bd Ag 25:806-10 O '18

**Illinois**

Essentials in larger food production. C. G. Hopkins. Ill Ag Exp C 197:1-4 '17

**Indiana**

Indiana war gardens. Purdue Ag 13:40 O '18

Maintain the wheat acreage and increase the yield for 1919. Purdue Ag Ext 8p '18

Many sides to the hog question. F. Crissey. il Country Gent 83:6-7+ Ja 12 '18

**Iowa**

Getting together in Iowa. F. Crissey. il Country Gent 82:2025 D 22 '17

Increasing the food supply. Wallaces' F 42: 645 Ap 13 '17

**Italy**

Agricultural mobilization. Int R Ag Econ 9, no 2:168-70 F '18

Décret de la lieutenance n. 1363 concernant les mesures à prendre pour l'augmentation de la culture du blé. Int Yearbook Ag Leg 1916: 559-60 '17

Législation concernant les contrats agricoles. Int Yearbook Ag Leg 1916:1211-18 '17

**Massachusetts**

How the Lenox folk are helping to win. E. L. D. Seymour. il Country Life 35:54-7 N '18

Vast Jersey estate given up for food plant. Jersey B 36:833-4 My 30 '17

**Missouri**

Missouri's war rations. S: O. Rice. Country Gent 83:13 Ag 10 '18

War-time farming in Missouri. Mo Ag Bd B v 15:1-61 Ag '17

**Nebraska**

Nebraska asked to increase the wheat acreage for the 1919 crop. Neb Ag Ext Emergencies B 34:1-12 '18

**New York**

Food supply and the war, as shown by the report of the New York state food supply commission. 32p '18 N. Y. State food supply commission, Agricultural hall, Albany

Report of the million acre wheat committee and statement of the patriotic farmers fund. M. Cole. N Y Farms & Markets Dept Ag B 105:145-50 Mr '18

**Ohio**

\* Mobilizing and distributing farm labor in Ohio. W. M. Leiserson. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:781-91 Ap '18

Ohio's 1918 farm drive. J. M. Cox. Review of Reviews (30 Irving place, N.Y. 25c) 57:297-8 Mr '18

**Pennsylvania**

Agricultural preparedness for Pennsylvania. map Pa Ag Ext C 57:1-8 '17

Pennsylvania makes its plans; banker leaders in each county to stimulate production. L. T. McFadden. il Banker-F 5:14 My '18

**South Carolina**

South Carolina's program for food production in 1918. S C Ag Ext B 38:1-12 '18

**Southern states**

Problem in the South. B. C. Powell. Banker-F 5:7 Ja '18

Win-the-war message. Weekly N L 5:8 Ap 3 '18

**Tennessee**

Tells how Tennessee grew much food in home gardens. Weekly N L 6:13 N 27 '18

**United States**

Advisory committee of farmers. Power F 27: 56 My '18

Agricultural and military preparedness. J. W. Henceroth. Coop Manager & F 7:78 N '17

Agricultural mobilization convention, Washington, D.C., April 10, 1917. Ag Digest 1:412-32 My 1 '17

Agricultural policy for the United States in war time. G. Pinchot. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74: 181-7 N '17

Agricultural preparedness is necessary—production is patriotic and profitable. Banker-F 4:2 Ap '17

Agricultural production for 1918. Weekly N L 5:1-6 F 27 '18

Agricultural programme of the United States. J Bd Ag 25:277-81 Je '18

Agricultural situation for 1918. pts 1-11 U S Ag C 84:1-24; 85:1-24; 86:1-34; 87:1-8; 88:1-34; 89:1-24; 90:1-32; 91:1-16; 92:1-39; 93:1-14; 107:1-24 '18

Agriculture. H. W. Sumners. Congressional Record (Washington, D.C.) 56:2290-4 F 14 '18

Agriculture and national defense. Am Fert 47: 21-4 N 24 '17

Agriculture and preparedness. H. Myrick. (In Pro., Congress of constructive patriotism, p. 209-29) '17 National security league, 31 Pine st., N.Y.

Agriculture and the great war. O Judd Farmer 63:7 N 17 '17

Agriculture at the capital. Breeder's Gaz 72: 624 O 11 '17

Agriculture to have representation in machinery of War industries board. Weekly N L 5:14-15 Je 26 '18

All sides to a situation; how the eastern farmers look at war demands and crops. F. A. Waugh. Country Gent 82:1733 N 10 '17

America faces a war tragedy; how are perishable vegetables to be conserved and brought to the consumer. H. C. Hardy. il Scientific Am (233 Broadway, N.Y. 10c) 117:117 Ag 18 '17

America's opportunity. il Ag Digest 3:5-6 Jl '18

Another appeal to farmers; proclamation by Gov. Philipp of Wisconsin. Hoard's D 53: 599 Ap 27 '17

Are we prepared. M. Ryder. Coop & Manager & F 6:81-2 My '17

Arms and agriculture. Mo Ag Bd B v 15:1-31 Ap '17

Assistant Secretary Pearson points out business men's part in food production. Weekly N L 5:2-4 Jl '17

Banker and agriculture. C. Ousley. il Banker-F 5:2-4 O '18

Best things done by the land-grant institutions to aid the states and nation to meet the emergencies of the war. E. C. Perisho. Assn Am Ag Coll & Exp Pro 1917:175-83 '18

Both sides of the food question. Wallaces' F 42:1304 S 28 '17

Bread bullets and battleships. O Judd Farmer 63:2 D 29 '17

Bringing up the big guns of agriculture. il Power F 27:7-8 Ja '18

Coast view of increased production. A. Lindley. Breeder's Gaz 71:1236 Je 21 '17

Conditions confronting farmers in respect to farm labor. P. P. Campbell and others. Congressional Record (Washington, D.C.) 56:1632-4 Ja 31 '18

Co-operation with Uncle Sam. W. S. Trask. Coop Manager & F 7:46+ Mr '18



**Agriculture and the war**—United States—*Cont.*  
 Cost of agricultural production. Wallaces' F 42:1681 D 14 '17  
 Country life in war time. J. L. Williams. Country Life 34:41-4 J1 '18  
 Crops we must raise next year. J. C. Marquis. Country Gent 83:5-6 S 7 '18  
 Dairymen bear heavy war burdens. Kimball's D F 15:615 S 15 '17  
 Davison estate in war time. E: M. Woolley. Country Life 34:39-42 Ag '18  
 Department of agriculture stimulates production. Country Life 34:39-42 Ag '18  
 Embattling the farmers. Nation (20 Vesey st. N.Y. 10c) 106:229 F 28 '18  
 Essentials to a food program for next year. G. Pinchot. Annals Am Academy (36th st. and Woodland av. Philadelphia \$1) 78:156-63 J1 '18; Reprint. 8p '18 Gifford Pinchot. Milford, Pa.; Same. Swine World 6:7-8 S '18; Same. Purdue Ag 13:7-10 O '18  
 Fall maneuvers for estate owners. E. L. Smith. Country Life 32:38-9 Ag '17  
 Farm appeal to the President by Federal board of farm organization. Jersey B 37:163+ Ja 30 '18; Same. Wallaces' F 43:175 F 1 '18  
 Farm thoughts for next year. W. W. Reynolds. Ohio F 140:602 D 29 '17  
 Farmer and food production. J: R. Connelly. Congressional Record (Washington, D.C.) 56:4221-2 Mr 22 '18  
 Farmer and his duty. G: D. Black. Ohio F 140:343 O 20 '17  
 Farmer and production. C: H. Betts. N Y Farms & Markets Dept Ag B 105:150-8 Mr '18  
 Farmer and the food supply. Ohio F 139:651 My 5 '17  
 Farmer and the war. H. C. Filley. Kimball's D F 15:343 My 15 '17  
 Farmer and the war. J. P. Goodrich. Purdue Ag Ext B 62:1-6 '18  
 Farmers and speculators. B. M. Anderson. (Columbia war papers, ser. 1, no. 8) 8p '17 Division of intelligence and publicity, Columbia university, N.Y.  
 Farmers and the war. Rural N Y 76:671, 701, 727, 769, 815, 939 My 12-26, Je 9, 23, Ag 4 '17  
 Farmer's burden. H: A. Clark. Congressional Record (Washington, D.C.) 56:1695-7 F 1 '18  
 Farmers' conference in Washington. Jersey B 37:266 F 20 '18  
 Farmer's income as affected by the war. T. N. Carver. Assn Am Ag Coll & Exp Pro 1917:59-67 '18  
 Farmer's response. A. R. Mann. Cornell Countryman 14:729 Je '17  
 Farmers should remain on the farm. G. S. Beaumont and R. S. Dunham. Farm Eng 5:7 Je '17  
 Farmers' war. Ag Digest 2:735-7 D '17  
 Farmers' war board needed. O Judd Farmer 63:8 D 1 '17  
 Farmer's war responsibility. C. Dubose. Purdue Ag 12:133 D '17; Same. Better Fruit 12:19 D '17; Same. Power F 27:16 F '18  
 Farmer's wife on living questions. H. L. Wood. Rural N Y 77:667 My 11 '18  
 Farmers win the war program. 34p '18 National bd. of farm organizations, Woodward bldg., Washington, D.C.  
 Federal government and the farmer. G: D. Black. Ohio F 140:58 J1 28 '17  
 Finding labor to harvest the food crops. G. I. Christie. map U S Ag C 115:1-8 '18  
 Firing line of the states. Country Life 34:39-42 Ag '18  
 First hand report of conference of 126 farm paper and live stock journal editors. G. M. Curtis. Reliable P J 24:635+ O '17  
 Five million children to be enrolled in the U.S. garden army and what this should mean to water works superintendents. Eng & Contracting (608 S. Dearborn st. Chicago \$3 per yr.) 49:449 My 8 '18  
 Food and victory to be gained only by co-operation. H. C. Hoover. Power F 26:7-8 O '17; Same cond. Banker-F 4:2-3 S '17; Same cond. Hoard's D 54:188-9 S 7 '17; Same cond. Wallaces' F 42:1212 S 7 '17; Excerpts. Jersey B 36:1370B-1370C S 5 '17  
 Food control and democracy; an article proposing the organization of chambers of agriculture to regulate the equitable distribu-

tion of farm products at fair prices both for the producer and the consumer. D: Lubin. (U.S. 65th Cong., 1st sess. S. Doc. 120) 13p '17 Apply to congressmen  
 From the Atlantic monthly for August, 1917  
 Food crops must be increased. Coop Manager & F 6:42-5 My '17  
 Food crops must be increased. D. F. Houston. Weekly N L 4:1-3 Ap 18 '17; Same cond. Jersey B 36:630 Ap 25 '17  
 Food foresight for 1918. Banker-F 5:14 Ja '18  
 Food increase and conservation—a patriotic duty. F. D. Fuller. Coop Manager & F 6:77-8 Je '17  
 Food needs for 1918; agricultural program for the period beginning with the autumn of 1917. U S Ag C 75:1-14 '17  
 Food policy and the organization of agricultural production. Int R Ag Econ 9,no 1:60-74 Ja '18  
 Food production, conservation, and distribution; hearings before the House Committee on agriculture 65th cong., 1st sess. on H. J. Res. 75, H. R. 4125, H. R. 4188, and H. R. 4360. 538p '17 Apply to congressmen  
 Food production report submitted to the senate; the secretary of agriculture submits proposals. Weekly N L 4:1-2 My 2 '17  
 Food question. A. D. Wilson. Coop Manager & F 7:53-6 Mr '18  
 Food supply. Wallaces' F 43:228 F 8 '18  
 Food will win the war—produce it. F. F. Rockwell. Country Life 32:53-5 Ap '18  
 For increased production. Ag Digest 2:483 Je '17  
 Foreign lesson and its application. Hoard's D 53:912 Je 29 '17  
 Fruit grower in a crisis. Purdue Ag 11:40-1 Je '17  
 General orders for the army of maintenance. F. F. Rockwell. Country Life 32:46-7 J1 '17  
 Grange and patriotism. O. Wilson. Hoard's D 54:681 D 7 '17  
 Great upheaval. B. W. Currie. Country Gent 82:867 My 12 '17  
 Houston urges farmers to beat 1917 record. Ag Digest 2:873 Mr '18  
 How Department helped to meet farm labor need. Weekly N L 6:7 D 11 '18  
 How extension service aided in war; plans peace tasks. Weekly N L 6:1-4 D 4 '18  
 How the Department of agriculture is helping to win the war. A. W. Overmyer. Congressional Record (Washington, D.C.) 56:11837-41 S 28 '18  
 How the farmer can do his bit. Power F 26:36 J1 '17  
 Illinois plan of farm mobilization. Breeder's Gaz 71:781 Ap 12 '17  
 Illinois state institute sends recommendations to President Wilson. Wallaces' F 43:443 Mr 8 '18; Same. O Judd Farmer 64:1 Mr 9 '18  
 In the food trenches. Country Life 34:39-42 Ag '18  
 Increase the food supply. Kimball's D F 16:603 O 15 '18  
 Increasing farm production. Nation (20 Vesey st., N.Y. 10c) 104:450-1 Ap 19 '17  
 Kaiser a foe of all Americans. E. L. Luther. Hoard's D 55:46 F 1 '18  
 Keep the food coming. C: L. Pack. Country Life 34:48-9 Ag '18  
 Keep the war crops growing. F. F. Rockwell. Country Life 34:48-9 Ag '18  
 Learn to eat corn, says Uncle Joe Cannon. Country Gent 82:1077-8 Je 30 '17  
 Mobilization for production. Country Life 34:48-9 Ag '18  
 Mobilization of the nation's agriculture. Power F 26:7-8 My '17  
 Mobilizing the estate in food production. Country Life 32:48a My '17  
 Mobilizing unused land and forces to meet an unprecedented crisis. R. G. Stoddard. Country Life (Tribune bldg., N.Y. 35c) 16:471-81 My '17  
 Opportunity of the farmer and the duty of the banker. G: M. Reynolds. Banker-F 4:5 Je '17  
 Organizing the food problem. Rural N Y 76:679 My 12 '17  
 Our armies of food supply. H. J. Hughes. map Review of Reviews (30 Irving Place, N.Y. 25c) 55:506-10 My '17

**Agriculture and the war—United States—Cont.**  
 Patriotic justice for the husbandman. L. J. Cochran. Rural Manhood 8:237-41 Je '17  
 Patriotism, potatoes, and paucity of power. E. R. Eastman. Hoard's D 54:23 Jl 27 '17  
 Peace to find hungry world calling on farms for food. Weekly N L 6:1+ N 13 '18  
 Pine log war-time problems. C. Harris. Country Gent 82:1857 N 24 '17  
 Playing the fiddle while fire spreads. O Judd Farmer 64:3 Mr 16 '18  
 Prepare now for bigger crops next year. F. F. Rockwell. il Country Life 32:54-5 S '17  
 President considers farm emergencies. O Judd Farmer 64:6 F 23 '18  
 President Wilson's message to the farmers. Congressional Record (Washington, D.C.) 56:1697-8 F 1 '18; Same. Banker-F 5:5 F '18; Same. Am Sheep B & W 38:169-70 Mr '18  
 Problems of production, conservation, and rural labor. D. F. Houston. Weekly N L 5:1-3 N 28 '17  
 Produce greater crops. il Fruit-Grower 28:233 Ap 15 '17  
 Put agriculture on a war footing. H. Myrick. il O Judd Farmer 62:1+ Ap 21 '17  
 Quit fooling and talk sense. J. R. Smith. Country Gent 82:1220-1 Ag 4 '17  
 Railways and food problem in the war. il Railway Age Gazette (Woolworth bldg., N.Y. 15c) 62:1376-83 Je 22 '17  
 Reconstruction and the farmer. C. A. Lyman. Power F 27:26 D '18  
 Relation of farmers and the Food administration. C. J. Tyson. Prac F 114:169 My 1 '18  
 Report of advisory committee of producers; regulations adopted regarding food production measures. Weekly N L 5:1-5 Ap 17 '18  
 Response of the farmers; year's gains on the agricultural front. D. F. Houston. Weekly N L 5:1-4 D 12 '17  
 Roosevelt would aid farmers. Ag Digest 2:915 Ap '18  
 Rural service army dynamics. H. B. Wright. Rural Manhood 8:235-7 Je '17  
 Scope of service among war farmers. H. Israel. Rural Manhood 8:245-8 Je '17  
 Secretary Houston, in address, reviews agriculture in the war. Weekly N L 5:1+ Je 26 '18  
 Secretary Houston looks ahead. D. Lawrence. Country Gent 83:3-4+ Ja 19 '18  
 Secretary Lane tells how the government will open up land for food. A. E. Richter. il Country Gent 82:1105 Jl 7 '17  
 Secretary tells 1918 advances by America's army of the soil. Weekly N L 6:1+ D 11 '18  
 Sees farmers' work in war in rank of greatest deeds. L. M. Estabrook. Weekly N L 6:1 D 11 '18  
 Shall we have enough to eat next winter? W. O. Thompson. 12p '17 Chamber of commerce, Cleveland, O.  
 Soldiers of the soil. D. F. Houston. il Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D.C. 25c) 31:273-9 Mr '17  
 Some achievements in food. N. C. McLoud. il Am For 23:593-9 O '17  
 Some fundamental considerations affecting the food supply of the United States. T. F. Hunt. Cal Ag Exp C 163:1-13 '17  
 Speaking of prices. F. Crissey. il Country Gent 82:1667-8+ N 3 '17  
 Tells how he followed 1918 agricultural war program. Weekly N L 6:1-2 O 2 '18  
 Ten commandments of war-time agriculture. C. Poe. Prog F 33:17 Ja 5 '18  
 Their lives depend on us. Prog F 32:614 My 19 '17  
 Thirteen to one. F. Crissey. il Country Gent 83:14-15+ Ja 19 '18  
 300 million-dollar war order. C. S. Wheeler. Ohio F 139:711 My 26 '17  
 Timely topics of interest to farmers' institute workers. A. C. True. Am Assn Farmers' Inst Workers Pro 1917:58-60 '18  
 True spirit of farming. Rural N Y 77:354 Mr 2 '18  
 Uncle Sam's gardening. F. Duncan. Gard M 27:233; 28:52 Je, S '18  
 Wanted: a program of food production. E. Davenport. Country Gent 83:10-11+ Ja 26 '18

War at an end. Reliable P J 25:872+ D '18  
 War crisis in farming; an open letter to President Wilson. O Judd Farmer 64:8 Mr 2 '18  
 War! keep breeding stock, feed cheap roughage, save grain for food! C. Vrooman. Banker-F 4:2 My '17  
 War, the farm, and the farmer. H. Quick. Hoard's D 55:317+ Mr 15 '18; Same. Prog F 33:357 Mr 16 '18  
 War's culminating crisis has come—achievements this year must determine issue. W. Wilson. Weekly N L 5:1-2 F 13 '18  
 Wartime farm efficiency. J. C. Marquis. il Country Gent 82:859-60 My 12 '17  
 What a woman on a farm thinks of price-fixing. H. C. Bennett. Outlook (381 4th av, N.Y. 10c) 118:531-2 Ap 3 '18  
 \* What American farmers have done this season to feed the soldier allies. Touchstone (118 E. 30th st, N.Y. 35c) 4:153-6 N '18  
 What American farmers have done this year. C. Vrooman. Review of Reviews (30 Irving place, N.Y. 25c) 56:499-503 N '17  
 What can the stations most profitably do to increase the efficiency of food production and conservation in the present national emergency? R. Pearl; E. W. Allen. Assn Am Ag Coll & Exp Pro 1917:256-66 '18  
 What is the duty of the American banker? P. W. Goebel. Banker-F 4:2-4 Je '17  
 What the college did. il Cornell Countryman 25:82-8+ N '17  
 Where farming fits in the war program. A. E. Taylor. Country Gent 83:5-6+ Jl 20 '18 (to be cont)  
 Word from the deans; food resources, production and marketing. Field Il 27:530-1 Jl '17

### Washington

State plan for increasing food production for season of 1918. G. Severance and W. A. Linklater. Wash Ag Ext Ser 1, no 36:1-13 '18

### Agriculture in literature

Literary farming. M. Johnson. Canadian Magazine (200 Adelaide st. West, Toronto, Canada 25c) 49:315-18 Ag '17

### Agrilus anxius. See Bronze birch borers

**Agrilus bilineatus.** See Chestnut borers, Two-lined

**Agromyza.** See Cambium miners

### Agromomic institute of Moscow

First 50 years of the Moscow higher school of agriculture. N. M. Kataew. Int R Sci & Prac Ag 7, no 4:511-15 Ap '16

### Agronomy. See Agriculture

**Agronomy, American society of.** See American society of agronomy

**Agropyron.** See Grasses

**Agrostology.** See Grasses

### Air

See also Aeroscopes

### Bacteriology

Germ content of stable air and its effect upon the germ content of milk (B. 409). G. L. A. Ruehle and W. L. Kulp. bibliog N Y State Ag Exp Rep 1915:151-206 '16

Methods of bacterial analyses of air. G. L. A. Ruehle. bibliog J Ag Research 4:343-68 Jl '15

### Measurement

See also Aerometers

### Air pollution

Bacteria in the air. J Home Econ 8:41-2 Ja '16

### Air washers

Control of experimental conditions in phytopathological research. A. A. Potter. Phyt 6:85-8 F '16

### Airedale terriers

Handling the Airedale. G. Tucker, jr. il Rural N Y 76:77, 130, 179 Ja 20-F 3 '17

When is an Airedale? W. A. Dyer. il Country Life 29:64-5 Mr '16

### Aitken, D. D.

Portrait. Breeder's Gaz 69:1245 Je 15 '16



**Alabama**

*See also* subhead Alabama under special subjects

**Education**

Educational progress in Alabama. W: F. Feagin. Prog F 31:805 Je 24 '16

**Highway commission, State**

6th annual report, from April 1st, 1916, to April 1st, 1917. (B. 14) 46p il '17 The commission, Montgomery

**Industries and resources**

Alabama land book; a detailed description of the agricultural and business conditions. L. W. Statler, comp. and ed. 161p il map 25c '16 Trustees Alabama development fund, Montgomery, Ala.

**Markets bureau**

Helping Alabama farmers find markets. E. A. Jones. Prog F 31:903 Jl 22 '16

**Alabama agricultural experiment station**

Annual report of the director on work done under the local experiment law in 1916. J. F. Duggar. Ala Ag Exp C 35:1-35 '17

Annual report of the director on work done under the local experiment law in 1917. J. F. Duggar. Ala Ag Exp C 38:13-52 '18

29th annual report, 1916. Ala Ag Exp Rep 1916:1-28 '17

30th annual report, 1917. Ala Ag Exp Rep 1917:1-28 '18

**Alabama home economics association**

Proceedings of the 3d annual conference, Jan. 25-27, 1917. Ala Girls Tech Inst (Montevallo) B n s 40:1-24 Ap '17

**Alabama veterinary medical association**

11th annual meeting, Auburn, March 1-2. C. A. Cary. Am Vet M Assn J 53:129-33 Ap '18

**Alarm clocks**

Alarm clock shuts off pump. Country Gent 81:571 Mr 11 '16

**Alaska**

*See also* subhead Alaska under Agriculture; Forests and forestry; Grain

**Description and travel**

Information for prospective settlers in Alaska. C. C. Georgeson. il map Alaska Ag Exp C 1:1-30 '16

**Industries and resources**

Information for prospective settlers in Alaska. C. C. Georgeson. il map Alaska Ag Exp C 1:1-30 '16

**Alaska agricultural experiment station**

Report, 1916. il map Alaska Ag Exp Rep 1916:1-91 '18

**Alaska derby.** *See* Dog racing

**Alaska wheat.** *See* Wheat—Varieties

**Alberta, Canada**

*See also* subhead Canada under special subjects

**Description and travel**

Pleasant journey through Alberta. il Irr Age 33:184-6 S '18

**Alberta university**

**College of agriculture**

College of agriculture. G: Harcourt. Ag Gaz of Canada 4:494-7 Je '17  
Provincial college of agriculture. E. A. Howes and others. il Ag Gaz of Canada 5:885-93 S '18

**Albinos and albinism**

Heredity of albinism. C. B. Davenport. pors J Heredity 7:221-3 My '16

**Alcohol**

Agricultural alcohol: studies of its manufacture in Germany. E: Kremers. bibliog U S Ag B 182:1-36 '15

Alcohol a substitute for gasoline. Power F 26:56 Mr '17

Alcohol from sawdust. E. J. Weber. O Judd Farmer 60:14 My 20 '16

Contribution to the study of the alcohols of cider. E. Kayser. Int R Sci & Prac Ag 9,no 2:239-41 F '18

Denatured alcohol from a chemist's standpoint. Rural N Y 75:881 Je 17 '16

Denatured spirit of alcohol. Ag J of India 12:156-8 Ja '17

Detection of methyl alcohol in alcoholic beverages and its formation by the several kinds of yeasts. T. Takahashi and others. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:2723-6 D '17

Fuel alcohol in Australia. Int R Sci & Prac Ag 8,no 11:1131-2 N '17

Future of denatured alcohol. Rural N Y 75:1559 D 23 '16

Gasoline and the government. B. W. Currie. il Country Gent 81:1014-15 My 13 '16

Grain for distilleries and denatured alcohol. G. D. Crain, Jr. Power F 25:33 S '16

Great need of industrial alcohol. A. H. Pulver. Rural N Y 75:805 My 27 '16

Industrial alcohol; a substitute for petrol. J Dept Ag S Australia 20:961-2 Jl '17

Manufacture of alcohol. C. W. Hines. il Philippine Ag R 10,no 3:189-200 '17

Manufacture of fuel alcohol from sawdust and timber waste. B. C. Aston. J Ag New Zealand 16:286-7 My '18

Manufacture of industrial alcohol. Rural N Y 76:850 Jl 7 '17

New alcohol tables; alcoholic strength of Australian wines. W. P. Wilkinson. J Dept Ag Victoria 14:487-92 Ag '16

Power-alcohol; a substitute for petrol. J Dept Ag Victoria 16:115-17 F '18

Production of alcohol from algae. Int R Sci & Prac Ag 9,no 5:612-13 My '18

Production of war alcohol with perry pears. A. Truelle. Int R Sci & Prac Ag 9,no 2:241-2 F '18

Use of horse-chestnuts for the production of alcohol. Int R Sci & Prac Ag 9,no 1:111-12 Ja '18

Utilisation of acorns by alcoholic fermentation. Int R Sci & Prac Ag 9,no 1:112 Ja '18

*See also* Liquors

**Physiological effects**

Experimental modification of germ cells; general plan of experiments with ethyl alcohol and certain related substances. R. Pearl. Maine Ag Exp B 268:297-303 '17; Same. Maine Ag Exp Rep 1917:297-303 '18

**Aldehydes**

Generation of aldehydes by fusarium cubense. E. C. Lathrop. Phyt 7:14-16 F '17

Harmful effects of aldehydes in soils. O. Schreiner and J. J. Skinner. U S Ag B 108:1-26 '15

*See also* Salicylic aldehyde; Vanillin

**Alder**

Alnus Oregona; its value as a forest type on the Siuslaw national forest. H. M. Johnson. J For 15:981-7 D '17

**Diseases and pests**

*See also* Alder flea-beetles

**Alder flea-beetles**

Biology of the alder flea-beetle. W: C. Woods. bibliog il Maine Ag Exp B 265:249-84 '17; Same. Maine Ag Exp Rep 1917:249-84 '18

**Alderney cattle.** *See* Guernseys; Jerseys

**Ale**

Study of American beers and ales. L. M. Tolan. U S Ag B 493:1-23 '17

**Aleurodidae.** *See* White flies

**Alexander, Alexander Septimus**

Portrait. Breeder's Gaz 71:1063 My 24 '17

**Alfalfa**

Account of some experiments in lucerne cultivation at Saharanpur remount depot. J. Bruce. Ag J of India 13:254-9 Ap '18

Agricultural somersault. H. S. Stabler. il Country Gent 82:1550-1+ O 13 '17

Alfalfa. Wallaces' F 42:969 Fe 29 '17

Alfalfa. F. App. il N J Ag Dept B 15:1-51 '18

Alfalfa. J. L. R. Dickson Coop Manager & F 6:61 Ap '17

Alfalfa. F. D. Gardner. Pa Ag Ext C 46:1-7 '16

Alfalfa a good crop in Kansas. Irr Age 32:85 Ap '17

**Alfalfa—Continued**

- Alfalfa and clover in the orchard. A. C. Weed. Rural N Y 75:581 Ap 8 '16
- Alfalfa and cows in Arizona. M. E. Bemis. il Kimball's D F 15:86 F 15 '17
- Alfalfa and crimson clover in Virginia. W. H. Harrison. Rural N Y 76:851 Ji 7 '17
- Alfalfa and farm management. A. E. Grant-ham. il Prac F 113:314 S 15 '17
- Alfalfa and its culture. H. J. Wheeler. (B. 4) 23p il n.d. Am. agricultural chemical co., 92 State st., Boston
- Alfalfa and publicity. H. Jeffries. il Kimball's D F 15:242 Ap 1 '17
- Alfalfa and sweet clover. C. A. Norcross. il Nev Ag Ext B 5:2-20 '16
- Alfalfa as a cover crop. Country Gent 81:1482 Ag 5 '16
- Alfalfa as a green manure. L. L. De Bra. Hoard's D 55:94 F 8 '18
- Alfalfa as a lawn grass. B. Jones. il Gard M 23:144 Ap '16
- Alfalfa criticism answered. L. F. Graber. il Country Gent 81:2218 D 30 '16
- Alfalfa crop. J. Murray. il J Ag (Quebec) 19: 216-17, 236 Ap-May '16
- Alfalfa culture. C. G. Williams. il Ohio Ag Exp B v 2:173-7 Je '17
- Alfalfa culture in New England. S. C. Damon. Mass Hort Soc Trans 1916, pt 1:31-8 '16
- Alfalfa, easy to get and good to have. J. N. Shirley. il Hoard's D 55:181 F 22 '18
- Alfalfa experience in Kentucky. J. M. Ev-yard. Breeder's Gaz 70:1286 D 28 '16
- Alfalfa experience in the Northwest. F. Sher-win. Jersey B 35:1312 Ag 23 '16
- Alfalfa experiments. Minn. Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 33-8) '17
- Alfalfa fertilizers. G. G. Brown. Ore Ag Exp B 141:55-6 '17
- Alfalfa growing. W. C. Kolb. Purdue Ag 12: 494 My '18
- Alfalfa growing in Canada. D. H. Bark. Irr Age 32:40-5 Ja '17
- Alfalfa growing in Iowa. C. S. Dorchester and others. il Ia Ag Ext B 39:1-8 '16
- Alfalfa growing in West Virginia. H. Dorsey. il W Va Ag Ext C 208:1-11 '18
- Alfalfa hay market. S. Sosland. Hoard's D 55: 435 Mr 29 '18
- Alfalfa haying and the weather. L. F. Graber. il Country Gent 82:927 My 26 '17
- Alfalfa heretic's sermon. J. N. Shirley. il Rural N Y 76:1077 S 15 '17
- Alfalfa in Arkansas. C. O. Carpenter. Prog F 32:517 Ap 21 '17
- Alfalfa in Australia. A. W. Perry. Hoard's D 54:510 N 2 '17
- Alfalfa in Canada. M. O. Malte. il Ag Gaz of Canada 4:547-50 Ji '17
- Alfalfa in cloverland. L. F. Graber. Hoard's D 55:981 Ji 5 '18
- Alfalfa in Connecticut. W. L. Slate, jr. Conn Ag Coll Ext C 3:1-8 '16
- Alfalfa in corn. G. W. Fenn. Kimball's D F 15:325 My 1 '17
- Alfalfa in eastern Iowa. G. R. Bliss. il Coun-try Gent 81:97 Ja 15 '16
- Alfalfa in Indiana. H. J. Koppers. il Country Gent 81:634 Mr 18 '16
- Alfalfa in Kansas. Hoard's D 51:756 My 26 '16
- Alfalfa in Maine. W. T. Guptill. Maine Ag Dept B 15:1-9 Mr '16
- Alfalfa in Maryland. F. W. Oldenburg. Md Ag Ext Letter no 24 4p n.d.
- Alfalfa in Montana. Hoard's D 51:126 F 11 '16
- Alfalfa in New England. C. W. Adams. Coun-try Gent 81:327 F 12 '16
- Alfalfa in New England. B. G. Southwick. Rural N Y 77:723 My 25 '18
- Alfalfa in Quebec. J. Ag (Quebec) 22:77 N '18
- Alfalfa in rows. H. Jeffries. il Kimball's D F 14:673 O 15 '16
- Alfalfa in southwestern Ohio. R. L. Dean. Nat Stock & F 40:1348 Mr 10 '17
- Alfalfa in the Chautauqua grape belt. R. P. Wright. il Prac F 112:4 Ja 1 '16
- Alfalfa in the East and New England. M. Ryder and O. M. Kile. (Soil improvement com. pamph. 19) 14p n.d. Nat. fertilizer assn., Chicago
- Alfalfa in the heart of the Northwest. J. G. Haney. Coop Manager & F 7:71-2 Je '18
- Alfalfa in the orchard, or better orchard farming. P. S. Darlington. Better Fruit 10: 15-18 F '16
- Alfalfa in the semiarid regions. T. S. Parsons. Country Gent 82:1222 Ag 4 '17
- Alfalfa in times of war. C. D. Carlisle. Coop Manager & F 7:91 O '17
- Alfalfa in Wyoming. T. S. Parsons. il Wyo Ag Exp B 111:1-55 '16
- Alfalfa, lime and milk. Rural N Y 75:1439-40 N 18 '16
- Alfalfa, melilotus and red clover. T. Butler. Prog F 31:978 Ag 12 '16
- Alfalfa more profitable than wheat. F. D. Baldwin. il O Judd Farmer 63:3 Ag 18 '17
- Alfalfa on a city lot. Fruit-Grower 27:143 F 15 '16
- Alfalfa on a railroad's right-of-way. il Wal-laces' F 41:1143 S 1 '16
- Alfalfa on every farm. J. E. Buck. Kimball's D F 15:54 F 1 '17
- Alfalfa on high-priced city land. il Rural N Y 76:959 Ag 11 '17
- Alfalfa on land not naturally adapted to that crop (C. 39). J. F. Barker. il N Y State Ag Exp Rep 1915:108-15 '16
- Alfalfa on mesa soils. J. T. Barlow. Jersey B 35:1210 Ag 2 '16
- Alfalfa on 100 fields of blow sand. O Judd Farmer 62:1 My 26 '17
- Alfalfa paid for farms. H. E. McDougal. il Country Gent 83:13 Ja 26 '18
- Alfalfa pays in Illinois. Hoard's D 51:341 Mr 17 '16
- Alfalfa—pro and con. L. F. Graber. il Coun-try Gent 81:2149 D 16 '16
- Alfalfa seeding. Wallaces' F 42:1081 Ag 3 '17
- Alfalfa seeding and handling. Rural N Y 76: 960 Ag 11 '17
- Alfalfa should have preference. P. W. Hute-mar. Coop Manager & F 6:87 My '17
- Alfalfa the cash crop. il Wallaces' F 41:663 Ap 28 '16
- Alfalfa, the enchanted herb. F. D. Coburn. il Mo Ag Bd Yearbook 1916:437-42; Same cond. N Y Ag Dept B 87:2887-97 S '16
- Alfalfa the indispensable. P. C. Swartz. il Hoard's D 53:468 Ap 6 '17
- Alfalfa the wonderful. F. D. Coburn. (In De Laval dairy hand book, p 25-8) il '16 De Laval separator co., New York
- Alfalfa thrives in Kane co., Illinois. O Judd Farmer 62:16 Mr 31 '17
- Alfalfa turns yellow. L. Ogilvy. Hoard's D 56:668 D 6 '18
- Alfalfa versus corn. C. B. Wing. Ohio F 138: 539 D 2 '16
- Alfalfa vs. red clover. C. N. Meriwether. Breeder's Gaz 69:916 Ap 27 '16
- Alfalfa versus timothy. J. N. Shirley. Nat Stock & F 42:850 D 21 '18
- Alfalfa won't follow directions. A. H. de Graff. il Country Gent 83:9 F 9 '18
- Alfalfas that do and do not winterkill. L. F. Graber. il Country Gent 82:637 Mr 31 '17
- Another sermon on alfalfa. Rural N Y 76: 1199-1200 O 20 '17
- Barley vs. alfalfa. W. S. Tomlinson. Ohio F 140:211 S 15 '17
- Before and after alfalfa. D. H. Williams. il Country Gent 82:1475 S 29 '17
- Cattle and alfalfa in the South. F. D. Tom-son. Breeder's Gaz 73:1086 My 23 '18
- Central New York fruit and alfalfa farm. il Rural N Y 75:71-2 Ja 15 '16
- Clip the alfalfa low. J. N. Shirley. il Country Gent 83:43 F 23 '18
- Cold resistance of alfalfa. Hoard's D 51:424 Mr 31 '16
- Comparison of the hourly evaporation rate of atmometers and free water surfaces with the transpiration rate of medicago sativa. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 9:277-92 My 28 '17
- Concerning alfalfa and soy beans. J. L. Hills. Vt Ag Exp B 204:40-63 '17
- Concerning the value of alfalfa. Hoard's D 51:881 Je 23 '16
- Cultivating alfalfa. W. Loomis. Hoard's D 51: 198 F 25 '16
- Cultivation of alfalfa in the oasis of Tripoli. N. Mazzocchi-Alemanni. Int R Sci & Prac Ag 9,no 2:188-9 F '18



**Alfalfa—Continued**

- Cutting and curing alfalfa. *il* Hoard's D 51: 884 Je 23 '16
- Cutting and curing alfalfa. *Prac* F 113:230 Je 15 '17
- Dad is caught overworking alfalfa. E. B. Heaton. *O Judd Farmer* 60:5 My 27 '16
- Different methods of seeding alfalfa. I. H. C. Cook. *Rural N Y* 76:1317 N 17 '17
- Disk harrow injures alfalfa. C. R. Weidle. *Country Gent* 81:570 Mr 11 '16
- Diversified farming is safe farming. 32p *il* '16 *Int. harvester co., Chicago*
- Does alfalfa enrich the soil? *il* *Rural N Y* 77:849 Jl 6 '18
- Does alfalfa pay? *il* *Country Gent* 81:1863 O 21 '16
- Duty of water and how to determine it. E. C. McClellan. *Irr Age* 32:184-6 O '17
- Economical irrigation of alfalfa in Sacramento valley. S. H. Beckett and R. D. Robertson. *il* *Cal Ag Exp B* 280:273-94 '17
- Effect of clipping on the root development of alfalfa. R. McKee. *Am Soc Agron J* 8:329-32 S '16
- Effect of different methods of inoculation on the yield and protein content of alfalfa and sweet clover. A. C. Army and R. W. Thatcher. *Am Soc Agron J* 9:127-37 Mr '17
- Effect of frequent cutting on the water requirement of alfalfa and its bearing on pastureage. L. J. Briggs and H. L. Shantz. *il* *U S Ag B* 228:1-6 '15; *Abstract. Int R Sci & Prac Ag* 7,no 2:221-3 F '16
- Effect of phosphorus on alfalfa and alfalfa bacteria. H. W. Truesdell. *bibliog il* *Soil Sci* 3:77-98 Ja '17
- Effect of prolonged growing of alfalfa on the nitrogen content of the soil. C. O. Swanson. *Am Soc Agron J* 9:305-14 O '17
- Experience with transplanted alfalfa. H. A. Roush. *Rural N Y* 76:669 My 12 '17
- Experimentation with alfalfa. D. A. Coleman. *N J Ag Exp Rep* 1916:307-17 '17
- Expert alfalfa growing. *il* *Rural N Y* 75:767 My 20 '16
- Farm that came back on bacteria. H. W. Collingwood. *il* *Country Life* 30:50-1 Je '16
- Farming practice in the sand hills of Nebraska. J. Cowan. *il* *Neb Ag Exp B* 156:22-38 '16
- Fertilizers for alfalfa. A. E. Grantham. *Prac F* 112:54 F 1 '16
- Fertilizing alfalfa. H. W. Doyle. *Country Gent* 82:419 Mr 3 '17
- Final steps in seeding alfalfa. *Prac F* 112:150 Ap 1 '16
- Finish fight with quack grass. H. C. Collins. *Rural N Y* 76:405 Mr 17 '17
- First cutting of alfalfa. *Prac F* 112:212 My 15 '16
- Five hundred Wisconsin farmers on alfalfa. L. F. Graber. *Hoard's D* 51:624 My 5 '16
- Flood brought alfalfa success. L. Graber. *il* *Country Gent* 83:22 Ag 3 '18
- For more and hardier alfalfa in the Northwest. J. G. Haney. 31p *il* '16 *Int. harvester co., Chicago*
- Forage crop improvement—report of progress. W. Southworth. *il* *Ag Gaz of Canada* 5: 158-62 F '18
- Getting a stand of alfalfa. C. McIntire. *Ohio F* 142:522 N 30 '18
- Getting a start with alfalfa in the corn belt. P. G. Holden. 11p *il* '17 *International harvester co., Agricultural extension dept., Chicago*
- Getting alfalfa started. *Prac F* 112:248 Je 15 '16
- Getting started right with alfalfa. L. F. Graber. *il* *Hoard's D* 53:179 F 23 '17
- Getting started with alfalfa. L. F. Graber. *il* *Country Gent* 82:309, 367 F 17-24 '17
- Giving alfalfa a square deal. L. F. Graber. *il* *Country Gent* 82:140 Ja 27 '17
- Glandular pubescence in various medicago species. R. McKee. *Am Soc Agron J* 10: 159-62 Ap '18
- Grimm lucerne; introduction in New Zealand. A. Macpherson. *il* *J Ag New Zealand* 17:19-23 Jl '18
- Growing alfalfa and its feed value; with discussion. M. Michels. *Wis Dairymen's Assn Rep* 1913-1916:145-53 '17; *Same. Hoard's D* 51:89 F 11 '16
- Growing alfalfa in rows. A. C. Hartenbower. *Breeder's Gaz* 73:1034 My 16 '18
- Growing alfalfa in rows. H. Jeffries. *il* *Kimball's D F* 14:831 Ja 1 '17
- Growing of lucerne. A. J. Perkins. *J Dept Ag S Australia* 21:782-96 My '18
- Growth of the root system of medicago sativa. *Int R Sci & Prac Ag* 7,no 8:1088-9 Ag '16
- Hairy Peruvian alfalfa. W. E. Bryan. *Ariz Ag Exp Timely Hints* 132:1-6 '17
- Handling alfalfa hay. *Rural N Y* 76:768 Je 9 '17
- Handling alfalfa hay. J. W. Ames and G. E. Boltz. *Ohio Ag Exp B v* 2:178-80 Je '17
- Handling the alfalfa crop. W. S. Tomlinson. *Ohio F* 137:646 My 6 '16
- Hardy alfalfa best in Minnesota. F. Forbell. *il* *Hoard's D* 54:177 S 7 '17
- Hardy alfalfa in Canada. F. E. Ellis. *Hoard's D* 56:359 O 11 '18
- Hardy alfalfas. *Ag Gaz of Canada* 5:787-91 Ag '18
- Hardy types of alfalfa. A. M. Ten Eyck. *Wallaces' F* 42:1116 Ag 10 '17
- How alfalfa blessed a country. W. A. Sawtell. *Breeder's Gaz* 69:367 F 17 '16
- How is your alfalfa? L. F. Graber. *Country Gent* 82:1052 Je 23 '17
- How to succeed with alfalfa. L. P. Woodward. *Prog F* 33:823 Jl 20 '18
- Hybrid origin of cultivated lucerne. *Int R Sci & Prac Ag* 8,no 6:848-50 Je '17
- Idaho alfalfa notes. J. F. Bruins. *il* *Hoard's D* 56:98 Ag 16 '18
- Important alfalfa winter-killing precaution. L. F. Graber. *Hoard's D* 56:155 Ag 30 '18
- Influence of lime upon the yield of dry matter and nitrogen content of alfalfa. *N J Ag Exp Rep* 1916:387-93 '17
- Influence of the time of cutting on the yield of lucerne, in Italy. A. Moretini. *Int R Sci & Prac Ag* 8,no 6:869-71 Je '17
- Inoculation for alfalfa. A. E. Grantham. *Prac F* 112:108 Mr 1 '16
- Inoculation of alfalfa. M. O. Malte. *Ag Gaz of Canada* 3:213 Mr '16
- Intensive cultivation of alfalfa. R. H. Forbes. *Ariz Ag Exp Timely Hints* 93:1-8 '12 (rev. '17)
- Irrigation of alfalfa. S. Fortier. *il* *Farmers' B* 865:1-40 '17 (B. 373 rev.)
- Irrigation of alfalfa in Imperial valley. W. E. Packard. *il* *Cal Ag Exp B* 284:67-84 '17
- Irrigation of alfalfa in Nevada. C. S. Knight. *il* *Nev Ag Exp B* 93:1-18 '18
- Leave last alfalfa crop. L. W. Wise. *O Judd Farmer* 60:8 Je 17 '16
- Lime and inoculation—two alfalfa essentials. A. D. Cromwell. *il* *Prac F* 114:253 Ag 1 '18
- Liming the land for alfalfa. *Prac F* 112:37 Ja 15 '16
- Little alfalfa trip. *Nat Stock & F* 40:278 Je 10 '16
- Little farm well-tilled. R. H. Forbes. *Ariz Ag Exp Timely Hints* 133:1-8 '18
- Lucerne-cultivation. A. McTaggart. *il* *J Ag New Zealand* 12:202-4 Mr '16
- Lucerne-culture. *il* *J Ag New Zealand* 12:456-61; 13:62-64 Je-Jl '16
- Lucerne-culture. A. W. Green. *il* *J Ag New Zealand* 14:423-30 Je '17
- Lucerne-growing; a Canterbury object-lesson. *il* *J Ag New Zealand* 12:285-7 Ap '16
- Lucerne-growing in North Otago. S. M. Taylor. *J Ag New Zealand* 14:45-6 Ja '17
- Lucerne growing in South Gippsland. A. Mess. *il* *J Dept Ag Victoria* 16:36-8 Ja '18
- Lucerne-growing in the Westport district. C. S. Dalgliesh. *il* *J Ag New Zealand* 17:162-3 S '18
- Lucerne in Southland. J. D. Hopkins. *J Ag New Zealand* 13:483 D '16
- Lucerne inoculation experiment. Hawkesbury agricultural college (New South Wales) 1912-16. J. O. Heinrich. *il* *Ag Gaz of New South Wales* 27:305-13 My '16; *Abstract. Int R Sci & Prac Ag* 7,no 10:1420-3 O '16

**Alfalfa—Continued**

- Lucerne manurial tests, State research farm, Werribee. A. E. V. Richardson. *il J Dept Ag Victoria* 14:449-60 Ag '16
- Lucerne manurial trials at research farm, Werribee; the value of winter top-dressing and renovation. H. A. Mullett. *J Dept Ag Victoria* 16:497-9 Ag '18
- Making alfalfa and clover hay. A. O. Choate. *Hoard's D* 53:896 Je 22 '17
- Managing alfalfa pastures in Arizona. R. W. Clothier. *Int R Sci & Prac Ag* 7,no 3:421-2 Mr '16
- Market fruit garden. *il Gard Chron (Lond)* 62:126 S 29 '17
- Mechanical curing of alfalfa. E. M. Bassler. *il Am Soc Heating & Ventilating Eng* (29 W. 39th st, N.Y.) 23:561-3; Discussion. 563-9 '17
- Medicago falcata, a yellow-flowered alfalfa. R. A. Oakley and S. Garver. *bibliog il map U S Ag B* 428:1-70 '17
- Observations of alfalfa. E. H. Jenkins. *Conn State Ag Exp B* 192:1-12 '17
- Observations on alfalfa experiments in Quebec. J. Murray. *il J Ag (Quebec)* 20:97 N '16
- Of three good things choose the best; red clover, alfalfa, sweet clover. J. Buchanan. *Wallaces' F* 42:546 Mr 23 '17
- Orchard-raised livestock. R. E. Jones. *il Country Gent* 83:15 Mr 16 '18
- Permanent stand of alfalfa. L. F. Graber. *il Country Gent* 82:485 Mr 10 '17
- Plant of Siberian alfalfa. *il Rural N Y* 75:929 Jl 1 '16
- Pollination of alfalfa by bees of the genus megachile. F. W. L. Sladen. *il Ag Gaz of Canada* 5:125-6 F '18
- Preparation for alfalfa. A. Agee. *Nat Stock & F* 40:514 Ag 19 '16
- Preparation of the land for alfalfa. A. E. Grantham. *Prac F* 112:9 Ja 1 '16
- Prepare now for alfalfa and green manure crops. A. E. Grantham. *Prac F* 114:230 Jl 1 '18
- Preparedness for alfalfa. J. N. Shirley. *Breeder's Gaz* 69:724 Mr 30 '16
- Preparing for alfalfa; symposium. *Prac F* 113:247 Jl 1 '17
- Progress report, Spur, 1909-1914; alfalfa. *il Tex Ag Exp B* 218:10-14 '17
- Reducing the high cost of alfalfa. J. N. Shirley. *Wallaces' F* 42:534 Mr 23 '17
- Results in growing alfalfa obtained along the line of the Lehigh railroad in central New York. F. R. Stevens. *il N Y Ag Dept B* 87:2909-13 S '16
- Sampling tubes for manure, alfalfa or other organic materials. A. D. Shamel. *il Rural N Y* 76:668 My 12 '17
- Seeding alfalfa. C. C. Osborne. *il Country Gent* 81:1227 Je 17 '16
- Seeding alfalfa in the mud. M. J. White. *Rural N Y* 77:1258 N 9 '18
- Seeding alfalfa in the spring. *il Hoard's D* 55:664 My 3 '18
- Seeding alfalfa successfully. W. W. Burr. *Coop Manager & F* 7:109-10 Mr '18
- Seeding to alfalfa. T. E. Martin. *Rural N Y* 75:109 Ja 22 '16
- Should alfalfa winterkill? J. Lacey. *Hoard's D* 56:133 Ag 23 '18
- Silage and alfalfa in Idaho. *Hoard's D* 51:547 Ap 21 '16
- Solving the sagebrush problems. N. E. Hansen. *il map Ag Digest* 1:134-6 O '16
- Some alfalfa troubles. *Hoard's D* 53:377 Mr 23 '17
- Some essential factors in alfalfa growing. R. Summerby. *il J Ag (Quebec)* 20:237 Je '17
- Some phases of alfalfa as a crop in the orchard. P. S. Darlington. *Better Fruit* 12:10-11+ My '18
- Soup stones in agriculture. B. Howard. *il Country Gent* 82:1629 O 27 '17
- Sowing alfalfa in wheat in spring. A. E. Grantham. *Prac F* 114:71 F 15 '18
- Sowing alfalfa in winter. J. N. Shirley. *il Country Gent* 82:2031 D 22 '17
- Spring-killing of alfalfa. H. Jeffries. *Hoard's D* 53:893 Je 22 '17
- Spring versus fall seeding for alfalfa. A. T. Morison. *Hoard's D* 55:425 Mr 29 '18
- Still another alfalfa sermon. *Rural N Y* 76:1413 D 15 '17
- Study of the problem of forage production in Uruguay, dealing with the use of artificial inoculation in the lucerne fields. A. S. Moreira and M. F. Mendizabal. *Int R Sci & Prac Ag* 7,no 11:1615-18 N '16
- Successful alfalfa in the Hudson valley. M. E. Thew. *il Rural N Y* 77:315 Mr 2 '18
- Suggested rotation for alfalfa. A. E. Grantham. *Prac F* 114:48 F 1 '18
- Suggestions for growing alfalfa. C. R. Hoffer. *il Purdue Ag* 11:36-7 Mr '17
- Suggestions for obtaining a stand of alfalfa. J. L. Stone. *N Y Ag Dept B* 87:2904-8 S '16
- Sweet clover and alfalfa seed and seeding. G. C. Wooster. *Coop Manager & F* 7:109 Jl '18
- Sweet clover compared with alfalfa. W. E. Bowers. *Rural N Y* 75:911 Je 24 '16
- Sweet clover vs. alfalfa. I. J. Mathews. *Ohio F* 142:71 Jl 27 '18
- To grow alfalfa successfully. *Hoard's D* 55:278 Mr 8 '18
- To prevent winter-killing of alfalfa. A. M. Teneyck. *Hoard's D* 54:652 N 30 '17
- Top-dressing lucerne with superphosphate. *Ag Gaz of New South Wales* 28:461-2; 29:468-70 Jl '17, Jl '18
- Transplanting alfalfa. N. E. Hansen. *il S D Ag Exp B* 167:424-45 '16; Summary. *Int R Sci & Prac Ag* 8,no 5:730-1 My '17
- Transplanting alfalfa roots. *Rural N Y* 76:344 Mr 3 '17
- Truth about Siberian alfalfa seed. L. F. Graber. *Hoard's D* 53:463 Ap 6 '17
- Try a small area in alfalfa. *Prog F* 31:1143 S 30 '16
- Twenty-three years an alfalfa grower. F. E. Ellis. *Hoard's D* 55:913 Je 21 '18
- Twenty years with alfalfa in New Jersey. M. Ryder. *Prac F* 112:212 My 15 '16
- Two reasons why alfalfa fails. J. N. Shirley. *il Nat Stock & F* 41:862 D 8 '17
- Wanted—alfalfa insurance. *Hoard's D* 55:835 Je 7 '18
- Weeds—a menace to alfalfa. F. S. Prince. *Ohio F* 140:115 Ag 18 '17
- Well prepared seedbed essential for alfalfa, inoculate the seed, plant at right depth. *Coop Manager & F* 7:80 My '18
- What alfalfa needs most—lime. L. F. Graber. *il Country Gent* 82:45 Ja 13 '17
- What shall we do with our lucerne? R. T. Archer. *J Dept Ag Victoria* 14:309-11 My '16
- Why alfalfa succeeds or fails. W. E. Bowers. *il Country Gent* 82:1224 Ag 4 '17
- Why and how of alfalfa in the East. F. R. Stevens. *il Prac F* 113:47 F 1 '17
- Why does alfalfa winterkill? E. B. Heaton. *il O Judd Farmer* 64:501 My 11 '18
- Winter injury of alfalfa and clover. C. A. Gearhart. *Ohio Ag Exp B* v 1:199-201. Jl '16
- Wintering of alfalfa in the provinces. *Ag Gaz of Canada* 4:572-7 Jl '17
- Work of the Yuma experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) p 18-22 il '18 U S Ag

See also Alfalfa as feed; also New Jersey state alfalfa association

**Breeding**

- Alfalfa hybridization. W. Southworth. *Ag Gaz of Canada* 3:445-6 My '16
- Breeding of alfalfa. O. F. Jensen. *Rural N Y* 75:181 F 5 '16
- Hybridizing alfalfa in America. C. C. Haas. *Hoard's D* 52:164 S 1 '16

**Composition**

- Chemical composition of alfalfa as affected by stage of maturity, mechanical losses and condition of drying. C. O. Swanson and W. L. Latshaw. *Int R Sci & Prac Ag* 7, no 10:1446-8 O '16
- Influence of lime upon the yield of dry matter and nitrogen content of alfalfa. J. G. Lipman and A. W. Blair. *N J Ag Exp B* 316:1-13 '17

**Diseases and pests**

- Alfalfa leaf spot. G. O. Osner. *Purdue Ag* 11:37 My '17



**Alfalfa—Diseases and pests—Continued**

- Alfalfa web worm. C. E. Sanborn. bibliog il Okla Ag Exp B 109:1-7 F '16
- Control of the green clover worm in alfalfa fields. C. C. Hill. il map Farmers' B 982: 1-7 '18
- Controlling the garden webworm in alfalfa fields. E. O. G. Kelly and T. S. Wilson. il Farmers' B 944:1-7 '18
- Diseases of alfalfa and clover. C. Gregory. il N Y Ag Dept B 87:2898-903 S '16
- Insects injurious to alfalfa. G. A. Dean. il Kan Ag Ext B 5:1-36 '16
- Life history of habrocytus medicaginis, a recently described parasite of the chalcis fly in alfalfa seed. T. D. Urbahns. il J Ag Research 7:147-54 O 23 '16
- New disease of alfalfa. G. A. Osner. Purdue Ag 10:21 Mr '16
- Observations on meigenia floralis, a dipterous parasite of the lucerne negril, (colaspidea atra), in France. Int R Sci & Prac Ag 8,no 12:1299-1300 D '17
- Sclerotinia trifoliorum, the cause of stem rot of clovers and alfalfa. A. H. Gilbert and C. W. Bennett. bibliog il Phyt 7:432-42 D '17
- Tetrastichus bruchophagi, a recently described parasite of bruchophagus funebris. T. D. Urbahns. il J Ag Research 8:277-82 F 12 '17
- \* White-spot disease of alfalfa. P. J. O'Gara. Science (Science Press, Garrison, N.Y. 15c) n s 48:299-301 S 20 '18
- See also Alfalfa caterpillars; Alfalfa crown wart; Alfalfa hoppers, Three-cornered; Alfalfa loopers; Alfalfa weevils; Alfalfa yellow-leafblotch

**Roots**

- Development of the root system of cirsum arvense and medicago sativa with reference to their vegetative reproduction; observations carried out in Russia. J. Paczowski; F. Berg. Int R Sci & Prac Ag 8, no 4:563-5 Ap '17

**Seed**

- Alfalfa experiments. N J Ag Exp Rep 1916: 244-8 '17
- Alfalfa for seed and forage. H. W. Hulbert. il Country Gent 83:9+ Ap 20 '18
- Alfalfa seed movement in Kansas. U S Seed Rep 1:7 D '17
- Alfalfa seed production and inoculation. Ag Gaz of Canada 3:336-40 Ap '16
- Alfalfa seed production; pollination studies. C. V. Piper and others. il U S Ag B 75:1-32 '14
- Commercial Turkestan alfalfa seed. E. Brown. il U S Ag B 138:1-7 '14
- Hardy alfalfa seed. B. F. Sheehan. il Country Gent 82:1376 S 8 '17
- Hardy alfalfa seed. C. E. Wing. Breeder's Gaz 69:583 Mr 9 '16; Same. Hoard's D 51:531 Mr 17 '16; Same. Rural N Y 75:513 My 25 '16
- Inventory of clover and alfalfa seed. U S Seed Rep 1:1 D '17
- Production of alfalfa seed in southern Idaho. L. C. Aicher. il Idaho Ag Exp B 101:1-20 '17
- Timothy, clover and alfalfa seed prices. U S Seed Rep 2:7 O '18

**Varieties**

- Commercial varieties of alfalfa. R. A. Oakley and H. L. Westover. il map Farmers' B 757: 1-24 '16
- Comparative yields of hay, from several varieties and strains of alfalfa. A. N. Hume and M. Champlin. il S D Ag Exp B 163:282-343 '16
- Grimm alfalfa. R. S. Hyde. il Kimball's D F 15:95 F 15 '17
- Importance of variety in growing alfalfa. H. Jeffries. il Kimball's D F 15:8 Ja 15 '17
- Varieties of alfalfa. il Nat Stock & F 40:692 O 7 '16

**Alfalfa as feed**

- Alfalfa bloat. R. H. Williams. Hoard's D 53: 477 Ap 6 '17
- Alfalfa-fed baby beeves. J. W. Frazier. il Breeder's Gaz 73:316 F 14 '18

- Alfalfa for horses. L. Ogilvy. Breeder's Gaz 70:473 S 21 '16
- Alfalfa for poultry. C. B. Allaire. Am P Advocate 26:39 D '17
- Alfalfa for poultry. J. Marsh. Hoard's D 52: 606 N 17 '16
- Alfalfa for seed and forage. H. W. Hulbert. il Country Gent 83:9+ Ap 20 '18
- Alfalfa for the dairy cow. J. C. Beavers. il Kimball's D F 16:105 F 15 '18
- Alfalfa hay situation. Wallaces' F 43:1790 D 6 '18
- Alfalfa meal. Hoard's D 54:729 D 14 '17
- Alfalfa not a balanced ration. Hoard's D 51: 776 Je 2 '16
- Alfalfa not a poultry feed. Hoard's D 52:173 S 1 '16
- Alfalfa not a poultry feed (?). B. Forbell. Hoard's D 52:355 O 6 '16
- Alfalfa saves the day for the American swine grower. J. M. Evvard. il Country Gent 82:956 Je 2 '17
- Alfalfa steaming box. Country Gent 81:800 Ap 8 '16
- Alfalfa's place on the horse's bill-of-fare. A. C. Hartenbower. Country Life 32:92 S '17
- Balanced ration from alfalfa and silage; alfalfa substituted for grain. Rural N Y 75: 1536 D 16 '16
- Chopped alfalfa vs. bran in grain ration for dairy cows. W. P. Snyder and E. A. Burnett. il Neb Ag Exp B 164:1-11 '18; Abstract. Wallaces' F 43:1648 N 8 '18; Excerpt. Hoard's D 56:485 N 1 '18
- Clover vs. alfalfa for milk production. C. C. Hayden. Ohio Ag Exp B 327:1-36 '18; Abstract. Ohio Ag Exp B v 3:184-6 Je '18
- Corn and alfalfa feeding trial. Hoard's D 56: 428 O 18 '18
- Cows prove alfalfa superior to bran. Hoard's D 56:485 N 1 '18
- Digestibility of corn silage, velvet-bean meal, and alfalfa hay when fed singly and in combinations. P. V. Ewing and F. H. Smith. J Ag Research 13:611-18 Je 17 '18
- Effects of alfalfa hay. H. M. Wilson. Hoard's D 52:75 Ag 11 '16
- Feeding alfalfa in the west. F. F. Dean. Hoard's D 51:958 Jl 14 '16
- Feeding value of alfalfa. H. G. Van Pelt. Kimball's D F 14:432, 461 Jl 1-15 '16
- Full value from alfalfa. F. W. Merrill. Kimball's D F 16:543 Jl 1 '18
- Making alfalfa meal. E. A. Burnett. Rural N Y 75:1092 Ag 19 '16
- Manufacture of alfalfa meal. Breeder's Gaz 69:272 F 3 '16
- Pasturing hogs on alfalfa. H. W. Doyle. il Hoard's D 53:89 F 9 '17
- Organizing for feed defense. S. Sosland. Hoard's D 56:35 Ag 2 '18
- Several hog-feeding inquiries. Prog F 33:35 Ja 12 '18
- Silage and alfalfa for cows. Hoard's D 53: 971 Jl 13 '17
- Surplus lucerne hay. T. A. J. Smith. J Dept Ag Victoria 14:138-9 Mr '16
- Trials with alfalfa as a hog feed; some pasture crops for hogs. W. H. Peters and D. J. Geiken. N D Ag Exp C 13:1-8 My '16
- Utilization of feed by range steers of different ages; alfalfa hay and milo maize meal. F. W. Christensen and others. il N M Ag Exp B 103:1-117 '16
- Value of alfalfa as a dairy feed and horse ration. C. D. Carlisle. Coop Manager & F 6: 84-5 Ja '17
- Value of barley for cows fed alfalfa; experiments in California. G. H. True and others. Int R Sci & Prac Ag 7,no 3:402-3 Mr '16

**Silage**

- Alfalfa as silage. H. W. Doyle. Country Gent 81:1930 N 4 '16
- Alfalfa for silage in California. F. W. Woll. Hoard's D 51:170 F 18 '16
- Alfalfa silage. O. E. Reed and J. B. Fitch. il Kan Ag Exp B 217:1-9 '17
- Alfalfa silage. F. W. Woll. Wallaces' F 41:875 Je 16 '16
- Alfalfa silage for summer feed. C. Atwood. il O Judd Farmer 62:1 My 12 '17

**Alfalfa as feed—Silage—Continued**

Alfalfa silage mixtures. J. B. Fitch. *Walters' F* 41:974 J1 14 '16

Chemical studies in making alfalfa silage. C. O. Swanson and E. L. Tague. *J Ag Research* 10:275-92 Ag 6 '17

Chemistry of sweet-clover silage in comparison with alfalfa silage. C. O. Swanson and E. L. Tague. *J Ag Research* 15:113-32 O 14 '18

Clover or alfalfa in the silo. F. C. Minkler. *Rural N Y* 75:1027 J1 29 '16

Preserving alfalfa silage. O Judd Farmer 60:8 Je 24 '16

**Alfalfa as food**

Alfalfa as human food. A. D. Faville. *Country Gent* 81:1332 J1 8 '16

Alfalfa food specialties, for which a plant has been established at Council Bluffs, Iowa, for the manufacture of alfalfa products for human food by a new process, will include, it is said, alfalfa flour, alfalfa sirup, alfalfa cookies, alfalfa candy, alfalfa tea and coffee substitutes, and alfalfa extracts

*See also Alfalfa flour*

**Alfalfa caterpillars**

Alfalfa caterpillar. V. L. Wildermuth. *il U S Ag B* 124:1-40 '14

**Alfalfa crown wart**

Alfalfa crown wart in the western United States. R. McKee. *Am Soc Agron J* 8:244-6 J1 '16

**Alfalfa driers**

Dairy lowering costs while increasing production. *il System on the Farm* 1:182-3 J1 '17

**Alfalfa flour**

Alfalfa flour for cooking. *Rural N Y* 75:791 My 20 '16

Making wholesome bread out of alfalfa hay. E. Hendrick. *Scientific Am* (233 Broadway, N.Y. 10c) 116:441 My 5 '17

**Alfalfa hoppers, Three-cornered**

Three-cornered alfalfa hopper. V. L. Wildermuth. *biolog il map J Ag Research* 3:343-62 Ja '15

**Alfalfa loopers**

Alfalfa looper, *autographa californica* Speyer. A. Gibson. *il Ag Gaz of Canada* 5:132-6 F '18

**Alfalfa webworms. See Garden webworms****Alfalfa weevils**

Alfalfa weevil. H. R. Hagan. *il Utah Ag Exp C* 31:1-8 '18

Alfalfa weevil. H. S. Smith. *il Cal State Comm Hort B v* 6:295-7 J1 '17

Alfalfa weevil and methods of controlling it. G. I. Reeves and others. *il map Farmers' B* 741:1-16 '16

Alfalfa weevil and state quarantine. G. P. Weldon. *il Cal State Comm Hort B v* 7:484-7 Ag '18

Alfalfa weevil and the menace of Tia Juana, Mexico. H. V. M. Hall. *il Cal State Comm Hort B v* 6:233-5 Je '17

Alfalfa weevil investigation. G. I. Reeves. *J Econ Entom* 10:123-31 F '17

Birds in relation to the alfalfa weevil. E. R. Kalmbach. *il map U S Ag B* 107:1-64 '14

California state commission of horticulture quarantine order no. 29. *Cal State Comm Hort B v* 6:32 Ja '17

Cultivation kills the weevil. *Country Gent* 81:264 F 5 '16

Report of recent investigation for evidence of alfalfa weevil in alfalfa fields adjacent to the Salt Lake railroad. V. G. Stevens. *Cal State Comm Hort B v* 7:546-8 S '18

*Sporotrichum globuliferum* Speg., a natural enemy of the alfalfa weevil. L. P. Rockwood. *J Econ Entom* 9:493-9 O '16

**Alfalfa worm. See Fall army worm****Alfalfa yellow-leafblotch**

Yellow-leafblotch of alfalfa caused by the fungus *pyrenopeziza medicaginis*. F. R. Jones. *biolog il J Ag Research* 13:307-30 My 6 '18

**Algae**

Algae of the Hawaiian archipelago. V. MacCaughey. *Bot Gaz* 65:42-57, 121-49 Ja-F '18

Axial susceptibility gradients in algae. C. M. Child. *biolog Bot Gaz* 62:89-114 Ag '16

Composition and use of certain seaweeds. J. Hendrick. *J Bd Ag* 22:1095-1107 F '16

Cytological studies in protococcales; cell structure and autospore formation in tetradion minimum (A. Br.). Hansg. G. M. Smith. *biolog il Ann Bot* 32:459-64 O '18

Cytological studies in the protococcales; cell structure and zoospore formation in pediatrum Boryanum (Turp.). Menegh. G. M. Smith. *biolog il Ann Bot* 30:467-79 J1 '16

Cytological studies in the protococcales; zoospore formation in characium Sieboldii. A. Br. G. M. Smith. *biolog il Ann Bot* 30:459-66 J1 '16

Dysmorphococcus variabilis. H. Takeda. *Ann Bot* 30:151-6 Ja '16

Geographical distribution of the marine algae. W. A. Setchell. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:197-204 Mr 2 '17

Industrial uses of seaweed, more especially as manure. P. Gloess. *Int R Sci & Prac Ag* 7,no 12:1747-9 D '16

Manure from the sea. E. H. Jenkins and J. P. Street. *il Conn State Ag Exp B* 194:1-13 '17

New Pacific Coast marine algae. N. L. Gardner. *biolog il Cal Univ Pub Botany v* 6,no 16 429-54p '18 (25c)

New species of green algae. E. N. Transeau. *Am J Bot* 1:289-301, pl 25-9 Je '14

Notes on osmotic experiments with marine algae. R. H. True. *biolog Bot Gaz* 65:71-82 Ja '18

On a species of chlamydomonas. F. E. Fritsch and H. Takeda. *Ann Bot* 30:373-7 J1 '16

On carteria Fritschii, sp. nov. H. Takeda. *il Ann Bot* 30:369-72 J1 '16

On the life-history and cytology of chlorochytrium grande, sp. nov. B. M. Bristol. *il Ann Bot* 31:107-26 Ja '17

Periodicity of freshwater algae. E. N. Transeau. *Am J Bot* 3:121-33 Mr '16

Picro-nigrosin, a combination fixative and stain for algae. O. F. Curtis and R. H. Colley. *biolog Am J Bot* 2:89-92 F '15

Production of alcohol from algae. *Int R Sci & Prac Ag* 9,no 5:612-13 My '18

Puget Sound algae. G. B. Rigg. *Bot Gaz* 63:415-17 My '17

Scourfieldia cordiformis, a new chlamydomonad. H. Takeda. *Ann Bot* 30:157-9 Ja '16

\* Sea-meadows. J. A. Thomson. *New Statesman* (10 Great Queen st, Kingsway, London, W.C. 6d) 11:449-50 S 7 '18

Seaweed as a fertilizer. B. L. Emslie. *Ag Gaz of Canada* 4:936-41 N '17

Seaweeds from American waters; photographs. S. L. Bastin. *il Country Life* 32:52 Ag '17

Seaweeds of Hawaii. V. MacCaughey. *Am J Bot* 3:474-9 O '16

Seaweeds; some of their economic uses and possibilities. M. A. Howe. *Sci Am Sup* (233 Broadway, N.Y. 10c) 83:134-5 Mr 3 '17

Structure and mode of life of a form of horridium flaccidum. A. Braun. A. Piercy. *il Ann Bot* 31:513-37 J1 '17

Studies on nuclear division in desmids; hyalotheca dissiliens (Sm.) Breb. E. Acton. *il Ann Bot* 30:379-82 J1 '16

Temperature coefficient of the duration of life of ceramium tenuissimum. A. H. Ayres. *biolog Bot Gaz* 62:65-9 J1 '16

*See also* Diatoms; Dumontia filiformis; Fucus; Kelp; Volvox; Zygnema

**Algae as feeding stuff.** *See* Feeding and feeding stuffs—Algae

**Algaroba. See Carob**

**Algaroba beans**

Locust-bean. J. Beverley. *J Ag New Zealand* 13:471 D '16

**Algeria**

*See also* subhead Algeria under Agricultural credit; Agriculture; Forests and forestry; Live stock

**Industries and resources**

Algerian forest code. T. S. Woolsey, jr. *For Quar* 14:66-80 Mr '16

Notes on French forestry in Africa and Corsica. T. S. Woolsey, jr. *Soc Am For Pro* 11:343 J1 '16



**Alkali lands.** See Soils, Alkali

**Alkalies**

- Effect of alkali upon Portland cement. K. Steik. *il Wyo Ag Exp B* 113:71-122 '17
- Effect of some alkali salts upon fire-holding capacity of tobacco. H. R. Kraybill. *bibliog Bot Gaz* 64:42-56 J1 '17
- Effects of alkali salts on nitrification. P. E. Brown and E. B. Hitchcock. *bibliog Soil Sci* 4:207-29 S '17
- Possibility of utilising reh of sajjji mitti for the manufacture of commercial alkalis. A. H. Silver. *Ag J of India* 12:477-80 J1 '17
- Report of committee on the use of alkalies in buttermaking. J. H. Frandsen and others. *J Dairy Sci* 1:162-73 J1 '17

**Alkaloids**

- Application of optical methods of identification to alkaloids and other organic compounds. E. T. Wherry. *U S Ag B* 679:1-9 '18
- Physiological observations on alkaloids, latex and oxidases in papaver somniferum. R. H. True and W. W. Stockberger. *Am J Bot* 3:1-11 Ja '16

**Allergias**

- Notes on parasitic anaphylaxis and allergy. L. Van Es and A. F. Schalk. *il N D Ag Exp B* 125:151-93 '17

**Alligator pears.** See Avocados

**Allium**

- Permeability of the cell walls of allium. S. C. Brooks. *Bot Gaz* 64:509-12 D '17
- Reduction divisions in the pollen mother cells of allium tricoccum. M. Nothnagel. *bibliog il Bot Gaz* 61:453-76 Je '16

See also Onions; Wild garlic

**Allotment of land**

- Acquisition of land for crops in England. *Gard Chron (Lond)* 60:296-7 D 16 '16
- Allotment gardens in Belfast. G. H. Oliver. *il J Dept Ag Ireland* 17, no 3:428-32 '17
- Allotment gardens in Stafford. *J Bd Ag* 23:489-90 Ag '16
- Allotment in Leeds, and its lessons. A. G. Ruston. *J Bd Ag* 25:303-9 Je '18
- Allotments in England with special reference to Oxfordshire. *Int R Ag Econ* 9,no 2:153-65 F '18
- Allotments in 1918. *J Bd Ag* 24:1257-62 F '18; Abstract. *Int R Ag Econ* 9,no 3:256-8 Mr '18
- Allotments in the year 1793 and in 1917. *il Gard Chron (Lond)* 62:256 D 29 '17
- Distribution of rural property and land settlement in their relation to the agrarian problem. *Int R Ag Econ* 65:99-115; 67:95-106 My, J1 '16
- Gardens and allotments. *Gard Chron (Lond)* 62:228 D 8 '17
- Improvement of allotments. *J Bd Ag* 22:958-63 Ja '16
- Land settlement in Victoria. F. E. Jenkins. *Int R Ag Econ* 67:87-94 J1 '16
- Land settlement of ex-service men. *J Bd Ag* 25:71-5 Ap '18
- Management of allotments for tenants on military service. *J Bd Ag* 23:74 Ap '16
- Notes on allotments. *J Bd Ag* 25:456-8 J1 '18
- Production of food in urban centres: Birkenhead. *J Bd Ag* 24:551-5 Ag '17
- Putting England's acres to work. C. Mackenzie. *il Country Gent* 83:15 F 16 '18
- Rights of allotment holders. *Gard Chron (Lond)* 61:211 My 26 '17
- Salvation army holdings at Boxted. *J Bd Ag* 23:136-9 My '16
- Settlement of ex-service men within the British empire after the war. *Ag Gaz of Canada* 5:427-31 Ap '18; Same. *Int R Ag Econ* 83:75-80 N '17

Some aspects of the allotments movement in France. *J Dept Ag Ireland* 17,no 4:611-18 '17

Town allotments and productive thrift. G. Fletcher. *J Dept Ag Ireland* 17,no 3:433-41 '17

Working of the small holdings and allotments act, 1908. *Int R Ag Econ* 67:107-15 J1 '16

See also Croydon vacant lands cultivation society; West Bridgford allotment-holders' association

**Almanacs**

- Farm almanac and buyers' guide. 140p *il n.d.* Federation of Jewish farmers of America, 174 2d av., N.Y.
- Most of the text is in Yiddish

**Almond**

- Almond in California. R. H. Taylor. *bibliog il Cal Ag Exp B* 297:1-72 '18

**Diseases and pests**

- Eurytoma sp., an hymenopteran pest on almond trees in Palestine. J. Aharoni. *Int R Sci & Prac Ag* 7,no 11:1723-4 N '16

**Marketing**

See also California almond growers' exchange

**Almond oil**

- \* Oil in cherry pits. H. L. Maxwell. *School Sci and Math* (2059 E. 72d Place, Chicago 30c) 18:401-4 My '18

**Almshouses**

- Your poorhouse farm. H. A. Bereman. *Country Gent* 31:427 F 19 '16

**Alpaca**

- Mohair versus alpaca. S. B. Hollings. *Am Sheep B & W* 38:354 My '18

**Alpine plants**

- Alpine flowers under glass. *Gard Chron Am* 20:510 D '16
- Alpine garden. *Gard Chron (Lond)* 61:241; 62:105 Je 16, S 15 '17
- Alpine garden. S. Arnott. *Gard Chron (Lond)* 63:77 F 23 '18
- Alpine garden; anemone allenii; double crimson pompadour primrose. S. Arnott and E. H. Jenkins. *Gard Chron (Lond)* 63:229 Je 1 '18
- Alpine house at Wisley. *Gard Chron (Lond)* 59:169-70 Mr 25 '16
- Alpine plants for the rock garden. Mrs L. S. Chanler. *il Mass Hort Soc Trans* 1918,pt 1:17-32 '18
- Alpines for early bloom. M. Free. *Gard M* 25:84 Mr '17
- Alpines in dry weather. S. Arnott. *Gard Chron Am* 21:301 Ag '17
- Alpines without a rock garden. C. Elliott. *Gard Chron (Lond)* 61:211 My 26 '17; Same. *Gard Chron Am* 21:276 J1 '17
- Foothills vegetation in the Colorado front range. A. G. Vestal. *bibliog il Bot Gaz* 64:353-85 N '17
- Planting the alpine or rock garden. G. H. Chisholm. *il Gard Chron Am* 20:346-8 Ag '16
- Quadrat studies in a mountain grassland. F. Ramaley. *Bot Gaz* 62:70-4 J1 '16
- Vegetation of the Selkirks. C. H. Shaw. *map Bot Gaz* 61:477-94 Je '16

See also Cushion plants; Drabas

**Alsace-Lorraine**

- Has France a right to Alsace-Lorraine? C. Poe. *Prog F* 33:1313 N 30 '18

**Alsike clover.** See Clover, Alsike

**Alternaria**

- Alternaria leaf-spot of cotton. R. C. Faulwetter. *il Phyt* 8:98-105 Mr '18
- Alternaria on datura and potato. R. D. Rands. *bibliog il Phyt* 7:327-38 O '17
- Alternaria panax, the cause of a root-rot of ginseng. J. Rosenbaum and C. L. Zinnsmeister. *il J Ag Research* 5:181-2 O 25 '15
- Early blight of potato and related plants. R. D. Rands. *bibliog il Wis Ag Exp Research B* 42:1-48 '17
- New leaf-spot disease of cherries. B. A. Rudolph. *il Phyt* 7:188-97 Je '17
- Taxonomic characters of the genera alternaria and macrosporium. J. A. Elliott. *bibliog il Am J Bot* 4:439-76 O '17

**Althæa**

- Hedge of althæa. G. W. Kerr. *Country Gent* 81:455 F 26 '16

**Altica bimarginata Say.** See Alder flea-beetles

**Alum in food**

- Alum in foods. *U S Ag B* 103:1-7 '15

**Aluminum**

Toxic action of soluble aluminium salts upon the growth of the rice plant. K. Miyake. *Int R Sci & Prac Ag* 9, no 5:552-4 My '18

See also Plants, Effect of aluminum on

**Alunite**

Alunite deposits of Australia and their utilization. (B. 3) 38p bibliog il maps '17 Advisory council of science and industry, Melbourne, Australia

Alunite near Marysville, Utah. (*In* Am. fertilizer hdbk., 1917, p. 80-1) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia  
New deposit of alunite. T. H. Norton. *Am Fert* 44:54 Je 24 '16

Potash from alunite. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 17: 433 O 1 '17

\* Potash from desert lakes and alunite. J. W. Hornsey. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10: 838-9 O '18

Potash salts—1915. W. C. Phalen. *Am Fert* 45:29-30 S 2 '16

Potassium sulphate from alunite at Marysville, Utah. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:391-2 Ap 15 '18

Recovery of potash from alunite. W. H. Wagaman and J. A. Cullen. map U S Ag B 415:1-14 '16

**Alvarado Jersey cattle club**

Community cattle clubs. D. F. Bobbitt. *Prog F* 31:292 F 26 '16

**Amaryllis**

Adaptable amaryllis. *il Gard M* 25:302 Je '17

Care of amaryllis. *Rural N Y* 75:887 Je 17 '16

Hippeastrum (amaryllis). *Gard Chron Am* 22: 152 My '18

Hippeastrums. *Gard Chron (Lond)* 63:63 F 16 '18

**Ambler, Pennsylvania**

Back to the farm! School of horticulture at Ambler, Pennsylvania. Illustrated World (Drexel av, and 58th st, Chicago 15c) 28:613 D '17

**Ambrosia beetles**

Orchard barkbeetles and pinhole borers, and how to control them. F. E. Brooks. *il Farmers' B* 763:1-15 '16

**Amentiferae**

Seeding anatomy of certain amentiferae. A. J. Davey. bibliog *il Ann Bot* 30:575-99 O '16

**American and delaine merino record association**

American merino interests unite. *Am Sheep B & W* 37:17 Ja '17

Annual meeting, Columbus, Ohio, Jan. 5. *Am Sheep B & W* 38:130 F '18

**American association for agricultural legislation**

Agricultural legislation. Public (122 E. 37th st, N.Y. 10c) 21:562-3 My 4 '18

**American association for the advancement of agricultural teaching**

8th annual meeting, Washington, D.C., Nov. 13, 1917. *Exp Station Rec* 37:798 D '17

**American association of creamery butter manufacturers**

Annual meeting, Chicago, Feb. 20, 1917. *Creamery* 5:59 Mr '17; *Hoards D* 53:274 Mr 9 '17

Annual meeting, Chicago, Feb. 20, 1917. G. L. McKay. *N Y Prod R* 43:714 F 28 '17

District meeting, St Paul, Minn., Sept. 6, 1917. *Creamery* 6:70 O '17

Meeting at Omaha. *N Y Prod R* 42:142+ My 17 '16

**American association of dairy, food and drug officials. See Association of American dairy, food and drug officials****American association of economic entomologists**

List of officers and members, 1916; and list of meetings and past officers. *J Econ Entom* 9: ix-xxi F '16

List of officers and members, 1917. *J Econ Entom* 10:ix-xxii F '17

Proceedings of the 28th annual meeting, Columbus, O., Dec. 27-30, 1915. *J Econ Entom* 9:1-14 F '16

Proceedings of the 29th annual meeting, N.Y. City, Dec. 28-30, 1916. *J Econ Entom* 10: 1-224 F '17

Papers and proceedings of the 30th annual meeting, Pittsburgh, Pa., Dec. 31, 1917; Officers and members, 1918; List of meetings and past officers. *J Econ Entom* 11: ix-xxiii, 1-156, 157-267 F-Ap '18

16th annual meeting of the section on horticultural inspection, Pittsburgh, Pa., Jan. 1, 1918. *J Econ Entom* 11:118-48 F '18

Proceedings of the first annual meeting of the Pacific slope branch, San Diego, Cal., Aug. 10-11, 1916. *il J Econ Entom* 9:453-510 O '16

2d annual meeting of the Pacific Slope branch, Stanford university, Cal., April 5-6, 1917. *il J Econ Entom* 10:305-76 Je '17

3d annual meeting of the Pacific slope branch, Citrus experiment station, Riverside, California, March 28-29. *J Econ Entom* 11:275-341 Je '18

**American association of farmers' institute workers**

Proceedings of the 21st annual meeting, Washington, D.C., Nov. 13-15, 1916. *Am Assn Farmers' Inst Workers Pro* 1916:1-138 '17

22d annual meeting, Washington, D. C., Nov. 12-14, 1917. bibliog *Am Assn Farmers' Inst Workers Pro* 1917:1-139 '18

**American association of instructors and investigators in poultry husbandry**

Association of poultry instructors and investigators. *Reliable P J* 25:679+ O '18

Earnest and loyal friends of poultry culture. *Reliable P J* 24:967 Ja '18

**American association of medical milk commissions**

Report of the committee on veterinary inspections and protection against tuberculosis, 1916-1917. E. C. Fleischner. *Am Vet M Assn J* 52:268-88 D '17

**American association of nurserymen**

Active for trade betterment. *Am Flor* 48:778 Ap 21 '17

41st annual convention, Milwaukee, Wis., June 28-30, 1916. *Am Flor* 46:1274, 1322-3, 1370 Jl 1-15 '16; *Fruit-Grower* 27:376 Ag 1 '16

42d annual convention, Philadelphia, Pa., June 27-29, 1917. *Am Flor* 48:1344-5+ Jl 7 '17

43d annual convention, Chicago, June 26-28. *Am Flor* 50:1232 Jl 6 '18

New committees. *Am Flor* 47:642 O 7 '16

**American association of official horticultural inspectors**

Proceedings of the 14th annual meeting, Columbus, O., Dec. 28-29, 1915. *J Econ Entom* 9:200-3 F '16

**American association of park superintendents**

19th annual convention, St Louis, Mo., Sept 11-13, 1917. *Am Flor* 49:486 S 22 '17

Partial programme of activities for 1917. *Gard Chron Am* 20:518 D '16

**American association of refrigeration**

Annual convention, New York city, Nov. 8-9. *N Y Prod R* 45:50 N 14 '17

Joint convention with cold storage subdivision of American warehousemen's association. *N Y Prod R* 47:178-9 D 11 '18

6th annual convention, Chicago, Oct. 11-13. *N Y Prod R* 42:1082+ O 18 '16

**American bankers association****Agricultural commission**

Making the hyphen larger; the agricultural commission of the A. B. A. gives a report. J. Hirsch. *Banker-F* 5:13-14 Je '18

**American Berkshire congress. See National Berkshire congress association****American carnation society**

Annual meeting and exhibition, Boston, Mass., Jan. 30-31. *Am Flor* 50:97-100, 145-7 F 2-9 '18



- American carnation society**—*Continued*  
25th annual meeting and exhibition, St. Louis, Mo., Jan. 26-27; with list of awards. *Am Flor* 46:53-9 Ja 29 '16  
26th annual meeting and exhibition, Indianapolis, Ind., Jan. 31-Feb. 1, 1917. *Am Flor* 48:109-16, 173-6 F 3-10 '17
- American chemical society**  
Annual meeting, Cleveland, Sept. 10-12, 1918. *Am Fert* 49:32-3 O 12 '18  
55th annual meeting, Boston, Sept. 10-13. *Am Fert* 47:21-30 S 29 '17  
Some practical suggestions from the American chemical society. L. Stanley. *J Home Econ* 9:257-61 Je '17
- American cooperative journal**  
By-laws of the Co-operative journal company. *Am Coop J* 11:912-13 My '16
- American cotton manufacturers' association**  
Proceedings of the 21st annual convention, Washington, D. C., May 22-23, 1917, together with certificate of incorporation and by-laws. 128p '17 *Am. cotton mfrs. assn.*, W. D. Adams, sec., Charlotte, N.C.
- American cranberry exchange**  
Is co-operative marketing practical for beekeepers? C. Gano. *il Am Bee J* 58:14 Ja '18
- American dahlia society**  
2d annual meeting, New York, Sept. 26-28, 1916. *il Am Flor* 47:546-7, 601-3 S 30-O 7 '16  
3d annual meeting, New York, Sept. 25-7. *Am Flor* 49:537-9, 594 S 29-O 6 '17
- American dairy record association**  
Grade cow herdbook. W. C. Jeffries. *il Ohio F* 138:71 Jl 22 '16
- American dairy science association**  
Province of the dairy instructors in helping to solve the problem of the price of milk. H. E. Van Norman. *J Dairy Sci* 1:433-6 Ja '18  
12th annual conference, Columbus, Ohio, October 22, 1917. *N Y Prod R* 44:1132 O 31 '17; *J Dairy Sci* 1:377-44 Ja '18
- American farm management association**  
American farm management association meets. F. W. Peck. *Hoard's D* 55:6 Ja 25 '18  
Record of the proceedings of the 6th annual meeting, Berkeley, Cal., August 9-10, 1915. 91p *il '16 G. A. Billings, sec.*, Washington, D.C.
- American federation of water users**  
32 water users' associations form new organization. *Irr Age* 31:133 Jl '16
- American feed manufacturers' association**  
9th annual meeting, Chicago, June 14-16, 1917. *Hoard's D* 52:918 Je 29 '17  
10th annual convention, Buffalo, N.Y., June 7-8. *Coop Manager & F* 7:94 Jl '18
- American fertilizer hand book, 1917; the standard reference book and directory of the commercial fertilizer industry and allied trades.** various paging \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- American foresters, Society of.** See *Society of American foresters*
- American forestry association**  
37th annual meeting and the International forestry conference, Washington, D.C., Jan. 18-19, 1917. *Am For* 23:108-9 F '17
- American gladiolus society**  
8th annual exhibition, Bronx park, New York, August 23. *il Am Flor* 49:336 S 1 '17  
9th annual meeting and exhibition, Buffalo, N.Y., Aug. 14-17. *Am Flor* 51:251-2 Ag 24 '18
- American Guernsey cattle club**  
Annual meeting, Chicago, May 15. *Breeder's Gaz* 73:1092 My 23 '18; *Hoard's D* 55:775 My 24 '18; *Kimball's D F* 16:454 Je 1 '18  
Annual meeting, New York, May 10, 1916. *Jersey B* 35:766 My 17 '16; *Breeder's Gaz* 69:1071 My 18 '16; *Hoard's D* 51:742 My 26 '16; *Kimball's D F* 14:367 Je 1 '16; *Country Gent* 81:1196 Je 10 '16  
Annual meeting, New York, May 16, 1917. *Jersey B* 36:840 My 30 '17; *Hoard's D* 53:794 Je 1 '17; *Kimball's D F* 15:385 Je 1 '17  
Annual meeting to be held in Chicago, May 15th. *Kimball's D F* 16:214 Mr 15 '18
- American Holstein-Friesian association.** See *Holstein-Friesian association of America*
- American home economics association**  
11th annual meeting, Chicago, June 27-29. C. Winchell. *J Home Econ* 10:435-6 S '18  
Emergency committee. I. E. Lord. *J Home Econ* 9:268-70 Je '17
- American horticultural congress.** See *National congress of horticulture*
- American Jersey cattle club**  
Address of president. M. D. Munn. *Jersey B* 35:935-+ Je 14 '16  
Amendment of club constitution. R. M. Gow. *Jersey B* 36:505 Ap 4 '17  
Amendments to the constitution of the club proposed. R. M. Gow. *Jersey B* 36:798 My 23 '17  
A. J. C. C. and the fairs. R. M. Gow. *Jersey B* 36:395 Mr 14 '17  
A. J. C. C. and the 1918 fairs. R. M. Gow. *Jersey B* 37:394 Mr 13 '18  
A. J. C. C. Club fair premium list. *Jersey B* 37:726 My 8 '18  
American Jersey cattle club fair premiums—1916. *Jersey B* 35:682 My 3 '16  
A. J. C. C. jubilee year. R. M. Gow. *Jersey B* 36:1366-7 S 5 '17  
Annual report, 1915-1916; extracts. R. M. Gow. *Hoard's D* 51:695 My 19 '16  
Appropriation for premiums at the National dairy show. R. M. Gow. *Jersey B* 37:1636 O 9 '18  
Black-and-white-and-fawn. A. L. Tichane. *Jersey B* 37:1870 N 6 '18  
Club flag. *Jersey B* 35:1355 Ag 30 '16  
Club's fiftieth year its greatest. R. M. Gow. *Jersey B* 36:2016-17 D 26 '17  
For a progressive club. J. M. Axley. *Jersey B* 35:638 Ap 26 '16  
48th annual meeting, New York city, May 3, 1916. *Jersey B* 35:721-2+ My 10 '16; *Breeder's Gaz* 69:1016 My 11 '16; *Kimball's D F* 14:342+ My 15 '16; *Hoard's D* 51:694 My 19 '16; *Field* 11 26:514 Je '16  
49th annual meeting, New York city, May 2, 1917. *il Jersey B* 36:705-9, 711-13 My 9 '17; *Kimball's D F* 15:352 My 15 '17; *Hoard's D* 53:726 My 18 '17; *Field* 11 27:458-9 Je '17  
50th annual meeting, New York city, April 30-May 1. *Jersey B* 37:715-17+ My 8 '18; *Kimball's D F* 16:390 My 15 '18; *Breeder's Gaz* 73:1037 My 16 '18  
Get acquainted with the club. A. L. Tichane. *Jersey B* 37:1637-8 O 9 '18  
Making of a moving picture. R. M. Gow. *il Jersey B* 37:1673-5 O 9 '18  
Mr Gow explains. R. M. Gow. *Kimball's D F* 16:334 Ap 15 '18  
Practical value of register of merit work. R. E. Hutchison. *Jersey B* 36:267 F 21 '17  
Proclamation of the American Jersey cattle club. M. D. Munn. *Hoard's D* 54:252 S 21 '17  
Regarding the fee, registration of foreign and domestic animals. F. R. Clark. *Jersey B* 35:765 My 17 '16  
Scale points. R. M. Gow. *Jersey B* 36:1330-1 Ag 29 '17  
Significant year. *Breeder's Gaz* 71:975 My 10 '17  
Stimulating dairy farming with advertising. W. Macmonnies. *Jersey B* 36:85 Ja 17 '17  
Where is that jewel, consistency? T. S. Cooper. *Breeder's Gaz* 35:554+ Ap 12 '16; Same cond. *Breeder's Gaz* 69:824 Ap 13 '16
- American journal of physical anthropology**  
New scientific journal. *J Heredity* 9:131 Mr '18
- American milking shorthorn breeders' association**  
1st annual meeting, Hamline, Minn. *Breeder's Gaz* 70:491 S 21 '16
- American milking shorthorn cattle club**  
1st annual meeting, Cleveland, Feb. 29-Mar. 2. *il Field* 11 26:324-5+ Ap '16
- American national live stock association**  
Annual meeting, El Paso, Tex., Jan. 25-27, 1916. *Breeder's Gaz* 69:312 F 10 '16  
Annual meeting, Salt Lake City, Utah, Jan. 14-17. *Breeder's Gaz* 73:207 Ja 31 '18  
Market committee's work. J. B. Killian. *Breeder's Gaz* 70:126 Jl 27 '16

**American peony society**

14th annual meeting, Philadelphia, June 13-14, 1917. *Am Flor* 48:1201-3 Je 23 '17  
15th annual exhibition, Cleveland, O., June 5-6. *Am Flor* 50:1060 Je 15 '18

**American phytopathological society**

Abstracts of papers, 7th annual meeting, Columbus, Ohio, Dec. 28-31, 1915. *Phyt* 6:95-119 F '16

Abstracts of papers presented at the eighth annual meeting of the American phytopathological society, New York city, December 26-30, 1916. *Phyt* 7:58-78 F '17

Abstracts of papers presented at the 9th annual meeting, Pittsburgh, Dec. 28, 1917-Jan. 1, 1918. *Phyt* 8:68-82 F '18

Field conference of cereal pathologists, 1917, Madison, Wis. C. W. Hungerford. *Science* (Science Press, Garrison, N.Y. 15c) n s 46: 316-18 S 28 '17

7th annual meeting, Columbus, Ohio, Dec. 28-31, 1915. *Phyt* 6:209-18 Ap '16

8th annual meeting, Columbia university, New York City, Dec. 26-30, 1916. *Phyt* 7: 145-9 Ap '17

9th annual meeting, Pittsburgh, Pa., Dec. 28, 1917-Jan. 1, 1918. C. L. Shear. *Phyt* 8: 178-82 Ap '18

Report of the Riverside meeting of the Pacific division, December 29, 1915. *Phyt* 6:307-10 Je '16

Speeding up the plant doctors. H. R. O'Brien. *il Country Gent* 83:11+ Ag 24 '18

**American Poland China record association**

Annual meeting, Chicago, Dec. 5, 1917. *Swine World* 5:9-10 Ja '18

**American pomological society**

Fruit growers meet. Ohio F 140:454 N 17 '17

**American poultry association**

Annulment of the 1917 annual meeting of the American poultry association. T. Hewes. *Am P J* 48:804 JI '17; Same. *Reliable P J* 24:468 JI '17

Comment on reports of A. P. A. convention. H. T. Woods. *Am P J* 47:241-3 F '16

41st annual meeting, Cleveland, O., August 7-11. *Am P Advocate* 24:751 S '16

41st annual convention, Cleveland, August 7-11, 1916. L. J. Brosemer. *Reliable P J* 23: 703-5, 778-9+ S-O '16

41st annual meeting, Cleveland, Ohio, Aug. 7-11, 1916. P. T. Woods. *Am P J* 47:1056-7+ S '16

42d annual meeting, Milwaukee, Sept. 25-28, 1917. *Am P J* 48:1042-4 N '17; *Reliable P J* 24:715-18+ N '17

43d annual convention, Chicago, August 12-15. T. Hewes. *il Am P J* 49:766-7+ S '18

43d annual meeting, Chicago, Aug. 12-15, 1918. *Am P Advocate* 26:566 S '18; *Reliable P J* 25:583-91+ S '18

Great work to be undertaken. *Am P Advocate* 25:742 N '17

John H. Robinson sets out to correct D. Lincoln Orr on unwritten A. P. A. history. *Reliable P J* 24:377-8 Je '17

Misguided patriotism on the part of American poultry association. H. V. Tormohlen. *Reliable P J* 24:467 JI '17

Nation-wide campaign makes enthusiastic progress. E. Whitney. *Am P J* 48:756 Je '17

Nationalism or fraternalism? which? W. M. Higgs. *Am P J* 47:615 Ap '16

Reconstruction and future progress of the association. F. E. Hering. *Am P J* 47:1120-2 O '16

Tentative plan for co-operation of United States Department of agriculture and the American poultry association. *Reliable P J* 24:593 S '17

Trap nests—egg packages—baby chick boxes; exhibit at meeting. Chicago, Aug. 12-15. F. L. Sewell. *il Reliable P J* 25:682-3+ O '18

*See also* Poultry conference, Chicago

**American public health association**

A. P. H. A. convention. *Creamery* 6:42-3 N '17

Conference, Cincinnati, Oct. 24-27, 1916. *J Home Econ* 9:123-6 Mr '17

**American rose society**

*Am. rose society visits test garden. il Am Flor* 46:1036-7 Je 3 '16

Annual inspection of Washington test garden, June 4, 1917. *Am Flor* 48:1108-9 Je 9 '17; Same cond. *Gard Chron Am* 21:251 Je '17

Executive committee meeting, Philadelphia, May 10. E. A. White. *Am Flor* 50:972 Je 1 '18  
Hartford test garden inspection. E. A. White. *Am Flor* 50:1152 Je 29 '18

Joint meeting with Syracuse rose society at Ithaca, N.Y., June 22, 1916. *Am Flor* 46: 1233 JI 1 '16

Meeting, New York, Aug. 23. E. A. White. *Am Flor* 49:338 S 1 '17

National rose garden for America. *Gard Chron (Lond)* 63:6 Ja 5 '18

President Fennock's address at annual meeting, Philadelphia, March 21, 1917. *Am Flor* 48:636-7 Ap 7 '17

Putting the rose on the map. J. H. MacFarland. *Gard M* 26:166 D '17

17th annual meeting, Philadelphia, Pa., March 27. *Am Flor* 46:530-1, 590-1 Ap 1-8 '16

**American royal live stock show**

American Royal a splendid show. *il Wallaces' F* 43:1746-8 N 29 '18

American Royal less popular. O Judd Farmer. *61:10 O 21 '16*

Beef is king at American Royal. R. V. Hoffman. *il Field* 11 26:930-1+ N '16

Blue blood at American Royal. R. V. Hoffman. *il Field* 11 27:859-61+ N '17

Great show of the beef breeds. *Breeder's Gaz* 70:662+ O 12 '16

19th annual American Royal show. *Breeder's Gaz* 72:610-11 O 11 '17; *il Wallaces' F* 42: 1380-2 O 12 '17

1916 American Royal. *il Wallaces' F* 41:1337-8 O 13 '16

**American school of poultry husbandry**

Comment concerning T. E. Quisenberry and the correspondence courses of the American school of poultry husbandry. P. T. Woods. *Am P J* 49:148-9 F '18

What it is and what is being done there. *il Reliable P J* 24:1114-15+ F '18

**American seed trade association**

34th annual convention, Chicago, June 20-22, 1916. *Am Flor* 46:1208+, 1266+ Je 24-JI 1 '16

35th annual convention, Detroit, Mich., June 19-21, 1917. *Am Flor* 48:1234+, 1290+ Je 23-30 '17

36th annual convention, Chicago, June 18-20. *Am Flor* 50:1130+, 1178+ Je 22-29 '18

**American shorthorn breeders' association**

Beginning of the shorthorn association. S. F. Lockridge. *Breeder's Gaz* 73:15 Ja 3 '18

Home of shorthorn association. *il Breeder's Gaz* 70:975-6 N 23 '16

**American society of agricultural engineers**

Business records and committee reports presented at the 10th annual meeting, Chicago, December 1916. *Am Soc Ag Eng Trans* 10, no 1:1-122 '17

Papers presented at the 10th annual meeting, Chicago, December, 1916. *il Am Soc Ag Eng Trans* 10, no 2:1-160 '17

Report of the committee on irrigation for the year 1917. O. W. Israelsen and E. H. Murdock. *Irr Age* 33:23-5 Mr '18

Report of the 11th annual meeting, Chicago, December, 1917. *Am Soc Ag Eng Trans* 11: 1-261 '18

10th annual meeting, Chicago. C. K. Shedd. *Hoard's D* 53:6 Ja 26 '17

11th annual meeting, Chicago, Dec. 27-29, 1917. *Engineering News-Record* (10th av at 36th st, N.Y. 15c) 80:52 Ja 3 '18

Transactions; report of the ninth annual meeting, Chicago, December, 1915; with business records. *il Am Soc Ag Eng Trans* 9:1-289 '16

**American society of agronomy**

Address list of members. *Am Soc Agron J* 8: 369-81 N '16

10th annual meeting, Washington, D.C., Nov. 12-13, 1917. *Am Soc Agron J* 9:391-427 D '17



**American society of animal production**

Record of proceedings of annual meetings, Dec. 1915, and Dec. 1916. *Am Soc Animal Production Pro* 1915-1916:1-270 '17

**American sweet pea society**

Annual meeting and exhibition, Bar Harbor, Me., July 15-16, 1916; with list of awards. *il Am Flor* 47:1-4 J1 22 '16

Annual meeting and exhibition, Boston, July 7-8, 1917. *Am Flor* 49:1-2 J1 21 '17  
San Francisco show. *il Am Flor* 46:1179 Je 24 '16

10th annual meeting and exhibition, Philadelphia, June 25-26. *Am Flor* 50:1149 Je 29 '18

**American tractor association**

\* Tractor makers protest curtailment; 30 manufacturers form association. *Automotive Industries* (231 W. 39th st, N.Y. 10c) 39:657-9+ O 17 '18

**American veterinary medical association**

Constitution and by-laws. *Am Vet M Assn J* (Proc no) 50:495-511 D 15 '16

Directory of members, with addresses. *Am Vet M Assn J* (Proc no) 50:512-64 D 15 '16  
53d annual convention, Detroit; addresses and reports. *Am Vet M Assn J* 49:852-67; 50:79-119 S-O '16

53d annual convention, Detroit, Mich., August 21-24, 1916; proceedings. *Am Vet M Assn J* (Proc no) 50:424-564 D 15 '16

53d annual convention; report of committees, and attendance list. *Am Vet M Assn J* 50:246-66 N '16

54th annual meeting. J. G. Wills. *Am Vet M Assn J* 52:220-31 N '17

54th annual meeting, Kansas City, Missouri, Aug. 20-24, 1917; with constitution and by-laws, and list of members. *Am Vet M Assn J* (Pro. no.) 52:502-636 Ja 15 '18

55th annual meeting, Philadelphia. *Am Vet M Assn J* 53:694-6, 794-804; 54:163-90 S, N '18

Meeting, Philadelphia, Aug. 19-22, 1918; advance program. *Am Vet M Assn J* 53:673-8 Ag '18

Meetings of the association; with lists of officers and members. *Am Vet M Assn J* 49:558-612 J1 '16

Proceedings, 1915. *Am Vet M Assn J* 48:478-96, 634-44, 763-83; 49:125-33, 274-92, 415-31, 544-57, 718-60 Ja-Ag '16

Proposed constitution. D. M. Campbell. *Am Vet M Assn J* 51:259-65 My '17

Report of section on college faculties and examining boards. M. Jacob; R. D. Wall. *Am Vet M Assn J* 52:740-7 F '18

Report of the committee on intelligence and education, 1918. *Am Vet M Assn J* 54:71-5 O '18

Reports of resident secretaries. *Am Vet M Assn J* 51:436-43 Je '17

Secretary's annual report (1917). *Am Vet M Assn J* 52:89-99 O '17

**American warehousemen's association**

Joint convention of the cold storage subdivision with the American association of refrigeration. *N Y Prod R* 47:178-9 D 11 '18

**American white Orpington club**

Specialty clubs—of what value can they be to poultrymen? O. W. Aldrich. *Reliable P J* 24:145+ Ap '17

**American wool improvement association**

Organization and object of association. *Am Sheep B & W* 36:552 S '16

**Americans**

New civic spirit. C. Zueblin. *Ill Farmers Inst Rep* 1917:83-92 '17; Same. *Ill Farmers Inst Household Sci* 1917:67-76 '18

**Americans in China**

Magna charta of China's forestry work. J. Bailie. *il Am For* 22:268-72 My '16

**Amino-acids**

Feeding experiments on the substitution of protein by definite mixtures of isolated amino-acids. H. H. Mitchell. *Int R Sci & Prac Ag* 9,no 5:589-90 My '18

Is lysine the limiting amino-acid in the proteins of wheat, maize or oats? E. V. McCollum and others. *Int R Sci & Prac Ag* 8,no 6:901-2 Je '17

See also Glycocol

**Ammonia**

\* Ammonia and nitric nitrogen determinations in soil extracts and physiological solutions. B. S. Davisson. *il J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:600-5 Ag '18

Ammonia program for 1918. C. W. Merrill. *Am Fert* 48:32-4 Je 8 '18

\* Determination of loosely bound nitrogen as ammonia in eggs. N. Hendrickson and G. C. Swan. *il J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:614-17 Ag '18

Electric power for nitrogen fixation. E. K. Scott. *Am Inst Electrical Eng Pro* (33 W. 39th st, N.Y. \$1) 37:779-92 J1 '18

Household ammonia. J. F. Snell. *J Home Econ* 8:232-5 My '16

Presence of nitrites and ammonia in diseased plants. P. A. Bonquet and M. Bonquet. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39:2088-93 S '17

Production of ammonia from cyanamid. W. S. Landis. *Am Fert* 44:21-6 F 5 '16

Role of ammonia in the metabolism of nitrogenous substances in plants. *Int R Sci & Prac Ag* 8,no 2:204-11 F '17

Save ammonia. *N Y Prod R* 46:828 O 2 '18

Synthesis of ammonia by the Haber process. R. O. E. Davis and H. Bryan. *Am Fert* 47:29-30 S 29 '17

**Ammonia Bordeaux**

Ammonia Bordeaux for cucumber blight. H. F. Button. *Rural N Y* 76:1003 Ag 25 '17

**Ammonia in soils.** See Ammonification; Soils—

Ammonia content

**Ammoniates, Animal**

Production and sale of organic ammoniates. (In Report on the fertilizer industry, p 66-85) '16 U.S. Federal trade comm., Washington, D.C.

Western animal ammoniate market. J. H. Schmaltz. (*In* Am. fertilizer hdbk., 1918, p. J2-J7) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia

**Ammonification**

Ammonifiability versus nitrifiability as a test for the relative availability of nitrogenous fertilizers. C. B. Lipman and P. S. Burgess. *bibliog Soil Sci* 3:63-75 Ja '17

Correlation between the production of carbon dioxide and the accumulation of ammonia by soil organisms. J. R. Neller. *bibliog il Soil Sci* 5:225-41 Mr '18

Effect of soil reaction on ammonification by certain soil fungi. N: Kopeloff. *bibliog il Soil Sci* 1:541-74 Je '16

Effect of some manganese salts on ammonification and nitrification. P. E. Brown and G. A. Minges. *la Ag Exp Research B* 35:1-22 '16; Same. *Soil Sci* 2:67-85 J1 '16

Effects of certain alkali salts on ammonification. P. E. Brown and D. R. Johnson. *bibliog la Ag Exp Research B* 44:1-24 '18

Fixation of ammonia in soils. I. G. McBeth. *J Ag Research* 9:141-55 Ap 30 '17

Further studies of the nature of ammonification. K. Miyake. *Soil Sci* 4:321-5 O '17

Importance of mold action in the soil; ammonification. S. A. Waksman. *Soil Sci* 6:142-5 Ag '18

Influence of some common humus-forming materials of narrow and of wide nitrogen-carbon ratio on bacterial activities. P. E. Brown and F. E. Allison. *Soil Sci* 1:49-75 Ja '16

On the nature of ammonification and nitrification. K. Miyake. *Soil Sci* 2:481-92 N '16

Oxygen requirements of biological soil processes. T. J. Murray. *bibliog J Bact* 1:597-614 N '16

Relation between certain bacterial activities in soils and their crop-producing power. P. E. Brown. *J Ag Research* 5:855-69 Ja 31 '16

Some effects of oxygen and carbon dioxide on nitrification and ammonification in soils. J. K. Plummer. *bibliog Cornell Ag Exp B* 384:305-30 '16; Same. *Cornell Ag Exp Rep* 1917:305-30 '18

**Ammonification—Continued**

Sulfocation in relation to nitrogen transformations. J. W. Ames and T. E. Richmond. *Soil Sci* 5:311-21 Ap '18

**Ammonium chloride**

Influence of various cations upon the rate of absorption of ammonium ion by soil. K. Miyake. bibliog *Soil Sci* 2:583-8 D '16

**Ammonium fluoride.** See Hydrofluoric acid**Ammonium phosphate**

Some availability studies with ammonium phosphate and its chemical and biological effects upon the soil. F. E. Allison. bibliog *Soil Sci* 5:1-80 Ja '18

**Ammonium sulfate**

Adsorption of ammonium sulfate by soils and quartz sand. M. I. Wolkoff. *Soil Sci* 3:561-4 Je '17

British sulphate of ammonia. *Am Fert* 44:53 Je 24 '16

Carbon and nitrogen changes in the soil variously treated: soil treated with lime, ammonium sulfate and sodium nitrate. R. S. Potter and R. S. Snyder. bibliog *il Soil Sci* 1:76-94 Ja '16

Cause of the injurious effect of sulfate of ammonia when used as a fertilizer. R. W. Ruprecht and F. W. Morse. *il Mass Ag Exp B* 176:119-34 '17

Comparison between the effects of manuring potatoes with nitrate of soda and sulphate of ammonia. A. Zasukhin. *Int R Sci & Prac Ag* 7,no 8:1114-15 Ag '16

Effect of ammonium sulfate in nutrient solution on the growth of soybeans in sand cultures. M. I. Wolkoff. bibliog *Soil Sci* 5:123-50 F '18

Effect of ammonium sulfate on soil acidity. F. E. Allison and R. C. Cook. *Soil Sci* 3:507-12 Je '17

Effect of soil reaction on the availability of the ammonium sulfate. R. C. Cook and F. E. Allison. *Soil Sci* 3:487-98 My '17

Factors affecting the absorption and distribution of ammonia applied to soils. R. C. Cook. bibliog *Soil Sci* 2:305-44 O '16

Fertilizer materials statistics; sulphate of ammonia. (*In* Am. fertilizer hdbk., 1917, p. 20-2, 58-62) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

Gas industry as a producer of fertilizing materials. N. H. Humphrys. *il Am Gas Eng J* (42 Pine st., N.Y. 10c) 107:65-6 Jl 21 '17

Increasing the supply of sulphate of ammonia. W. B. Phillips. *Am Fert* 48:32-3 F 16 '18

Influence of ammonium sulfate on the germination and the growth of barley in sand and soil cultures kept at different moisture contents and at various osmotic concentrations of the soil solution. M. I. Wolkoff. bibliog *Soil Sci* 5:421-79 Je '18

International movement of fertilisers; sulphate of ammonia. *Int Crop Report and Ag Statistics* (Int. inst. of agriculture, Rome) 7th year, no 9 p 650-7 S '16

More data on ammoniates. C. G. Atwater. *Am Fert* 44:52 Je 24 '16

Nitrate of soda and sulphate of ammonia; annual review of the market for the year 1915. *Am Fert* 44:34-41 Mr 18 '16

Nitrogen of sulphate. C. G. Atwater. *Gard M* 25:292 Je '17

Production and sale of inorganic nitrates and ammoniates; sulphate of ammonia. (*In* Report on the fertilizer industry, p 36-54) '16 U.S. Federal trade comm., Washington, D.C.

Question of sulphate of ammonia in Russia. *Int R Sci & Prac Ag* 7,no 7:952-3 Jl '16

Recovery and uses of sulphate of ammonia. C. G. Atwater. *Farmers' Nat Congress Pro* 1916:22-4

Significance of the sulfur in sulfate of ammonia applied to certain soils. C. B. Lipman and W. F. Gericke. *Soil Sci* 5:81-6 Ja '18

Status of sulphate of ammonia. *Am Fert* 46:47-8 Je 23 '17

Storage of sulphate of ammonia on farms. *J Bd Ag* 25:703-5 S '18

Sulfate of ammonia. *Am Fert* 48:27 Je 8 '18

Sulphate of ammonia. *J Bd Ag* 23:672-4 O '16

Sulphate of ammonia and nitrate of soda; annual review of the market for the year 1916. *Am Fert* 46:34a-34g Mr 3 '17

Sulphate of ammonia in place of nitrate of soda. E. F. Cauthen. *Prog F* 31:270 F 19 '16

Sulphate of ammonia; its source, production and use. 23p *il* n.d. Barrett co., Ag. dept., 17 Battery Place, N.Y.

Sulphate of ammonia; purchase and use by farmers. *J Bd Ag* 22:1309-12 Mr '16

Twenty years' work on the availability of nitrogen in nitrate of soda, ammonium sulfate, dried blood and farm manures. J. G. Lipman and A. W. Blair. *il Soil Sci* 5:291-301 Ap '18

Use of sulphate of ammonia as manure. *J Bd Ag* 22:1267-70; 24:859-61 Mr '16, N '17

Use of sulphate of ammonia for wheat. *J Bd Ag* 23:576-80 S '16

**Bibliography**

Influence of ammonium sulfate on germination and growth. I. Wolkoff. *Soil Sci* 5:468-79 Je '18

**Statistics**

Fertilizer materials statistics. (*In* Am. fertilizer hdbk., 1918, p. 24-6, 78-9) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia

International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 34-7 My '18 Int. inst. of ag., Rome

Sulphate of ammonia statistics, 1916. *Am Fert* 45:40-1 Jl 8 '16

Sulphate of ammonia statistics, 1917. *Am Fert* 47:34-5 Ag 18 '17

**Amortization loans.** See Agricultural credit**Amphiscepa bivittata.** See Cranberry vine-hoppers**Amusements**

Amusement and instruction of children. *Nat Stock & F* 40:286 Je 10 '16

Amusement book. H. Richmond. *Rural N Y* 75:17 Ja 1 '16

Call of the hour to the farmer. Mrs. C. G. Lewis. *Mo Ag Bd v* 14:15-21 Ap '16

Fun for Valentine's day. N. Tachau. *Country Gent* 82:299 F 10 '17

Good times on the farm. *Country Gent* 81:1637 S 2 '16

Grange camp fire. E. M. Furbush. *Country Gent* 82:172 Ja 27 '17

Indoor games for farm homes. J. C. Elsom. *Breeder's Gaz* 69:74 Ja 13 '16

Keeping the young folks interested. A. C. Wortman. *Fruit-Grower* 28:207 Mr 15 '17

Leisure hour. V. C. Meredith. *Breeder's Gaz* 69:240 F 3 '16

Merry-go-rounds in Michigan. R. B. Eskil. *Country Gent* 81:1992 N 11 '16

Patriotic party on Washington's birthday. E. Paige-Loomis. *il Country Gent* 82:356 F 17 '17

Time for play. E. C. Salisbury. *Country Gent* 81:768 Ap 1 '16

Winter social and the summer picnic. A. C. Wortman. *Country Gent* 81:306 F 5 '16

See also Children's amusements; Efficiency contests; Entertainments; Games; Pageants; Recreation; Sports; Theater, Community; Toys

**Anabiosis**

Function of anabiosis in the hibernation of winter grain crops. V. Sabachnikov. *Int R Sci & Prac Ag* 8,no 3:327-30 Mr '17

**Anabolism.** See Metabolism**Anæsthesia.** See Anesthetics**Anaphylaxis**

Anaphylaxis in cattle and sheep, produced by the larvae of hypoderma bovis, h. lineatum and oestrus ovis; with discussion. S. Hadwen and E. A. Bruce. *il Am Vet M Assn J* 51:15-44 Ap '17

Hypodermal anaphylaxis. *il Am Vet M Assn J* 49:309-11 Je '16

Notes on parasitic anaphylaxis and allergy. L. Van Es and A. F. Schalk. *il N D Ag Exp B* 125:151-93 '17

Studies in anaphylaxis xxi,xxii (J. Immunol., 2, no. 6 525-69p., 571-2p. '17). *Exp Sta Record* 38:182 F '18



**Anatomy, Comparative**

Arboreal man. il J Heredity 8:531-42 D '17

**Anatomy, Veterinary.** See Veterinary anatomy

**Ancestry.** See Heredity

**Anchylosis**

Orthodactyly. F: N. Duncan. il J Heredity 8: 174-5 Ap '17

**Anconas (poultry)**

Ancona for city poultrymen. W: R. Brown. Am P J 48:299 F '17

Anconas attract attention. E. Matthews. Am P J 48:759 Je '17

Anconas for farmers. Field II 27:656 Ag '17

Anconas for large eggs and many of them. H. M. Long. Am P J 49:735 Ag '18

Anconas—hardy, efficient and economical. W. S. Carson. Am P J 48:400 Mr '17

Anconas popular. H. C. Sheppard. il Reliable P J 22:1227+ Ja '16

How H. C. Sheppard breeds his beautiful mottled Anconas. H. C. Sheppard. il Reliable P J 23:1071-2+ Ja '17

Mottled Ancona. R. W. Van Hoesen. Am P J 49:382 Mr '18

Why the popularity of the Ancona? T. H. Holmes; L. E. Hepp. il Am P J 47:1292-4 D '16

**Ancylis comptana.** See Strawberry leaf-rollers

**Andalusians (poultry)**

Blue Andalusian. W. H. Card. il Country Gent 81:980 My 6 '16

Origin, history and good qualities of the blue Andalusian. W: O. Jennings. il Reliable P J 23:212-13+ Ap '16

**Anelsonia**

Anelsonia, a new genus of the cruciferae. J. F. Macbride. Bot Gaz 64:78-81 Jl '17

**Anemones**

Anemone pulsatilla. W. R. Dykes. il Gard Chron (Lond) 61:209 My 26 '17

Variations in anemone nemorosa. E. J. Salisbury. il Ann Bot 30:525-8 O '16

**Anesthesia.** See Anesthetics

**Anesthetics**

Decrease of permeability produced by anesthetics. W. J. V. Osterhout. Bot Gaz 61: 148-58 F '16

Local anesthesia in animal dentistry. H. E. Bemis. il Am Vet M Assn J 51:188-93 My '17

Volatility of organic compounds as an index of the toxicity of their vapors to insects. W: Moore. J Ag Research 10:365-71 Ag 13 '17

See also Ether

**Angelica**

Lovage. G. H. Hardy. Gard Chron (Lond) 64:155 O 19 '18

Rehabilitation of the herb angelica. G. H. Hardy. Gard Chron (Lond) 64:95 S 7 '18

**Angell memorial hospital**

Twelve thousand animals treated in two years. W: M. Morrill. il Field II 27:858 N '17

**Angiosperms**

Additional notes upon the angiosperms tetra-centron, trochodendron, and drimys, in which vessels are absent from the wood. I. W. Bailey and W. P. Thompson. bibliog il Ann Bot 32:503-12 O '18

Anatomy and phylogenetic position of the betulaceae. C. S. Hoar. bibliog il Am J Bot 3: 415-35 O '16

Climatic distribution of certain types of angiosperm leaves. I. W. Bailey and E. W. Sinnott. Am J Bot 3:24-39 Ja '16

Histology of the phloem in certain woody angiosperms. L. H. MacDaniels. bibliog il Am J Bot 5:347-78 Jl '18

Independent evolution of vessels in gnetales and angiosperms. W. P. Thompson. bibliog il Bot Gaz 65:83-90 Ja '18

Investigations on the phylogeny of the angiosperms. E. W. Sinnott and I. W. Bailey. il Am J Bot 1:303-22, pl 30-5, 441-53; 2:1-22 Jl, N '14, Ja '15

Morphology and affinities of gnetum. W. P. Thompson. bibliog il Am J Bot 3:135-84 Ap '16

\* Scalariform pitting a primitive feature in angiospermous secondary wood. F. B. H. Brown. Science (Science Press, Garrison, N.Y. 15c) n s 48:16-18 Jl 5 '18

**Angora goats.** See Goats

**Angora rabbits**

Rearing of Angora rabbits for their wool. L. E. Moore. J Bd Ag 23:664-8 O '16

**Angoumois grain moths**

Notes on the biology of the angoumois grain moth, sitotroga cerealella Oliv; with discussion. J. L. King. map J Econ Entom 11: 87-93 F '18

**Animal breeding.** See Breeding

**Animal coloration.** See Color of animals

**Animal dips**

See also Arsenical dip; Lime-sulfur dip

**Animal experimentation**

Improved method for recovering trypanosomes from the blood of rats for antigen purposes in connection with complement fixation. F. H. Reynolds and H. W. Schoening. J Ag Research 14:573-6 S 23 '18

Pathologic conditions noted in laboratory animals. F. C. Mann and S. D. Brimhall. il Am Vet M Assn J 52:195-204 N '17

Practical method for the identification of guinea-pigs under treatment. A. P. Hitchens. J Bact 1:541-5 S '16

**Animal food**

See also Meat

**Animal husbandry.** See Live stock, and references under that subject

**Animal industry.** See Live stock

**Animal industry, Bureau of.** See United States—Animal industry, Bureau of

**Animal instinct.** See Instinct

**Animal production, American society of.** See American society of animal production

**Animal products**

See also Dairy products; Manures; Meat

**Statistics**

Exports of animal products; Argentina, Brazil and New Zealand, Australia. Doc Leaflets 1, no 3:38-40 S '17

**Animal surgery.** See Veterinary surgery

**Animals**

Who's who in the zoo; photographs. il Country Gent 81:2239 D 30 '16

See also Color of animals; Domestic animals; Fur-bearing animals; Insects; Live stock; Zoology, Economic; also headings beginning Animal, and names of animals

**Bibliography**

Birds and wild animals; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 39—7th ed) 14p '17 Supt. of doc., Washington, D.C.

**Breeding**

See Breeding

**Coloration**

See Color of animals

**Diseases and pests**

Bacterium pyogenes and its relation to suppurative lesions in animals. A. R. Ward. bibliog J Bact 2:619-28 N '17

Glanders in wild animals kept in zoological gardens. G: H. Hart. Am Vet M Assn J 49: 659-63 Ag '16

On certain relations of the lower animals to human disease. D: J: Davis. Am Vet M Assn J 50:387-90 D '16

Osteomalacia or cage paralysis in primates; with discussion. W. R. Blair and H. Brooks. Am Vet M Assn J 51:330-47 Je '17

See also subhead Diseases and pests under names of animals

**Experimentation**

See Animal experimentation

**Animals—Continued****Habits and behavior**

Christmas eve at Stone Wall farm. A. Fear-  
ing. *il Country Life* 33:41-4 D '17  
Plants and animals of the Atlantic and gulf  
states. R. W. Shufeldt. *Am For* 23:743-7 D  
'17

**Photographs and photography**

Get a good picture. *il Hoard's D* 52:78 Ag 11  
'16  
Some points in photographing dairy cattle.  
I. J. Matthews. *il Kimball's D F* 14:523 S 1  
'16

**Protective equipment**

Nature's camouflage and man's. A. Embury.  
*il Country Life* 34:27-40 Je '18

**Treatment**

Kindness to livestock. Ohio F 142:270 S 21 '18  
Loi n. 152 sur la protection des animaux do-  
mestiques au Danemark. *Int Yearbook Ag*  
*Leg* 1916:690-1 '17

**Animals, Fur-bearing.** See Fur-bearing animals

**Animals, Predatory**

Bounty system. *Nat Wool Grower* 7:42 My  
'17  
Brief for the salaried trapper; opposed to  
bounty system. S. H. Hill. *Am Sheep B &*  
*W* 36:197 Ap '16  
Destructive animals. *Weekly N L* 4:11 My 9  
'17  
Diplomat of the open range. G. F. Stratton.  
*il Country Gent* 82:2048-9+ D 29 '17  
Exterminating predatory animals. G. J.  
Joyce. *Breeder's Gaz* 70:91 J1 20 '16  
Exterminating predatory animals. E. W.  
Nelson. *Am Sheep B & W* 38:90-1 F '18;  
Same. *Nat Wool Grower* 8:14-16 Mr '18  
Lobo. C. Hayne. *il Am Sheep B & W* 38:699-  
701 N '18  
Natural enemies of birds. E. H. Forbush. *il*  
*Mass Ag Bd Yearbook* 1916, pt 2:210-63 '17  
Stock-killing animals. *Weekly N L* 5:3 Ja 9 '18  
Stock saved by destroying roving predatory  
animals. *Weekly N L* 6:6 N 13 '18  
Texas demands more efficient methods of  
predatory animal control. *Am Sheep B &*  
*W* 36:70-1 F '16  
To kill or not to kill; bounty question. F. C.  
Pellett. *il Country Gent* 81:380 F 19 '16  
U. S. hunters make war on wild animals; save  
meat. *Weekly N L* 5:2 J1 3 '18  
Uncle Sam's hunters ridding range of preda-  
tory animals. *Weekly N L* 6:5 O 23 '18  
Wild animal tolls. E. J. Farlow. *Nat Wool*  
*Grower* 8:48 Ap '18  
See also Birds, Injurious and beneficial;  
Coyotes; Dogs; Insects, Injurious and ben-  
eficial; Wolves

**Laws**

Destruction of noxious animals and birds.  
(*In Game and fish laws*, p. 186-92) '17 Sec.  
of state, Lansing, Mich.

**Animals as carriers of contagion**

Dog as a carrier of parasites and disease.  
M. C. Hall. *il U S Ag B* 260:1-27 '15

**Animals in art**

Animals in decorative art. J. M. Breese. *il*  
*Country Life* 34:90+ J1 '18  
See also Dogs in art

**Anions**

Antagonism between anions as affecting bar-  
ley yields on a clay-adobe soil. C. B. Lip-  
man and W. F. Gericke. *bibliog il J Ag*  
*Research* 4:201-18 Je '15

**Annals (plants)**

Annual and perennial blossoms—and roses. *il*  
*Country Gent* 81:938-9 Ap 29 '16  
Annual flowers. J Ag (Quebec) 19:249 My '16  
Annual flowers for the garden. G. W. Kerr.  
*il Country Gent* 83:48+ Mr 23 '18  
Annual flowers for the greenhouse. H. Turner.  
*Am Flor* 47:166 Ag 12 '16  
Annals for the flower garden. L. H. Cobb.  
*il Kimball's D F* 16:226 Mr 15 '18  
Flower garden; annual climbers for quick re-  
sults where vines are required. *il Country*  
*Gent* 83:36 My 25 '18

Flowers for everybody's garden. A. S. Swan-  
son. *Minn Hort* 45:86-92 F '17  
Getting an early start with annuals. F.  
Spring. *il Gard M* 23:23-4 F '16  
Hardy annuals for southern gardens. J. Bus-  
bee. *Country Gent* 81:1806 O 7 '16  
Just a border of annuals. L. Melish. *il Gard*  
*M* 23:74 Mr '16  
Taking the annual seriously. G. Tabor. *il*  
*Country Life* 31:27-34 Mr '17

**Anopheles.** See Mosquitoes

**Anoplura.** See Plant lice

**Ant.** See Ants

**Anthelmintics**

Efficacy of some anthelmintics. M. C. Hall  
and W. D. Foster. *bibliog J Ag Research* 12:  
397-447 F 18 '18

**Anthoceros**

Pyrenoid of anthoceros. F. McAllister. *bibliog*  
*il Am J Bot* 1:79-95 F '14

**Anthocyans.** See Color of flowers

**Anthophila.** See Bees

**Anthracoese**

Anthracoese of raspberry and blackberry.  
H. S. Jackson. *Fruit-Grower* 27:411 S 1 '16  
See also Apple canker; Bean anthrac-  
nose; Cotton anthracnose; Grape anthrac-  
nose; Lettuce anthracnose; Raspberry an-  
thracoese

**Anthrax**

Anthrax. W. A. Davis. *Tex Ag Dept B* 52:  
138-41 '16  
Anthrax. C. H. Higgins. *Ag Gaz of Canada*  
4:556-8 J1 '17  
Anthrax. J. G. Kerr. *Tex Ag Dept B* 52:135-8  
'16  
Anthrax (charbon). W. H. Dalrymple. *il Am*  
*Vet M Assn J* 50:831-46 Mr '17  
Anthrax in Massachusetts. W. H. Brown and  
others. 19p '17 Mass. State dept. of health,  
Boston  
Anthrax infection difficult to control. *Am Vet*  
*M Assn J* 54:208-10 D '18  
\* Anthrax of charbon. (*In* 5th biennial report,  
p. 16-36) *il* '18 La. State live stock sanitary  
bd., Baton Rouge  
Anthrax or charbon. H. J. Washburn. *Farm-*  
*ers' B* 784:1-16 '17  
Bacteriological study of methods for the dis-  
infection of hides infected with anthrax  
spores. F. W. Tilley. *bibliog J Ag Research*  
4:65-92 Ap '15  
Blood-sucking insects as transmitters of an-  
thrax or charbon. H. Morris. *il La Ag Exp*  
*B* 163:1-15 '18  
Controlling anthrax. *Va Ag Dept B* 109:73-5  
'16

**Preventive inoculation**

Charbon or anthrax. *Weekly N L* 5:7 S 19 '17  
Desiccated anthrax antigen for immuniza-  
tion purposes. N. S. Ferry. *Am Vet M*  
*Assn J* 51:200-3 My '17  
Experiments in vaccination against anthrax.  
A. Eichhorn. *U S Ag B* 340:1-16 '15; Same.  
*Am Vet M Assn J* 48:669-86 Mr '16  
Immunity studies on anthrax serum. A. Eich-  
horn and others. *bibliog J Ag Research* 8:  
37-56 J Ja 8 '17  
Vaccination against anthrax. *Am Sheep B &*  
*W* 37:313 My '17

**Anthrax, Symptomatic**

Black-leg. W. H. Dalrymple. *Kimball's D F*  
14:279 Ap 15 '16  
Blackleg. W. J. Hartman. *Am Vet M Assn*  
*J* 50:618-20 Ja '17  
Blackleg; a preventable disease, prevalent in  
all parts of Nevada, causing severe losses  
of cattle. E. Records. *Nev Ag Ext B* 18:  
1-7 '18  
Blackleg and its control. M. M. Dougherty.  
*Tex Ag Dept B* 52:145-7 '16  
Blackleg and its control. C. J. Reakes. *J Ag*  
*New Zealand* 13:121-5 Ag '16  
Blackleg; symptoms and treatment. *J Ag*  
(Quebec) 21:183 Je '18  
Blackquarter, quarter ill or black leg. *J Bd*  
*Ag* 23:247-50 Je '16  
Methods of controlling blackleg developed by  
the Kansas state agricultural college.  
L. W. Goss. *Kan Ag Exp Rep* 1915-1916:44-9  
'17



**Anthrax, Symptomatic—Continued**

Symptomatic anthrax in swine. *Int R Sci & Prac Ag* 7,no 1:101-2 Ja '16

**Preventive inoculation**

Blackleg and its prevention. G. A. Johnson. *Am Vet M Assn J* 53:214-21 My '18

Blackleg filtrate. A. Eichhorn. *Am Vet M Assn J* 51:406-13 Je '17

Blackleg; with new methods for its prevention and treatment. G. H. Hart. *il Cal Ag Exp C* 205:1-8 '18

Concentration of symptomatic anthrax (blackleg) toxin. W. N. Berg. *J Ag Research* 14:263-4 Ag 5 '18

Improved methods of immunization against symptomatic anthrax (blackleg). R. A. Kelsner. *J Ag Research* 14:253-62 Ag 5 '18

Investigations on blackleg immunization. N. Nitta. *bibliog Am Vet M Assn J* 53:466-82 Jl '18

Preliminary report on two new methods of preventing blackleg by means of an anti-blackleg serum and an aggressin. F. S. Schoenleber and others. *Kan Ag Exp C* 59: 1-7 '17

Prevention of blackleg. G. H. Glover. *il Colo Ag Ext B* 140:1-4 '18

Standardization of blackleg vaccine. L. W. Goss and J. P. Scott. *Am Vet M Assn J* 54: 234-43 D '18

Studies in blackleg immunization with special reference to blackleg filtrate; with discussion. A. Eichhorn. *Am Vet M Assn J* 52:653-69 F '18

Vaccination prevents blackleg in calves. *Prog F* 31:766 Je 10 '16

**Anthropology**

See also Ethnology; Eugenics; Evolution; Sociology

**Anticarsia gemmatilis.** See Velvet bean caterpillars

**Antigens and antibodies**

Diagnosis of tuberculosis by complement fixation, with special reference to bovine tuberculosis. A. Eichhorn and A. Blumberg. *bibliog J Ag Research* 8:1-20 Ja 2 '17; *Excerpts. Int R Sci & Prac Ag* 8,no 5:758-60 My '17

Improved method for recovering trypanosomes from the blood of rats for antigen purposes in connection with complement fixation. F. H. Reynolds and H. W. Schoening. *J Ag Research* 14:573-6 S 23 '18

**Anti-glanders serum**

Properties of the serum of animals hyperimmunized against glanders, and the choice of animals for the preparation of such serum rich in suitable antibodies. E. Bertetti and G. Fuizi. *Am Vet M Assn J* 53: 665-7 Ag '18

**Antimony**

Solution of antimony from enameled cooking utensils. E. W. Miller. *J Home Econ* 8:361-7 Jl '16

**Antipyrin**

Report on synthetic products. W. O. Emery. *Assn Offic Ag Chem J* 2,no 1:pt1:75-9 My '16

**Antiques**

Antiques in wartime. L. G. Harring. *il Country Life* 33:52 D '17

**Antiseptics**

Antiseptic substances in the treatment of infected wounds. H. D. Dakin. *Am Vet M Assn J* 49:109-11 Ap '16

Chlor-antiseptics. H. S. Eakins. *Am Vet M Assn J* 51:221-9 My '17

Extraction and saturation of soils with volatile antiseptics. J. P. du Buisson. *bibliog il Soil Sci* 3:353-91 Ap '17

See also Chloramine; Disinfection and disinfectants

**Antitoxin, Diphtheria.** See Diphtheria antitoxin

**Antitoxin, Tetanus.** See Tetanus antitoxin

**Antler moths**

Invasion of the caterpillars of the antler moth into Yorkshire. J. Snell. *il J Bd Ag* 24:523-6 Ag '17

Report on an infestation of larvæ of the antler moth (*charæas graminis*, L.) in the peak district. A. C. Cole and A. D. Imms. *J Bd Ag* 24:514-22 Ag '17

**Ants**

*Ant. dolichoderus bituberculatus*, in the control of pests of the cocoa-tree, in Java. P. van der Goot. *Int R Sci & Prac Ag* 8,no 12: 1300-1 D '17

Ants and aphids. *il J Heredity* 8:363-5 Ag '17

Argentine ant. *Am Bee J* 58:410 D '18

Argentine ant. W. A. Pryal. *il Am Bee J* 57:378 N '17

Argentine ant as an orchard pest. H. S. Smith. *il Cal State Comm Hort B v* 6:254-8 Je '17

Argentine ant: distribution and control in the United States. E. R. Barber. *il map U S Ag B* 377:1-23 '16

Argentine ant in relation to citrus groves. J. R. Horton. *il U S Ag B* 647:1-73 '18

Control of the Argentine ant in orange groves. J. R. Horton. *il Farmers' B* 928:1-20 '18

Do ants kill trees about their colonies? R. C. Hawley and S. J. Record. *il Am For* 22:685-6 N '16

Eradicating the little house ant or Pharaoh's ant from a dwelling house. M. P. Zappe. *Conn State Ag Exp B* 203:314-15 '18

Gramang ant (*plagiopsis longipes*) from the point of view of its economic importance. P. Van Der Goot. *Int R Sci & Prac Ag* 8,no 5:811-12 My '17

House ants. *Purdue Ag* 10:40 Je '16

House ants: kinds and methods of control. C. L. Marlatt. *il Farmers' B* 740:1-12 '16

Household and camp insects; house ants. E. P. Felt. *il N Y State Museum (Albany)* B 194:57-60 F '17

Indian ant introduced into the United States. W. M. Wheeler. *bibliog il J Econ Entom* 9:566-9 D '16

Life economy of *solenopsis molesta* Say. J. W. McColloch and W. P. Hayes. *bibliog il J Econ Entom* 9:23-38 F '16

Municipal control of the Argentine ant. E. R. de Ong. *J Econ Entom* 9:468-72 O '16

My experience with ants. *Country Life* 29: 152 Mr '16

New method of subterranean fumigation; control of fungus-growing ant in Cuba. J. S. Houser. *J Econ Entom* 9:285-7 Ap '16

Pavement ant. *Market Growers J* 18:293 Ap 15 '16

Remedy for ants. *Fruit-Grower* 27:448 O 1 '16

Some weatherproof bands for use against ants. J. R. Horton. *Cal State Comm Hort B v* 5:419-21 N '16

See also Termites

**Ants, White.** See Termites

**Apateticus.** See Stink bugs

**Aphanelytrum**

Structure of the spikelet of *aphanelytrum*. A. Chase. *il Bot Gaz* 61:340-3 Ap '16

**Aphis.** See Plant lice

**Aphis, Apple.** See Apple aphid

**Aphthous stomatitis.** See Stomatitis, Vesicular

**Apiaries.** See Bee culture; Bees

**Apiaries, Out.** See Bee culture—Out-apiaries

**Apiculture.** See Bee culture

**Apogamy**

Apogamy in *phlegopteris polypodioides* fée, *osmunda cinnamomea* L., and *O.*, *claytoniana* L. E. D. Wuist. *Bot Gaz* 64:435-7 N '17

Apogamy in the *cyathecaceae*. A. G. Stokey. *bibliog il Bot Gaz* 65:97-102 Ja '18

**Appendicitis**

Appendicitis. E. Mellen. *O Judd Farmer* 64: 542, 562 My 18-25 '18

**Appetite, Depraved.** See Pica (depraved appetite)

**Apple and thorn skeletonizer**

Apple and thorn skeletonizer. E. P. Felt. *il Cornell Ag Ext B* 27:143-7 '18; Same. (*In Report, Entom. Soc. of Ontario, 1917*, p. 44-7) '18 Ontario ag. dept., Toronto

**Apple anthracnose.** See Apple canker

**Apple aphis**

- Contact poisons and green apple aphid. Better Fruit 10:6 Ap '16
- Control of apple plant lice. *il N J Ag Exp Rep* 1916:494-501 '17
- Correct name for our apple-grain aphid. A. C. Baker. *Science (Science Press, Garrison, N.Y. 15c) n s 46:410-11 O 26 '17*
- General notes on aphides which occur on apple trees; with discussion. W. A. Ross. (*In Report, Entomological soc. of Ontario, 1916, p. 43-9*) '17 Ontario ag. dept., Toronto
- How the apple aphid lives. O Judd Farmer 60:16 Mr 11 '16
- Identity of *eriosoma pyri*. A. C. Baker. *J Ag Research* 5:1115-19 Mr 6 '16
- Morphology and biology of the green apple aphid. A. C. Baker and W. F. Turner. *bibliog il map J Ag Research* 5:955-94 F 21 '16
- Plant lice injurious to apple orchards. P. J. Parrott and others. *il N Y State Ag Exp B* 415:11-53 '16; 431:1-79 '17
- Recent studies on the rosy aphid. P. J. Parrott. *N Y State Fruit Growers' Assn Pro* 1916:38-45
- Rosy apple aphid. A. C. Baker and W. F. Turner. *bibliog il J Ag Research* 7:321-44 N 13 '16
- Spraying orchards with reference to aphid control S. W. Foster. *Better Fruit* 11:7-8 F '17
- Status of spraying practices for the control of plant lice in apple orchards (B. 402). P. J. Parrott and H. E. Hodgkiss. *il N Y State Ag Exp Rep* 1915:385-402 '16

**Apple bitter pit**

- Bitter pit. *Sci Am Sup* (233 Broadway, N.Y. 10c) 82:407 D 23 '16
- Bitter pit investigation; Mr D. McAlpine's fourth report. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 27:279-81 Ap '16
- Bitter pit investigation; the cause and control of bitter pit, with the results of experimental investigation. D. McAlpine (Rpt. Bitter Pit Invest. (Aust.) 5 144p. '15-'16). *Exp Sta Record* 38:352-3 Mr '18
- Bitter pit; its cause and control. D. McAlpine. *Better Fruit* 12:18 Ag; 8+ S '17

**Apple bitter-rot. See Apple canker****Apple black rootrot**

- Apple root-rot in Virginia. C. H. Crabill. *il Phyt* 6:159-61 Ap '16
- Black rootrot of the apple. F. D. Fromme and H. E. Thomas. *bibliog il J Ag Research* 10:163-74 J1 23 '17
- Root-rot disease of the apple in Virginia. F. D. Fromme and H. E. Thomas. *Science (Science Press, Garrison, N.Y. 15c) n s 45: 93 Ja 26 '17*
- Xylaria rootrot of apple. F. A. Wolf and R. O. Cromwell. *il J Ag Research* 9:269-76 My 21 '17

**Apple black rot. See Apple canker****Apple black-spot. See Apples—Diseases and pests****Apple blight. See Fire blight****Apple blister canker. See Apple canker****Apple blotch**

- Apple blotch and its control. J. W. Roberts. *il U S Ag B* 534:1-11 '17
- Blotch, a dreaded apple disease. H. Clarke. *Gard M* 22:216 Ja '16
- Spraying experiments in 1916 for the control of apple blotch. A. J. Gunderson. *Ill State Hort Soc Trans* 1916:248-51 '17

**Apple borers. See Apple root borers; Flat-headed borers; Round-headed apple-tree borers****Apple bounty**

- Australia—Act authorizing government to give growers of apples a bounty of 10 per cent on evaporated apples for one year. On application of minister, the federal arbitration court, or state industrial authority, may declare what wages and conditions of employment are fair and reasonable. Total amount of bounty to be paid is limited to £12,000,000. (Passed both Houses 1918)

**Apple breeding**

- Apple breeding at the University experiment station. C. S. Crandall. *Ill State Hort Soc Trans* 1916:444-51; Discussion 126-9, 451-7 '17
- Apple breeding in Canada. W. T. Macoun. *Ag Gaz of Canada* 5:126-8 F '18
- Apple breeding in Idaho. *Int R Sci & Prac* Ag 7, no 1:59-60 Ja '16
- Apple-bud selection; apple seedlings from selected trees. C. S. Crandall. *il Ill Ag Exp B* 211:181-264 '18
- Apple culture in Victoria. J. Farrell. *il J Dept Ag Victoria* 16:16-24 Ja '18
- Breeding new apples. U. P. Hedrick. *Rural N Y* 75:359 Mr 4 '16
- Effect of cross-pollination on size, color, shape, and quality of the apple. W. H. Wicks. *bibliog il Ark Ag Exp Tech B* 143: n.p. '18; Same cond. *Better Fruit* 13:9-11 N '18
- Long experience at top-working apples. T. H. King. *il Rural N Y* 75:741 My 13 '16
- Methods and problems in pear and apple breeding. W. R. Ballard. *il Md Ag Exp B* 196:79-92 '16; Same. *Md Ag Exp Rep* 1915-1916:79-92 '16

**Apple butter**

- Apple butter. Va Ag Dept B 122:6-7 O '17
- Apple butter without sugar. Ohio F 142:514 N 23 '18
- Making old-time apple-butter. F. J. Koch. *il Green's Fruit Grower* 36:2 S '16

**Apple canker**

- Apple anthracnose or black spot canker. D. C. George. *Fruit-Grower* 27:25 Ja 1 '16
- Apple bitter-rot and its control. J. W. Roberts and L. Pierce. *il Farmers' B* 938:1-13 '18
- Apple blister canker. A. S. Colby. *il Green's Am Fruit Grower* 38:27 Ap '18
- Apple canker. A. D. Cotton. *il J Bd Ag* 24: 1263-6 F '18
- Apple cankers. Wallaces' F 41:14 Ja 7 '16
- Apple cankers and control. A. S. Colby. *il Green's Am Fruit Grower* 38:31 Mr '18
- Apple tree anthracnose and how to control it. L. Childs. *il Better Fruit* 13:7-8 N '18
- Bitter-rot research. *il Country Gent* 81:1192 Je 10 '16
- Black rot, leaf spot, and canker of pomaceous fruits. L. R. Hesler. *bibliog il Cornell Ag Exp B* 379:53-148 '16; Same. *Cornell Ag Exp Rep* 1917:53-148 '18
- Blister canker. H. W. Doyle. *Country Gent* 81:2006 N 18 '16
- Blister canker control; with discussion. H. E. Vasey. (*In Nebraska Horticulture v. 6, no. 12 p. 59-68*) (F) '17 Neb. state hort. soc., Lincoln
- Blister spot of apples and its relation to a disease of apple bark. D. H. Rose. *il Phyt* 7:198-208 Je '17
- Blossom wilt and canker diseases of apple trees. H. Wormald. *il J Bd Ag* 24:504-13 Ag '17
- Canker in the orchard. J. S. Underwood. *Green's Fruit Grower* 36:3 Je '16
- Effects of the blackrot fungus, *sphaeropsis malorum*, upon the chemical composition of the apple. C. W. Culpepper and others. *bibliog J Ag Research* 7:17-40 O 2 '16
- Killing blister canker. M. G. Kirkpatrick. *il Ohio F* 138:622 D 23 '16
- Methods of controlling blister canker. J. R. Cooper. *il Neb Ag Exp B* 161:1-18 '17
- More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. *il Ontario Ag Dept B* 257:10-15 '17
- Orchard canker. F. L. Ballard. *Country Gent* 82:262 F 10 '17
- Saving your dying trees. *Fruit-Grower* 28:118 F 1 '17
- Sources of apple bitter-rot infections. J. W. Roberts. *bibliog il U S Ag B* 684:1-25 '18
- Sources of the early infections of apple bitter-rot. J. W. Roberts. *bibliog il J Ag Research* 4:59-64 Ap '15



**Apple canker—Continued**

- Studies of the etiology and control of blister canker on apple trees. J. R. Cooper. bibliog il Neb Ag Exp Research B 12:1-117 '17  
Popular edition, B 161 with title, Methods of controlling blister canker

**Apple culture**

- Agriculture for beginners; apple growing with dairying. W. I. Chamberlain. il Nat Stock & F 40:205 My 20 '16  
Annual crops in the apple orchard, by W. S. Perrine; C. F. Heaton; with discussion; Can the farmer afford to grow apples? by H. M. Dunlap; with discussion. Ill State Hort Soc Trans 1917:151-8, 158-65, 212-27 '18  
Another old orchard pays. L. W. Cushman. Fruit-Grower 27:87 F 1 '16  
Apple and how to grow it. G. B. Brackett. Green's Fruit Grower 36:1 O '16  
Apple as affected by varying degrees of dormant and seasonal pruning. W. H. Alderman and E. C. Auchter. bibliog il W Va Ag Exp B 158:1-56 '16  
Apple growing and transportation. J. F. Benton. Cal State Comm Hort B v 6:426-7 N '17  
Apple suckers and fruit setting. Gard Chron (Lond) 62:86 S 1 '17  
Apples in a Jersey orchard. H. C. Bennett. il Country Gent 81:2110 D 9 '16  
Best soils for the northern spy apple. E. W. Gage. Green's Fruit Grower 36:9 J1 '16  
Better apple crop. Wallaces' F 41:237 F 11 '16  
Bringing a neglected orchard back. H. F. Thurston. Fruit-Grower 27:15 Ja 1 '16  
Bringing back old apple trees. H. R. Cox. il Country Gent 82:910 My 19 '17  
Bringing up an orchard. F. L. Marble. il Country Life 29:74 Ap '16  
Building an apple tree. F. W. Allen. il Country Gent 81:100 Ja 15 '16  
Care of the apple orchard. J Ag (Quebec) 19: 211-12 Ap '16  
Case of a misfit apple tree. C. O. Ormsbee. Green's Fruit Grower 37:5 J1 '17  
Cultivating apple orchards. J. S. Underwood. il Green's Fruit Grower 37:31 Ap '17  
Cultivating the apple orchard. A. C. Weed. Rural N Y 76:379 Mr 10 '17  
Cultivation of the apple orchard. W. L. Haisley. Green's Fruit Grower 37:11 J1 '17  
Cultural methods in bearing orchards. J. P. Stewart. il map Pa Ag Exp B 141:1-28 '16  
Culture of the apple orchard. F. I. Odell. Country Gent 82:967 Je 2 '17  
Culture of young orchards. J. P. Stewart. il Country Gent 82:999 Je 9 '17  
Dehorning old apple trees. F. H. Ballou. Country Gent 81:344 F 12 '16  
Distance apart for apple trees. W. I. Chamberlain. Nat Stock & F 41:1358 Mr 23 '18  
Does thinning pay. il Fruit-Grower 28:294 Je 15 '17  
Economics of fruit growing. W. Lochhead. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 1-6) '16  
Eight apple crops in eight years. C. N. Crotsenburg. il Fruit-Grower 27:469 N 1 '16  
Experiments in the irrigation of apple orchards. E. P. Taylor and G. J. Downing. il Idaho Ag Exp B 99:1-48 '17  
Experiments with nitrate of soda as a fertilizer. G. G. Brown. Better Fruit 13:14-17 D '18  
Fall work in the orchard. il Wallaces' F 41: 1231 S 22 '16  
Fancy fruit by plain methods. Rural N Y 75: 1565 D 23 '16  
Farm apple orchard experience. W. M. Patton. Prac F 114:90 Mr 1 '18  
Farm orchard pays big. E. M. Davis. il Fruit-Grower 28:221 Ap 1 '17  
Farmer's apple orchard. R. S. Duncan. (In Report, Ontario ag. and exp. union, 1916, p. 62-7) '17 Ontario ag. dept., Toronto  
Feeding fruit trees on sandy soil. H. F. Thurston. Green's Fruit Grower 36:12 Mr '16  
Feeding hay to apples. H. W. Collingwood. il Country Life 29:40-1 Ap '16  
Fertilization of apple orchards. J. P. Stewart. il Pa Ag Exp B 153:1-31 '18  
Fertilizing apple orchards. F. H. Ballou. Ohio Ag Exp B v 3:125-7 Ap '18  
Fertilizing apple trees. E. T. Owen. Ohio F 141:566 Ap 20 '18  
Field experiments in spraying apple orchards in 1916. A. J. Gunderson and W. S. Brock. Ill Ag Exp C 194:1-15 '17  
Five years' investigations in apple thinning. E. C. Auchter. bibliog il W Va Ag Exp B 162:1-56 '17  
Fruit-bud formation related to orchard practice. E. J. Kruse. il Better Fruit 12:6-8+ O '17  
Grower of perfect apples. H. R. Cox. Country Gent 82:636 Mr 31 '17  
Growth and production of an apple tree. il Green's Fruit Grower 36:2 Mr '16  
He is an apple farmer now. C. N. Crotsenburg. il Fruit-Grower 27:470 N 1 '16  
Home apple orchard. F. H. Sweet. il Green's Fruit Grower 36:22 F '16  
Hope farm notes; history of an orchard. Rural N Y 75:814 My 27 '16  
How thrift paid in our orchard. J. E. McCord. il Prac F 114:21 Ja 15 '18  
How to cure the off year habit. C. B. McGee. il Nat Stock & F 40:1279 F 24 '17  
Influence of commercial fertilizer upon the bearing apple tree. C. I. Lewis and G. G. Brown. il Ore Ag Exp B 141:37-47 '17; Same cond. by G. G. Brown. Better Fruit 11:16-17 F '17; Same. (In 8th annual report, 1916, p. 36-41) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Abstract. Better Fruit 11:15 Ap '17  
Influence of soil variation on crop production; soils suited to varieties of apples. H. J. Wilder. Mass Ag Bd B 2 (5th ed.):35-53 '16  
Keep your eye on the ball. J. F. Sugrue. Better Fruit 11:7+ My '17  
Methods of encouraging cider apples to bear every year. Int R Sci & Prac Ag 7,no 1:87 Ja '16  
Moisture influence on apples. S. Van Aken. Green's Am Fruit Grower 38:9 Je '18  
Money-making orchard. E. H. Favor. il Fruit-Grower 27:470 N 1 '16  
My experience in growing and marketing apples. D. G. Miller. il Va Ag Dept B 109: 88-96 '16  
My experience with a young orchard. R. Viall. Minn Hort 44:42-5 Ja '16  
My first experiences in apple-growing. R. E. Clark. Cornell Countryman 15:262 F '18  
Nitrate of soda for apples. J. A. Burton. Country Gent 82:1004 Je 9 '17  
Nitrogen and apples—nitrogen a stimulant. R. W. Allen. Better Fruit 10:29+ Mr '16  
Observations on spray injury of fruit and foliage of the apple. L. Childs. (In 8th annual report, 1916, p. 20-9) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.  
Orchard boarder. R. D. Price. Fruit-Grower 27:85 F 1 '16  
Orchard equipment and selling. H. M. Dunlap. O Judd Farmer 61:18 J1 29 '16  
Orchard in sod or cultivation. E. Anderson. Green's Fruit Grower 37:3 Ag '17  
Orchard management plan. il Wallaces' F 43: 527 Mr 22 '18  
Orchard pays big. W. B. James. il Fruit-Grower 28:187 Mr 15 '17  
Orchard reclamation by modern methods. J. M. Field. Am P J 48:222 F '17  
Orchard rejuvenation. C. Razor. Ky Ag Dept Rep 1916-1917:460-4 '18  
Orchard renovation. W. C. Robinson. il Maine Ag Dept B v 17:71-6 S '18  
Planning the orchard. T. G. Bunting. J Ag (Quebec) 20:165 F '17  
Plant food and water for apples. F. W. Allen. il Fruit-Grower 27:342 J1 1 '16  
Planting and care of the apple orchard. E. C. Brinser. Prac F 112:145 Ap 1 '16  
Practical points in commercial apple growing. il Rural N Y 75:73 Ja 15 '16  
Present day orchard essentials. S. Van Aken. Ohio F 138:83 J1 29 '16  
Production in the off season. O. R. Abraham. il Fruit-Grower 28:45 Ja 15 '17  
Quarter century of apples; we have been learning a lot about growing good fruit. F. A. Waugh. il Country Gent 83:7 Ap 20 '18  
Redeeming a corn belt orchard. E. L. Kirkpatrick. O Judd Farmer 62:7 My 5 '17

**Apple culture—Continued**

- Renovating old apple orchards. F. C. Sears. *il Country Gent* 83:10-11 F 23 '18
- Selecting soils for apples of various varieties. E. W. Gage. *il Green's Fruit Grower* 36:1 My '16
- Shall the apple orchard be fertilized? *Prac F* 112:418 N 15 '16
- Should we neglect the home orchard. F. P. Cullinan. *Purdue Ag* 13:58 N '18
- Side line for the fruit grower. H. E. Botsford. *N Y State Fruit Growers' Assn Pro* 1918: 94-7
- Sod mulch vs. tillage for apple orchards. W. D. Auchter. *il N Y Ag Dept B* 79:pt 1: 803-10 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 2:803-10 '17
- Sod-mulched orchards. J. C. Whetten. *Country Gent* 83:11 F 23 '18
- Soil management investigations in a young apple orchard. C. G. Woodbury and others. *il Ind Ag Exp B* 205:1-52 '17
- Soil mulch for apple orchards. F. H. Sweet. *Green's Fruit Grower* 36:3 Mr '16
- Soil requirements of Baldwin trees. E. W. Gage. *Green's Fruit Grower* 36:1a Ag '16
- Soils for the greening apple tree. E. W. Gage. *Green's Fruit Grower* 36:11 O '16
- Square deal to the sod orchard. F. H. Ballou. *il Country Gent* 83:9-10 S 21 '18
- Starting a commercial apple orchard. F. A. Waugh. *il Country Gent* 82:1764-5 N 17 '17
- Success in orcharding. J. F. Harrison. *il Minn Hort* 45:215-18 My '17
- Successful apple orchard. E. W. Gage. *Green's Fruit Grower* 36:17 F '16
- Successful orchard. S. A. Beach. *Minn Hort* 45:196-201 My '17
- Ten years' experience building an orchard. V. H. Davis. *N H Ag Dept Rep v* 34:180-7 '16
- Test of orchard planting. *Rural N Y* 76:108 Ja 27 '17
- Thinning apples. F. G. Carlisle. *Better Fruit* 11:18 Ag '16
- Thinning apples. H. L. Lantz. *il Fruit-Grower* 28:266 My 15 '17
- Thinning apples. H. E. Robison. *il Purdue Ag* 12:541-4 Je '18
- Thinning fruit. C. I. Lewis. *il Country Gent* 81:1219 Je 17 '16
- Thinning the apple crop. *il Purdue Ag* 10:41-2 Je '16
- Thinning the apple trees. E. W. Gage. *Green's Fruit Grower* 37:3 Je '17
- Top-working young apple trees. F. H. Ballou. *il Rural N Y* 75:579 Ap 8 '16
- Tree is a long time bet. P. S. Lovejoy. *Country Gent* 82:1375 S 8 '17
- Twenty-one apple crops. *il Fruit-Grower* 28: 189 Mr 15 '17
- Twenty years of fertilizers in an apple orchard; with discussion. R. D. Anthony. *N Y State Fruit Growers' Assn Pro* 1918:210-18; Excerpts. *Nat Stock & F* 42:13 Mr 30 '18
- Ups and downs of apple planting. *Nat Stock & F* 42:152 My 4 '18
- Valuable system of commercial apple growing. *il Va Ag Dept B* 126:154-61 '18
- What's a tree worth? *Fruit-Grower* 27:298 My 15 '16
- Why he succeeded. *Fruit-Grower* 28:7 Ja 1 '17
- Winter versus summer pruning of apple trees. C. C. Vincent. *il Idaho Ag Exp B* 98:1-28 '17
- Woman without capital, and an orchard. H. W. Collingwood. *il Country Life* 29:40-1 F '16
- Wormless apple. D. Plank. *Rural N Y* 75:776 My 20 '16

*See also* Fruit culture; Pruning; Spraying and dusting

**Bibliography**

- List of publications dealing with the growing of apples. *Mass Ag Bd B* 2 (5th ed):236-50 '16

**Breeding**

*See* Apple breeding

**Costs**

*See* Apples—Costs

**Grafting**

*See* Grafting

**History**

- Introduction of the apple into America and New York state. C. S. Wilson. *il N Y Ag Dept B* 79:pt 1:743-60 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:743-60 '17

**Pruning**

*See* Pruning

**Arkansas**

- Blooming period of the apple in northwest Arkansas. W. H. Wicks. *il Ark Ag Exp B* 134:1-12 '17

**Australia**

- Apple culture in Victoria. J. Farrell. *il J Dept Ag Victoria* 14:471-9, 522-32, 577-89, 654-66, 711-27; 15:24-35, 140-57, 277-94, 333-44, 385-403, 457-69, 542-53, 577-88; 16:16-24, 80-8, 129-40, 355-63, 454-62 Ag-D '16-Ja, Mr, My-O '17, Ja-Mr, Je, Ag '18 (to be cont)
- Blossoming dates of apples and pears. G. H. Johnston. *Ag Gaz of New South Wales* 28: 663-6 S '17
- Orcharding at Mount Keira and Mount Kembla. J. G. R. Bryant. *il Ag Gaz of New South Wales* 27:41-2 Ja '16

**California**

- Apple powdery mildew and its control in the Pajaro valley. W. S. Ballard and W. H. Volck. *il map U S Ag B* 120:1-26 '14

**Canada**

- Apple in Canada; its cultivation and improvement. W. T. Macoun. 135p *il '16 Canada Ag Apples in the land of Evangeline*; W. W. Pineo's methods. A. J. Campbell. *il Fruit-Grower* 27:374 Ag 1 '16
- Fruit notes from Nova Scotia. J. Buchanan. *Rural N Y* 75:323 F 26 '16
- Hardy apples and plums for the Canadian Northwest. F. W. Broderick. *il Minn Hort* 46:393-9 N '18
- Improvement of the fruit industry in Quebec. (*In Report, Quebec Pomological and fruit growing soc.*, 1916, p. 45-50) '16
- McIntosh and fameuse apples in Quebec; with discussion. T. G. Bunting. (*In Report, Quebec Pomological and fruit growing soc.*, 1916, p. 36-43) '16
- Necessity for new apple orchards in western Ontario. J. W. Crow. (*In Report, Fruit-growers' assn.*, 1916, p. 16-20) '17 Ontario ag. dept., Toronto
- Some of the pioneer apple growers of the province of Quebec. R. Brodie. (*In Report, Quebec Pomological and fruit growing soc.*, 1916, p. 7-10) '16

**Colorado**

- Cost of producing apples in western Colorado. S. M. Thomson and G. H. Miller. *il map U S Ag B* 500:1-44 '17

**Delaware**

- Speaking of fruit growers; Frank C. Bancroft of Delaware. H. R. Cox. *il Country Gent* 81:1391-2 J1 22 '16

**Georgia**

- Apple culture in Georgia. T. H. McHatton and others. *il Ga Ag Coll (Ext) B* 134:1-35 '17
- Apple growing in north Georgia. *Rural N Y* 76:33 Ja 13 '17
- Growing apples in Georgia. E. C. Fawcett. *il Nat Stock & F* 41:1205 F 23 '18

**Great Britain**

- Apple reinette rouge étoilée. E. A. Bunyard. *Gard Chron (Lond)* 59:295 Je 3 '16

**Idaho**

- Apple breeding in Idaho. *Int R Sci & Prac Ag* 7,no 1:59-60 Ja '16
- Cost of production of apples in the Payette valley, Idaho. S. M. Thomson and G. H. Miller. *il maps U S Ag B* 636:1-36 '18
- Solving the southern Idaho fruit problem. K. Green. *Better Fruit* 12:12 Ag '17



Apple culture—Continued

Illinois

- Big meeting in big orchard; Illinois fruit men visit A. L. McClay. O Judd Farmer 61:14 Ag 12 '16  
Fertilizing Illinois apple orchards, by A. J. Gunderson; Fertilizing the orchard, by H. M. Dunlap. Ill State Hort Soc Trans 1917:227-34, 401-6 '18  
Optimistic about Illinois fruit. O Judd Farmer 63:3 J1 14 '17  
Studying fruits in Illinois. J Heredity 7:38 Ja '16

Indiana

- Planting and care of the young apple orchard. H. J. Reed. il Ind Ag Exp C 67:1-20 '17; Excerpts. Purdue Ag 12:221-2 Ja '18  
Profits in Indiana apples. G. L. Ogle. Ohio F 138:414 O 28 '16

Iowa

- Apples on Missouri River hills. O Judd Farmer 60:5 Ap 22 '16  
Farming Iowa orchards. il Wallaces' F 42:391 Mr 2 '17  
Spencer succeeds with apples. H. R. O'Brien. il Country Gent 83:5 N 16 '18

Kansas

- Way Kansas does. C. N. Crotsenburg. il Fruit-Grower 27:422-3 S 15 '16

Maine

- Apple, tree and fruit. F. H. Dudley and S. H. Eaton. il Maine Ag Dept B v 16:1-48 Je '17  
Fertilizer experiments on apple trees. Maine Ag Exp B 246:2-4 Ja '16  
Fertilizer experiments on apple trees at Highmoor farm. Maine Ag Exp B 269:9-15 '18

Maryland

- Management of the Tonoloway orchard co. Green's Fruit Grower 36:1+ Mr '16

Massachusetts

- Apple growing. il Mass Ag Bd B 2 (5th ed):1-253 '16  
Contents: Opportunities for fruit growing in Massachusetts, by F. C. Sears; Varieties of apples for Massachusetts orchards, by F. C. Sears; Influence of soil variation on crop production, by H. J. Wilder; Planting of a commercial orchard in Massachusetts, by F. C. Sears; New orchard, by F. C. Sears; Renovating old orchards, by F. C. Sears; Pruning the apple tree, by C. D. Jarvis; Root and cleft grafting, by H. D. Hemenway; Massachusetts fruit trees and their insect foes, by H. T. Fernald; Three common scale insects, by H. T. Fernald; Plant lice or aphids, by H. T. Fernald; Apple diseases, by G. E. Stone; Insecticides, fungicides and directions for their use, by H. T. Fernald; Spray calendar for apples, by E. H. Forbush; Storage of apples, by F. C. Sears; United fruit companies of Nova Scotia, by W. H. Woodworth; Apple packing for Massachusetts growers, by A. R. Jenks; Massachusetts apple grading law, by W. Wheeler and H. L. White; Bibliography; Index

Minnesota

- Apples and orchards; with discussion. E. A. Smith. il Minn Hort 45:33-43 Ja '17  
How I grow apples. D. C. Webster. il Minn Hort 46:224-8 Je '18  
My orchard crop of 1915. H. Simmons. il Minn Hort 44:89-94 Mr '16  
Orcharding in Minnesota. Minn Hort 44:291-3 J1 '16  
Orchardists' value of apple varieties grown in Minnesota; with discussion. R. Wellington. il Minn Hort 46:357-63 O '18  
Young top-worked orchard; with discussion. E. G. Lee. il Minn Hort 45:14-22 Ja '17

Missouri

- Growing exhibition fruit. Mrs G. W. Curd. Fruit-Grower 27:235 Ap 1 '16

Here's real conservation; Wm. E. Schilling's reclaimed orchard in Missouri. C. N. Crotsenburg. il Fruit-Grower 27:373+ Ag 1 '16

New England

Soils of Massachusetts and Connecticut with especial reference to apples and peaches. H. J. Wilder. il maps U S Ag B 140:1-73 '15

New Jersey

Jersey apple orchard comes back. il Rural N Y 76:403 Mr 17 '17  
Top-worked New Jersey orchard. il Rural N Y 76:3 Ja 6 '17

New York

Apples of New York. S. A. Beach. map N Y Ag Dept B 79.pt 1:761-8 Ja '16; Same. N Y Ag Dept Rep 1916.pt 2:761-8 '17  
Cost of dusting and spraying a New York apple orchard. C. R. Crosby. J Econ Entom 9:375-6 Je '16  
Cultivating the apple orchard. Rural N Y 76:313 Mr 3 '17  
Study of soils in relation to apple growing. H. J. Wilder. N Y State Fruit Growers' Assn Pro 1916:238-54

Northwestern states

Orchard problems of the Northwest. E. M. Reeves. il Minn Hort 46:420-6 N '18

Ohio

Ohio farm orchard. R. B. Cruickshank. il Ohio F 141:354 Mr 9 '18  
Orchard rejuvenation in southeastern Ohio. F. H. Ballou. il Ohio Ag Exp B 301:1-40 '16; Abstracts. Ohio Ag Exp B v 1:313-18, 344-7 O-N '16  
Well-managed Ohio apple orchard. J. F. Cunningham. il Ohio F 137:677 My 13 '16

Oregon

Cost of producing apples in Hood River valley. S. M. Thomson and G. H. Miller. il U S Ag B 518:1-52 '17

Virginia

Growing and marketing apples in Virginia. S. L. Lupton. N Y State Fruit Growers' Assn Pro 1916:100-14

Washington

Cost of producing apples in Wenatchee valley, Washington. G. H. Miller and S. M. Thomson. il map U S Ag B 446:1-35 '17  
Cost of producing apples in Yakima valley, Washington. G. H. Miller and S. M. Thomson. il U S Ag B 614:1-74 '18  
Where glaciers feed the apple roots. W. P. Eaton. il Harper's (Franklin sq., N.Y. 35c) 135:621-30 O '17

Western states

Apples across the continent; photographs. Country Gent 83:2 S 21 '18  
Northwestern apples and other fruits. C. I. Lewis. il Country Gent 82:2007+ D 22 '17

Apple curculio

Curculio in apples. C. R. Crosby. Rural N Y 77:325 Mr 2 '18

Apple datana. See Yellow-necked apple caterpillars

Apple flakes

Apple flakes. W. P. James. il Ill Ag Exp C 213:1-8 '18; Excerpts. O Judd Farmer 65:441 N 9 '18

Apple flies. See Apple maggots

Apple fruit spurs

Factors influencing the abscission of flowers and partially developed fruits of the apple (pyrus malus L.). A. J. Heinicke. bibliog il Cornell Ag Exp B 393:45-114 '17  
Influence of pruning upon the fruit spur system of the apple. V. R. Gardner. (In 8th annual report, 1916, p. 66-72) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Same. Better Fruit 11:14-15+ Ja '17  
Statistical study of the fruit-spur system of certain apple trees. A. F. Yeager. il Ore Ag Exp B 139:78-88 '16

Apple handling. See Apples—Handling

**Apple industry**

- Advertising our products; with discussion. A. W. Brayton. Ill State Hort Soc Trans 1916:417-25 '17
- After the apple boom. F. A. Waugh. il Country Gent 82:1964+ D 15 '17
- Apple; advertise it. E. A. Smith. Minn Hort 46:431-3 N '18
- Apple men in quandary. Nat Stock & F 41:514 Ag 25 '17
- Apple situation for 1918. J. G. Anderson. (In Report, Ontario fruit growers' assn., 1917, p. 33-7) '18 Ontario ag. dept., Toronto
- Apples for America and Europe. W. E. Aughinbaugh. Better Fruit 12:20 D '17
- Brief outline of the development of the apple drying industry in the Pajaro valley. A. W. Tate, jr. Cal State Comm Hort B v 7:502-3 Ag '18
- Commercial apple crop of the United States. J. C. Folger. Better Fruit 11:6 My '17
- Commercial apple regions. Monthly Crop Rep 4:33 Ap '18
- Exporting apples. C. W. Kimball. N Y Ag Dept B 79,pt 1:911-14 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:911-14 '17
- Initial promise in apples. O Judd Farmer 64:549 My 25 '18
- 1918 apple crop. F. A. Grindley. Ag Gaz of Canada 5:775-7 Ag '18
- Northwestern apples and other fruits. C. I. Lewis. il Country Gent 82:2007+ D 22 '17
- Northwestern boxed apples and salt mackerel. D. L. Woodruff. Better Fruit 12:5-6 Je '18
- Outgo and income of a ten-acre apple orchard; with discussion. U. P. Hedrick. Ill State Hort Soc Trans 1917:70-89 '18
- Playing the red apple game. R. Howard. il Country Gent 83:10-11+ Ja 12 '18
- Plight of the apple man. il Nonpartisan Leader (Box 941, Fargo, N. D. \$2.50 per yr.) 5:14 N 15 '17
- Return of peace means to apple industry. G. C. Corbaley. Better Fruit 13:16+ Jl '18
- Uneven apple crop in sight. O Judd Farmer 65:396 N 2 '18
- See also Apples—Costs; Apples—Distribution; Apples—Marketing; Apples—Prices
- Laws and regulation**
- Act relative to the packing, grading and sale of apples (Mass.). Mass Ag Bd Yearbook 1916, pt 2:271-2
- Act to establish a standard for the packing and marketing of apples. Cal State Comm Hort B v 5:295-9 Ag '16
- Agricultural law, 1916; apples; fruit-bearing trees. N Y Ag Dept B 83:2047-52 My '16; Same. N Y Ag Dept Rep 1916,pt 3:2047-52 '17
- Apple grading and packing; the United States standard barrel law, the United States apple grading law and the Massachusetts apple grading law. H. L. White. Mass Ag Bd B 2 (5th ed):213-35 '16; Same. Mass Ag Bd C 50:1-27 '16
- Apple grading law. G. F. Potter. Wis Hort Soc Rep 48:200-3 '18
- Apple grading law. B. D. Van Buren. N Y Ag Dept B 79,pt 1:669-78 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:669-78 '17
- Apple packing and grading. Ohio F 139:79 Ja 20 '17
- Apple standardization. A. W. Tate. Cal State Comm Hort B v 6:332-4 Ag '17
- Apple standardization work in California. G. P. Weldon. Better Fruit 13:5-6 O '18
- Canadian inspection and sales act, by J. W. Crow; New York state packing and grading law, by C. S. Wilson. N Y State Fruit Growers' Assn Pro 1916:114-17, 118-22
- Delaware apple packing law. Prac F 112:363 O 1 '16
- Does the inspection and sales act protect the consumer?; with discussion. A. S. Chapin. (In Report, Fruitgrowers' assn., 1916, p. 27-37) '17 Ontario ag. dept., Toronto
- National apple packing law. A. F. Mason. il Country Gent 83:14-15 Mr 2 '18
- New York state grading and packing law; with discussion. C. S. Wilson. N Y State State Fruit Growers' Assn Pro 1916:223-32

- Packing apples in central packing houses and the New York apple packing law. 15p il n. d. Agricultural dept., New York Central railroad co., Grand Central terminal, N. Y.
- Pennsylvania's new apple grading and packing law. Pa Ag Ext B v 4:1-4 O '17
- Relation of apple diseases and insects to the apple grading laws. Prac F 113:124 Mr 15 '17
- Standardization of apple grades. H. C. Hetzel. N Y State Fruit Growers' Assn Pro 1918:74-80; Excerpts. Nat Stock & F 41:1070 Ja 26 '18
- Standardization of the apple under the act of 1915. F. S. Jerome. il Cal State Comm Hort B v 6:154-8 My '17
- Standards and grades for apples. U. T. Cox. Ohio F 139:381 Mr 10 '17
- U.S. grading and packing law. Green's Am Fruit Grower 38:10 Ja '18
- Washington grading rules and regulations for 1917. Better Fruit 12:5 Ag '17
- West Virginia apple packing law. W Va Ag Dept B 25:1-5 '17
- Wisconsin apple grading law. E. D. Ball. Wis Hort Soc Rep 48:162-4 '18

**Statistics**

- Apple and peach crop report for 1918. L. M. Estabrook. Green's Am Fruit Grower 38:3-4 Ag '18
- Apple crop report, 1918 season. Va Ag Dept B 132:9-12 S '18
- Apple production and value by varieties, 1916 and 1915. Monthly Crop Rep 3:32 Ap '17
- Apples; production estimates and important commercial districts and varieties. H. P. Gould and F. Andrews. maps U S Ag B 485:1-48 '17 (10c Supt. of doc.)
- Apples will be wanted. O Judd Farmer 61:8 O 21 '16
- Cold storage apple holdings Feb. 1, 1918. C: J Brand. Better Fruit 12:18 Mr '18
- Commercial stocks of apples. U S Food Surveys 1:1-4 Jl 24 '18
- Estimated apple crop conditions September 1, 1917, with comparisons. Better Fruit 12:20 O '17
- Official apple crop report for August, 1918. L. M. Estabrook. Am Fruit Grower 38:4 S '18
- Official apple crop report for 1918. L. M. Estabrook. Green's Am Fruit Grower 38:3 Jl '18
- Production, and prices Dec. 1, by states. See United States Department of agriculture Yearbooks
- Special commercial apple crop report, August, 1918. Monthly Crop Rep 4:93 Ag '18
- Table showing number of apple trees and production in bushels in New York state by counties. N Y Ag Dept B 73,pt 1:969-70 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:969-70 '17
- Wholesale prices and receipts of apples in Boston for 36 years. F. E. Rogers. Cornell Ag Ext B 28:149-59 '18
- Apple leaf hoppers**
- Apple-leaf jassid. W. W. Froggatt. il Ag Gaz of New South Wales 29:568-71 Ag '18
- Apple leaf miners**
- Ornix geminatella, the unspotted tentiform leaf miner of apple. L. Haseman. bibliog il J Ag Research 6:289-96 My 22 '16
- Apple leaf-mining case-bearers**
- Apple leaf-mining case-bearer. W. H. Volck. il Cal State Comm Hort B v 6:463-7 N '17
- Apple leaf-sewers**
- Apple leaf-sewer. B. R. Leach. bibliog il U S Ag B 435:1-14 '16
- Apple leaf spot. See Apple canker
- Apple maggots**
- Control of apple maggot by poisoned bait spray. H: H. P. Severin. map Maine Ag Exp B 25:1:149-68 '16
- Increasing menace of the apple and cherry maggots and methods of control; with discussion. G. W. Herrick. N Y State Fruit Growers' Assn Pro 1918:218-26
- Rhagoletis pomonella, the apple maggot or railroad worm, an injurious dipteran recorded for the first time in British Columbia, Canada. R. C. Treherne. Int R Sci & Prac Ag 9,no 1:128-9 Ja '18



- Apple pectin**  
Keeping juice for jelly. A. Mills. Country Gent 81:1742 S 23 '16
- Apple pomace**  
Apple pomace—its uses. E. L. Ragsdale. Am Fruit Grower 38:4 D '18  
See also Feeding and feeding stuffs—Apples
- Apple pomace as fertilizer**  
Apple pomace as a fertilizer. Rural N Y 75:72 Ja 15 '16
- Apple products**  
Apple orchard by-products. E. W. Gage. Green's Fruit Grower 37:4 S '17  
Good food from waste apples. F. B. McMillin. Better Fruit 13:10-11 S '18  
Manufacture of cider vinegar and other apple juice products. A. H. Pulver. Rural N Y 77:1325, 1346 N 30-D 7 '18  
Utilize the cull apples. F. B. McMillin. Ohio F 142:246 S 14 '18
- Apple red bugs**  
Apple red bugs. Penn State F 10:79 Ap '17  
False apple red bug. H. A. Gossard. il Ohio Ag Exp B v 3:153-55 My '18
- Apple root borers**  
Apple root borer. F. E. Brooks. il J Ag Research 3:179-86 N '14
- Apple rootrot.** See Apple black rootrot
- Apple rot**  
Bitter-rot research. il Country Gent 81:1192 Je 10 '16  
Sources of the early infections of apple bitter-rot. J. W. Roberts. bibliog il J Ag Research 4:59-64 Ap '15  
Temperature relations of apple-rot fungi. C. Brooks and J. S. Cooley. il J Ag Research 8:139-64 Ja 22 '17
- Apple rust**  
Apple or cedar rust. R. C. Walton. il Ohio Ag Exp B v 3:86-8 Mr '18; Same. Ohio F 141:750 Je 8 '18  
Apple rust. F. D. Kern. Country Gent 81:1790 O 7 '16  
Avoiding apple rust. O Judd Farmer 60:10 F 26 '16  
Control of the cedar rust in West Virginia. W. E. Rumsey. J Econ Entom 9:204-5 F '16  
Dusting for cedar rust. F. D. Fromme and H. E. Thomas. il Va Ag Exp Rep 1915-1916:179-83 '17  
New or noteworthy facts concerning apple rust. N. J. Giddings and A. Berg. Phyt 6:79-80 F '16  
Preventing apple-tree destruction from rust. F. L. Holmes. il Rural N Y 75:371 Mr 4 '16  
Red cedar a nuisance. D. C. Babcock. il Ohio F 141:798 Je 22 '18  
Three cedar rust fungi, their life histories and the diseases they produce. J. L. Weimer. bibliog il Cornell Ag Exp B 390:509-49 '17; Same. Cornell Ag Exp Rep 1917:509-49 '18
- Apple scab**  
Apple scab and methods of its control. A. J. Gunderson. Ill State Hort Soc Trans 1916:357-64 '17  
Apple scab control. Wis Hort Soc Rep 1917:46-56  
Apple-scab control in Oregon. H. P. Barss. Better Fruit 10:34+ F '16  
More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. il Ontario Ag Dept B 257:5-10 '17  
New facts regarding the period of ascospore discharge of the apple scab fungus. L. Childs. Ore Ag Exp B 143:1-11 '17; Abstract. Better Fruit 11:15 Mr '17  
Observations on the relation of the height of fruit to apple scab infection. L. Childs. il Ore Ag Exp B 141:5-17 '17; Same. Better Fruit 11:5-8 Ap '17  
Over-wintering of the apple scab-fungus in Canada. W. P. Fraser. Int R Sci & Prac Ag 8:11:1161-3 N '17  
Scab on apples. J Ag (Quebec) 20:29 Ag '16  
Shall we continue to spray? il Ag Gaz of Canada 4:199-207 Mr '17  
Spraying of orchards; how scab and codling worm may be controlled in Quebec orchards. J Ag (Quebec) 20:203 Ap '17 (to be cont)
- Use of lime-sulfur as a summer spray for apple scab. C. C. Vincent. il map Idaho Ag Exp B 85:1-16 '16
- Apple scald.** See Apples—Storage
- Apple-seed chalcid flies**  
Syntomaspis druparum, the apple-seed chalcid. R. A. Cushman. bibliog il J Ag Research 7:487-502 D 11 '16
- Apple shows.** See Apples—Exhibits
- Apple tree borer, Round-headed.** See Round-headed apple-tree borers
- Apple-tree borers.** See Apple root borers; Flat-headed borers; Round-headed apple-tree borers
- Apple trees**  
Baby trees bearing fruit. Rural N Y 77:855 Jl 6 '18  
Bracing bearing apple trees. A. E. Murneek. Green's Am Fruit Grower 38:14 Mr '18  
Bring up a tree in the way it should grow. P. S. Lovejoy. il Country Gent 82:1634-5 O 27 '17  
First apple tree of the Northwest. H. E. Zimmerman. il Am For 23:591 O '17  
Propping apple trees. M. L. Williams. il Country Gent 81:1160 Je 3 '16  
Renovating the old apple trees. C. P. Sweetser. Gard Chron Am 22:144-5 My '18  
Some observations on the growth of apple trees. J. H. Gourley. N H Ag Exp Tech B 12:1-38 '17  
Studies on methods of protecting ringing wounds on apple trees to promote their healing. A. W. Drinkard, Jr. and A. A. Ingham. il Va Ag Exp Tech B 17:147-60 '17; Same. Va Ag Exp Rep 1915-1916:147-60 '17
- Apple trees, Dwarf.** See Fruit trees, Dwarf
- Apple twig miners**  
Notes on the life-history of marmara elotella Busck, a lepidopterous sap feeder in apple twigs. S. C. Vinal. il J Econ Entom 10:488-96 O '17
- Apple woolly aphid.** See Woolly aphid
- Apples**  
Advertising the apple. Gard Chron (Lond) 60:301 D 23 '16  
All about an apple. H. Benjafield. il J Ag New Zealand 12:325-6 Ap '16; Same. Better Fruit 11:6 S '16  
America's big red apples. E. W. Gage. il Green's Fruit Grower 36:1 O '16  
Apple crop of 1917. il Ohio F 141:14 Ja 5 '18  
Apple estimate, by varieties. Monthly Crop Rep 3:88 S '17  
Apple-fruit-bud development. Gard Chron (Lond) 61:40 Ja 27 '17  
Apple Ribston pippin. Royal Hort Soc J 42, pts 2-3:431-3 S '17  
Apples as a side line. M. G. Kirkpatrick. O Judd Farmer 61:11 Ag 12 '16  
Apples, hens and sheep. J. T. Bartlett. il Fruit-Grower 28:249 My 1 '17  
Apples; the best varieties for all uses, their food value, recipes. Utah Ag Ext C v 5, no 29 3p '17  
Apples vs. potatoes. Mrs H. M. Dunlap. Better Fruit 12:22 N '17; Same. J Ag (Quebec) 22:35 S '18  
Better apples. F. D. Garrison. Better Fruit 13:13 D '18  
By-products and principal products of fruit business. L. D. Batchelor. Better Fruit 11:18+ Jl '16  
\* Cider apple jelly. B. T. P. Barker. Sci Am Sup (233 Broadway, N.Y. 10c) 86:282-3 N 2 '18  
Cider fruit for table use. B. T. P. Barker. J Bd Ag 24:394-402 Jl '17  
Commercial apple-growing. W. I. Chamberlain. il Nat Stock & F 40:893 D 2 '16  
Dessert and cooking apples. W. H. Jenkins. Nat Stock & F 42:78 Ap 13 '18  
Disposing of cider apples. O Judd Farmer 61:11 S 23 '16  
Enzymes of apples and their relation to the ripening process. R. W. Thatcher. bibliog J Ag Research 5:103-16 O 18 '15  
Evaporate, can or make into cider. Nat Stock & F 41:450 Ag 4 '17

**Apples—Continued**

- Farmer who has apples. *il* Wallaces' F 42:1271 S 21 '17
- Food value of apples. *Better Fruit* 12:25 N '17
- Fruit and its effect on the war. W. F. Gwin. *Better Fruit* 12:9 Mr '18
- Golden apple. S. Morgan. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:5 JI 6 '18
- Harvesting, packing and marketing the apple crop. A. F. Mason. *il* Pa Ag Ext C 50:1-44 '16
- Household use of Ohio apples. W. J. Green. *il* Ohio Ag Exp B v 3:308-12 O '18
- How the apple forms its buds. F. C. Bradford. *Better Fruit* 11:23 O '16
- Influence of summer pruning on bud development in the apple. J. R. Magness. *bibliog il* Ore Ag Exp B 139:46-77 '16
- Keeping quality of apples. C. L. Hamilton. *Better Fruit* 11:18+ O '16
- Levulose the preponderant sugar of apple juices. J. R. Eoff, Jr. *J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:587-8 Je '17
- McIntosh and Fameuse apples in Quebec. T. G. Bunting. *J Ag* (Quebec) 20:121 D '16
- Make this year's apple crop fit the market. *Better Fruit* 12:10 S '17
- Modern methods of growing apples. F. C. Sears. *Maine Ag Dept B v* 17:35-52 S '18
- New apples from Bedford. *Gard Chron* (Lond) 63:86 Mr 2 '18
- New York state apples. *Rural N Y* 75:3 Ja 1 '16
- New York's blue ribbon apples. *il* *Rural N Y* 75:365 Mr 4 '16
- Official apple estimates. *Nat Stock & F* 41:722 O 27 '17
- On apple eating. *Better Fruit* 11:24 My '17
- Paradise apple stocks. *Gard Chron* (Lond) 62:160 O 20 '17
- Prize apple tree. *Rural N Y* 75:183 F 5 '16
- Quality in apples. R. J. Barnett. *Country Gent* 82:1747 N 10 '17
- Russet ring on the apple. M. J. Dorsey. *il* *Minn Hort* 46:415-16 N '18
- Shall we plant more apples? *Nat Stock & F* 40:972 D 23 '16
- Skookum apples. *Better Fruit* 11:27 Mr '17
- Some old English apples. E. A. Bunyard. *Gard Chron* (Lond) 63:219 My 25 '18
- Special apple report for early varieties, June, 1918. *Monthly Crop Rep* 4:63 Je '18
- Study of variation in apples during the growing season. W. E. Whitehouse. *Ore Ag Exp B* 134:1-13 '16
- Using all the apple crop. C. H. Sapp. *Ohio F* 140:246 S 22 '17
- Venture in apples. C. H. Sapp. *Ohio F* 142:378 O 19 '18
- Vinegar farm; making low grade apples into vinegar. A. M. Latham. *Ohio F* 142:54 JI 20 '18
- Where our apples are grown. E. B. Reid. *il* *map Country Gent* 83:11 Je 29 '18
- See also* Apples, Dried; Cider; Cookery—Apples; Feeding and feeding stuffs—Apples; Fruit; Fruit culture; also headings beginning Apple

**Anatomy**

- Of the recognition of apples—Truelle's line. H. E. Durham. *il* *Gard Chron* (Lond) 60:239-40 N 18 '16
- Pollination of the pomaceous fruits; gross vascular anatomy of the apple. E. J. Kraus and G. S. Ralston. *bibliog il* *Ore Ag Exp B* 138:1-12 '16

**Breeding**

*See* Apple breeding

**By-products**

*See* Apple products

**Composition**

- Effects of the blackrot fungus, *sphaeropsis malorum*, upon the chemical composition of the apple. C. W. Culpepper and others. *bibliog J Ag Research* 7:17-40 O 2 '16

**Costs**

- Cost of a box of apples. *Country Gent* 81:1473 Ag 5 '16

- Cost of producing apples in Hood River valley. S. M. Thomson and G. H. Miller. *il* U S Ag B 518:1-52 '17
- Cost of producing apples in Wenatchee valley, Washington. G. H. Miller and S. M. Thomson. *il* *map U S Ag B* 446:1-35 '17
- Cost of producing apples in western Colorado. S. M. Thomson and G. H. Miller. *il* *map U S Ag B* 500:1-44 '17
- Cost of producing apples in Yakima valley, Washington. G. H. Miller and S. M. Thomson. *il* U S Ag B 614:1-74 '18
- Cost of production of apples in the Payette valley, Idaho. S. M. Thomson and G. H. Miller. *il* *maps U S Ag B* 636:1-36 '18
- Cutting wisdom teeth and orchard costs. L. F. Dumas. *Better Fruit* 11:22+ Ap '17
- Economics of apple orcharding in the Pacific northwest. *Int R Sci & Prac Ag* 7,no 2:278-80 F '16
- Operating costs of a well-established New York apple orchard. G. H. Miller. *il* U S Ag B 130:1-16 '14
- Profits on a barrel of apples. U. P. Hedrick. *N Y Ag Dept B* 79,pt 1:889-94 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:889-94 '17
- Thirty years in a home orchard; financial history of two acres. F. J. Heacock. *Country Gent* 81:1013 My 13 '16

*See also* Apples—Prices

**Diseases and pests**

- Apple diseases. G. E. Stone. *il* *Mass Ag Bd B* 2 (5th ed):139-54 '16
- Apple diseases in India. H. S. Jackson. *il* *Ind Ag Exp C* 70:1-23 '17
- Apple dusting in Nova Scotia. P. A. Murphy. *il* *Ag Gaz of Canada* 4:251-9 Ap '17
- Apple ermine moth. P. J. Parrott. *J Econ Entom* 11:55-6 F '18
- Apple powdery mildew and its control in the arid regions of the Pacific Northwest. D. F. Fisher. *bibliog il* U S Ag B 712:1-28 '18
- Apple powdery mildew and its control in the Pajaro valley. W. S. Ballard and W. H. Volck. *il* *map U S Ag B* 120:1-26 '14
- Apple scald; renewal of air in storage houses is an effective remedy. *Weekly N L* 5:3 D 5 '17; Same. *Better Fruit* 12:10 D '17
- Apple spraying experiments in 1916 and 1917. W. J. Morse. *Maine Ag Exp B* 271:101-28 '18
- Apple tree insects of Maine. E. M. Patch and O. A. Johannsen. *il* *Maine Ag Exp Doc* 525:1-72 '16
- Arsenate of lime in combination with soluble sulphur as a spray material for the apple. G. E. Sanders. *Ag Gaz of Canada* 3:305-6 Ap '16
- Black spot and leaf curl. W. Laidlaw and C. C. Brittlebank. *il* *J Dept Ag Victoria* 16:479-87 Ag '18
- Black-spot of apples. W. H. Taylor. *J Ag New Zealand* 15:98-100 Ag '17
- Blister spot of apples and its relation to a disease of apple bark. D. H. Rose. *il* *Phyt* 7:198-208 Je '17
- Brown rot of apples. H. Wormald. *il* *J Bd Ag* 25:299-302 Je '18
- Can the side worms of apples be controlled? P. W. Mason. *il* *Purdue Ag* 12:412 Ap '18
- Capsid bugs. J. C. F. Fryer. *il* *J Bd Ag* 22:950-8 Ja '16
- Collar rot and fire blight. *il* *Rural N Y* 77:974 Ag 17 '18
- Common diseases of apples, pears and quinces. M. T. Cook. *il* *N J Ag Exp C* 80:1-27 '17
- Common insects and diseases of apples and peaches. E. H. Favor. *il* *Fruit-Grower* 27:7-9 Ja 1 '16
- Control of the apple capsid bug by spraying. F. R. Petherbridge. *il* *J Bd Ag* 24:1401-10 Mr '18
- Controlling apple insects in the province of Quebec. C. E. Petch. *Ag Gaz of Canada* 3:697-8 Ag '16
- Cork, drouth spot and related diseases of the apple. A. J. Mix. *bibliog il* *N Y State Ag Exp B* 426:473-522 '16; Summary. *Better Fruit* 12:10 JI '17
- Summary with several illustrations published separately. 8p



**Apples—Diseases and pests—Continued**

- Dimorphism in coniothorium pirinum Sheldon. C. H. Crabill. il Am J Bot 2:449-67 N '15
- Discussion of fruit diseases. il Cal State Comm Hort B v 7:144-9 Mr '18
- Do sprays cause any injury? A. Fearing. il Gard M 25:325 Jl '17
- Dormant spraying for apple orchards. F. C. McConnell. Purdue Ag 13:113-14 D '18
- Dusting and spraying experiments with apples. W. C. Dutton. Mich Ag Exp Spec B 87:1-24 '18
- Dusting and spraying experiments with apples. D. Reddick and S. R. Crosby. il Cornell Ag Exp B 369:309-56 '16; Same. Cornell Ag Exp Rep 1916:309-56 '17; Same cond. Country Gent 81:695 Mr 25 '16; Abstract. Fruit-Grower 27:197 Mr 15 '16
- Effect of temperature aeration and humidity on Jonathan-spot and scald of apples in storage. C. Brooks and J. S. Cooley. bibliog il J Ag Research 11:287-318 N 12 '17
- Elm leaf rosette and woolly aphid of the apple. E. M. Patch. il Maine Ag Exp B 256:329-44 '16
- Experiments in spraying apple orchards to control aphids and false red-bug. W. E. Britton and M. P. Zappe. Conn State Ag Exp B 203:259-62 '18
- Experiments with apple leaf-spot fungi. J. W. Roberts. bibliog il J Ag Research 2:57-66 Ap '14
- Factors influencing the abscission of flowers and partially developed fruits of the apple (pyrus malus L.). A. J. Heinicke. bibliog il Cornell Ag Exp B 393:45-114 '17
- Factors involved in the growth and the pycnidium formation of plendomus fuscomaculans. G. H. Coons. bibliog J Ag Research 5:713-69 Ja 17 '16
- Field experiments in spraying apple orchards. il Ill Ag Exp B 185:1-12 '16
- Field experiments in spraying apple orchards in 1913 and 1914. B. S. Pickett and others. il Ill Ag Exp B 206:427-509 '18
- Fruit and vegetable diseases and their control. E. C. Stakman and A. G. Tolaas. il Minn Ag Exp B 153:15-32 '16
- Fungi producing heart-rot of apple trees. B. O. Dodge. il Mycol 8:5-15 Ja '16
- Further observations on the capsids which attack apples. F. R. Petherbridge and M. A. Husain. il J Ed Ag 25:54-8 Ap '18
- How I spray. H. Koeller. Fruit-Grower 28:9 Ja 1 '17
- Improving the apple crop by summer spraying. W. A. Radspinner. Purdue Ag 12:544-5 Je '18
- Insect problems of the Hudson valley. E. P. Felt. N Y State Fruit Growers' Assn Pro 1916:200-7
- Insects particularly affecting the apple, by E. P. Felt; Some of our most common apple diseases, by H. H. Whetzel. il N Y Ag Dept B 79,pt 1:842-54, 855-70 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:842-54, 855-70 '17
- Insects that deform fruits. G. W. Herrick. N Y State Fruit Growers' Assn Pro 1916:218-23
- Investigation on spraying for woolly aphid 1916. E. L. Childs. Better Fruit 11:27 Ja '17
- Irrigation experiments on apple-spot diseases. C. Brooks and D. F. Fisher. bibliog il J Ag Research 12:109-38 Ja 21 '18
- Is crown gall injurious to apple nursery stock? S. B. Fracker. J Econ Entom 11:133-5 F '18
- Kill the worms and save the apples. H. F. Wilson. il Wis Ag Ext C 78:1-8 '17
- Leaf blister mite on pear and apple foliage. H. C. Clarke. Gard M 27:29 F '18
- Life-history and control of the rose leaf-hopper. L. Childs. il Ore Ag Exp B 148:1-32 '18
- Maine fly and the Australian apple crop. E. M. Patch. il Country Life 33:100 Ap '18
- Mature apples kept cool and ventilated will not scald. Weekly N L 5:12 Jl 31 '18
- Methods of spraying. G. A. Yeaton. Maine Ag Dept B v 18:6-13 Je '18
- Notes on apple diseases in Illinois. H. W. Anderson. Ill State Hort Soc Trans 1917:413-20 '18

- Notes on three species of apple leaf-hoppers. F. H. Lathrop. il J Econ Entom 11:144-8 F '18
- Powdery mildew of apple. Better Fruit 10:11-12 Mr '16; Same. Better Fruit 11:12 My '17
- Powdery mildew of the apple; experiments with iron sulphide and other sprays for its control. W. J. Allen and W. le Gay Brerton. Ag Gaz of New South Wales 29:408-12 Je '18
- Prevent apple scald. Better Fruit 13:12 S '18
- Prospects for wormy apples. Better Fruit 11:21 Ag '16
- Protecting apple and pear trees. F. H. Sweet. il Green's Fruit Grower 37:2 Ap '17
- Report on further investigations on the capsids which attack apples. J. C. F. Fryer and F. R. Petherbridge. il J Ed Ag 24:33-44 Ap '17
- Results from spraying apples. Fruit-Grower 27:127 F 15 '16
- Results from spraying in Nova Scotia. G. E. Sanders and W. H. Brittain. Canada Ag 11p '16
- Shall we continue to spray our apple orchards? with discussion. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 53-73) '16
- Six years of experimental apple spraying at Highmoor farm. W. J. Morse. Maine Ag Exp B 249:81-96 '16
- Spot diseases of the apple causing much general confusion. C. Brooks and D. F. Fisher. Better Fruit 10:13-15 F '16
- Spray calendar for apples and quinces. il N J Ag Exp C 93:1-4 '18 (C. 75 rev.)
- Spray program for the northwest apple orchards. L. Childs. il Better Fruit 12:6-7 Ap '18
- Spraying apples. B. S. Pickett. Ill State Hort Soc Trans 1917:328-37 '18
- Spraying apples and pears. H. P. Barss and A. L. Lovett. il Ore Ag Ext B 193:1-8 '17
- Spraying experiments and apple diseases in 1915. W. J. Morse. il Maine Ag Exp B 252:169-92 '16
- Spraying experiments in Nebraska. J. R. Cooper. il map Neb Ag Exp Research B 10:1-98 '17; Summary (Why, when, and how to spray). (Pop ed) B 158:1-20 '17
- Spraying for insects affecting apple orchards in Nova Scotia. G. E. Sanders and W. H. Brittain. 11p il '16 Canada Ag
- Spraying peach and apple orchards. J. W. Roberts. (In Peninsula hort. soc. Trans., 1916, p. 30-3) '16 W. Webb, sec., Dover, Del.
- Spraying problem; high grade apples. Rural N Y 76:335+ Mr 3 '17
- Spraying the apple. Prac F 113:146 Ap 1 '17
- Spraying the apple. D. W. Legore. Fruit-Grower 27:22 Ja 1 '16
- Spraying the apple orchard. il Mass Ag Ext C 61 4p '18
- Spraying the apple orchard. R. S. Duncan. Green's Fruit Grower 36:2 F '16
- Stippen and spray injury. C. H. Crabill and H. E. Thomas. Phyt 6:51-4 F '16
- Three common diseases of the apple in Pennsylvania. E. West. il Penn State F 10:73-4 Ap '17

*See also* Apple and thorn skeletonizer; Apple aphid; Apple bitter pit; Apple black rootrot; Apple blotch; Apple canker; Apple curculio; Apple leaf miners; Apple leaf-mining case-bearers; Apple leaf-sewers; Apple maggots; Apple red bugs; Apple root borers; Apple rot; Apple rust; Apple scab; Apple-seed chalcid flies; Apple-twig miners; Buffalo tree hoppers; Codling moths; Dock false-worms; Fire blight; Pear leaf blister mites; Yellow-necked apple caterpillars

**Distribution**

- Distribution of the famous northwest apple. Better Fruit 12:7 D '17
- Distribution of the northwestern apple crop. E. H. Shepard. Better Fruit 12:12 O '17
- More information on fruit distribution. E. H. Shepard. Better Fruit 12:7 Ag '17
- Not overproduction of apples, but lack of distribution. E. H. Shepard. Better Fruit 12:5-7 Jl; 12-13 S '17

**Apples—Distribution—Continued**

Recent car shipments from the Northwest.  
Better Fruit 12:10 N '17  
Storage-in-transit privilege. Better Fruit 12:  
18 N '17

**Embargo**

Apple embargo. Ag Gaz of Canada 4:466 Je '17  
British apple embargo removed. C. W. Bax-  
ter. Ag Gaz of Canada 5:1142-3 D '18

**Exhibits**

Fruit show at the Panama exposition. E. C.  
Gillett. N Y State Fruit Growers' Assn Pro  
1916:184-5  
Horticultural exhibit of the state of New  
York at the Panama-Pacific international  
exposition. C. G. Porter. N Y State Fruit  
Growers' Assn Pro 1916:125-8  
New York apples in San Francisco; with list  
of awards. L. L. Woodford. Rural N Y 75:  
119 Ja 22 '16  
Purdue apple show. W. H. Lloyd. il Purdue  
Ag 12:365-8 Mr '18  
Sixth Indiana apple show. Fruit-Grower 28:25  
Ja 1 '17  
7th annual Indiana show, Washington, Nov.  
21-27, 1917. il Purdue Ag 12:217-20 Ja '18  
7th annual Indiana apple show, Washington,  
Nov. 21-27, 1917. F. I. Odell. il Green's Am  
Fruit Grower 38:7 Ja '18  
7th Ohio apple show, Toledo. R. B. Cruick-  
shank. Ohio F 140:603 D 29 '17  
Students' apple shows. il Fruit-Grower 27:64  
Ja 15 '16  
To put an apple in every mouth; the Illinois  
apple show begins November 19. il O Judd  
Farmer 65:429 N 9 '18  
Value of apple shows. W. J. Green. Ohio F  
141:50 Ja 12 '18  
*See also* National apple show

**Grading**

Act relative to the packing, grading and sale  
of apples (Mass.). Mass Ag Bd Yearbook  
1916, pt 2:271-2 '17  
Another apple grader; what growers say  
about mechanical apple graders. A. W. Wil-  
liams. Nat Stock & F 40:651 S 23 '16  
Apple grading and packing; the United States  
standard barrel law, the United States apple  
grading law and the Massachusetts apple  
grading law. H. L. White. Mass Ag Bd B 2  
(5th ed):213-35 '16; Same. Mass Ag Bd C  
50:1-27 '16  
Apple grading law. G. F. Potter. Wis Hort  
Soc Rep 48:200-3 '18  
Apple grading law. B. D. Van Buren. N Y Ag  
Dept B 79, pt 1:669-78 Ja '16; Same. N Y Ag  
Dept Rep 1916, pt 2:669-78 '17  
Apple sizes. M. L. Williams. il Country Gent  
82:1356 S 1 '17  
Grading apples by machinery. C. I. Lewis.  
Fruit-Grower 27:465 O 15 '16  
Grading rules and regulations season 1918.  
Better Fruit 13:9 Ag '18  
Has high grading in 1916 paid? C: A.  
Malboeuf. (In 8th annual report, 1916, p. 76-  
82) '17 Oregon state hort. soc., C. D. Min-  
ton, sec., Portland, Ore.  
Last season's apple crop. W. J. Green. Ohio F  
137:835 Je 24 '16  
Making good grading bill. Fruit-Grower 28:84  
F 1 '17  
National apple packing law. A. F. Mason. il  
Country Gent 83:14-15 Mr 2 '18  
Orchard machinery and supplies; apple grad-  
ers. U. T. Cox. Ohio F 137:364 Mr 4 '16  
Packing apple ammunition. O. H. Barnhill.  
il Better Fruit 12:5-6 S '17  
Packing apples. E. H. Shepard. il Better Fruit  
11:5-7 Ag '16  
Pennsylvania's new apple grading and pack-  
ing law. Pa Ag Ext B v 4:1-4 O '17  
Sorting table for apples. A. C. Weed. il Rural  
N Y 75:1306 O 14 '16  
Standard grades demanded. Fruit-Grower 28:  
46 Ja 15 '17  
Standardization of apple grades. H. C. Het-  
zel. N Y State Fruit Growers' Assn Pro  
1918:74-80; Excerpts. Nat Stock & F 41:1070  
Ja 26 '18

Standardization of the apple under the act of  
1915. F. S. Jerome. il Cal State Comm Hort  
B v 6:154-8 My '17  
Two grades of apples. Better Fruit 13:12 D '18  
U. S. grading and packing law. Green's Am  
Fruit Grower 38:10 Ja '18  
Washington grading rules and regulations for  
1917. Better Fruit 12:5 Ag '17  
What do you think about it, growing fruit for  
fun or for money? il Fruit-Grower 27:525 D  
15 '16  
Wisconsin apple grading law. E. D. Ball.  
Wis Hort Soc Rep 48:162-4 '18

**Handling**

Apple from tree to market. G; H. Vroom.  
N H Ag Dept Rep v 34:167-80 '16  
Bruised apple losing proposition. L. F. Dumas.  
Better Fruit 12:15 Ag '17  
Care of apples preparatory to storage. C. G.  
Randell. il Purdue Ag 13:13-14 O '18  
Central packing sheds and weighing-in sys-  
tem. I. Cleveland. Better Fruit 13:7-8+ S  
'18  
Handling and storage of apples in the Pacific  
Northwest. H. J. Ramsey and others. il  
U S Ag B 587:1-31 '17; Abstract. Better  
Fruit 12:8 D '17  
Handling late apple crop. J. S. Underwood.  
Green's Fruit Grower 36:3 O '16  
Handling of apples. Prac F 112:439 D 1 '16  
Harvesting apples. W. G. Brierley. il J Ag  
(Quebec) 20:73 O '16  
Modern methods of handling the apple crop;  
with discussion. C. J. Tyson. il Md Ag Soc  
Rep 1916, v 1:110-24 '17  
Who picks your apples? M. L. Williams. il  
Country Gent 82:1229 Ag 4 '17

**Judging**

Rules and methods for judging apples. A. J.  
Farley. (In Peninsula hort. soc. Trans.,  
1916, p. 16-25) '16 W. Webb, sec., Dover,  
Del.  
Scoring apples. Fruit-Grower 27:473 N 1 '16

**Laws**

*See* Apple industry—Laws and regulation

**Marketing**

Advertising and merchandising northwestern  
apples. R. C. Gano. Better Fruit 10:6-8 Je  
'16  
Advertising that sold the apples. R. C. Gano.  
Fruit-Grower 27:345 Jl 1 '16  
Advertising the apple. F. C. Sears. il Country  
Gent 83:8 N 30 '18  
Advertising the apple. F. C. Sears. il Mass  
Ag Ext B 10:1-20 '16  
Advertising the northwest box apples. O. Dor-  
man. Better Fruit 10:31 Ja '16  
Apple industry of U. S. to be placed upon  
strong foundation. P. C. Stark. Fruit-  
Grower 27:356 Jl 15 '16  
Apple market investigations, 1914-15. C. W.  
Moomaw and M. M. Stewart. il U S Ag B  
302:1-23 '15  
Apple-price conditions, 1916—can we do bet-  
ter? E. H. Shepard. Better Fruit 11:5-7 F '17  
Apples for local or special markets. W. E.  
Sanger. Prac F 112:27 Ja 15 '16  
Apples for near-by grocers. G. A. Anderson.  
Country Gent 81:1285 Jl 1 '16  
Apples from producers to consumer. C. Weck-  
esser. Rural N Y 75:549 Ap 1 '16  
Apples in an apple land. O. H. Barnhill. Coun-  
try Gent 81:2191 D 23 '16  
Apples should not be wasted. R. Livingstone.  
Better Fruit 11:16 N '16  
Associational selling of apples. H. L. Alex-  
ander. W Va Ag Dept B 13:41-3 Ja '16  
Brotherhood of fruit growers; United fruit  
companies of Nova Scotia. A. J. Campbell.  
il Ohio F 137:785-6 Je 10 '16  
Coöperation in marketing apples. Country  
Gent 81:446 F 26 '16  
Dakota won't have culls. Fruit-Grower 27:182  
Mr 1 '16  
Developing foreign markets for apples. C. W.  
Moomaw. (In Pan American scientific con-  
gress Pro., 1915, v. 3, p. 646-65) '17  
Distribution of the northwestern apple crop.  
E. H. Shepard. Better Fruit 12:12 O '17



**Apples—Marketing—Continued**

- Druggist grows apples. W. A. Irvin. *il Fruit-Grower* 27:421 S 15 '16  
 Effect of retail prices on fruit. R. E. George. *Better Fruit* 10:5-6 Je '16  
 Exporting apples. C. W. Kimball. *N Y Ag Dept B* 79,pt 1:911-14 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:911-14 '17  
 Government aid for fruit growers and selling agents. *Better Fruit* 10:15+ Ap '16  
 Local markets for apples. A. W. Stephens. *Rural N Y* 76:31 Ja 13 '17  
 Marketing apples. H. W. Moorhouse. *Okla Ag Ext C* 75 4p '18  
 Marketing the apple crop. C. E. Bassett. *Va Ag Dept B* 109:109-12 '16  
 More information on fruit distribution. E. H. Shepard. *Better Fruit* 12:7 Ag '17  
 My experience in growing and marketing apples. D. G. Miller. *il Va Ag Dept B* 109:88-96 '16  
 Northwest apples to be advertised. R. C. Gano. *il Fruit-Grower* 27:438 O 1 '16  
 Northwestern boxed apples and salt mackerel. D. L. Woodruff. *Better Fruit* 12:5-6 Je '18  
 Not overproduction of apples, but lack of distribution. E. H. Shepard. *Better Fruit* 12:5-7 Jl; 12-13 S '17  
 Notes on the auctions. *Rural N Y* 75:87 Ja 15 '16  
 Orchardists' future; the marketing problem. S. A. Beach. *Fruit-Grower* 27:278-9 My 1 '16  
 Packing and marketing apples; with discussion. H. M. Dunlap. *Minn Hort* 44:333-42 S '16  
 Packing and marketing the apple crop. S. L. Lupton. *Prac F* 114:307 S 15 '18  
 Roadside market. *il Fruit-Grower* 27:490 N 15 '16  
 Selecting an apple buyer. P. H. Shepard. *Fruit-Grower* 28:97 F 1 '17  
 Selling apples direct to the consumer. A. K. Bassett. *Wis Hort Soc Rep* 48:97-102 '18  
 Selling from the freight car. A. C. Newton. *Country Gent* 81:1285 Jl 1 '16  
 Shooting holes in a state's reputation. *Rural N Y* 75:107 Ja 22 '16  
 Skookum apple advertising increased. R. C. Gano. *il Green's Am Fruit Grower* 38:13 Ja '18  
 Study of apple marketing. *Fruit-Grower* 27:15 Ja 1 '16  
 Successful selling plan. C. L. Opperman. *Country Gent* 81:1508 Ag 12 '16  
 Timely advice on marketing the apple crop. *Better Fruit* 11:10 S '16  
 Utilizing the waste in commercial orchards. J. W. Steinhart. (*In Nebraska Horticulture* v. 6, no. 12, p. 133-8) (F) '17 Neb. state hort. soc., Lincoln  
 What the enterprising city visitor did. M. E. Gardner. *Fruit-Grower* 27:109 F 1 '16  
 Where to market your apples; city for your variety. J. R. Smith. *il Country Gent* 81:919-20 Ap 29 '16

See also Apple industry; Apples—Distribution

**Auction method**

- Apples at auction in New York state. G. T. Powell. *Prac F* 112:49 F 1 '16

See also Fruit—Marketing—Auction method

**Morphology**

- Nature of the inflorescence and fruit of *pyrus malus*. C. A. Black. *bibliog il N H Ag Exp Tech B* 10:519-47 '16

**Packing**

- Act relative to the packing, grading and sale of apples (Mass.). *Mass Ag Bd Yearbook* 1916,pt 2:271-2 '17  
 Act to establish a standard for the packing and marketing of apples. *Cal State Comm Hort B v* 5:295-9 Ag '16  
 Apple grading and packing; the United States standard barrel law, the United States apple grading law and the Massachusetts apple grading law. H. L. White. *Mass Ag Bd B* 2 (5th ed):213-35 '16; Same. *Mass Ag Bd C* 50:1-27 '16

- Apple packing for Massachusetts growers. A. R. Jenks. *il Mass Ag Bd B* 2 (5th ed):199-212 '16  
 Apple-packing method. *Weekly N L* 4:5 Jl 25 '17  
 Apple-packing train. F. S. Welsh. *il N Y Ag Dept B* 79,pt 1:679-83 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:679-83 '17  
 Barrel packing of apples. C. L. Burkholder. *il Purdue Ag Ext B* 59:1-8 '17  
 Bogus apple packer again. H. M. Eastman. *Rural N Y* 77:31 Ja 12 '18  
 Bogus apples in the barrel. *il Rural N Y* 76:1439 D 22 '17  
 Box pack. *Nat Stock & F* 40:754 O 21 '16  
 Central packing house. R. W. Rees. *N Y State Fruit Growers' Assn Pro* 1918:52-8  
 Central packing houses for New York fruit. F. S. Welch. *il plan N Y Ag Dept B* 79,pt 1:895-905 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:895-905 '17; Same. *N Y Ag Dept B* 86:2620-30 Ag '16; Excerpt. *N Y State Fruit Growers' Assn Pro* 1916:128-42  
 Championship apples. J. L. Ashlock. *il Country Gent* 81:513 Mr 4 '16  
 Cost of picking and packing apples. J. A. Cohill. *Country Gent* 81:1437 Jl 29 '16  
 Delaware apple packing law. *Prac F* 112:363 O 1 '16  
 Fines for unlawful apple packing. *Rural N Y* 75:691 Ap 29 '16  
 Golden rule in an apple barrel. E. P. Powell. *Country Gent* 81:1795 O 7 '16  
 Harvesting, packing and marketing the apple crop. A. F. Mason. *il Pa Ag Ext C* 50:1-44 '16  
 Harvesting the fruit crop. *il Country Gent* 81:1324 Jl 8 '16  
 How to pack good apples. A. C. Weed. *il Rural N Y* 75:1173 S 9 '16  
 Illustrations for apple packs in the standard apple box. *Better Fruit* 13:3 Ag '18  
 Last season's apple crop. W. J. Green. *Ohio F* 137:835 Je 24 '16  
 Modern methods of packing apples. 60p '17 Canada Ag  
 More about apple packages. *il Country Life* 29:132 Mr '16  
 National apple packing law. A. F. Mason. *il Country Gent* 83:14-15 Mr 2 '18  
 Packing a barrel of apples. *il Nat Stock & F* 40:676 S 30 '16  
 Packing and marketing apples; with discussion. H. M. Dunlap. *Minn Hort* 44:333-42 S '16  
 Packing and marketing the apple crop. S. L. Lupton. *Prac F* 114:307 S 15 '18  
 Packing apple ammunition. O. H. Barnhill. *il Better Fruit* 12:5-6 S '17  
 Packing apples. E. H. Shepard. *il Better Fruit* 11:5-7 Ag '16  
 Packing apples in boxes. R. W. Rees. *il Cornell Countryman* 14:366-9 F '17  
 Packing apples in central packing houses and the New York apple packing law. 15p *il n. d. Agricultural dept., New York Central railroad co., Grand Central terminal, N. Y.*  
 Packing of apples in barrels and boxes. W. H. Wolff. *il N H Ag Ext B* 7:1-32 '16  
 Packing of apples in California. W. P. Tufts. *il Cal Ag Exp C* 178:1-31 '17  
 Packing the apple crop in barrels or in boxes for the fancy market. A. F. Mason. *il Country Gent* 82:1514-15 O 6 '17  
 Pennsylvania's new apple grading and packing law. *Pa Ag Ext B v* 4:1-4 O '17  
 Picking and packing apples for market. P. Thayer. *il Ohio F* 138:273-4 S 23 '16  
 Some suggestions for packing apples in boxes. *il Nat Stock & F* 42:602 S 28 '18  
 Up-to-date packing house. *Green's Am Fruit Grower* 38:16 Ja '18  
 Washington grading rules and regulations for 1917. *Better Fruit* 12:5 Ag '17  
 West Virginia apple packing law. *W Va Ag Dept B* 25:1-5 '17  
 When apples are hard ripe rough handling injures keeping. *Green's Fruit Grower* 36:3 S '16

**Apples—Packing—Continued****Training**

School for apple packing in New Brunswick. E: A. Dow. (Commerce Reports no. 81) p 89 (Ap 7) '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.

**Physiology**

Apple culture in Victoria. J. Farrell. il J Dept Ag Victoria 15:24-35, 140-57, 277-94, 333-44, 385-403, 457-69, 542-53, 577-88 Ja, Mr, My-O '17

**Prices**

Apple crop short, prices high. O Judd Farmer 63:8 O 13 '17

Apple-price conditions, 1916—can we do better? E. H. Shepard. Better Fruit 11:5-7 F '17

Apple sellers and buyers apart. O Judd Farmer 61:5 S 23 '16

Hood River apple prices highest since 1911. Better Fruit 12:11+ Ap '18

How about apple prices? Nat Stock & F 42: 471 Ag 17 '18

Receipts and prices of apples in New York city and exports of apples from United States and Canada. H. B. Knapp. N Y Ag Dept B 79:pt 1:327-36 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:327-36 '17

**Seed**

Seed production in apples. C: S. Crandall. il Ill Ag Exp B 203:185-213 '17

**Standards**

Apple standardization work in California. G: P. Weldon. Better Fruit 13:5-6 O '18  
Standardization of apple grades. H. C. Hetzel. N Y State Fruit Growers' Assn Pro 1918:74-80; Excerpts. Nat Stock & F 41:1070 Ja 26 '18

**Statistics**

See Apple industry—Statistics

**Storage**

Apple scald. Country Gent 81:513 Mr 4 '16  
Apple scald; renewal of air in storage houses is an effective remedy. Weekly N L 5:3 D 5 '17; Same. Better Fruit 12:10 D '17

Apple storage, facts and fancies. Fruit-Grower 27:343 Jl 1 '16

Apple storage on the farm. H. R. Cox. Country Gent 81:145 Ja 22 '16

Apples easy to keep. Fruit-Grower 27:460 O 15 '16

Apples go wrong in storage. A. C. Weed. Rural N Y 75:1276 O 7 '16

Cold storage costs for apples. Country Gent 81:1790 O 7 '16

Color as an indication of the picking maturity of fruits and vegetables. L. C. Corbett. il U S Ag Yearbook 1916:99-106; Same. Separate 686

Common-storage sense. M. L. Williams. il Country Gent 82:1051 Je 23 '17

Cool storage for the commercial apple grower, by R. A. Simpson; Cold storage plants for the commercial apple grower, by F. A. Simpson; Keeping apples in common storage; discussion. Ill State Hort Soc Trans 1916:147-60, 160-5, 412-16 '17

Effect of temperature aeration and humidity on Jonathan-spot and scald of apples in storage. C: Brooks and J. S. Cooley. bibliog il J Ag Research 11:287-318 N 12 '17

Efficient apple storage house. il plan Ohio F 142:170 Ag 24 '18

Handling and storage of apples. C: W. Mann. Maine Ag Dept B v 17:77-81 S '18

Handling and storage of apples in the Pacific Northwest. H. J. Ramsey and others. il U S Ag B 587:1-31 '17; Abstract. Better Fruit 12:8 D '17

Home storage cellar. Fruit-Grower 27:297 My 15 '16

Home storage for apples. J. M. Myers. il Rural N Y 76:69 Ja 20 '17

Keeping quality of fruit. M. L. Williams. Country Gent 81:976 My 6 '16

Management of common storage houses for apples in the Pacific Northwest. H. J. Ramsey and S. J. Dennis. il Farmers' B 852:1-23 '17; Excerpts. Fruit-Grower 28:306 Jl 1 '17  
Mature apples kept cool and ventilated will not scald. Weekly N L 5:12 Jl 31 '18  
Practical farm apple cellar. Rural N Y 76:830 Je 30 '17

Prevent apple scald. Better Fruit 13:12 S '18  
Simple design marks cold storage building for apples. S. T. Smith. il plans Eng News-Record (10th av at 36th st, N.Y. 15c) 80: 1175-7 Je 20 '18

Simple storage of apples. J. F. Forbes. Rural N Y 76:724 My 26 '17

Storage cave for apples. D. E. Lewis. Green's Fruit Grower 36:9 O '16

Storage of apples; with discussion. F. C. Sears. Mass Ag Bd B 2 (5th ed):169-83 '16

Storage of apples on the farm. B: W. Douglass. il Rural N Y 76:639, 669 My 5-12 '17

Storing apples at home. Fruit-Grower 27:313 Je 1 '16

Storing of apples. Gard Chron (Lond) 63:37 Ja 26 '18

Successful apple storage; description of storage house. C. N. Crottsenburg. il Fruit-Grower 27:294 My 15 '16

Successful cold storage for apples. H. F. Hansen. Minn Hort 44:243-4 Je '16

Successful home storage. R. A. Simpson. Green's Fruit Grower 37:2 Mr '17

Water-core of the King David apple. J. B. Keil. il Ohio Ag Exp B v 1:117-18 Ap '16

What causes apples to decay. Va Ag Dept B 108:8-10 Ja '16

**Transportation**

Heavy loading of freight cars in the transportation of northwestern apples. H. J. Ramsey. (Markets Doc. 13) 23p il '18 U S Ag Proposed increase in freight rates. Better Fruit 13:3 Jl '18

Sending apples by parcel post. P. Thayer. il Ohio Ag Exp B v 1:377-82 D '16

Storage-in-transit privilege. Better Fruit 12: 18 N '17

Truck boosts apple profits. C. N. Crottsenburg. il Fruit-Grower 28:5 Ja 1 '17

**Varieties**

Apple breeding in Canada. W. T. Macoun. Ag Gaz of Canada 5:126-8 F '18

Apple culture in Victoria. J. Farrell. il J Dept Ag Victoria 15:457-69 Ag '17

Apple culture in Victoria; the production of the new varieties. J. Farrell. il J Dept Ag Victoria 16:16-24 Ja '18

Apple production and value by varieties. Better Fruit 10:10 Je '16

Apple varieties. F. D. Wells. Nat Stock & F 40:1120 Ja 27 '17

Apples; production estimates and important commercial districts and varieties. H. P. Gould and F. Andrews. maps U S Ag B 485: 1-48 '17 (10c. Supt. of doc.)

Assortment apple row. E. H. Burson. il Green's Fruit Grower 36:4-5 Mr '16

Commercial apples. Weekly N L 5:4 My 8 '18

Cox's orange pippin apple. G: T. Powell. Rural N Y 75:1538 D 16 '16

Delicious apple. il Fruit-Grower 28:222 Ap 1 '17

Duchess apple improved. M. J. Dorsey. il J Heredity 8:565-7 D '17

Few varieties and when to eat them. Green's Fruit Grower 37:12 S '17

Fitness of apples. Fruit-Grower 27:493 N 15 '16

Golden winesap. il Fruit-Grower 27:138 F 15 '16

Good talk on apples. H. Losee. Rural N Y 75: 227 F 12 '16

Good word for the Ben Davis. H. E. White. Nat Stock & F 40:1319 Mr 3 '17

History of the McIntosh apple. il Green's Fruit Grower 36:3 Ja '16

Important apple varieties. W. J. Wright. il Nat Stock & F 41:56 Ap 7 '17

Indiana horticultural society's experimental orchard. J. Oskamp. il Ind Ag Exp C 74: 1-16 '17



**Apples—Varieties—Continued**

- Keeping quality of different varieties of apples; with discussion. W. T. Macoun. (*In* Report, Quebec Pomological and fruit growing soc., 1916, p. 82-8) '16
- McIntosh apple. J Ag (Quebec) 20:165 F '17
- McIntosh apple. Rural N Y 75:1397 N 4 '16
- Newtown pippin. S. F. Brown. Country Gent 81:267 F 5 '16; Same. Better Fruit 10:35 Ap '16
- Opalescent apple. U. P. Hedrick; H. Losee. Rural N Y 75:514 Mr 25 '16
- Orchardists' value of apple varieties grown in Minnesota; with discussion. R. Wellington. *il* Minn Hort 46:357-63 O '18
- Origin of the Rome beauty apple. U. T. Cox. *il* Fruit-Grower 28:266 My 15 '17
- Originating new varieties. Fruit-Grower 27:509 D 1 '16
- Paradise apple stocks; being the first report of the work in progress at the Wye college fruit experiment station, East Malling. R. G. Hatton. *il* Royal Hort Soc J 42,pts 2-3:361-99 S '17
- Plant only quality apples. Rural N Y 76:315 Mr 3 '17
- Profit in apples. F. J. Heacock. Country Gent 81:1089 My 20 '16
- Promising new apple, golden winesap. *il* Fruit-Grower 27:80-1 F 1 '16
- Quality of the Ben Davis. C. H. Sapp. Ohio F 142:78 Jl 27 '18
- Queen of yellow apples—golden winesap. G: S. Cake. Fruit-Grower 28:16 Ja 1 '17
- Red Gravenstein apple. H. O. Mead. *il* Rural N Y 75:362 Mr 4 '16
- Right varieties. F. W. Allen. *il* Fruit-Grower 28:45 Ja 15 '17
- Second distribution of station apples (C. 37). U. P. Hedrick. N Y State Ag Exp Rep 1915:607-8 '16
- Selecting the variety. Prac F 112:399 N 1 '16
- Soil types for varieties of apples. H. J. Wilder. N Y Ag Dept B 79, pt 1:769-75 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:769-75 '17
- Soils of Massachusetts and Connecticut with especial reference to apples and peaches. H. J. Wilder. *il* U S Ag B 140:52-65 '15
- Some good old varieties of apples nearly extinct. G: T. Powell. *il* Rural N Y 77:312 Mr 2 '18
- Tests of newer apples. H. W. Doyle. Country Gent 81:1375 Jl 15 '16
- Variation of internal structure of apple varieties. E. J. Kraus. *il* Ore Ag Exp B 135:1-42 '16
- Varieties of apples for Massachusetts orchards. F. C. Sears. *il* Mass Ag Bd B 2 (5th ed):17-34 '16
- Varieties of apples for planting; with discussion. H. T. Foster. (*In* Report, Fruitgrowers' assn., 1916, p. 11-16) '17 Ontario ag. dept., Toronto
- Varieties of cider apple suitable for the manufacture of jelly, in France. A. Truelle. *Int R Sci & Prac Ag* 8,no 1:89-91 Ja '17
- Wealthy apple. F. H. Ballou. *il* Minn Hort 44:461-2 D '16
- What varieties of apples to select. Green's Fruit Grower 36:2 Ja '16
- Winesap and its many offsprings. *il* Am Fruit Grower 38:7 D '18
- Apples, Dried**
- Apple drying. J. Farrell. *il* plans J Dept Ag Victoria 14:196-211 Ap '16
- Brief outline of the development of the apple drying industry in the Pajaro valley. A. W. Tate, jr. Cal State Comm Hort B v 7:502-3 Ag '18
- Commercial evaporation of apples. Nat Stock & F 42:226 My 25 '18
- Cost of an evaporating outfit. A. H. Pulver. Rural N Y 75:33 Ja 8 '16
- Evaporated apples. C. S. McGillivray. 38p *il* plans '17 Canada Ag
- Evaporated apples. L. A. Munger. W Va Ag Dept B 13:31-4 '16
- Evaporated fruit industry in New York state. E. W. Catchpole. *il* N Y Ag Dept B 79,pt 1:337-53 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:937-53 '17; Same. N Y State Fruit Growers' Assn Pro 1916:290-8

- Evaporating or canning apples. A. H. Pulver. Rural N Y 75:612 Ap 15 '16
- Evaporation of apples. A. F. Barss. Better Fruit 13:9+ S '18
- Evaporation of apples. J. S. Caldwell. *il* plans Wash Ag Exp B 131:1-110 '16; Excerpts. J Dept Ag Victoria 15:589-607, 671-84 O-N '17 (to be cont)
- Humble dried apple. E. H. Favor. *il* Fruit-Grower 28:234 Ap 15 '17
- Saving the cull. S. Fraser. plans Country Gent 81:1401 Jl 22 '16
- Sending dried apples abroad. O Judd Farmer 60:34 F 5 '16
- Where's the profit. Fruit-Grower 28:285 Je 1 '17

*See also* Apple flakes

- Appleseed, Johnny (John Chapman) 1776-1843**
- Johnny Appleseed monument in Sherman-Heineman park, Mansfield, Ohio. *il* Am Flor 47:216 Ag 12 '16
- Memorial inscription on monument. *il* Better Fruit 11:7 S '16
- Monument recently erected. M. W. Richards. *il* Country Gent 81:1302 Jl 1 '16
- Monument to Johnny Appleseed. *il* Rural N Y 75:832 Je 3 '16
- Tribute to Johnny Appleseed; story of his life. M. W. Richards. *il* Fruit-Grower 27:310 Je 1 '16

**Appraisal.** *See* Farm values

**Apricots**

- California apricot industry. A. Marple. *il* Am Fruit Grower 38:13 O '18
- Gumming of apricot trees. G: Quinn. J Dept Ag S Australia 20:741-2 Ap '17
- Outlook for the apricot. F. B. McKeon. Better Fruit 10:30 My '16

**Diseases and pests**

- Bacterial gummosis of apricots—preliminary report. J. T. Barrett. *il* Cal State Comm Hort B v 7:137-9 Mr '18
- Lead arsenates, stone fruits, and the weather. G: P. Gray. *il* J Econ Entom 10:385-92 Ag '17
- Monilia sp., the cause of a specific gummosis of the apricot tree, in Italy. V. Peglion. *Int R Sci & Prac Ag* 9,no 5:635-6 My '18
- Report of investigation of alleged spray-injury to apricot buds. G: P. Gray. Cal State Comm Hort B v 7:454 Jl '18

**Marketing**

*See also* California prune and apricot growers; Prune and apricot growers' information bureau

**Apricots, Dried**

- Need of a state-wide dried apricot growers' association. R. E. Harrington. Cal State Comm Hort B v 5:15-19 Ja '16

**Aprons**

- We learn to make an apron. Mrs W. N. Hutt. Prog F 31:1344 N 18 '16

**Aquariums**

- Aquarium in the home. *il* Country Life. 35:92 N '18
- Combined conservatory and aquarium. H. A. Walker. *il* Country Life 33:64 Ja '18
- Goldfish aquarium. V. Laval. Country Gent 81:2062 N 25 '16

**Aquatic plants**

- Aquatic compositae. J. Hutchinson. *il* Gard Chron (Lond) 59:305 Je 10 '16
- Aquatic weeds of the Godavari and Pravara canals of the Bombay presidency—a problem in applied ecology. W. Burns. *il* Ag J of India Sci Congress No 1916:65-71 '16
- Eleven important wild-duck foods. W. L. McAttee. *il* maps U S Ag B 205:1-25 '15
- Five important wild-duck foods. W. L. McAttee. *il* maps U S Ag B 58:1-19 '14
- Marsh land and other aquatic plants. R. W. Shufeldt. *il* Am For 23:611-18 O '17
- Observations on the flora and fauna of flooded fenland. F. R. Petherbridge. *il* J Ag Sci 7:508-11 Ap '16
- Tolerance of fresh water by marine plants and its relation to adaptation. W. J. V. Osterhout. Bot Gaz 63:146-9 F '17

**Aquatic plants—Continued**

Vegetation and tide levels. G: D. Fuller. Bot Gaz 62:78-80 J1 '16

Water lilies and aquatic plants for every garden. C: L. Tricker. il Gard Chron Am 21: 202-3 My '17

What can be done in a stagnant marsh. S. F. Hamblin. il Gard M 23:242 My '16

See also Algae; Caltha; Diatoms; Kelp; Mare's tail; Tule; Vallisneria; Water lilies

**Aquilegia.** See Columbines

**Arabia.** See Live stock—Arabia

**Arabis**

Early and long flowering arabis. K. K. Perigo. il Gard M 23:128 Mr '16

**Arachnida.** See Spiders

**Arber, Edward Alexander Newell**

Sketch; with bibliography of works. Ann Bot 32:vii-ix O '18

**Arbor day**

\* Arbor and bird day. E: H. Forbush and H. A. Reynolds. (B. 122) 8p il plans '18 Mass. forestry assn., Boston

Arbor and bird day manual for April, 1917. Conn School Doc no 6—1917 (whole no 416)

16p '17 Conn. State bd. of educ., Hartford

Arbor and bird day manual for April, 1918. (School doc. no. 2—1918; Whole no.—422)

15p '18 Conn. State bd. of educ., Hartford

\* Arbor and bird days. H. T. Swift. (C. 128) 74p il '18 Ill. Dept. of public instruction, Springfield

Arbor day manual for Oregon, 1918. 32p bibliog il '18 Ore. Dept. of educ., Salem

Conservation, bird and arbor day. (B. 19) 30p il '17 Cal. state bd. of educ., Sacramento

Ohio arbor day and bird annual 1917. J. C. Hambleton. 80p il '17 Ohio State dept. of pub. instruction, Columbus

**Arboretums.** See Botanical gardens

**Arboriculture.** See Trees

**Arbors**

How we made our grape arbor attractive. il Green's Fruit Grower 36:3 D '16

See also Summer houses

**Archegonium**

Archegonium of catharinea angustata brid. (atrichum angustatum). G: S. Bryan. bibliog il Bot Gaz 64:1-20 J1 '17

**Archips cerasivorana.** See Cherry tree tortrix

**Architectural drawing**

Mechanical drawing for the farm and agricultural school. G: F. Krogh. bibliog il plans maps Minnesota Univ Ag Dept (Minneapolis) General Ser B 43p 41-51 J1 '16 25c

**Architectural gardening.** See Landscape gardening

**Architecture**

Achieving the picturesque in building. E. T. Seton. il Country Life 34:44-7 O '18

See also Arbors; Architecture, Colonial; Architecture, Domestic; Architecture, Dutch; Doors; Farm buildings; Fences; Fireproof construction; Floors; Foundations; Gambrel roofs; Garages; Masonry; Pergolas; Roofs; Schoolhouses; Stairways; Towers; Trusses

**Architecture, Colonial**

Building of the house of Prudence, A. D. 1762. F. E. Wallis. il plans Country Life 31:35-8 Ja '17

Germantown's old houses. W. N. Parker. il Ohio F 141:316 Mr 2 '18

Lindens—a house with a history. W. Fales. il Country Life 33:46-9 Mr '18

Oldtown—a dream. F. E. Wallis. il Country Life 30:27-30 Je '16

On the two horns of the gambrel. A. Embury. il Country Life 32:49-52 My '17

Restoring a colonial house. R. W. Haddon. il plans Am For 24:300-3 My '18

Soul of our colonial architecture. M. P. Corse. il Country Life 34:48-51 O '18

Unknown colonial type. C. L. Rose. il Country Life 32:67-9 Je '17

Washington's last headquarters. M. Stapley. il Country Life 32:84+ Je '17

**Architecture, Domestic**

Building an atmosphere of stability into the home. R. W. Haddon. il plans Am For 23:630-2 O '17

Development of the house. H. B. Young. J Home Econ 9:349-54 Ag '17

Eight rooms and a bath. W. H. Butterfield. il plan Country Gent 82:4 Ja 6 '17

Farmhouse improved. W: A. Etherton. Kan Ag Coll B v 1, no8:1-88 My 1 '17 (50c)

Fireproof suburban house. J: R. McMahon. il Country Gent 81:1439-40 J1 29 '16

Ready-made homes. il Farm Eng 5:28 F '17

Suburbanite his own architect. J: R. McMahon. il Country Gent 81:1367-8 J1 15 '16

When you build your house. R. W. Haddon. il plans Am For 24:57-8 Ja '18

See also Bedrooms; Bungalows; Ceilings; Country houses; Dining rooms; Doorways; Farm buildings; Farmhouses; Fireplaces; Halls; Heating; House decoration; Kitchens; Libraries (rooms in houses); Lighting; Living rooms; Log cabins; Plumbing; Porches; Stairways

**Designs and plans**

Bachelor's country home. J. W. O'Connor. il plan Country Life 33:49-51 N '17

Character in a small house. J: T. Boyd, jr. il plan Country Life 31:30-1 N '16

Holmhill Lodge, Roseland, N.J.; the home of Frank Richards Ford; photographs. plans Country Life 33:64-5 F '18

Home of John B. Frey, esq., Pittsford, N.Y.; photographs. Country Life 29:56 Ap '16

Home of Mrs Leopold Cahn at Hartsdale, N.Y.; photographs. Country Life 33:62-3 F '18

House built for outdoor sleeping. il plans Country Life 31:42-3 Ja '17

House designed for housekeeping. R. Fisher. il plans Country Life 29:38-9 F '16

House on the moors, the home of William E. Atwood. Country Life 33:70-1 Mr '18

Nuttinghame again remodeled. C: E. Hooper. il plans Country Life 30:31-3 O '16

\* Reconstruction in France; the competition by French architects for the creation of types of rural dwellings. il plans Am Inst Architects J (The Octagon, Washington, D.C. 50c) 6:473-9 O '18

**England**

Englishman and his country home. A. W. Jackson. il Country Life 34:26-39 O '18

**France**

\* Reconstruction in France; the competition by French architects for the creation of types of rural dwellings. il plans Am Inst Architects J (The Octagon, Washington, D.C. 50c) 6:473-9 O '18

**Switzerland**

Real Swiss chalet. H. E. Warren. il Country Life 32:70-2 O '17

**United States**

Architect's bungalow on the coast of Maine. il map plans Country Life 30:30 J1 '16

Beachleigh, Great Neck, Long Island, home of Mr G. A. Schieren; pictures. plan Country Life 33:62-3 D '17

Best twelve country houses in America. H: H. Saylor. il Country Life 29:26-9 Ja; 25-7 F; 38-41 Mr '16

Character in a small house. J: T. Boyd, jr. il plan Country Life 31:30-1 N '16

Coghill, St. Martins; the home of Miss Jessie Willcox Smith. H. D. Eberlein. il plan Country Life 30:18-21 O '16

Hillside site. A. R. Kelly. il Country Life 30: 41-3 My '16

Historic Dutch houses upon old Staten Island. H. S. Gillespie. il Country Life 31:74-5 Ap '17

Holmhill Lodge, Roseland, N.J.; the home of Frank Richards Ford; photographs. plans Country Life 33:64-5 F '18

Home of George Arents, jr., at Rye, N.Y.; views and plan. Country Life 33:65-8 Ja '18

Home of John B. Frey, esq., Pittsford, N.Y.; photographs. Country Life 29:56 Ap '16



**Architecture—United States—Continued**

- Home of Mrs Leopold Cahn at Hartsdale, N.Y.; photographs. *Country Life* 33:62-3 F '18
- Home of Philander C. Knox, Valley Forge, Pa.; photographs. *Country Life* 31:46-7 D '16
- House and garden of Mr. Frank Miles Day at Germantown, Pennsylvania; photographs. *Country Life* 29:44-5 Ja '16
- House in an apple orchard; the home of Wm. Adams Delano at Syosset, L.I. *il Country Life* 34:68-9 My '18
- House on the moors, the home of William E. Atwood; views and plans. *Country Life* 33:70-1 Mr '18
- In the spirit of 1800; the home of Mr Nathaniel Guernsey, Greenwich, Conn. *il plan Country Life* 31:59-61 F '17
- Lindens—a house with a history. W. Fales. *il Country Life* 33:46-9 Mr '18
- Master builder of the early nineteenth century. M. W. Cole. *il Country Life* 29:22-3 F '16
- My home and why it is different. C. A. Briggs. *il Country Life* 34:41-3 Je '18
- Scaleby—a new mansion of the South. P. M. Riley. *il plans Country Life* 30:23-5 JI '16
- Summer home of Mr Robert W. Chambers, Broadalbin, N.Y.; photographs. *Country Life* 29:38-9 Ap '16
- Tepee camp. E. I. Farrington. *il Country Life* 32:63 S '17
- Windham, Bryn Mawr, Pa., home of Mrs R. White Steel; photographs. *Country Life* 30:50-1 My '16

*See also* Architecture, Colonial

**Architecture, Dutch**

- Historic Dutch houses upon old Staten Island. H. S. Gillespie. *il Country Life* 31:74-5 Ap '17

**Ardisias**

- Plant notes. *Am Flor* 46:989 My 27 '16
- Suggestions for plant growers. *Am Flor* 46:1033 Je 3 '16

**Arenga saccharifera.** *See* Sugar palm

**Argentina**

- See also* subhead Argentina under special subjects, e.g. Agriculture—Argentina, Dairying—Argentina

**Description and travel**

- Trip to the Argentine. C. F. Curtiss. *Ia Ag Bd Yearbook* 1916:96-105

**Industries and resources**

- Argentina—a land of cattle and alfalfa. C. F. Curtiss. *il Breeder's Gaz* 70:1200-1 D 21 '16
- Markets for agricultural implements and machinery in Argentina. F. H. von Motz. (Special agents ser. no 125) 86p '16 U.S. Bureau of foreign and domestic commerce, Washington, D. C.; 5c Supt. of doc.

**Argentine ants.** *See* Ants

**Arid farming.** *See* Dry farming

**Arisaemas**

- Hardy arisaemas. H. J. Elwes. *Gard Chron* (Lond) 62:127 S 29 '17
- Wandering tapetal nuclei of arisaema. F. L. Pickett. *il Am J Bot* 3:461-9 O '16

*See also* Jack-in-the-pulpit

**Aristolochia.** *See* Pelican flower

**Arithmetic**

- Going to school at home. E. F. Lynch. *Country Gent* 81:953 Ap 29 '16
- Practical examples in dairy arithmetic. H. E. Ross and others. *Cornell Ag Exp Rep* 1916, v 2:1079-99 '17

**Arizona**

- See also* subhead Arizona under special subjects, e.g. Agriculture—Arizona, Dairying—Arizona

**Agriculture and horticulture, Commission of**

- 9th annual report for the year ending June 30, 1917. 68p *il* '17 Arizona Comm. of ag. and horticulture, Phoenix

**Land commissioner, state**

- \* 4th bi-annual report, Jan. 1-June 30, 1917. 22p '18 Arizona State land dept., Phoenix

- \* 5th bi-annual report, July 1-Dec. 31, 1917. 19p '17 Arizona State land dept., Phoenix
- \* 6th bi-annual report, Jan. 1-June 30, 1918. 16p '18 Arizona State land dept., Phoenix

**Missions**

*See also* San Xavier mission, Arizona

**Arizona agricultural experiment station**

- 27th annual report for the year ending June 30, 1916. *il Ariz Ag Exp Rep* 1916:239-320 '16
- 28th annual report for the year ending June 30, 1917. *il Ariz Ag Exp Rep* 1917:393-498 '17

**Arizona state fair**

- Arizona state fair. Kimball's D F 14:766 D 1 '16
- Premium list; rules and regulations of the 13th annual fair, Nov. 12-17, 1917. 174p '17
- State fair comm., B. W. Zachau, sec., Phoenix, Ariz.
- Recent state fair at Phoenix. *Breeder's Gaz* 70:1070 D 7 '16

**Arizona university**

**Agricultural extension service**

- Cooperative demonstration work in agriculture and home economics; second annual report for the year ending Nov. 30, 1916. *Ariz Ag Ext Rep* 1916:1-44 n.d.
- 3d annual report for the year ending December 1, 1917. *Ariz Ag Ext Rep* 1917:1-51 n.d.

**Arkansas**

- Give a bushel; share with those who have suffered in service at the front. *il Country Gent* 83:13 S 21 '18

*See also* subhead Arkansas under special subjects, e.g. Agriculture—Arkansas, Dairying—Arkansas

**Arkansas stock growers' association**

- 4th annual meeting, Little Rock, January, 1916. *Prog F* 31:116 Ja 22 '16

**Armenia**

- Armenia as seen by an American forester. *Am For* 24:48 Ja '18

**Armilaria**

- Death of chestnuts and oaks due to armilaria mellea. W. H. Long. *il U S Ag B* 89:1-9 '14

**Armour, Philip Danforth**

- Packers are people; brief biographical sketch. L. L. Heller. *por il Field* 11 28:559-60 Ag '18

**Armcur and company**

- Seeing Armour's. 47p *il* n.d. Armour & co., Chicago

**Army cutworms**

- Army cutworm. E. H. Strickland. 31p bibliog *il* '16 Canada Ag
- Army cutworm in Montana. R. A. Cooley and J. R. Parker. *il Mont Ag Exp C* 52:97-108 '16
- Observations on the life history of the army cutworm, chorizagrotis auxiliaris. R. A. Cooley. *J Ag Research* 6:871-81 S 4 '16

**Army horses.** *See* Horses, Army; Horses in war

**Army life.** *See* Military training camps

**Army veterinary service, United States.** *See* United States—Army—Veterinary corps

**Army worms**

- Army-worm in New York in 1914. H. H. Knight. *il Cornell Ag Exp B* 376:751-65 '16; Same. *Cornell Ag Exp Rep* 1916:751-65 '17
- Biology of apanteles militaris. D. G. Tower. bibliog *il J Ag Research* 5:495-508 D 20 '15
- Comparative study of the amount of food eaten by parasitized and nonparasitized larvæ of cirphis unipuncta. D. G. Tower. *J Ag Research* 6:455-8 Je 19 '16
- Egg parasite of the army-worm. W. P. Flint. *J Econ Entom* 9:377 Je '16
- How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:8-11 '17
- Life-history studies of cirphis unipuncta, the true army worm. J. J. Davis and A. F. Satterthwait. *il J Ag Research* 6:799-812 Ag 21 '16

**Army worms—Continued**

- Notes on rhogastermalis Cress. W. E. Pennington. *il J Econ Entom* 9:401-6 Ag '16  
 True army worm and its control. W. R. Walton. *il map Farmers' B* 731:1-12 '16

*See also* Fall army worms

**Arnold arboretum**

- Arnold arboretum. E: I. Farrington. *Mass Hort Soc Trans* 1918, pt 1:33-49 '18; *Abstract. Am Flor* 50:4-5 Ja 19 '18  
 Arnold arboretum—what it is and does. C. S. Sargent. *il Gard M* 26:122-5 N '17  
 \* Debt of landscape art to a museum of trees. B. Farrand. *il Architectural Record* (115 W. 40th st. N.Y. 35c) 44:406-13 N '18  
 Man with the thousand-year tree garden. F. A. Arnold. *Am Flor* 24:297-8 My '18  
 Seen in the Arnold arboretum. T. A. Havemeyer. *il Gard M* 28:138-9 D '18  
 Winter's effect in Arnold arboretum. *Am Flor* 50:822 My 11 '18; *Same. Gard Chron (Lond)* 63:235 Je 8 '18

**Aroids****Diseases and pests**

- Storage-rots of economic aroids. L. L. Harter. *il J Ag Research* 6:549-72 Jl 10 '16; *Abstract. Int R Sci & Prac Ag* 7, no 12:1852-4 D '16

**Aroostook county, Maine**

- How about Aroostook? E. Hungerford. *il Country Gent* 82:1410-11 S 15 '17

**Arsenate of lead. See Lead arsenate****Arsenate of lime. See Calcium arsenate****Arsenates**

- Toxic values and killing efficiency of the arsenates. A. L. Lovett and R. H. Robinson. *J Ag Research* 10:199-207 Jl 23 '17  
*See also* Arsenical dip; Calcium arsenate; Lead arsenate

**Arsenic**

- Arsenic as an insecticide. A. L. Lovett and R. H. Robinson. *J Econ Entom* 10:345-9 Je '17  
 Arsenic in sulfured food products. W. D. Collins. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:360-4 My '18  
 Detection of arsenic in bees. E. B. Holland. *J Econ Entom* 9:364-6 Je '16  
 Determination of arsenic in insecticides by potassium iodate. G: S. Jamieson. *J Industrial & Eng Chemistry (Am Chemical Soc., Easton, Pa. 60c)* 10:290-2 Ap '18  
 Presence of arsenic in hops. W. W. Stockberger and W. D. Collins. *U S Ag B* 568:1-7 '17  
 Report on heavy metals in foods, 1916; with discussion. E. L. P. Treuthardt. *Assn Offic Ag Chem J* 1, no 4, pt 1:580-5 F '16  
 Report on heavy metals in foods, 1917. E. L. P. Treuthardt. *Assn Offic Ag Chem J* 3:43-7 My '17  
 Stimulating influence of arsenic upon the nitrogen-fixing organisms of the soil. J. E. Greaves. *bibliog J Ag Research* 6:389-416 Je 12 '16; *Summary. Int R Sci & Prac Ag* 8, no 2:193-5 F '17

**Arsenic acid**

- Reduction of arsenic acid to arsenious acid by thiosulphuric acid. R. M. Chapin. *J Ag Research* 1:515-17 Mr '14

**Arsenic as a spray**

- Fate and effect of arsenic applied as a spray for weeds. W. T. McGeorge. *J Ag Research* 5:459-63 D 13 '15

- Herbicide investigations. G: P. Gray. *Cal State Comm Hort B* v 5:133-9 Ap '16

**Arsenical dip**

- Laboratory and field assay of arsenical dipping fluids. R. M. Chapin. *U S Ag B* 76:1-17 '14  
 Studies on changes in the degree of oxidation of arsenic in arsenical dipping baths. R. M. Chapin. *U S Ag B* 259:1-12 '15

**Arsenical poisoning**

- Arsenical residues after spraying. W. C. O'Kane and others. *bibliog il N H Ag Exp B* 183:1-62 '17

**Art**

*See also* Animals in art; Arts and crafts; Children in art; Dogs in art; House decoration; Landscape gardening; Pictures; Wall coverings

**Art industries. See Arts and crafts****Artesian wells**

- Artesian water for irrigation in Little Bitterroot valley, Montana. O. E. Meinzer. (Water supply paper 400—B) 37p *il maps* '16  
 U.S. Geological survey, Washington, D.C.; Excerpt. *Irr Age* 32:45 Ja '17

**Arthur, Joseph Charles**

- Sketch. M. L. Fisher. *por Purdue Ag* 10:11-12 Ap '16

**Artichokes**

- Culture of the globe artichoke. J. W. Wellington. *N Y State Ag Exp B* 435:311-19 '17; *Summary. Am Flor* 49:1196 D 15 '17  
 Experience with artichokes. Wallaces' F 41: 178 F 4 '16  
 Experience with the globe artichoke. C. O. Ormsbee. *Market Growers J* 18:393 Je 15 '16  
 Girasole or Jerusalem artichoke, a neglected source of food. T. D. A. Cockerell. *Sci Monthly (Science Press, Garrison, N.Y. 30c)* 6:260-9 Mr '18  
 Jerusalem artichoke. *Gard Chron (Lond)* 63: 183 My 4 '18  
 Jerusalem artichoke. T. D. A. Cockerell. *Gard Chron (Lond)* 63:65 F 16 '18  
 Jerusalem artichoke as a war plant. L. O. Howard. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:344 Ap 5 '18  
 Jerusalem artichokes. *J Bd Ag* 25:84-5 Ap '18; *Same. J Dept Ag Victoria* 16:639-40 O '18; *Excerpt. Gard Chron (Lond)* 63:150 Ap 6 '18  
 Jerusalem artichokes. F. J. Bellwood. *il Country Gent* 81:1576 Ag 26 '16  
 Of globe artichokes. H. E. Durham. *Gard Chron (Lond)* 60:40 Jl 22 '16  
 Variation in artichokes. A. D. Shamel. *il J Heredity* 8:306-9 Jl '17

**Composition**

- Studies on inulin in plants: its formation; the changes it undergoes in the resting tuber of the Jerusalem artichoke. H. Colin. *Int R Sci & Prac Ag* 9, no 4:428-9 Ap '18

**Artificial lakes. See Lakes, Artificial****Artificial silk. See Silk, Artificial****Arts and crafts**

- Cabin home handicrafts. M. H. Talbott. *il Country Gent* 83:40 O 19 '18  
 Early art industries of the Pennsylvania Dutch. *il Country Life* 30:100+ My '16  
 General principles of design. W. M. Barnes. *J Ag (Quebec)* 20:113 N '16  
 Handicrafts of the Labrador. *J Ag (Quebec)* 22:84 N '18  
 Toy industries. *J Ag (Quebec)* 19:269 Je '16

*See also* Bookbinding; Embroidery; Furniture; Indian blankets; Metal work; Needlework; Pottery; Rugs

**Ascaris**

- Life history of ascaris lumbricoides and related forms. B. H. Ransom and W. D. Foster. *J Ag Research* 11:395-8 N 19 '17  
 Serum test influenced by ascaris infestation. R. R. Birch. *Am Vet M Assn J* 51:694-6 Ag '17

**Asclepias. See Milkweeds****Ascobolus**

- Earth-inhabiting species of ascobolus. F. J. Seaver. *il Mycol* 8:93-7 Mr '16

**Ascochyta**

- Ascochyta clematidina, the cause of stem-rot and leaf-spot of clematis. W. O. Gloyer. *bibliog il J Ag Research* 4:331-42 Jl '15; *Same (Tech. B. 44). N Y State Ag Exp Rep* 1915:318-29 '16  
 Hitherto unreported disease of okra. L. L. Harter. *il J Ag Research* 14:207-12 Jl 29 '18

**Ascodesmis**

- North American species of ascodesmis. F. J. Seaver. *il Mycol* 8:1-4 Ja '16

**Ascomycetes**

- Conjugate nuclei in the ascomycetes. E. J. Welsford. *il Ann Bot* 30:415-17 Jl '16



**Ascomycetes—Continued**

New or noteworthy ascomycetes and lower fungi from New Mexico. C: E: Fairman. Mycol 10:239-64 S '18

See also Philocopra

**Ash**

Ash in North Carolina. (Press B 156) 8p '17  
N. C. geological and economic survey, Chapel Hill

**Ashes**

Ashes: their characteristics and management. W. D. Sterrett. il map U S Ag B 299:1-88 '15  
Grass and ash trees. J For 15:502-4 Ap '17  
Pitcher-leaved ash trees. G: H. Shull. il J Heredity 8:431 S '17  
Trees of Vermont; the ashes. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:184-93 '16  
Utilization of ash. W. D. Sterrett. il U S Ag B 523:1-52 '17

**Ashes as fertilizer**

Ashes and nitrates for the spring crops. A. E. Grantham. Prac F 114:70 F 15 '18  
Ashes as a fertilizer. Va Ag Dept B 109:50-1 '16  
Availability of potash in wood ashes. R. E. Stallings. Am Fert 46:24 Ja 20 '17  
Coal ashes on clay soil. H: F. Thurston. Ohio F 129:152 F 3 '17  
Potash from wood ashes. C. T. Edgar. Am Fert 48:38-9 My 25 '18  
Potash from wood ashes. S: J. Record. Country Gent 82:1483 S 29 '17  
Save the wood ashes. S: J. Record. il Country Gent 82:1982 D 15 '17  
Something from nothing. E. M. Gilbert. Gard Chron Am 22:46 F '18  
Study of the availability of potash in commercial wood ashes. R. E. Rose. Am Fert 46:21-3 Ja 20 '17  
Value of coal ashes. C. O. Ormsbee. Market Growers J 23:90 S 1 '18  
Value of wood ashes and hen manure. R. L. Watts. Market Growers J 22:172 Mr 1 '18  
Value of wood ashes applied to a growing crop. Prog F 32:516 Ap 21 '17  
Wood-ashes as a source of potash. F. B. Guthrie. Ag Gaz of New South Wales 29: 817-19 N '18

Asimina triloba. See Papaws

**Asparagus**

Asparagus. R. W. DeBaun. N J Ag Exp C 57: 1-4 n.d.  
Asparagus. L. Porter. J Dept Ag S Australia 20:837-9 My '17  
Asparagus. H. C. Thompson. il Farmers' B 829:1-20 '17  
Asparagus by the acre. E. W. Record. Minn Hort 44:164 Ap '16  
Asparagus can be grown all winter by forcing in fields or cellars. Weekly N L 6:5 O 2 '18  
Asparagus culture. A. Bieschke. il Gard Chron Am 22:83-4 Mr '18  
Asparagus culture. L. M. Montgomery; R. G. Kirby. Ohio F 141:498 Ap 6 '18  
Asparagus culture; celery culture; onion culture. W. T. Macoun. 8p n.d. Canada Ag  
Asparagus culture; with yield, 1910-1915. C. E. Myers. (In Ohio vegetable growers' assn. directory, 1918, p. 11-12) n.d. Ohio vegetable growers' assn., Columbus  
Asparagus in New Jersey. N. Demarest. Market Growers J 18:146 F 15 '16  
Canning and using asparagus. L. O. Knapp. Rural N Y 76:698 My 19 '17  
Care of asparagus bed. Wallaces' F 43:1333 S 20 '18  
Care of asparagus bed. Weekly N L 4:6 Jl 25 '17  
Care of asparagus in early spring. Market Growers J 18:171 Mr 1 '16  
Chemical study of the asparagus plant. F. W. Morse. Mass Ag Exp B 171:265-96 '16  
Cover crops on asparagus. A. E. Wilkinson. Country Gent 81:975 My 6 '16  
Experience with asparagus; symposium. Market Growers J 21:15+ Jl 1 '17; 23:171-3 N 1 '18  
Experience with asparagus culture. C. E. Smith. Green's Fruit Grower 37:22 F '17  
Fall treatment of asparagus. F. W. Sweet. Green's Fruit Grower 36:22 O '16

Family asparagus bed. Fruit-Grower 27:143 F 15 '16  
Fresh asparagus for winter use. Prog F 32: 863 Ag 11 '17  
Growing and marketing asparagus. F. Wheeler. il Mass Ag Bd B 5:154-63 '18 (3d ed rev.)  
Growing asparagus. Fruit-Grower 28:137 F 15 '17  
Growing asparagus. Minn Hort 44:391-3 O '16  
Growing asparagus. Prac F 113:122 Mr 15 '17  
Home garden: forcing rhubarb and asparagus. il Country Gent 83:32 N 16 '18  
How to grow asparagus. G: W. Holsinger. O Judd Farmer 62:15 Ja 6 '17  
How to grow asparagus. C. E. Myers. il Country Gent 83:42 Mr 2 '18  
Inexpensive luxury of an asparagus bed. H. Sage. Gard M 23:44 F '16  
Maine woman's asparagus patch. C. N. Fogg. Rural N Y 76:697 My 19 '17  
More about asparagus. C. E. Smith. Fruit-Grower 27:243 Ap 1 '16  
New asparagus, developed by Department breeder, brings big premium on market. Weekly N L 5:8 Je 5 '18  
New Jersey methods with asparagus. R. W. De Baun. Market Growers J 19:80-1 Ag 15 '16  
New methods in asparagus culture. L. Rupp. Rural N Y 77:553 Ap 13 '18  
Plan for an asparagus bed. il Green's Fruit Grower 36:18 Mr '16  
Preparing ahead for asparagus. M. R. Conover. Ohio F 137:714 My 20 '16  
Production of asparagus plants. J. T. Rosa, jr. Country Gent 81:1866 O 21 '16  
Rhubarb, asparagus, and suchlike. il Country Gent 82:732 Ap 14 '17  
Selection of asparagus plants. J. T. Rosa, jr. il Rural N Y 77:785 Je 15 '18  
Setting out asparagus beds. L. A. Mac Cumber. O Judd Farmer 62:9 F 17 '17  
Setting out asparagus plants. Market Growers J 18:308 My 1 '16  
Starting asparagus. Wallaces' F 43:725 Ap 26 '18  
Successful asparagus culture. C. V. Holsinger. Market Growers J 23:195 N 15 '18  
Successful 14 years with asparagus. il O Judd Farmer 62:7 Mr 3 '17

**Diseases and pests**

Asparagus and rust. J. B. Norton. Weekly N L 4:3 Mr 7 '17  
Control of asparagus rust. S. L. de Fabry. Country Gent 81:1651 S 9 '16  
See also Asparagus beetles

**Storage**

Experiments in keeping asparagus after cutting. F. W. Morse. Mass Ag Exp B 172:297-307 '17

**Asparagus beans**

Leguminosae dolichos melanophthalmus and d. sesquipedalis as vegetables in Italy. A. Ragionieri. Int R Sci & Prac Ag 9,no 1:65 Ja '18

**Asparagus beetles**

Asparagus-beetle egg parasite. F. A. Johnston. bibliog il J Ag Research 4:303-14 Jl '15  
Asparagus beetles and their control. F. H. Chittenden. il map Farmers' B 837:1-13 '17  
Controlling the asparagus beetle. Market Growers J 18:308 My 1 '16

**Aspen**

Aspen as a permanent forest type. J. M. Fetherolf. J For 15:757-60 O '17  
Aspen as a temporary forest type. F: S. Baker. il J For 16:294-303 Mr '18  
Aspen reproduction in relation to management. F: S. Baker. J For 16:389-98 Ap '18  
Effects of varying certain cooking conditions in producing soda pulp from aspen. H: E. Surface. bibliog il U S Ag B 80:1-63 '14  
Role of aspen in reforestation. C. F. Korstian. Soc Am For Pro 11:103-4 Ja '16  
Stability of aspen as a type. A. W. Sampson. Soc Am For Pro 11:86-7 Ja '16

**Diseases and pests**

See also Aspen tortrix

**Aspen tortrix**

Large aspen tortrix, *cacœcia confictana*, Walk. N. Criddle. *il Ag Gaz of Canada* 5: 1049-51 N '18

**Aspergillus**

*Aspergillus fumigatus*, a. *nidulans*, a. *terreus* n. sp. and their allies. C: Thom and M. B. Church. bibliog *il Am J Bot* 5:84-104 F '18  
*Aspergillus niger* group. C: Thom and J. N. Currie. *J Ag Research* 7:1-15 O 2 '16  
 Black mold of onions. W. Van Pelt. *il Ohio Ag Exp B* v 2:152-6 My '17

**Asphalt****Testing**

Effect of controllable variables upon the penetration test for asphalts and asphalt cements. P. Hubbard and F. P. Pritchard. *J Ag Research* 5:805-18 Ja 24 '16

**Asphaltum**

Asphaltum for peach borers. *Rural N Y* 76: 404 Mr '17 '17

**Aspidistra**

Repotting the aspidistra. *Gard Chron Am* 20: 14 Ja '16

**Asplenium**

*Asplenium nidus avis*. *il Am Flor* 48:792 Ap 28 '17  
*Asplenium* as indoor plants. *il Gard Chron Am* 20:514 D '16

**Asses and mules**

American jack stock and mule production. W. S. Anderson and J. J. Hooper. *il Ky Ag Exp B* 212:235-301 '17; Abstract. *Am Soc Animal Production Pro* 1915-1916:131-2 '17  
 American mule supreme. *Nat Stock & F* 40: 1273 F 24 '17

Army horse and mule requirements. W. Dinsmore. *Breeder's Gaz* 71:924 My 3 '17; Same. *Wallaces' F* 42:788 My 11 '17; Same. *Nat Stock & F* 41:196 My 12 '17; Same. *Prac F* 113:205 My 15 '17; Same. *Hoards' D* 53:755 My 25 '17; Same cond. *Ag Digest* 2:489 Je '17  
 Army horses and mules. G. H. Conn. *il Ohio F* 142:74 Ji 27 '18

Asses and mules. C. W. Brodhead. *il N Y Ag Dept Rep* 1916, pt 2:119-28 '17  
 From N Y Ag Dept B 76

Bigger mules for bigger profits. *Ag Digest* 1: 305 F '17

Breeding white-faced mules. S. J. Miller. *il Breeder's Gaz* 69:184 Ja 27 '16

Burro and his future. *il Rural N Y* 76:725 My 26 '17

Buying horses and mules for the army. G. H. Conn. *Breeder's Gaz* 73:428-9 F 23 '18

Confession. G. E. Wentworth. *Country Gent* 81:1788 O 7 '16

Doubting the hybrid's integrity. G. E. Wentworth. *Breeder's Gaz* 73:977 My 9 '18

Draft mules in the field in Mexico. A. G. Fraser. *Am Vet M Assn J* 52:357-61 D '17

Economy of mule production in the South and methods of management. H. K. Gayle and E. R. Lloyd. *il Miss Ag Exp B* 176:1-15 '16

Future jack and mule trade. J. L. Jones. *Breeder's Gaz* 71:121 Ja 18 '17

Future of the jack and the mule. J. L. Jones. *Breeder's Gaz* 73:603 Mr 21 '18

Heredity causes and importance of white marks on the coats of equine animals; research in Italy. C. Gugnioni. *Int R Sci & Prac Ag* 8, no 12:1251-2 D '17

Horse and mule on the farm. G. C. Faville. *il Hampton Leaflets* v 7, no 10 11p '17

Horses and mules. *Mo Ag Bd B v* 15:1-47 O '17

Horses for use of army. W. Dinsmore. *O Judd Farmer* 62:8 My 19 '17

Horses, mules, and asses. (*In* Geography of the world's agriculture, p. 109-16) maps '17.

U S Ag

How the big mules are made. E. McFarland. *il Breeder's Gaz* 71:1065-6 My 24 '17

Iowa mule farm. *il Wallaces' F* 43:1675 N 15 '18

Jack the weed-killer. J. C. Brown. *il Rural N Y* 75:298 F 19 '16

Large mule colts best to raise. *il O Judd Farmer* 60:20 Ja 8 '16

Let's raise more mules. W. L. DeClow. *il Breeder's Gaz* 72:1155 D 20 '17

Mule breeding. *Country Life* 34:11 O '18

Mules for utility. P. M. Babcock. *Nat Stock & F* 42:810 D 7 '18

Mules in demand. *Country Gent* 81:687 Mr 25 '16

Mules that breed. O. Lloyd-Jones. bibliog *il J Heredity* 7:494-502 N '16

Mules to the front. *Nat Stock & F* 41:342 Je 30 '17

Quality mules in demand. *il Va Ag Dept B* 109:66-70 '16

Registering off-colored jacks. J. L. Jones. *Breeder's Gaz* 71:823 Ap 19 '17

Southern mules from purebred mares. *Breeder's Gaz* 71:777 Ap 12 '17

Spotted asses. A. E. Jenks. *il J Heredity* 7: 165-8 Ap '16

Those donkeys from Arizona. *Rural N Y* 76: 882 Ji 14 '17

Town that jacks built. J. E. Pickett. *il Country Gent* 82:1906-7+ D 8 '17

Value of good sires in the production of jacks and jennets. J. K. Wright. *il Mo Ag Bd B v* 14:35-41 S '16

What about brood mares? S: O. Rice. *il Country Gent* 83:32 S 28 '18

Why the mule is infertile. *Field* 11 27:450 Je '17

Wild burros. W. C. Barnes. *Breeder's Gaz* 72:376 S 13 '17

**Diseases and pests**

Disease resembling forage poisoning in horses and mules. R. Graham and others. *Am Vet M Assn J* 48:574-90 F '16

Hemorrhagic septicemia in mules. J. B. Hardenbergh and F. Boerner, jr. *Am Vet M Assn J* 51:817-22 S '17

Note on an outbreak of contagious pneumonia in donkeys. R. Branford. *Ag J of India* 12:268-73 Ap '17

**Feeding**

Feed for mules. T. Butler. *Prog F* 33:307 Mr 9 '18

Feeding young mules. P. S. Richey. *Breeder's Gaz* 73:1211 Je 6 '18

Mixing a feed for mules. T. Butler. *Prog F* 33:235 F 23 '18

Mules that are overfed. T. Butler. *Prog F* 33: 267 Mr 2 '18

**Judging**

Judging of jacks. J. L. Jones. *Breeder's Gaz* 71:576 Mr 15 '17

**Price lists**

Monsees jack and jennet auction. *Breeder's Gaz* 69:626 Mr 16 '16

**Statistics**

Estimated number and value on farms, January 1, 1914-1917, by states. *Monthly Crop Rep* 3:3 Ja '17

Mules: estimated number and value on farms, January 1, 1915-1918, by states. *Monthly Crop Rep* 4:10 F '18

Statistics of farm animals and their products. See United States Department of agriculture Yearbooks

**Assessment**

Loi réorganisant la formation du cadastre dans la République au Mexique. *Int Yearbook Ag Leg* 1916:1101-3 '17

**Assimilation. See Metabolism; Nutrition****Associated cooperators of Kentucky**

New plan of co-operative organization. *Coop Manager & F* 8:39-41 D '18

**Associated milk producers**

Associated milk producers, inc. (*In* Report Cal. State market director, 1916, p. 18-22) '16

Cal. State market director, Sacramento

**Association of American agricultural colleges and experiment stations**

Proceedings of the twenty-ninth annual convention held at Berkeley, Cal., August 11-13, 1915. *Assn Am Ag Coll & Exp Pro* 1915: 1-253

Proceedings of the 30th annual convention held at Washington, D.C., November 15-17, 1916. *Assn Am Ag Coll & Exp Pro* 1916:1-363 '17



**Assn. Am. ag. colleges and exp. stations—Cont.**  
 31st annual convention, held at Washington, D.C., Nov. 14-16, 1917; papers and proceedings. Assn Am Ag Coll & Exp Pro 1917: 1-328 '18  
 31st annual convention, Washington, D.C., Nov. 14-16. Exp Station Rec 37:601-11 N '17

**Association of American cemetery superintendents**  
 31st annual convention, Barre, Vt., Aug. 28-31, 1917. Am Flor 49:436 S 15 '17  
 32d annual convention, Rochester, N.Y., September 11-13. Am Flor 51:395 S 14 '18

**Association of American dairy, food and drug officials**  
 Annual convention, Atlantic City, N.J. N Y Prod R 44:573 Ag 8 '17  
 Convention, Chicago, Aug. 27-30. Creamery 7:50 O '18  
 Official proceedings of the 20th annual convention held at Detroit, Mich., Aug. 7-11, 1916. Assn Am Dairy Food & Drug Offic Pro 1916:1-240  
 Official proceedings of the 21st annual convention, Atlantic City, N.J., July 31-Aug. 3, 1917. Assn Am Dairy Food & Drug Offic Pro 1917:1-136  
 20th annual convention, Detroit, Aug. 7-11, 1916. N Y Prod R 42:641 Ag 16 '16; Kimball's D F 14:539 S 1 '16  
 22d annual convention, Chicago, Aug. 27-30. Assn Am Dairy Food & Drug Offic Pro 1918: 1-188

**Association of American horse shows**  
 Organization meeting, New York, Jan. 30, 1917. Breeder's Gaz 71:333 F 15 '17

**Association of official agricultural chemists**  
 Report of secretary-treasurer for the year 1914-15. C. L. Alsberg. Assn Offic Ag Chem J 3:54-5 My '17  
 Reports on the recommendations of referees. Am Fert 48:68+ My 11 '18  
 32d annual convention, Washington, D.C., Nov. 15-17, 1915. Assn Offic Ag Chem J 2,no 3,pt 1:113-74 N '16  
 33d convention; abstracts of reports and papers, with list of officers and members. Am Fert 45:21-38 D 9 '16  
 34th annual convention, Washington, Nov. 19-21; abstracts of reports and papers in the fertilizer division. Am Fert 47:25-35 D 8 '17

**Association of official seed analysts**  
 Proceedings, 1916 and 1917. Assn Offic Seed Analysts Pro 1916-1917:1-80 '17

**Association of the agriculturists of Spain**  
 Association of the agriculturists of Spain and its work. Int R Ag Econ 73:6-12 Ja '17  
 Some forms of the activity of the Association of agriculturists of Spain in 1916-1917. Int R Ag Econ 9,no 2:85-9 F '18

**Asters**  
 Aster a good flower to raise for the home and market. H. Findlay. il Country Gent 82:384 F 24 '17  
 Aster as a cut flower. Am Flor 47:150 Ag 12 '16  
 Aster growing. G. H. Ryerson. (In Report, Horticultural societies of Ontario, 1917, p. 58-63) il '18 Ontario ag. dept., Toronto  
 Aster problem. il Am Flor 47:761 O 28 '16  
 Aster trouble viewed by experts. il Am Flor 48:280 F 24 '17  
 \* Asters. E. G. Miller. il Nature Study R (Ithaca, N.Y. 15c) 14:249-52 S '18  
 Asters, easy to grow flowers. E. B. Wright. Fruit-Grower 28:228 Ap 1 '17  
 Asters for all; some of the best varieties and how to grow them. G. W. Kerr. il Country Gent 83:56 Mr 2 '18  
 Callistephus sinensis. R. P. Brotherston. Gard Chron (Lond) 59:217 Ap 22 '16  
 Growing the China aster. G. Arnold. Rural N Y 76:273 F 24 '17  
 Hardy asters (Michaelmas daisies). H. Rothe. il Gard Chron Am 21:159 Ap '17  
 Hardy asters and other decorative varieties of perennials for the autumn garden. (In Ontario horticultural societies, 11th annual report, 1916, p. 83-8) il '17 Ontario ag. dept., Toronto, Canada

Notes on asters as sources of nectar. F. C. Pellett. il Am Bee J 58:331-3 O '18  
 Perennial asters for fall flowers. B. Y. Morrison. il Gard M 23:237-8 My '16  
 Plant notes. Am Flor 46:878 My 13 '16  
 Science of growing asters. C. H. Stoots. Gard M 23:72 Mr '16  
 Trying to grow the China aster. E. J. Weaver. Rural N Y 76:67 Ja 20 '17  
 Venture in asters. H. G. McCallum. il Country Gent 81:642 Mr 18 '16  
 Woody aster poisoning. O. A. Beath. il Nat Wool Grower 7:19-20 F '17

**Asthma**  
 Immunochemical studies of the plant proteins; proteins of the wheat seed and other cereals. R. P. Wodehouse. bibliog Am J Bot 4:417-29 Jl '17

**Astilbes.** See Spireas

**Astragalus bisulcatus.** See Milk vetch

**Atavism.** See Heredity

**Athletes**  
 Sport answers reveille. L. Perry. il Country Life 34:55-62 S '18

**Athletics**  
 Have a county council of athletics. Prog F 32:1337 D 22 '17

**Atlantic county poultry association**  
 Poultrymen's institute at Pleasantville, N.J. M. K. Boyer. Am P Advocate 24:428 Ap '16

**Atmometers**  
 Comparison of the hourly evaporation rate of atmometers and free water surfaces with the transpiration rate of medicago sativa. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 9:277-92 My 28 '17

**Atmosphere**  
 Stories of the atmosphere. R. Nunn. il maps U S Ag Yearbook 1915:317-27

**Atropine**  
 Breeding for atropine. L. W. Arny. il J Heredity 8:164-7 Ap '17

**Atta insularis.** See Ants

**Attagenus plebius.** See Beetles

**Attics**  
 Top of the house. il Country Gent 81:1247 Je 17 '16

**Aubergines.** See Eggplants

**Auction method of marketing.** See Marketing—Auction method

**Auctions**  
 At the auction. T. F. Jager. Prac F 113:362 N 1 '17

**Auditing**  
 Method for supporting financial records. J Home Econ 8:130-2 Mr '16  
 Some debatable questions in farmers' elevators. J. E. Boyle. Coop Manager & F 6: 26 F '17  
 See also Equitable cooperative auditing association; North Dakota cooperative auditing circle

**Audubon, John James, 1780-1851**  
 Man who loved the birds. S: B. Detwiler. il Am For 22:214-17 Ap '16

**Aunt Mollie's Thanksgiving surprise.** B. A. Dana. il O Judd Farmer 63:4 N 24 '17

**Aunt Phemie's homes; story.** N. F. Brown. O Judd Farmer 64:588 Je 1 '18

**Australia**  
 See also subhead Australia under special subjects

**Industries and resources**  
 Agricultural implements and machinery in Australia and New Zealand. J. Homs. (Special agents ser.—no. 166) 195p il 25c '18  
 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Tabloding of primary products. R. Crowe. J Dept Ag Victoria 16:449-53 Ag '18

**Land tenure**  
 See Land tenure—Australia

**Australian desert kumquats.** See Kumquats

**Austria-Hungary**

See also subhead Austria-Hungary under  
Agricultural cooperative credit associations;  
Agricultural credit; Agriculture; Bee culture;  
Cattle; Cooperation; Food control;  
Food supply; Land tenure

**Description and travel**

Mountain milk boys of Hungary. F. J. Koch.  
il Hoard's D 53:928 Je 29 '17

**Law**

Décret impérial réglant les conditions des  
propriétés foncières aux environs des places  
fortifiées. Int Yearbook Ag Leg 1916:1172-5  
'17

Ordonnance impériale sur la troisième nouvelle  
modifiant partiellement le code civil autri-  
chien. Int Yearbook Ag Leg 1916:1162-72  
'17

**Autographa brassicae.** See Cabbage looper

**Autographa californica.** See Alfalfa loopers

**Automobile engine**

Carbon deposits in motors. P. T. Hines. Prog  
F 32:471 Ap 14 '17

Care of a tractor. A. O. Heston. Farm Eng  
3:271 Je '16

Causes of motors overheating and the reme-  
dies. H. A. Tarantous. Prog F 31:754 Je 10  
'16

Detachable power transmission. E. Hanson.  
Ohio F 137:679 My 13 '16

Engine talks; spark plugs. P. T. Hines. Coun-  
try Gent 82:662 Mr 31 '17

Evolution of the automobile engine. E. A.  
Stephens. il Country Life 30:82 O '16

Farm automobile. P. T. Hines. Prog F 33:169  
F 9 '18

Jump spark ignition. J. B. Kelley. Kimball's  
D F 15:16 Ja 15 '17

Keeping engines from freezing. H. Greene. O  
Judd Farmer 60:15 Ja 29 '16

Keeping the motor fit. P. S. Rose. il Country  
Gent 82:1969 D 15 '17

Knocks and pounds. Country Gent 82:1123 Jl  
7 '17

More miles on less gas. P. T. Hines. Country  
Gent 81:2073 D 2 '16

New device to increase the power of tractors.  
Int R Sci & Prac Ag 8,no 1:125-7 Ja '17

Overheating often attributable to faulty igni-  
tion. Better Fruit 11:15 Jl '16

Power. C. H. Claudy. Country Life 29:110+  
Mr '16

Power that falls by the wayside. A. Johnston.  
Country Life 33:88 Ja '18

Proper oiling of automobiles. H. A. Tarant-  
tous. O Judd Farmer 60:2 My 6 '16

Saving gasoline. E. Rogers. Power F 27:33 D  
'18

Sources of current for ignition. P. T. Hines.  
Prog F 33:142 F 2 '18

Stop, look, listen for carbon. W. B. Jones.  
Power F 27:14 My '18

Tractor adjustment. E. R. Wiggins. Country  
Gent 81:1512 Ag 12 '16

Tractor troubles and remedies. J. S. Glass.  
Ia Ag Ext 6p n. d.

Why a motor runs: principles of operation.  
P. T. Hines. Prog F 33:39 Ja 12 '18

Working the automobile engine. W. H. Under-  
wood. Power F 26:57 Mr '17

See also Carbureters

**Cooling**

Cooling system and its relation to engine ef-  
ficiency. A. Johnston. Country Life 32:90 S  
'17

Cooling the farm gas tractor. C. V. Hull. il  
Power F 27:34 D '18

**Fuel**

Burning kerosene in the tractor. G. P. Pearce.  
Country Gent 82:1540 O 6 '17

Burning question. A. Johnston. Country Life  
31:74 Ja '17

Motor fuel. B. W. Currie. Country Gent 81:  
1539 Ag 19 '16

Musings of a tramp engineer. D. R. A. Drum-  
mond. Power F 26:18 N '17

That gasoline problem. E. A. Stephens.  
Country Life 30:86 My '16

Use of hydrogen for driving engines: tests in  
Holland. Int R Sci & Prac Ag 9,no 5:605-6  
My '18

What about the tractor fuel supply? Wallaces'  
F 43:784 My 10 '18

See also Gasoline

**Lubrication**

Lubricating oils for kerosene-burning trac-  
tors; with discussion. D. L. Arnold. il Am  
Soc Ag Eng Trans 11:114-31 '18

**Valves**

How to grind and time valves. P. T. Hines.  
il Prog F 33:107 Ja 26 '18

Modern valve system and its care. A. Johns-  
ton. Country Life 33:96 N '17

Regrinding valves. G. W. Iverson. O Judd  
Farmer 63:9 Ag 25 '17

**Automobile headlights.** See Automobiles—  
Lighting

**Automobile industry**

Automobile. E. W. Currie. Country Gent 81:  
1425-6, 1468-9, 1502-3, 1538-9, 1574-5, 1610-11  
Jl 29-S 2 '16

**Automobile shows**

Kansas City 1916 automobile show. Fruit-  
Grower 27:124 F 15 '16

World's greatest auto show. O Judd Farmer  
60:27 F 5 '16

**Automobile tires.** See Tires (automobile)

**Automobile touring**

Just to relieve the monotony. W. L. Peters.  
Wallaces' F 42:754 My 4 '17

To California by automobile. il Ohio F 139:94  
Ja 20 '17

Touring the East. J. M. Evvard. Wallaces' F  
42:1724; 43:678, 831 D 21 '17, Ap 19, My 17  
'18

Virginia the no-man's land of touring. L. C.  
Hale. il Country Life 31:49-52 Ap; 32:62-4  
My '17

**Automobiles**

Automobile a business car on the farm.  
Hoard's D 55:300 Mr 8 '18

Automobile and the farmer. Hoard's D 56:617  
N 29 '18

Automobile for 1917. E. A. Stephens. il Coun-  
try Life 31:32-4 Ja '17

Automobile of 1916. E. A. Stephens. Country  
Life 29:40-1 Ja '16

Automobile on the farm. C. W. Smith. Farm  
Eng 7:20+ Mr '18

Automobile rules. Green's Fruit Grower 37:21  
Ap '17

Automobile trailer. il Farm Eng 3:258 My '16

Automobiles for beekeepers. J. L. Byer. Am  
Bee J 56:58 F '16

Automobiles, trailers and motor trucks.  
G. H. Alford. Prog F 33:442 Ap 6 '18

Buying a second-hand car. I. W. Dickerson.  
Wallaces' F 43:1192 Ag 23 '18

Check list for him who buys. A. Johnston.  
Country Life 32:108 My '17

Choosing our car. il Rural N Y 76:425 Mr 17  
'17

Combination auto. A. Phillips. Farm Eng 3:173  
F '16

Farm automobile. P. T. Hines. Prog F 33:  
22, 39, 66, 107, 169, 244, 276, 347, 378, 443, 489,  
519, 591, 625, 655 Ja 5-26, F 9, 23, Mr 2, 16-  
23, Ap 6-20, My 11-25 '18

Farm woman's auto. G. Shull. il Fruit-Grower  
27:269 Ap 15 '16

Farmer's automobile; its care and operation.  
Prog F 32:150 F 3 '17

Farmers own half of country's autos. Ag Di-  
gest 1:461 My '17

Game and a gamble. E. W. Currie. il Country  
Gent 81:48-9 Ja 8 '16

Going to buy a car? H. Greene. O Judd  
Farmer 60:6 F 19 '16

Haying with an automobile. D. B. Langstreth.  
il Country Gent 82:206 F 3 '17

Helps for automobile owners. P. T. Hines.  
Prog F 31:195 F 5 '16

How the auto changed the farm. Rural N Y  
75:638 Ap 15 '16



**Automobiles—Continued**

How to reduce automobile expense. A. F. Tenney. Fruit-Grower 27:366 J1 15 '16  
How we use the farm automobile. Prac F 113:373 N 1 '17  
I could not get along without a motor car. P. T. Hines. il Power F 27:11-12 D '18  
Is an automobile expensive? A. F. Tenney. O Judd Farmer 60:13 Ja 8 '16  
Learning to drive your car. M. B. Dean. Rural N Y 76:908 J1 21 '17  
Light auto trailer for the farm. Rural N Y 77:69 Ja 19 '18  
Maintenance and upkeep. C. H. Claudy. il Country Life 30:72- Ag '16  
Motor car house built of one piece of redwood weighing three tons. R. H. Moulton. il Am For 24:528-30 S '18  
Motor car in district representative work. il Ag Gaz of Canada 3:986-92 N '16  
Motor car of to-morrow. A. Johnston. Country Life 31:88 D '16  
My commercial car. J; L. Shawver. Power F 26:45 J1 '17  
Power attachments for automobiles. K. J. T. Ekblaw. Nat Stock & F 42:20 Mr 30 '18  
Real cost of a car. M. B. Dean. Rural N Y 77:32 Ja 12 '18  
Remember the radiator. Ag Digest 2:762 D '17  
Running the farm car in winter. L. E. Underwood. il Power F 26:12 D '17  
Says the auto ought to do the odd jobs. G. C. Brannon. Prog F 31:40 Ja 8 '16  
Steering gear and bearings. C. H. Claudy. Country Life 30:90 Je '16  
These farmers use power. M. N. Edgerton. il Fruit-Grower 27:258 Ap 15 '16  
Use of automobiles for outapiary work. W. Foster. il Am Bee J 56:54-5 F '16  
Using an auto as a tractor. A. W. Ross. il Power F 25:26 Ap '16  
Who owns the automobiles? Hoard's D 56:385 O 11 '18  
Why the farmer's gasoline should not be taxed. W. B. Jones. il Power F 27:9 Ag '18  
*See also* Automobile engines; Automobile touring; Automobiles, Care of; Garages; Motor trucks; Tires (automobile)

**Axles**

Construction and care of the rear axle. A. Johnston. Country Life 32:62 Ag '17

**Bearings**

Bearings—their function and care. A. Johnston. Country Life 33:88 F '18  
Lengthening the life of bearings. P. T. Hines. Prog F 33:489 Ap 13 '18  
Why use anti-friction bearings on the tractor? H. N. Trumbull. il Power F 25:34 S '16

**Bodies**

Custom-made motor car body. A. Johnston. il Country Life 34:66+ S '18

**Clutches**

Automobile clutches. H. A. Tarantous. O Judd Farmer 61:14 O 7 '16  
Clutch—its construction and care. A. Johnston. Country Life 32:96 O '17  
How to treat the clutch. P. T. Hines. Prog F 33:347 Mr 16 '18

**Cost of operation**

Automobile cost accounting. J. B. Stuart. Farm Eng 4:60 O '16

**Differential**

Adjustment of differential. I. W. Dickerson. Wallaces' F 43:854 My 24 '18  
How differentials work. P. T. Hines. Prog F 33:443 Ap 6 '18

**Electric equipment**

Storage battery and its maintenance. A. Johnston. Country Life 32:96 Je '17

**Equipment and supplies**

Home comforts in an automobile. K. H. Hamilton. il Country Life 34:88 J1 '18  
Year's developments in the accessory field. A. Johnston. Country Life 30:74+ J1 '16

**Fuel**

*See* Automobile engines—Fuel

**Lighting**

Putting blinders on the headlights. A. Johnston. Country Life 31:112 Ap '17

**Radiators**

How to make a radiator repair. R. H. Smith. Power F 27:47 D '18  
To keep radiators from freezing. Power F 27:30 D '18

**Steering gear**

Caring for steering mechanism. H. A. Tarantous. il O Judd Farmer 60:13 Ap 1 '16

**Tires**

*See* Tires (automobile)

**Transmission**

Problem of the gearset. A. Johnston. Country Life 33:96 D '17

**Automobiles, Care of**

Caring for your automobile in winter. Prog F 32:1261 D 1 '17  
Fine points in operation and maintenance. A. F. Loomis. il Country Life 29:72 F '16  
Giving the farm car the right care. F. H. Duerr. Power F 26:18 Ag; 38-9 S; 46 O '17  
Go over your car frequently. P. T. Hines. Power F 27:41 D '18  
Hints for the automobile's spring overhauling. Nat Stock & F 40:5 Ap 1 '16  
Patriotism and overhauling. A. Johnston. Country Life 34:70 O '18  
Pointers on car storage. B. H. Wike. Ohio F 140:447 N 17 '17  
Sins of omission. A. Johnston. Country Life 31:110 Mr '17  
Spring work on the car. I. W. Dickerson. Wallaces' F 43:814 My 17 '18  
Talk with Jones, the garageman. P. T. Hines. Country Gent 82:1892 D 1 '17  
Washing the automobile. W. H. Underwood. Power F 26:45 Ag '17  
Well groomed motor car. A. Johnston. Country Life 29:86 Ap '16

**Automobiles, Military**

Mechanical power users' associations in agriculture; utilizing motor cars after the war. Int R Ag Econ 62:28-36 F '16

**Auxanometer**

Simplified precision auxanometer. W. T. Bowie. il Am J Bot 2:95-9 F '15

**Aveline, Charles Paul, 1852-1916**

Late Charles Aveline. J; Ashton; W. S. Dunham. Breeder's Gaz 69:370 F 17 '16  
Portrait. Breeder's Gaz 69:173 Ja 27 '16  
Sketch. Breeder's Gaz 69:183 Ja 27 '16

**Aviation**

Sport in the air. R. T. Townsend. il Country Life 31:57-9 Ap '17

**Aviators**

Flying corps recruits from the ranks of country life. F. P. Stockbridge. il Country Life 32:41-4 O '17  
Select army aviators by test, not by education. R. H. Johnson. J Heredity 8:425 S '17  
Testing applicants for aviation corps. R. H. Moulton. Ohio F 141:600 Ap 27 '18

**Avocado weevils**

Avocado weevil. A. S. Hoyt. il Fla State Plant Bd Quar B v 2:108-12 Ja '18

**Avocados**

Avocado culture. P. H. Rolfs. Fla Ag Dept Quar B v 26:43-4 Ap '16  
Avocado monstrosity. R. W. Hodgson. il J Heredity 8:557-8 D '17  
Avocado or alligator pear. A. Hay. il Country Life 31:53 N '16  
Avocado propagation. P. H. Rolfs. Fla Ag Dept Quar B v 26:39-41 Ap '16  
Avocados as food in Guatemala. W. Popenoe. il J Heredity 9:99-107 Mr '18  
D-mannoketohexose: a new sugar from the avocado; abstract. F. B. LaForge. J Franklin Inst (Franklin Institute, Philadelphia 50c) 184:122 J1 '17

**Avocados—Continued**

- Freezing point lowering of the leaf sap of the horticultural types of *persea americana*. J. A. Harris and W. Popenoe. *J Ag Research* 7:261-8 N 6 '16; Abstract. *Int R Sci & Prac Ag* 8,no 4:566-7 Ap '17
- Growing the avocado. A. Hay. *Country Life* 31:66 N '16
- History of the avocado and its varieties in California with a check list of all named varieties. I. J. Condit. *il Cal State Comm Hort B v* 6:1-21 Ja '17
- This tree a gold mine. *il Gard M* 24:36d S '16
- Top working avocados. *Philippine Ag R* 9,no 4:365-7 '16
- Veteran ahuate tree. F. W. Popenoe. *il Gard Chron (Lond)* 63:179 Ap 27 '18

**Diseases and pests**

- Pythiacystis on avocado trees. H. S. Fawcett. *Phyt* 6:433-5 D '16

*See also* Avocado weevils

**Axles. See Automobiles—Axles****Ayer, Winslow B.**

- Portrait. *Breeder's Gaz* 70:879 N 9 '16

**Ayrshire breeders' association**

- Annual meeting, New York city, Jan. 11, 1917. *Field II* 27:105-6 F '17
- Annual meeting, New York city, Jan. 31. J. G. Watson. *Hoard's D* 55:263 Mr 1 '18; Same. *Kimball's D F* 16:176 Mr 1 '18
- 41st annual meeting, Philadelphia, Jan. 13-14, 1916. *Breeder's Gaz* 69:138 Ja 20 '16; *Rural N Y* 75:170 Ja 29 '16; *Field II* 26:118-19 F '16; *Kimball's D F* 14:61 F 1 '16; *Hoard's D* 51:44 F 4 '16
- 43d annual meeting, New York city, Jan. 31. *Breeder's Gaz* 73:323 F 14 '18

**Ayrshires**

- Ayrshire and the farmer. J. G. Watson. *Breeder's Gaz* 74:10 JI 4 '18
- Ayrshire cow. J. G. Watson. *il Field II* 27:750-1 O '17
- Ayrshire cows and the dairy type. H. E. Sharp. *Hoard's D* 51:381 Mr 24 '16
- Ayrshire progress during 1916. *Field II* 27:105-6 F '17
- Ayrshire progress in 1916. W. F. Stephen. *J Ag (Quebec)* 20:139 Ja '17
- Ayrshire progress—Penshurst share in it. *il Hoard's D* 52:831 Ja 5 '17
- Ayrshire records showing estimated production and feed consumed; tabulation. *N J Ag Exp Rep* 1916:217-18 '17
- Ayrshires and the official test. J. G. Watson. *il Kimball's D F* 15:624 S 15 '17
- Ayrshires at Glen Innes experiment farm. R. H. Gennys. *il Ag Gaz of New South Wales* 28:391-8 Je '17
- Ayrshires at Grafton experiment farm. A. H. Haywood. *il Ag Gaz of New South Wales* 27:209-11 Mr '16
- Ayrshires at the National. A. G. Morrell. *il Prac F* 112:428 N 15 '16
- Ayrshires at the National dairy show. *Hoard's D* 56:474 N 1 '18
- Ayrshires o' Strathglass. A. G. Morrell. *il Country Life* 30:56-7 Je '16
- Beauty, type and production. W. F. Stephen. *il Field II* 26:587 JI '16
- Bonnie coo from Scotland. J. G. Watson. *il Breeder's Gaz* 72:1162 D 20 '17
- Breeds of dairy cattle. *il Farmers' B* 893:7-12 '17
- Canadian Ayrshires at the National dairy show. *J Ag (Quebec)* 20:125 D '16
- Dairy side of the Ayrshire. C. M. Winslow. *il Field II* 26:588 JI '16
- Development of the Jean Armour family. *il Field II* 28:26-7 Ja '18
- Fayre farm. *il Hoard's D* 53:271 Mr 9 '17
- Garclaugh May Mischief 27944. *Kimball's D F* 14:8 Ja 15 '16
- Great old Scotch cow. G. McMillan. *il Field II* 26:589-91 JI '16
- Here's to the Ayrshire; poem. J. L. Stansell. *Field II* 26:607 JI '16
- Home of the Ayrshire. *il Hoard's D* 52:486 O 27 '16
- Leading Ayrshires in production. G. M. Winslow. *il Hoard's D* 52:764-5 D 22 '16

- Loveland farms and its Ayrshires. D. E. Andrews. *il Kimball's D F* 14:225 Ap 1 '16
- Management of an Ayrshire herd. L. E. Ortiz. *il Breeder's Gaz* 73:1195 Je 6 '18
- Maple Row Ayrshire farm. W. M. Kelly. *il Hoard's D* 52:656 D 1 '16
- National dairy show; the Ayrshires. *Breeder's Gaz* 72:792 N 1 '17
- Official records on South farm, Ohio. G. A. Cross. *il Hoard's D* 55:182 F 22 '18
- Record accomplishments at Strathglass farm. *il Field II* 27:106-7 F '17
- Sex-limited color in Ayrshire cattle. E. N. Wentworth. *bibliog J Ag Research* 6:141-7 Ap 24 '16
- Show ring and production. J. G. Watson. *il Kimball's D F* 15:89 F 15 '17
- Some Ayrshire herds of Sherbrooke, Stanstead and Compton. *il J Ag (Quebec)* 22:78 N '18
- Strathglass Ayrshires—beauty and efficiency. J. G. Watson. *il Hoard's D* 54:400 O 19 '17
- 10th National dairy show. *Breeder's Gaz* 70:779 O 26 '16
- Two prominent Ayrshire farms near Waterloo. *il J Ag (Quebec)* 22:42 S '18
- Value of breeding. J. G. Watson. *il Kimball's D F* 16:492 S 15 '18
- World's champion Ayrshire. *il Rural N Y* 75:204 F 5 '16

*See also* Ayrshire breeders' association; Canadian Ayrshire breeders' association; New England Ayrshire breeders' association

**Price lists**

- Fifty-four Ayrshires average \$646 at the Springfield sale. *Field II* 27:553 JI '17
- New England Ayrshire sale, Hartford, Conn., June 11-12. *Breeder's Gaz* 73:1309 Je 20 '18; *Field II* 28:515 JI '18; *Kimball's D F* 16:572 JI 15 '18
- 1918 New England club sale. J. G. Watson. *Hoard's D* 55:962 Je 28 '18
- Record Ayrshire auction. *Breeder's Gaz* 71:1251 Je 21 '17

**Azores**

*See also* Crops—Azores

**Azotobacter. See Soil bacteriology****B****Babbling**

- Bearings and babbitt pouring. F. L. Peterson. *Country Gent* 82:1234 Ag 4 '17

**Babcock, Stephen Moulton, 1843-**

- Babcock jubilee banquet. *Kimball's D F* 14:146 Mr 1 '16
- Babcock silver jubilee. *il Hoard's D* 51:187+ F 25 '16
- Dr Babcock's gift to the industry. *por Field II* 27:754 O '17
- Invention of the Babcock test. H. L. Russell. *Hoard's D* 51:197 F 25 '16
- Portrait. *Hoard's D* 51:185 F 25 '16

**Babcock test. See Milk—Testing****Babul. See Gum arabic trees****Baby beef clubs**

- Baby beef club show at Mississippi state fair. F. W. Farley. *Prog F* 31:1397 D 2 '16
- Baby beef contests for boys and girls. *Ag Gaz of Canada* 5:298 Mr '18
- Boys and baby beef at Madison. O Judd. *Farmer* 61:10 D 9 '16
- Encouraging baby beef production. R. Baker. *il Field II* 28:418-19 Je '18
- Recruiting for beef production. R. Beresford. *il Breeder's Gaz* 71:1193+ Je 14 '17
- Virginia baby beef club work in 1917. M. O. Cooper. *il Nat Stock & F* 41:914 D 22 '17
- Wisconsin baby beef contest. W. L. Houser. *Breeder's Gaz* 73:107 Ja 17 '18
- Wisconsin's baby beef contests. *Breeder's Gaz* 73:165 Ja 24 '18

**Bacillus amylovorus. See Fire blight****Bacillus radicolola. See Soil inoculation****Back slacking; story. Am Coop J** 13:242-3 F '18



Back to the old place on the farm; story. M. Delcomyn. *il Am Coop J* 14:14-15 S '18

# Back yards

Activities of Toronto back-yard garden committees. *Ag Gaz of Canada* 4:321 Ap '17  
Amateur adventures in a city back yard. A. Merlin. *Country Gent* 81:224 Ja 29 '16  
Backyard garden. *Rural N Y* 76:321 Mr 3 '17  
Backyard garden and its earnings. L. H. Williams. *Rural N Y* 77:1397 D 21 '18  
Back yard gardens. *Gard Chron Am* 21:103-5 Mr '17  
Backyard gardens become food munition plants. *il Touchstone* (118 E. 30th st, N.Y. 35c) 3:316-23 Jl '18  
Back-yard poultry keeping. R. R. Slocum. *il Farmers' B* 889:1-22 '17  
Back yards profitable. *Weekly N L* 5:5-6 D 19 '17  
Development of the garden plot. L. W. Ramsey. *il Gard M* 24:214-15 Ja '17  
Educative and economic possibilities of school-directed home gardening in Richmond, Indiana. J. L. Randall. (B.6) 25p *il '17 U.S. Bur. educ., Washington, D.C.*  
Flowers and fruit in the back yard. G. Taatjes. *il Green's Fruit Grower* 36:24 My '16  
Home, yard and garden contests. R. J. Pearse. *il Ia Ag Ext B* 38:1-15 '16  
Making a city backyard garden; experiences of the Touchstone garden editor. *il Touchstone* (118 E. 30th st, N.Y. 35c) 3:480-8 S '18  
My backyard garden. H. T. Howland. *Country Gent* 81:1163 Je 3 '16  
Society of little gardens. B. A. Clark. *il House Beautiful* (3 Park st., Boston 25c) 41:72-5 Ja '17  
Some happy back-yard experiences. H. L. McFarland. *il Country Gent* 82:381 F 24 '17  
Value of a small plot of ground to the laboring man. W. C. Funk. *il U S Ag B* 602:1-10 '18

# Bacon

Bacon cuts and curing. *il Breeder's Gaz* 74:207 Ag 8 '18  
Bacon industry. E. Belanger. *il Ag Gaz of Canada* 3:887-9 O '16  
Curing bacon. *J Dept Ag Victoria* 14:667 N '16

# Bacteriology

Bacteria and their control. H: C. Stewart. *Field H* 26:437 My '16  
Bacteria—friends and foes. D. H. Jones. *il Ontario Ag Dept B* 265:1-100 '18  
Bacteria in fresh and preserved eggs. W. D. Caldwell; O. M. Mason. *Int R Sci & Prac Ag* 7,no 3:434-5 Mr '16  
Bacteria in the air. *J Home Econ* 8:41-2 Ja '16  
Bacteria in the intestinal tract. J. Vanderleck. *J Ag (Quebec)* 20:179 F '17  
Bacteria, our invisible friends and foes: their relation to agriculture. B. L. Moss. *Prog F* 31:466 Ap 1 '16  
Bacteriological study of methods for the disinfection of hides infected with anthrax spores. F. W. Tilley. *bibliog J Ag Research* 4:65-92 Ap '15  
Bacterium pyogenes and its relation to suppurative lesions in animals. A. R. Ward. *bibliog J Bact* 2:619-28 N '17  
Biological variations of bacteria; induced variations in the cultural characters. M. R. Smirnov. *J Bact* 1:385-410 Jl '16  
Celery-rot bacillus. H. Wormald. *bibliog il J Ag Sci* 8:216-45 Mr '17  
Colorimetric determination of hydrogen ion concentration and its applications in bacteriology. W: M. Clark and H. A. Lubs. *J Bact* 2:1-34, 191-236 Ja, My '17  
Contribution to the bacteriology of silage. J. M. Sherman. *bibliog J Bact* 1:445-52 Jl '16  
Counting bacteria by means of the microscope. R. S. Breed and J. D. Brew. *il N Y State Ag Exp Tech B* 49:1-31 '16  
Curious accident due to b. pneumoniae. J. P. Simonds. *il J Bact* 2:244-7 My '17  
Effect of natural low temperature on certain fungi and bacteria. H. E. Bartram. *J Ag Research* 5:651-5 Ja 3 '16

Effect of tobacco smoke and of methyl iodide vapor on the growth of certain microorganisms. C. A. Ludwig. *bibliog Am J Bot* 5:171-7 Ap '18  
Enzymes of the tubercle bacillus. H. J. Corper and H. C. Sweany. *bibliog J Bact* 3:129-51 Mr '18  
Evolution of bacteria. R. E. Buchanan. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:320-4 Mr 29 '18  
Extreme resistance of two spore bearing microorganisms; bacillus anthracis and bacillus subtilis. W. V. Smith. *Am Vet M Assn J* 49:53-5 Ap '16  
Fallacy of refined readings of gas percentages in the fermentation of lactose peptone bile and lactose broth. W: W. Browne and B: Ackman. *bibliog J Bact* 2:249-61 My '17  
Germicidal action of freezing temperatures upon bacteria. C. M. Hilliard and M. A. Davis. *bibliog J Bact* 3:423-31 Jl '18  
Influence of illuminating gas and its constituents on certain bacteria and fungi. C. A. Ludwig. *bibliog Am J Bot* 5:1-31 Ja '18  
Influence of milk and carbohydrate feeding on the character of the intestinal flora. T: G. Hull and L. Rettger. *bibliog J Bact* 2:47-71 Ja '17  
Is symbiosis possible between legume bacteria and non-legume plants? T: J. Burrill and R. Hansen. *bibliog il Ill Ag Exp B* 202:115-181 '17  
Isolation and cultivation of bacterium tuberculosis on a synthetic culture medium. C. A. Magoon. *bibliog Wash Ag Exp B* 132:1-9 '16  
Life cycles of the bacteria. F. Löhnis and N. R. Smith. *bibliog il J Ag Research* 6:675-702 Jl 31 '16  
Method of anaerobic plating permitting observation of growth. H. M. Jones. *J Bact* 1:339-41 My '16  
Modification of the technique of the Voges and Proskauer reaction. G: C. Bunker and others. *J Bact* 3:493-8 S '18  
New apparatus for aseptic ultrafiltration. R. E. Smith. *il Phyt* 7:290-3 Ag '17  
New species of alcohol forming bacterium isolated from the interior of stalks of sugar cane infested with the cane-borer diatraea saccharalis. W: L. Owen. *bibliog il J Bact* 1:235-47 Mr '16  
Nitrogen fixation, nitrification, denitrification and the production of sulphuretted hydrogen by bacteria in the Arctic ocean. B. L. Issatchenko. *Int R Sci & Prac Ag* 7,no 12:1753-5 O '16  
Note on aerobic culture of anaerobes at higher temperatures. L. J. Ellefson and I. C. Hall. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:570 D 7 '17  
Note on cross-agglutination of b. coli communis and b. dysenteriae Shiga. I. J. Kligler. *bibliog J Bact* 3:441-4 S '18  
Note on the preparation of hyphomycetes for microscopical examination. M. F. Boyd. *il J Bact* 2:365-8 Jl '17  
Note on the reaction of the paratyphoids, alpha and beta, in litmus milk. P. B. Hadley. *J Bact* 2:263-7 My '17  
Number of colonies allowable on satisfactory agar plates. R. S. Breed and W. D. Dotterer. *bibliog J Bact* 1:321-31 My '16  
On the significance of the Voges-Proskauer reaction. M. Levine. *bibliog J Bact* 1:153-64 Mr '16  
Presence of the b. coli and b. welchii groups in the intestinal tract of fish (stenomus chrysops). W: W. Browne. *bibliog J Bact* 2:417-22 Jl '17  
Proteolysis of streptococcus erysipalatis and streptococcus lactis compared under different hydrogen ion concentration. A. Itano. *Mass Ag Exp B* 167:178-85 '16  
Relation of germs to disease, food, milk, water, etc. Mrs W. N. Hutt. *Prog F* 31:262 F 19 '16  
Relation of hydrogen ion concentration of media to the proteolytic activity of bacillus subtilis. A. Itano. *Mass Ag Exp B* 167:139-77 '16

**Bacteriology—Continued**

- Relative influence of microorganisms and plant enzymes on the fermentation of corn silage. A. R. Lamb. bibliog J Ag Research 8:361-80 Mr 6 '17
- Science of bacteriology and its relation to other sciences. L. F. Rettger. bibliog J Bact 3:103-13 Mr '18
- Simple method for staining the capsules of bacteria. F. M. Huntoon. J Bact 2:241-3 My '17
- Studies on fowl cholera; the toxins of bacillus avisepticus. P. Hadley. bibliog J Bact 3: 277-91 My '18
- Studies on the bacterial metabolism of sulfur. F. W. Tanner. bibliog J Bact 2:585-93 S '17
- Studies relative to the apparent close relationship between bact. pertussis and b. bronchisepticus. N. S. Ferry and H. C. Klix. J Bact 3:309-12 JI '18
- Studies relative to the apparent close relationship between bact. pertussis and b. bronchisepticus. N. S. Ferry and A. Noble. J Bact 3:193-208 My '18
- Studies upon the blackleg disease of the potato, with special reference to the relationship of the causal organisms. W. J. Morse. bibliog J Ag Research 8:79-126 Ja 15 '17
- Study of five members (or so-called species) of the septicemia hemorrhagica (pasteurella) group of organisms with special reference to their action on the various carbohydrates. A. M. Besemer. bibliog J Bact 2:177-84 Mr '17
- Study of the Boas-Oppler bacillus. P. G. Heinemann and E. E. Ecker. bibliog J Bact 1:435-44 JI '16
- Study of the diphtheroid group of organisms with special reference to their relation to the streptococci. R. R. Mellon. il J Bact 2:81-107, 269-307, 447-500 My-JI '17
- Study of the fermenting properties of bact. pullorum (Rettger) and bact. sanguinarium (Moore). S. A. Goldberg. Am Vet M Assn J 51:203-10 My '17
- Work of Elie Metchnikoff. Gard Chron (Lond) 60:51 JI 29 '16
- Wound infection. C. Murray. Ia Ag Coll Offic Pub v 14, no 36:241-5 '16
- See also Air—Bacteriology; Cheese—Bacteriology; Colon bacilli; Conglutination test; Cream—Bacteriology; Dairy bacteriology; Eggs—Bacteriology; Food—Bacteriology; Ice cream—Bacteriology; Intestines—Bacteriology; Lactic acid bacteria; Manures—Bacteriology; Milk—Bacteriology; Myxobacteriaceae; Nitrication; Phagocytes; Plants—Diseases and pests; Soil bacteriology; Spirochaeta; Streptococci; Water—Analysis; Water—Bacteriology; also subhead Diseases and pests under special subjects, e.g. Fruit—Diseases and pests*

**Classification**

- Classification of the aciduric bacteria. A. H. Rahe. bibliog J Bact 3:407-21 JI '18
- Comments on the evolution and classification of bacteria. R. S. Breed and others. bibliog J Bact 3:445-59 S '18
- Evolution and relationship of the great groups of bacteria. I. J. Kligler. J Bact 2:165-76 Mr '17
- Families and genera of the bacteria; preliminary report of the committee of the Society of American bacteriologists on characterization and classification of bacterial types. C. E. A. Winslow and others. bibliog J Bact 2:505-66 S '17
- Preliminary note on the classification of some lactose fermenting bacteria. M. Levine. J Bact 1:619-21 N '16
- Simple method for the classification of bacteria as to diastase production. F. W. Allen. il J Bact 3:15-17 Ja '18
- Statistical classification of the coloncloacae group. M. Levin. bibliog J Bact 3:253-76 My '18
- Studies in the nomenclature and classification of the bacteria. R. E. Buchanan. bibliog J Bact 1:591-6; 2:155-64, 347-50, 603-17; 3:27-61, 175-81, 301-6, 403-6, 461-74 N '16, Mr, JI, N '17, Ja-S '18

- Studies on aerobic spore-bearing non-pathogenic bacteria. C. A. Laubach. bibliog il J Bact 1:493-533, 1-15pl S '16
- Studies on aerobic spore-bearing non-pathogenic bacteria. J. S. Lawrence and W. W. Ford. bibliog il J Bact 1:273-320, 1-26pl My '16
- Study of green fluorescent bacteria from water. F. W. Tanner. bibliog J Bact 3:63-101 Ja '18

**Culture media**

- Bacterial nutrition: a brief note on the production of erepsin (peptolytic enzyme) by bacteria. N. Berman and L. F. Rettger. J Bact 1:537-9 S '16
- Bacterial nutrition: further studies on the utilization of protein and non-protein nitrogen. N. Berman and L. F. Rettger. bibliog J Bact 3:367-88 JI '18
- Bacteriological method useful for the study of other micro-organisms. F. M. Bachmann. il Am J Bot 5:32-5 Ja '18
- Bile compared with lactose bouillon for determining the presence of b. coli in water. M. M. Obst. bibliog J Bact 1:73-9 Ja '16
- Brief note on the use of gentian violet in presumptive tests for b. coli in milk with reference to sporulating anaerobes. I. C. Hall and L. J. Ellefson. bibliog J Bact 3:355-60 JI '18
- Comparison of Loeffler's coagulated blood serum and blood serum with the addition of sterile ox gall in the isolation of the diphtheria bacilli. H. R. Odell. bibliog J Bact 3:189-91 Mr '18
- Culture medium for maintaining stock cultures of the meningococcus. C. G. A. Roos. J Bact 1:67-71 Ja '16
- Effect of hydrogen ion concentration on the production of precipitates in a solution of peptone and its relation to the nutritive value of media. I. J. Kligler. J Bact 2:351-3 JI '17
- Effect of sterilization upon sugars in culture media. C. S. Mudge. J Bact 2:403-15 JI '17
- Elimination of spurious presumptive tests for b. coli in water by the use of gentian violet. I. C. Hall and L. J. Ellefson. bibliog J Bact 3:329-54 JI '18
- Endo medium for the isolation of b. dysenteriae and a double sugar medium for the differentiation of b. dysenteriae Shiga and Flexner. I. J. Kligler and J. Defandorfer. bibliog J Bact 3:437-40 S '18
- Fuchsin-aldehyde reaction on the endo medium. G. G. De Bord. J Bact 2:309-14 My '17
- Further studies on bacterial nutrition: the utilization of proteid and non-proteid nitrogen. L. F. Rettger and others. bibliog J Bact 1:15-33 Ja '16
- Growth of bacteria in protein-free enzyme- and acid-digestion products. H. C. Robinson and L. F. Rettger. J Bact 3:209-29 My '18
- Importance of uniform culture media in the bacteriological examination of disinfectants. J. H. Wright. J Bact 2:315-46 JI '17
- Influence of carbohydrate on the nitrogen metabolism of bacteria. N. Berman and L. F. Rettger. bibliog J Bact 3:389-402 JI '18
- Influence of hydrogen-ion concentration of medium on the reproduction of alfalfa bacteria. E. B. Fred and N. E. Loomis. bibliog J Bact 2:629-33 N '17
- Methods of pure culture study; preliminary report of the committee on the chart for identification of bacterial species; with glossary of terms used on chart. bibliog J Bact 3:115-28 Mr '18
- New and efficient substitute for nutrose. R. L. Mackenzie Wallis. Ag J of India 12:621-32 O '17
- New apparatus for obtaining simultaneous cultures of any desired age for comparative study. R. G. Perkins. il J Bact 3:23-6 Ja '18
- New culture medium for the tubercle bacillus. W. W. Williams and W. Burdick. J Bact 1:411-14 JI '16
- New differential plating methods for b. bifidus (Tissier) and b. acidophilus (Moro). J. C. Torrey. il J Bact 2:435-9 JI '17



**Bacteriology—Culture media—Continued**

- Observations sur l'influence chimique des milieux de culture sur le développement et la production de l'indol par les colibacilles et par les bacilles typhiques. E. Zunz and P. György. bibliog J Bact 1:627-61 N '16
- On the value of the petroleum-ether method for the isolation of *b. typhosus* from feces. L. A. Kohn and C. Krumwiede, jr. J Bact 3:361-6 J1 '18
- Practical observations on the titration and adjustment of culture media. B. V. Anthony and C. V. Ekroth. bibliog J Bact 1:209-34 Mr '16
- Preliminary report on synthetic media. C. J. T. Doryland. J Bact 1:135-52 Mr '16
- Preparation of culture media from whole blood. R. A. Kelsner. J Bact 1:615-17 N '16
- Pure cultures of wood-rotting fungi on artificial media. W. H. Long and R. M. Harsch. bibliog J Ag Research 12:33-82 Ja 14 '18
- Rapid and simple indol test. P. R. Cannon. J Bact 1:535-6 S '16
- Simple and practical medium for differentiating *b. typhosus*, *b. paratyphosus* A, *b. paratyphosus* B, *b. enteritidis*, and *b. coli*. K. Morishima. J Bact 3:19-22 Ja '18
- Some regulating factors in bacterial metabolism. I. J. Kligler. J Bact 1:663-71 N '16
- Synthetic culture media for wood-destroying fungi. E. J. Pieper and others. Phyt 7:214-20 Je '17
- Synthetic medium for the direct enumeration of organisms of the colonaerogenes group. S. H. Ayres and P. Rupp. J Bact 3:433-6 S '18
- Toxicity of Victoria blue 4 R. for *b. paratyphosus* A, *b. paratyphosus* B and *b. enteritidis*. O. Teague. J Bact 3:1-6 Ja '18
- Use of a three per cent lactose litmus agar plate for the demonstration of *b. coli* in water examination. E. M. Meyer. J Bact 2:237-40 My '17
- See also Agar; Milk as culture medium

**Nomenclature**

- Studies in the nomenclature and classification of the bacteria. R. E. Buchanan. bibliog J Bact 1:591-6; 2:155-64, 347-50, 603-17; 3:27-61, 175-81, 301-6, 403-6 N '16, Mr, J1, N '17, Ja-S '18

**Photographs and photography**

- Blue-printing directly from agar plates. J. Broadhurst. J Bact 3:187-8 Mr '18

**Study and teaching**

- Early instructors in bacteriology in the United States. D. H. Bergey. J Bact 2:595-601 N '17
- Early instructors in bacteriology in the United States. E. G. Hastings; C. B. Morrey. J Bact 3:307-8 My '18
- Pedagogics of bacteriology. D. H. Bergey. J Bact 1:5-14 Ja '16

**Bacteriology, Dairy.** See Dairy bacteriology

**Bacterium abortus.** See Abortion, Infectious

**Bacterium solanacearum.** See Wilt disease

**Bacterium tumefaciens.** See Crown gall

**Bactrocera cucurbitae.** See Melon flies

**Bagasse as feed.** See Feeding and feeding stuffs—Bagasse

**Bagasse as fuel**

- Tests of boilers with bagasse as fuel. E. W. Kerr. La Ag Exp B 160:1-58 '16

**Bags**

- Arrêté n. 5353 concernant les sacs en Allemagne. Int Yearbook Ag Leg 1916:426-30 '17
- Importation of burlap, burlap bags and jute. Am Fert 49:33 N 9 '18
- Save every bag. Kimball's D F 16:398 My 15 '18; Same. Coop Manager & F 7:55 My '18
- Use of 200-pound bags for fertilizers will effect needed saving in burlap. Weekly N L 5:10 Je 19 '18

**Bagworms**

- Bag-worm. Purdue Ag 11:36 D '16
- Bagworm, an injurious shade-tree insect. L. O. Howard and F. H. Chittenden. Il map Farmers' B 701:1-11 '16

**Bailey, Liberty Hyde, 1858-**

Ithaca's farewell to Doctor Bailey. Cornell Countryman 14:482-3 Mr '17

**Bakeries**

Bakery at Camp Dodge. Wallaces' F 43:1144 Ag 9 '18

Report of Federal trade commission on bakery business in United States; report of bakery section of Food administration. 23p '17 U.S. Food administration, Washington, D.C.

**Regulation**

Bakeries and bakery products. (In Municipal ordinances, 1916, p. 100-5) '17 U. S. Pub. health service, Washington, D.C.

\* Bakery regulations. (In Official statement no. 5, p. 16-17) '18 U.S. Food administration, Washington, D.C.

Revised rules and regulations governing licenses manufacturing bakery products, effective Feb. 1, 1918, and superseding series C. (Ser. D) 20p '18 U.S. Food administration, Washington, D.C.

**Bakers' bread.** See Bread, Bakers'

**Bakery products**

Commercial stocks of bakery products. U S Food Surveys 1:16-18 My 18 '18

**Baking**

Baking day. A. M. Ashton. Rural N Y 75:1056 Ag 5 '16

Barley flour now on market good substitute for wheat; recipes. Weekly N L 5:7 My 22 '18

Save more wheat. Cornell Countryman 15:474-5 My '18

Standardization of temperatures for cooking batters and doughs. E. Stanley and M. Wallace. J Home Econ 8:429-38 Ag '16

Use barley—save wheat; recipes. U S Ag C 111:1-4 '18

Use of wheat flour substitutes in baking. H. L. Wessling. Farmers' B 955:1-22 '18

See also Bread; Cake; Cookery; Ovens; Pastry

**Baking powder**

Role of calcium sulphate in phosphate baking powders. H. E. Patten. Assn Offic Ag Chem J 2:225-9 F '17

**Analysis**

Baking powders and their ingredients. bibliog Assn Offic Ag Chem J 2,no 3,pt 2:339-50 N '16

Report on baking powders. H. E. Patten. Assn Offic Ag Chem J 2:214-25 F '17

**Balanced ration; Thanksgiving.** Rural N Y 76:1320, 1350 N 17-24 '17

**Baldness**

Inheritance of baldness. D. Osborn. Il J Heredity 7:347-55 Ag '16

**Balling saccharometer.** See Saccharometers

**Balsa tree**

Lightest known wood. Il Rural N Y 75:839 Je 3 '16

New wood, the lightest known. Scientific Am (233 Broadway, N.Y. 10c) 117:444 D 8 '17

**Balsam fir.** See Fir

**Balsam poplar.** See Poplar

**Balsamorhiza**

Resin secretion in balsamorhiza sagittata. E. C. Faust. bibliog Il Bot Gaz 64:441-79 D '17

**Balsams**

Notes on balsam culture. Gard Chron Am 20:121 Mr '16

**Baltimore orioles.** See Orioles

**Bamboo**

Bamboo. J. Hudson. Royal Hort Soc J 42, pts 2-3:245-52 S '17

Bamboos grown in shade. B. Levett. Gard Chron (Lond) 61:83 F 24 '17

Cultivation of the bamboo as a profitable commercial enterprise. G. Girardi. Int R Sci & Prac Ag 7,no 4:575-6 Ap '16

Growers of foreign bamboo warned. Am Flor 46:938 My 20 '16

On the identity of Blanco's species of bambusa. E. D. Merrill. Am J Bot 3:58-64 F '16

**Bamboo** —*Continued***Diseases and pests***See also* Bamboo smut**Bamboo smut**

Bamboo smut fungus in Cuba. D. Fairchild. *Int R Sci & Prac Ag* 7,no 3:450 Mr '16  
Occurrence of bamboo smut in America. F. W. Patterson and V. K. Charles. *il Phyt* 6:351-6 Ag '16

**Bambusa**. *See* Bamboo**Banana flour**

Banana flour to help fortify America against a bread famine. *Current Opinion* (63 W. 36th st, N.Y. 25c) 63:355 N '17  
Superior bread baked from banana flour. Scientific Am (233 Broadway, N.Y. 10c) 117:92 Ag 4 '17

**Banana root borers**

Some pests we do not want, why we do not want them, and how they may arrive; the banana root borer. D. B. Mackie. *il Cal State Comm Hort B v* 7:498-502 Ag '18

**Banana stalks**

Banana stalks as a source of potash. H. E. Billings and A. W. Christie. *J Industrial and Engineering Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:153-4 F '17  
Potash in banana stalks and skins. R. H. Ellis. *Int R Sci & Prac Ag* 7,no 7:950-1 JI '16

**Banana wilt**

Banana wilt (Panama disease). E. W. Brandes. *il Porto Rico Ag Exp Rep* 1916:29-31 '18

**Bananas**

Alcoholic fermentation of banana must. R. Peratti and V. Riviera. *Int R Sci & Prac Ag* 9,no 5:610-12 My '18  
Banana: a food of exceptional value. S. C. Prescott. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 6:65-75 Ja '18  
Banana as a food. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:52 Ja 26 '18  
Banana culture in the Tweed district. C. E. B. Welsh. *Ag Gaz of New South Wales* 29: 731-6 O '18  
Bananas an important source of the nation's food supply. *Ag Digest* 2:549 JI '17  
Cook your bananas. *Lit Digest* (354 4th av, N.Y. 10c) 56:22 F 16 '18  
Dyestuffs from bananas; report from Eng-land. *Textile World J* (461 8th av, at 34th st., N.Y. \$3 per yr.) 53:993+ S 8 '17  
Food value of the banana. 35p '17 United Fruit company, 131 State st., Boston  
Native bananas of the Hawaiian Islands. V. MacCaughy. *Int R Sci & Prac Ag* 9,no 5: 571-3 My '18  
Ripening bananas by gas. *Gas Age* (52 Vanderbilt av., N.Y. \$3 per yr) 39:251 Mr 1 '17  
When food costs soar; bananas still stay at a reasonable price. G. V. Gray. *Country Gent* 82:750 Ap 14 '17  
Wonderful growers. *Green's Fruit Grower* 36: 23 My '16

*See also* Banana flour**Composition**

Changes in composition of peel and pulp of ripening bananas. H. C. Gore. *bibliog J Ag Research* 3:187-203 D '14

**Diseases and pests**

Banana as a host fruit of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. *bibliog il J Ag Research* 5:793-804 Ja 24 '16  
Banana diseases. *il Hawaii Ag Exp Rep* 1917: 40-2 '18  
Mediterranean fruit-fly (*ceratitis capitata* Wied.) breeds in bananas. H. H. P. Severin. *bibliog J Econ Entom* 10:318-21 Je '17  
Tylenchus similis, the cause of a root disease of sugar cane and banana. N. A. Cobb. *J Ag Research* 4:561-8 S '15

*See also* Banana root borers; Banana wilt**Band boxes**

Band-box gay. *il Country Life* 30:98 Je '16

**Bands (music)**

Boys' military bands to meet war needs. A. V. Chamberlain. *Rural Manhood* 9:151-3 Ap '18

**Banker-farmer (periodical)**

What the American bankers' association has done and is doing in farm development work. B. F. Harris. (*In Agricultural extension*, p 96-102) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

**Banking law**. *See* Agricultural credit—United States—Law**Banks and agricultural development**

Agriculturist for each bank—the day is surely coming! *Banker-F* 3:3 Ja '16  
Backing up the county agent. A. D. Cobb. *il Banker-F* 5:10-11 Ja '18  
Bank-agriculturist's work. M. D. Lincoln. *il Banker-F* 5:2-4 N '18  
Bank assistance to agriculture. *Ag Gaz of Canada* 3:179-80 F '16  
Bank with a heart. G. K. Turner. *il Country Gent* 82:1903-4+ D 8 '17  
Bank with a vision. F. H. Jeter. *il Country Gent* 83:2 O 12 '18  
Banker and agriculture. C. Ousley. *il Banker-F* 5:2-4 O '18  
Banker and farmer: dealers in pork and beans. M. T. Herrick. *Outlook* (287 4th av., N.Y. 10c) 116:21-2 My '17  
Banker and food production. J. Hirsch. *il Banker-F* 5:2-4 Ag '18  
Banker and his relations to his customer and the community. F. N. Shepherd. *il Banker-F* 4:4-5 Mr '17  
Banker boosts fruit-growing. H. L. Spooner. *il Fruit-Grower* 28:44 Ja 15 '17  
Banker dairy booster. *Wallaces' F* 42:823 My 18 '17  
Banker-farmer war program. J. Hirsch. *Banker-F* 5:5-7 O '18  
Banker who saw ahead. W. Harper. *Country Gent* 83:26 Ja 19 '18  
Bankers' activities for a better agriculture. R. H. Smith. *Penn State F* 9:337-8 Mr '16  
Bankers and the farm loan act. H. Quick. *Banker-F* 4:14-15 Ap '17  
Banker's viewpoint; Wisconsin farm management demonstration work. B. M. Smith. *Hoards' D* 54:764 D 21 '17  
Banking wisdom and purebred stock. F. D. Tomson. *Breeder's Gaz* 72:139 Ag 2 '17  
Bank's ag man. R. A. Blanchard. *Banker-F* 6:16 D 18  
Banks hasten to cooperate to bring increased food production. *Banker-F* 4:15 My '17  
Be a banker-farmer—these bankers point out the way. *il Banker-F* 3:12 Mr '16  
College calls New England bankers to the banker-farmer banner. *Banker-F* 3:13 JI '16  
Conditions adverse—but the bank brought milk cows and hogs. C. M. Kraemer. *il Banker-F* 3:13 Ja '16  
Country banker's opportunity to bring a safer agriculture. J. Hirsch. *Banker-F* 3:2-5 O '16  
County agent and banker. R. A. Ward. *il Banker-F* 5:10 N '18  
Financing the farmers of a community that is just developing. D. W. Davis. *Banker-F* 3:6 Mr '16  
Foster interest in livestock by helping to form calf, pig and sheep clubs. *il Banker-F* 4:6-7 My '17  
Get behind the farmer! *Banker-F* 5:9-10 O '18  
Getting the farmers and bankers together. *Ag Digest* 2:693 N '17  
How a Georgia bank placed \$6,000 worth of hogs among farmers. R. C. Dunlap. *il Banker-F* 4:10 JI '17  
How a letter from a farmer aroused the bankers of California. H. C. Carr. *Banker-F* 3:12:13 Ag '16  
How bankers state associations work for agriculture. *Banker-F* 3:14 Ap; 2-4 Je; 11-16 S '16  
How eleven banks cooperate to bring better cows and bigger milk checks. H. I. Wood. *il Banker-F* 4:6-7 Ja '17; Same cond. *Ag Digest* 1:295-6 F '17  
How Indiana banks build up their communities—and themselves. C. Henry. *il Banker-F* 4:10-11 S '17



**Banks and agricultural development—Cont.**

- How Kansas bankers paved the way for livestock improvement. Banker-F 4:14 N '17
- How Lone Star state bankers are battling—it's inspiring. Banker-F 3:15 JI '16
- How one bank helped. E. B. Harshaw. il Banker-F 5:15 My '18
- How Texas bankers plan to encourage beef cattle feeding. J. Hirsch. Banker-F 4:12 My '17
- How the bank-agriculturist is known as the farmers' minister. M. K. Lincoln. Banker-F 3:5 Je '16
- How the bank took the farmers to college. il Banker-F 4:10 Ja '17
- How the bankers' state associations are co-operating with the farmers. il Banker-F 4:2-4 Ag '17
- How the banks are cooperating. Banker-F 5:11 Mr; 14-15 Ap '18
- How Wisconsin banker-farmer work has helped farmers—and bankers! J. R. Wheeler. Banker-F 4:6 JI '17
- In Wisconsin and California. Banker-F 5:14 Ag '18
- Increased production is need. C: A. Hinsch. Banker-F 5:6 Ja '18
- Job for the banker. J. H. Collins. Country Gent 81:1937 N 4 '16
- Join the army of banker-farmers—these bankers point the way. Banker-F 3:14 F '16
- Kentucky bank's calf club. A. H. Eckles. il Banker-F 5:10 F '18
- Messages by banker-farmer leaders to the Atlantic City conference. J. R. Wheeler. Banker-F 4:9 N '17
- Mississippi results; banker-farmer work wins out. C. A. Cobb. Banker-F 6:15 D '18
- Organize and win. F. P. Brady. Banker-F 5:13 N '18
- Pennsylvania bankers at work. C. G. McBride. il Banker-F 5:6-7 N '18
- Pennsylvania makes its plans; banker leaders in each county to stimulate production. L. T. McFadden. il Banker-F 5:14 My '18
- Proceedings of the second banker-farmer convention under the auspices of the Washington bankers association. Nov. 9-10, 1917. Wash Ag Ext Ser 1,no 31:1-14 '17
- Rallying the bankers of America for agricultural preparedness. J. Hirsch. il Banker-F 4:2-3 O '17
- Relations of the farmer, the country banker and the city banker. J. R. Wheeler. Banker-F 4:4 Ja '17
- Results with the Kansas farm account books. P. E. McNall. Banker-F 4:15 Mr '17
- Rural organization. il Banker-F 5:2-4 S '18
- Short-time credit for farmers. C: P. Holland. Mass Ag Bd Yearbook 1917,pt 2:39-43 '18
- Some farm problems in New York. M. C. Burritt. il Banker-F 5:10 Mr '18
- Speeding up the North-west. R. A. Blanchard. il Banker-F 5:6 Je '18
- State associations strip for action—leaders tell plans. Banker-F 3:15 F '16
- This banker took a gun and dog—and got acquainted. Banker-F 3:13 F '16
- Three practical avenues of activity. W. C. Gordon. Banker-F 4:3 Ja '17
- To keep farm books; Ohio college and bankers unite. R. F. Taber. Banker-F 6:11 D '18
- Uncle Sam furnished the creamery—but a banker produced the cows. il Banker-F 4:12 Ja '17
- Use the bank lobby; agricultural displays succeed. R. A. Blanchard. il Banker-F 5:14 S '18
- Voice of the banker in ten southern states. Country Gent 81:688 Mr 25 '16
- What bankers everywhere are doing to co-operate with the farmer. il Banker-F 4:13 Mr; 12 Ap '17
- What safe farming is doing for southern agriculture—the banker's part. B. Knapp. Banker-F 4:4-5 N '17
- What the American bankers' association has done and is doing in farm development work. B. F. Harris. (In Agricultural extension, p 96-102) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- What the banker-farmer movement has meant to Michigan. Banker-F 3:14 JI '16
- What the banker ought to know. R. A. Blanchard. Banker-F 5:6 Je '18; Same cond. Ag Digest 3:10 JI '18
- What the bankers ought to know about agriculture—but don't. H. C. Carr. Banker-F 4:15-16 Ag '17
- What the empire builder thought of the banker-farmer movement. J. J. Hill. Banker-F 3:2 JI '16
- When the banker farms. Banker-F 6:10 D '18
- Why a big city bank has established an agricultural department. M. T. Herrick. Banker-F 4:14-15 O '17
- Why bankers, merchants, manufacturers and professional men should be vitally interested in farm development. C. J. Haase. (In Agricultural extension, p 11-14) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Why every banker should cooperate. R. A. Pearson. Banker-F 4:2-3 N '17
- Why the banker needs education just as much as the farmer. G: R. James. Banker-F 4:13 Ag '17
- Why the banker should encourage dairying. W. R. Finlayson. Ag Digest 1:380 Ap '17
- Why the banker should help to increase livestock production. J. O. Armour. il Banker-F 4:4 My '17
- Why the city banker should aid the banker farmer movement. G: J. Hurst. Banker-F 3:14 O '16
- Window displays in a big city. C. A. Tyler. il Banker-F 5:14 O '18
- Work and purpose of the Agricultural commission of the American bankers association. Banker-F 4:15 Je '17
- Working with the bankers. W. Macmonnies. Jersey B 36:675 My 2 '17
- See also Farm mortgage bankers' association

**Banks and banking**

- Activity of the agricultural bank of Egypt in 1916. Int R Ag Econ 9,no 3:230-2 Mr '18
- Agricultural banking in the delta of Burma. L. Dawson. Ag J of India 13:71-81 Ja '18
- Bank of Martinique. Int R Ag Econ 66:81-94 Je '16
- Bank of the Argentine nation and its development. Int R Ag Econ 9,no 3:227-9 Mr '18
- Boys' savings bank in Texas. T. J. Delohery. Hoard's D 51:992 JI 21 '16
- Business of advances on mortgage transacted by cantonal banks and local banks in Switzerland. Int R Ag Econ 66:95-9 Je '16
- Development of banking and thrift in India. A. C. Chatterjee. Ag J of India 13:305-18 Ap '18
- Federal banks and financial organization. Int R Ag Econ 76:55-69 Ap '17
- How banker and farmer may cooperate. Prog F 31:1330 N 18 '16
- How banks may profit by helping farmers out of the usual autumn squeeze. O Judd Farmer 61:9 S 30 '16
- Land bank of South Africa in 1916. Int R Ag Econ 79:28-32 JI '17
- Miscellaneous information relating to credit in Argentina. Int R Ag Econ 63:85-9 Mr '16
- Need of co-operation between manufacturers and bankers. F. C. Schwedtmann. Am Fert 45:66-8+ JI 22 '16
- Opportunity of the farmer and the duty of the banker. G: M. Reynolds. Banker-F 4:5 Je '17
- Part played by banks in agricultural economy in Kansas. Int R Ag Econ 69:75-80 S '16
- Position of certain popular banks in 1915, Italy. Int R Ag Econ 73:23-6 Ja '17
- Spirit of the banker-farmer movement—and its future. B. F. Harris. Banker-F 3:6-7 O '16
- What is the duty of the American banker? P: W. Goebel. Banker-F 4:2-4 Je '17
- When you ask your banker for a loan. Ag Digest 2:867-8 Mr '18

**Banks and banking—Continued**

Working of central and provincial banks in India. *Int R Ag Econ* 63:9-24 Mr '16

See also Agricultural credit; Banks and agricultural development; Central bank; Federal farm land banks; Mortgage banks; Postal savings banks; Savings banks; Stocks; also National bank of Italian rural credit societies

**Federal reserve system**

Relation of the new federal reserve system to the farmer. J. S. Williams. *Farmers' Nat Congress Pro* 1916:105-18

**Banks and banking, Cooperative**

Central co-operative bank of Bulgaria. *Int R Ag Econ* 79:1-7 '17

Co-operative agricultural credit in Sweden. *Int R Ag Econ* 70:17-25 O '16

Facts as to the development and organization of Catholic rural banks in the district of Lodi. *Int R Ag Econ* 72:30-7 D '16

General Raiffeisen federation in 1914-1915. *Int R Ag Econ* 74:1-13; 75:1-10 F-Mr '17

Government order as to the business of co-operative banks in British India. *Int R Ag Econ* 9:10 1:9-10 Ja '18

Rural cooperative credit. A. Desjardins. (*In* Nat. conf. on marketing and farm credits, 1916, p. 78-98) \$2 '17 C. W. Holman, sec., Madison, Wis.

Why not farmers' banks? D. R. Hubbard. *Wallaces' F* 41:169 F 4 '16

See also Agricultural cooperative credit associations; Central bank; Credit unions, Agricultural

**Bantams**

Black breasted red game bantam. J. K. Wylie. *Am P J* 49:190 F '18

Japanese bantams worth-while. *il O Judd Farmer* 60:11 Mr 11 '16

Raising bantams. A. C. Wainwright. *Am P Advocate* 24:324 Mr '16

Sebright bantams—some reflections concerning them. H. G. Rees. *il Am P Advocate* 24:778 O '16

Toy poultry; photographs. *Country Gent* 83: sup ii Ja 12 '18

**Barberries**

Banish the barberry. *il Weekly N L* 5:4 Ap 3 '18

Banish the spiny Hun; dig out barberry because it spreads black stem wheat rust. H. R. O'Brien. *il Country Gent* 83:9 My 25 '18

Barberry and the wheat rust. W. N. Clute. *Gard Chron Am* 22:232 S '18

Barberry bush and black stem rust of small grains. I. E. Melhus and L. W. Durrell. *il Ia Ag Exp C* 35 4p '17

Barberry bush extermination being planned. *Coop Manager & F* 7:26 Mr '18

Barberry eradication and wheat rust. H. R. O'Brien. *il Wallaces' F* 43:775 My 10 '18

Barberry eradication campaign. W. E. Leer. *il Purdue Ag* 13:26-8 O '18

Barberry plant menaces wheat. O Judd *Farmer* 64:512 My 11 '18

Black stem rust being found. H. R. O'Brien. *Hoards D* 55:1056 J1 19 '18

Case against the barberry. H. S. Jackson. *il Purdue Ag Ext Leaflet* 100:1-4 '18

Common barberry an enemy of wheat. E. M. Freeman. *il Minn Ag Ext Spec B* 26 4p '18

Control of rust. maps *Ag Gaz of Canada* 5: 974-7 O '18

Cooperation of nurserymen requested in eradication of common barberry to aid in the control of wheat-stem rust. (Service and regulatory announcements—Fed. Hort. Bd. 51) p 42-3 '18 U S Ag

Destroy the common barberry. E. M. Freeman. *il Minn Hort* 46:168 Ap '18

Destroy the common barberry bush; it threatens the wheat crop. *il S D Ag Ext C* 3 4p '18

Destroy the dangerous barberry bushes. *Coop Manager & F* 7:32 My '18

Grain rust threatens Iowa crops. H. R. O'Brien. *Wallaces' F* 43:900 Je 7 '18

New or noteworthy plants in the society's garden; *berberis rubrostilla*. *il Royal Hort Soc J* 42:pts 2-3:353-4 S '17

Ohio is digging out barberries. H. R. O'Brien. *il Nat Stock & F* 42:288 Je 15 '18

Protect the wheat crop; eradicate the common barberry from Illinois. *il Ill Ag Ext C* 22:1-4 '18

Pull the dangerous barberry bushes; save the wheat crop. E. D. Ball and R. E. Vaughan. *Wis Ag Ext C* 102 4p '18

Story of black stem rust of grain and the barberry. E. M. Freeman. *il Minn Ag Ext Spec B* 27:1-8 '18

To eradicate barberry bushes. H. R. O'Brien. *Hoards D* 55:652 My 3 '18

Traitorous barberry. J. W. Henceroth. *il Am Coop J* 14:9 S '18

**Barium phosphate**

Barium-phosphate—a new fertilizer. G. W. Cavanaugh. *Rural N Y* 75:580 Ap 8 '16

**Bark****Composition**

Tannin contents of some Queensland barks. J. C. Brünlich and A. T. Jefferis. *Int R Sci & Prac Ag* 7:10 5:687-8 My '16

**Bark as food**

Tree bark as human food. H. Maxwell. *il Am For* 22:277-80 My '16

**Barkbeetles**

Bark beetles. *Fruit-Grower* 28:101 F 1 '17

Bark-beetles infesting the Douglas fir. W. J. Chamberlin. *il Ore Ag Exp B* 147:1-40 '18

Canadian bark-beetles. J. M. Swaine. 32p '17 Canada Ag

Orchard barkbeetles and pinhole borers, and how to control them. F. E. Brooks. *il Farmers' B* 763:1-15 '16

See also Fine barkbeetles

**Barkley bill. See Misbranding****Barley**

Action of ammoniacal salts on the growth of barley. H. G. Soderbaum. *Int R Sci & Prac Ag* 7, no 9:1275-8 S '16

Antagonism between anions as affecting barley yields on a clay-adobe soil. C. E. Lipman and W. F. Gericke. *bibliog il J Ag Research* 4:201-18 Je '15

Barley. (*In* Geography of the world's agriculture, p. 40-4) maps '17 U S Ag

Barley. J. T. Pridham. *il New South Wales Ag Dept (Sydney) Farmers' B* 112:1-22 N '16

Barley; an early maturing crop for years of feed shortage. L. C. Burnett. *map Ia Ag Exp C* 48:1-4 '18

Barley for bread. S. S. Cline. *il map Country Gent* 83:22 Mr 30 '18

Barley improvement. F. A. Spragg. *il Mich Ag Exp C* 32:1-11 '16; Same. *il Mich Ag Bd Rep* 1917:664-72

Barley in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. *map U S Ag B* 222:1-32 '15

Barley in Washington. E. G. Schafer and E. F. Gaines. *il map Wash Ag Exp B* 141: 1-11 '17

Barley in Wyoming. T. S. Parsons. *il Wyo Ag Exp B* 115:1-35 '17

Barley vs. alfalfa. W. S. Tomlinson. *Ohio F* 140:211 S 15 '17

Cereal experiments at the Judith basin substation, Moccasin, Mont. N. C. Donaldson. *il U S Ag B* 398:31-4 '16

Crops and stock on the home farm. *Gard Chron (Lond)* 63:61 F 9 '18

Cultivation and utilization of barley. H. V. Harlan. *il maps Farmers' B* 963:1-39 '18

Effect of hydrogen and hydroxyl ion concentration on the growth of barley seedlings. D. R. Hoagland. *bibliog Soil Sci* 3: 547-60 Je '17

Effect of the concentration of the nutrient solution on the growth of barley and wheat in water cultures. W. E. Brenchley. *il Ann Bot* 30:77-90 Ja '16



**Barley**—*Continued*

- Experiments on the effects of constituents of solid smelter wastes on barley growth in pot cultures. C. B. Lipman and W. F. Gericke. *Cal Univ Pub Ag Sci* v 1, no 13 495-587p '17 (95c)
- Grain production in Nevada. C. S. Knight. *il Nev Ag Exp B* 89:28-31 '17
- Handling the barley crop. A. T. Morison. *il Country Gent* 83:26 My '18
- Influence of ammonium sulfate on the germination and the growth of barley in sand and soil cultures kept at different moisture contents and at various osmotic concentrations of the soil solution. M. I. Wolkoff. *bibliog Soil Sci* 5:421-79 Je '18
- Influence of the mechanical composition of the soil on the availability of nitrate of soda and dried blood. *il N J Ag Exp Rep* 1916: 369-80 '17
- More barley in northern Illinois. E. B. Heaton. *il O Judd Farmer* 63:3 Ag 4 '17
- New barley crop estimates. *Coop Manager & F* 8:79 S '18
- Oldest cereal in the world. W. H. Olin. *il Country Gent* 81:2183-4 D 23 '16
- Shall barley replace corn? *O Judd Farmer* 64: 8 F 9 '18
- Significance of the sulfur in sulfate of ammonia applied to certain soils. C. B. Lipman and W. F. Gericke. *Soil Sci* 5:81-6 Ja '18
- Some effects on successive cropping to barley. W. F. Gericke. *Am Soc Agron J* 9:325-32 O '17; *Excerpts. Int R Sci & Prac Ag* 9, no 3:322-4 Mr '18
- Studies by means of both pot and solution culture of the phosphorus and potassium requirements of the barley plant during its different periods of growth. F. R. Pember. *il R I Ag Exp B* 169:1-50 '17
- Threshing barley. *il J Ag (Quebec)* 22:37 S '18
- Twelve ways to use barley. A. L. Daniels. *Wis Ag Ext C* 80:1-8 '17 (rev. '18); Same cond. *J Home Econ* 9:333-6 Jl '17; *Excerpts. Rural N Y* 76:902 Jl 21 '17
- Wheat, rye and barley: useful facts about soils, culture, etc. J. F. Duggar. *Prog F* 31: 829 Jl 1 '16
- Winter barley. C. W. Warburton. *Country Gent* 82:1253 Ag 11 '17
- Winter oats, barley, spelt and emmer. N. Schmitz. *il Md Ag Exp B* 200:107-30 '17; Same. *Md Ag Exp Rep* 1916-1917 '17
- Wisconsin barley methods. R. E. Dimick. *O Judd Farmer* 60:18 F 12 '16
- See also* Feeding and feeding stuffs—Barley

**Breeding**

- Genetic study on the awns of a variety of six-rowed barley. S. Ikeno. *Int R Sci & Prac Ag* 9, no 4:439-41 Ap '18
- Importance of the awns of native wheat in Hungary and of barley in Sweden. *Int R Sci & Prac Ag* 8, no 5:727-9 My '17
- Inheritance in wheat, barley and oat hybrids. E. F. Gaines. *il Wash Ag Exp B* 135:26-45 '17
- Lulea branch of the Svalöf station, North Sweden. H. Tedin. *Int R Sci & Prac Ag* 9, no 3:302-4 Mr '18
- Some distinctions in our cultivated barleys with reference to their use in plant breeding. H. V. Harlan. *bibliog U S Ag B* 137:1-38 '14

**Diseases and pests**

- Bacterial-blight of barley. L. R. Jones and others. *il map J Ag Research* 11:625-44 D 17 '17
- Crioceris melanopa* (lema melanopus) injurious to oats and barley in Hungary. *Int R Sci & Prac Ag* 7, no 2:312-14 F '16
- Dwarfing of barley and the specific resistance of certain graminæ to several species of uredinaceæ and ustilaginaceæ. E. Henning. *Int R Sci & Prac Ag* 7, no 3:443 Mr '16
- On the specific susceptibility of barley to leaf stripe disease. *Int R Sci & Prac Ag* 8, no 8:1197-8 Ag '17

*See also* Barley smut

**Grading**

- Barley future market. C. F. MacDonald. *Coop Manager & F* 8:37 N '18

**Laws**

- Arrêté n. 5182 concernant la prohibition du commerce du malt en Allemagne. *Int Year-book Ag Leg* 1916:35-7 '17
- Arrêté n. 5309 concernant l'orge provenant de la récolte de 1916 en Allemagne. *Int Year-book Ag Leg* 1916:63-72 '17

**Milling and baking tests**

- Other grains than wheat in bread making; Milling value of barley. W. L. Stockham; T. Sanderson. *N D Ag Exp B* 123:100-7 '17

**Morphology**

- Morphology of the barley grain with reference to its enzym-secreting areas. A. Mann and H. V. Harlan. *il U S Ag B* 183:1-32 '15

**Prices**

- Profits and losses in barley production during the past sixty years. Wallaces' *F* 43:977 Je 28 '18

**Seed**

- Structure of the integumentary system of the barley grain in relation to localized water absorption and semi-permeability. E. J. Collins. *bibliog Ann Bot* 32:381-414 Jl '18

**Standards**

- \* Barley buying for export. (*In* Official statement no. 5, p. 8) '18 U.S. Food administration, Washington, D.C.

**Statistics**

- \* Barley and oats in Ontario. (*In* Report, Bur. of industries, 1917, p. 29) '18 Ontario ag. dept., Toronto
- Barley in the United States and other countries, including exports and imports. See United States Department of agriculture Yearbooks
- Commercial stocks of barley, Jan. 1. *U S Food Surveys* 1:6-8 Je 8 '18
- Commercial stocks of barley, July 1. *U S Food Surveys* 2:6-8 S 9 '18
- Farm stocks March 1, 1917, and shipments out of country. *Monthly Crop Rep* 3:23 Mr '17
- Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no 4) p 42-50 (O) '16 Bur. of statistics, Int. inst. of ag., Rome

**Varieties**

- Cereal experiments at Dickinson, N. Dak. J. A. Clark. *il U S Ag B* 33:31-6 '14
- Cereal experiments at the Williston station; experiments with barley. F. R. Babcock. *il U S Ag B* 270:28-33 '15
- Cereal investigations on the Belle Fourche experiment farm; experiments with barley. C. Salmon. *il U S Ag B* 297:34-8 '15
- Dry farming investigations at the Sherman county branch experiment station. D. E. Stephens and C. E. Hill. *il Ore Ag Exp B* 144:15-17 '17
- Experiments with spring cereals at the eastern Oregon dry-farming substation Moro, Oreg. D. E. Stephens. *il U S Ag B* 498:31-4 '17
- Experiments with wheat, oats, and barley in South Dakota. M. Champlin. *il U S Ag B* 39:28-36 '14
- Giovanni Raineri and Emilio Maraini, new varieties of autumn barley selected in Italy. N. Strampelli. *Int R Sci & Prac Ag* 8, no 8:1112-13 Ag '17
- Identification of varieties of barley. H. V. Harlan. *bibliog il U S Ag B* 622:1-32 '18
- Varieties of oats and barley: an account of the results of some recent experiments in England and Wales. *J Bd Ag* 23:1056-63 F '17

**Barley, Wild.** *See* Squirreltail grass

**Barley flour**

- \* Barley bread, optimum reaction and salt effect. L. L. Landenberger. Science (Science Press, Garrison, N.Y. 15c) n s 48:269-70 S 13 '18
- Barley flour now on market good substitute for wheat; recipes. Weekly N L 5:7 My 22 '18
- Barley for bread. W. H. Olin. il Country Gent 82:1303 Ag 18 '17
- Use barley—save wheat; recipes. U S Ag C 111:1-4 '18

**Statistics**

- Commercial stocks of barley flour, July 1. U S Food Surveys 2:11-13 S 9 '18

**Barley smut**

- Experiment in the treatment of covered smut of barley. E. S. Salmon and H. Wormald. il J Bd Ag 24:1388-94 Mr '18
- \* Possible new fungicide for wheat and barley smut. W. W. Mackie. Science (Science Press, Garrison, N.Y. 15c) n s 48:515-16 N 22 '18
- Smuts of oats and barley. G. L. Zundel. il Wash Ag Ext Ser 1,no 43 4p '18

**Barn raising**

- Old-fashioned community spirit; barn raising in Lancaster county, Pa. J: G. Zook. Rural N Y 76:849 Jl 7 '17

**Barnes, James Hector, 1879-1917**

- Sketch. por Ag J of India 12:566-8 O '17

**Barns and stables**

- \* Action of wind on barns and proper methods of bracing. Bldg Age (243 W. 39th st. N. Y. 25c) 40:476-7 O '18
- Barn building materials. W: E. Frudden. il Field II 26:748-9 S '16
- Barn construction problems. Ohio F 137:816 Je 17 '16
- Barn floor construction. H. C. Campbell. Hoard's D 53:452 Mr 30 '17
- Barn for the new settler. E. L. Luther. plans Hoard's D 51:732 My 26 '16
- Barn planning. W. Ashby. plan Am Soc Ag Eng Trans 10, no 2:22-34 '17
- Barn replanned to save labor. plan Country Gent 83:28 Mr 9 '18
- Barns for work animals. B. Youngblood. il plans Tex Ag Exp B 210:1-28 '17
- Barns that have saved labor. il System on the Farm 3:192+ N '18
- Before building. plans Hoard's D 51:733 My 26 '16
- Boost for the round barn. O. Gunderson. Country Gent 82:907 My 19 '17
- \* Building a sanitary barn. G: E. Walsh. Bldg Age (243 W. 39th st. N.Y. 25c) 40:559 D '18
- Building the barn. E. V. Laughlin. Farm Eng 5:6 Je '17
- Circular barn that satisfies. G. H. Dacy. il Farm Eng 4:95 D '16
- Combination barn. E. V. Laughlin. plan Farm Eng 5:7 Ag '17
- Combination barn and stable. il plan Country Gent 81:49 Ja 8 '16
- Convenience and good looks. W: A. Radford. il plan Am Coop J 12:683-4 Je '17
- Convenient buildings for the farm. W. E. Frudden. il plans Building Age (243 W. 39th st. N.Y. 25c) 39:687-90 D '17
- Creosoted wood blocks for stable floors. Hoard's D 51:737 My 26 '16
- Eight thrift plans in barn building. J. L. Justice. il plan System on the Farm 2:214-16 Je '18
- Evolution of the barn. L. L. Little. il Country Life 33:90 D '17
- Farm buildings in foreign lands. W. J. Fraser. Hoard's D 53:427 Mr 30 '17
- Fine barn on an Ohio farm. il Ohio F 139:709 My 26 '17
- Frame that is well adapted to large barns. W. E. Frudden. il plan Bldg Age (243 W. 39th st. N.Y. 25c) 40:285-7 Je '18
- General purpose barn. D. Scoates. plan Prog F 31:1385 D 2 '16
- General-purpose barn. J: L. Shawver. plan Nat Stock & F 40:544 Ag 26 '16
- General purpose farm barn. J: L. Shawver. il plans Power F 27:37 Ap '18
- Getting back the cost of a barn in two seasons. J. Wickre. plan System on the Farm 1:340-1 N '17
- Getting the most for your money in barn construction. C. I. Griffith. il Hoard's D 53:420+ Mr 30 '17
- Good insurance for the hay. E. V. Laughlin. plan Farm Eng 5:6 My '17
- Hay and stock barn. il plan Wallaces' F 42:1427 O 19 '17
- Hay barn and cattle shed; convenient plan for use on a cattle farm. A. L. French. plan Prog F 32:325 Mr 10 '17
- Hole in the doughnut; some arguments against the round barn. R. H. Smith. il Country Gent 82:396 F 24 '17
- How one man replaces three. A. S. Bard. il System on the Farm 3:138-9 O '18
- How rafters for a Gothic-roof barn were laid out. C. E. Kelly. il Bldg Age (243 W. 39th st. N.Y. 25c) 40:284-5 Je '18
- Illinois cattle barn. plans Breeder's Gaz 74:281 Ag 22 '18
- Keeping up with the times. L. F. Graber. il Hoard's D 55:45 F 1 '18
- Large barn of clay tile. G: W. Iverson. il O Judd Farmer 62:11 Ja 20 '17
- Modern barn. C. R. Pickering. il Hoard's D 51:8 Ja 28 '16
- New barn. H: Wallace. il Wallaces' F 42:188 F 2 '17
- New style barn doors. Building Age (243 W. 39th st. N.Y. 20c) 39:636 N '17
- Permanent farm buildings. K. J. T. Ekblaw. il Hoard's D 51:154 F 18 '16
- Plank barn frame. W. E. Frudden. il Hoard's D 51:731 My 26 '16
- Planning a farm barn. il plans Farm Eng 6:14 Ja '18
- Planning farm barns. W. Ashby. il plans Wallaces' F 42:796-7 My 11 '17
- Planning for better farm buildings. W. Kirkpatrick. il Kimball's D F 16:504+ S 15 '18
- Plans for a modern barn. W: A. Radford. il Country Gent 83:12-13 F 2 '18
- Practical feeding barn. H. D. Lollar. plans Ohio F 141:43 Ja 12 '18
- Prize competitions for stable conditions. J. Vanderleck. il J Ag (Quebec) 20:106 N '16
- Purpose of stabling animals. W. K. Brainerd. Hoard's D 51:760 My 26 '16
- Question of barn roofs. H. Shearer. plan Farm Eng 3:208 Mr '16
- Rebuild the old barn. F. E. Allison. Hoard's D 50:822 Ja 14 '16
- Reducing barn costs. C. A. Hall; J: B. Platto. il System on the Farm 1:192-3 Jl '17
- Replanning a small barn. E. Kammer. il Hoard's D 50:790 Ja 7 '16
- Right barn for every farm. W. Ashby. il Power F 26:12-13 Mr; 14-15 Ap '17
- Round barn. W. J. Fraser. il plans Ill Ag Exp C 230:1-52 '18
- Round barn for economy. il plan Field II 26:750 S '16
- Round barn for economy. J: E. Taylor. il Power F 27:16 Mr '18
- Round barn of hollow tile. il plan Country Gent 82:184 F 3 '17
- Round roofed barn. L. J. Fletcher. il Farm Eng 3:251 My '16
- Round versus rectangular barns. I. W. Dickerson. Wallaces' F 43:350 F 22 '18
- Safeguarding stock from fire. H. C. Campbell. il Ohio F 138:324 O 7 '16
- Satisfactory general barn. J: S. Glass. plan Farm Eng 5:7 D '17
- Saving 94 miles a year. S. Otis, jr. il System on the Farm 2:7-9 Ja '18
- Saving steps at chore time. E. Thronson and E: Shinnick. System on the Farm 1:334-5 N '17
- Setting a good pace in barn building. E. Zorn. il Hoard's D 51:729+ My 26 '16
- Shawver barn frame. W. E. Frudden. Hoard's D 53:640 My 4 '17
- Shortening the time for chores. Mrs G: Bartlett. il plan System on the Farm 3:94-5 S '18
- Small hay barn. E. V. Laughlin. Farm Eng 5:8 F '17



**Barns and stables—Continued**

- Some hints on modern barn construction. J. L. Justice. il Ohio F 140:209-10 S 15 '17
- Stable requirements. W. Ashby. Hoard's D 53:431 Mr 30 '17
- Stall-less stable experience. G. L. Hyslop. il plan Hoard's D 52:165 S 1 '16
- Stresses in a Shawver barn truss. G. W. Iverson. Am Soc Ag Eng Trans 10, no 2:15-22 '17
- Studying progressive farming on farms. O. F. Wren. Breeder's Gaz 69:180 Ja 27 '16
- Sub-committee on barn floors; with discussion. H. H. Niemann. Am Soc Ag Eng Trans 10, no 1:28-34 '17
- Successful basement barn. D. R. Van Horn. plan Farm Eng 6:19 F '18
- Types of barn doors and how to make them weather-tight. E. J. G. Phillips. plan Bldg Age (243 W. 39th st, N.Y. 25c) 40:232-5 My '18
- Walls of the stable. C. K. Brainerd. Hoard's D 52:872 Ja 12 '17
- Why I like a round barn. G. H. Dacy. il Country Gent 81:779 Ap 8 '16
- See also Calf pens; Cattle sheds; Dairy buildings; Farm buildings; Live stock sheds; Swine houses
- Bull stalls**
- Bull stall and paddock. Hoard's D 50:833 Ja 14 '16
- Dairy barns**
- Agriculture for beginners; the dairy barn. W. I. Chamberlain. il Nat Stock & F 40:38 Ap 8 '16
- Arrangements of rectangular dairy barns. R. S. Hulce and W. B. Nevens. il plans Ill Ag Exp C 199:1-30 '17
- Barn comfort promotes efficiency. C. W. Eddy. il Hoard's D 53:422 Mr 30 '17
- Barns for Wisconsin dairy farms; with plans. F. M. White and C. I. Griffith. il Wis Ag Exp B 266:1-32 '16; Same. Kimball's D F 14:563-5, 620-1, 663 S 15-O 15 '16
- Better barns for better butter. R. Wylie. il Ohio F 142:459 N 9 '18
- Brown Swiss in a modern barn. M. S. Yoder. il Kimball's D F 15:139 Mr 1 '17
- College dairy barn. D. G. Carter. il Kimball's D F 15:518 Ag 1 '17
- Concrete basement for the dairy barn. H. C. Campbell. il plans Hoard's D 53:424+ Mr 30 '17
- Concrete dairy barn. H. C. Campbell. il plan Kimball's D F 16:496+ S 15 '18
- Construction of cow-houses. plans J Bd Ag 23:447-59 Ag '16
- Cow and her health. L. R. Himmelberger. il Hoard's D 51:957 Jl 14 '16
- Dairy barn construction. L. A. Higgins and D. Scoates. il plans Miss Ag Ext B 2:1-8 n.d.
- Dairy barns. M. A. Nye. il Purdue Ag 11:27-9 My '17
- Dairy barns and equipment. plans Ontario Ag Dept B 253:58-71 '17
- Dairy farm plant. I. D. Charlton. il plan Western Wash Ag Exp B v 5:35-9 Je '17
- Efficient dairy barn. D. R. Van Horn. plan Farm Eng 5:21 N '17
- Equipment for the modern dairy barn. C. White. il Power F 26:38 O '17
- Evolution of the dairy barn. C. P. Goodrich. il Hoard's D 51:774 Je 2 '16
- Feeding stalls for cows. C. Pedersen. plan Ag Gaz of New South Wales 29:805-8 N '18
- Floor arrangement of the stables. C. K. Brainerd. il Hoard's D 53:428-9 Mr 30 '17
- Floor of the cow stable. H. H. Dean. Prac F 114:37 Ja 15 '18
- Form and utility in dairy barns. W. K. Brainerd. Hoard's D 52:690 D 8 '16
- Fresh air for dairy barns and creameries. C. L. Atwood. il Creamery 7:49 O '18
- Germ content of stable air and its effect upon the germ content of milk (B. 409). G. L. A. Ruehle and W. L. Kulp. bibliog N Y State Ag Exp Rep 1915:151-206 '16

- Germ-proof and fireproof cow house. M. Fleischer. il Country Gent 81:1179 Je 10 '16
- How a dairy barn and silo were planned for convenience. il plans Building Age (243 W. 39th st, N.Y. 25c) 40:67-72 F '18
- How I would equip the modern dairy barn. W. A. Radford. il plans Power F 27:12-13+ Je '18
- How to arrange cow stalls. Jersey B 35:1122 Jl 19 '16
- How to build a dairy barn. W. E. Frudden. plan Bldg Age (243 W. 39th st, N.Y. 25c) 40:186-7 Ap '18
- \* How to design a concrete dairy barn. H. C. Campbell. plan Bldg Age (243 W. 39th st, N.Y. 25c) 40:579-80 D '18
- Hygiene of the stables—hygiene of the milk. D. Généreux. (In Report, Quebec Dairy-men's assn., 1916, p. 343-51) '17
- Increased dairy profits from modern barn equipment. il System on the Farm 1:295-7 O '17
- Many improvements in dairy barn. il O Judd Farmer 60:7 My 20 '16
- Milking barn and cow shed built at Julius-town, N.J. il plans Bldg Age (243 W. 39th st, N.Y. 25c) 40:194-7 Ap '18
- Modern dairy barn; with plan. H. M. Ward. Kimball's D F 14:64 F 1 '16
- Modern fixtures on dairy farm. il O Judd Farmer 60:9 Mr 25 '16
- Open shed compared with the closed barn for dairy cows. T. E. Woodward and others. U S Ag B 736:1-13 '18; Abstract. Nat Stock & F 42:782 N 30 '18; Abstract. Jersey B 37:2023 D 4 '18
- Plan for cow barn. Rural N Y 75:19 Ja 1 '16
- Planning a dairy building. Rural N Y 75:1318 O 14 '16
- Practical dairy barn. plans Hoard's D 51:736 My 26 '16
- Putting fresh air in the barn. F. M. White. il O Judd Farmer 65:477 N 23 '18
- Sanitary dairy barn floors. W. W. Smith. Hoard's D 51:738 My 26 '16
- Scoring the dairy barn. A. C. Norris. Ohio F 137:38 Ja 8 '16
- Stanchion or covered barnyard. C. W. Ford. il Ohio F 137:298 F 26 '16
- Standardizing the dairy. J. Mappelbeck. il Country Gent 81:1968 N 11 '16
- Steel and concrete in the cow stable. il Prac F 113:321 S 15 '17
- Story of building John Michels' dairy barn. il plan Hoard's D 53:419 Mr 30 '17
- Sunlight for cows. il Hoard's D 53:227 Mr 2 '17
- Up-to-date dairy barn decreases farm labor. J. A. Ste Marie. plans J Ag (Quebec) 21:8 Jl '17
- Wood blocks for stall floors. W. E. Frudden. Hoard's D 51:758 My 26 '16

**Designs and plans**

- Build gambrel roof barn. Ga Ag Coll (Ext) Poster 21
- Description of sheep barn plans. C. M. Peck. plan Am Sheep B & W 37:360-1 Je '17
- Description of the sheep barn plan. plan Am Sheep B & W 37:496-7 Ag '17
- Iroquois sheep barns; view and plans. Am Sheep B & W 37:32-3 Ja '17
- Plan for sheep barn. C. E. Crothers. Ohio F 141:459 Mr 30 '18
- Sheep barn plan. F. N. Blair. Am Sheep B & W 37:232-3 Ap '17
- Sheep barn plan. F. Coles. plan Am Sheep B & W 37:296-7 My '17
- Sheep barn plan no 3. plans Am Sheep B & W 37:86-7 F '17
- Specifications for sheep barn. L. R. Fairn. plans Am Sheep B & W 37:182-3 Mr '17

**Equipment**

- Barn equipment is economy. Kimball's D F 13:803 Ja 1 '16
- Labor saving barn interiors. il Field II 28:636-7 S '18
- Mechanical installation for a stable (Naegell patent). plan Int R Sci & Prac Ag 8,no 8: 1174-7 Ag '17

**Barns and stables—Equipment—Continued**

- Small car for the stable. H. E. Skott. *il Farm Eng* 3:144 Ja '16  
 Standardizing the dairy. J. Mappelbeck. *il Country Gent* 81:1904-5 O 28 '16

**Horse stables**

- Advanced type of stable. *il plan Field* II 26: 755 S '16  
 Commodious frame barn for horses. W. E. Frudden. *il plan Building Age* (243 W. 39th st, N.Y. 25c) 39:541-3 O '17  
 Concrete horse barn plans and construction. *il plans Concrete* (Telegraph bldg., Detroit, Mich. 20c) 11:8-9 JI '17  
 Horse barn of modern construction. W. E. Frudden. *il plans Building Age* (50 Union Square, N.Y. 20c) 39:141-2 Mr '17  
 \* Small horse barn. plans Am Lumberman (431 S. Dearborn st, Chicago 15c) 2263:47 S 28 '18  
 Twenty-horse private stable. *plan Field* II 26:754 S '16

**Laws**

- Stables and disposal of manure. (*In Municipal ordinances*, 1916, p. 239-41) '17 U. S. Pub. health service. Washington, D.C.

**Sanitation**

- Disinfection of stables. *Farm Eng* 3:198 Mr '16  
 Disinfection of stables. G. W. Pope. *il Farmers' B* 954:1-12 '18 (B. 480 rev.)  
 Lime in stables injures manure. J. B. R. Dickey. *Market Growers J* 22:218 Mr 15 '18  
 Practical farm sanitation. G. H. Conn. *Ohio F* 141:181 F 9 '18  
 Sanitary housing of live stock. *Coop Manager & F* 7:91-4 N '17  
 Stable disinfection. H. P. Hoskins. *Creamery* 7:59-61 O '18

**Sheep barns**

- Barn plan. plan Am Sheep B & W 37:671 N '17  
 Barns and sheds for the flock. L. L. Heller. *il plan Field* II 27:756-7 O '17  
 Description of sheep barn plans. C. M. Peck. *plan Am Sheep B & W* 37:360-1 Je '17  
 Description of the sheep barn plan. plan Am Sheep B & W 37:496-7 Ag '17  
 Equipment for farm sheep raising. V. O. McWhorter. *il plans Farmers' B* 810:1-27 '17  
 Farm equipment that helps in increasing sheep profits. S. Peck. *il System on the Farm* 1:293-4 O '17  
 Iowa boys win barn plan contest. *il plan Am Sheep B & W* 36:724-6 D '16  
 Iroquois sheep barns; view and plans. *Am Sheep B & W* 37:32-3 Ja '17  
 Lambing sheds. R. F. Miller and G. E. Fernery. *il plans Cal Ag Exp C* 188:1-16 '17  
 Plan for sheep barn. C. E. Crothers. *Ohio F* 141:459 Mr 30 '18  
 Sheep barn plan. F. N. Blair. *Am Sheep B & W* 37:232-3 Ap '17  
 Sheep barn plan. F. Coles. *plan Am Sheep B & W* 37:296-7 My '17  
 Sheep barn plan no 3. plans *Am Sheep B & W* 37:86-7 F '17  
 Sheep buildings for winter protection. T. R. Arkell. *il plans N Y Ag Dept B* 96:54-65 Je '17  
 Specifications for sheep barn. L. R. Fairn. *plans Am Sheep B & W* 37:182-3 Mr '17  
 Summer housing of sheep. T. R. Arkell. *plans N Y Ag Dept B* 96:66-8 Je '17

**Ventilation**

- Air—two thirds of a cow's ration; King system of ventilation. L. Klima. *il Country Life* 33:56 N '17; *Power F* 26:32 D '17  
 Barn ventilation. *il plans Field* II 27:677 S '17  
 Barn ventilation. W. B. Clarkson. *Am Soc Ag Eng Trans* 10, no 1:51-9 '17  
 Barn ventilation. I. I. Myers. *Purdue Ag* 11: 23 Je '17  
 Barn ventilation. L. J. Smith. *Manitoba Farmers' Lib Ext B* 2:1-15 My '16  
 Cow and her health. L. R. Himmelberger. *il Hoard's D* 51:957 JI 14 '16  
 Experiment in barn ventilation. S. L. Dudley. *il Hoard's D* 53:426 Mr 30 '17  
 Fresh air and sunshine in the barn. *Prac F* 114:308 S 15 '18

- Fresh air for dairy barns and creameries. C. L. Atwood. *il Creamery* 7:49 O '18  
 Fresh air for farm animals. K. J. T. Ekblaw. *il Country Gent* 81:497-8 Mr 4 '16  
 How one farmer lost \$200 a head on his cattle. L. Klima. *il Am Coop J* 14:5 S '18  
 How to ventilate the barn. O. Judd Farmer 61:10 S 23 '16  
 King system of ventilation. J. M. Trueman. *Ag Gaz of Canada* 3:615-18 JI '16  
 Modern barn ventilation. L. Klima. *il Field* II 26:133-4 F '16; *Same. Ag Digest* 1:32 My '16  
 More about ventilation. W. A. Semmons. *Kimball's D F* 14:193, 245 Mr 15-Ap 1 '16  
 Necessity of proper ventilation. L. Klima. *Jersey B* 37:853-4 My 29 '18  
 Putting fresh air in the barn. F. M. White. *il O Judd Farmer* 65:477 N 23 '18  
 Report of committee on barn ventilation. W. B. Clarkson and others. *il Am Soc Ag Eng Trans* 11:206-11 '18  
 Resolved—that a ventilating system is necessary. F. M. White. *Hoard's D* 53:422 Mr 30 '17  
 Right and wrong ventilation. W. A. Semmons. *Kimball's D F* 14:109, 147 F 15-Mr 1 '16  
 Stable ventilation and tuberculosis. E. G. Hastings. *Hoard's D* 53:472 Ap 6 '17  
 Standardizing the dairy. J. Mappelbeck. *il Country Gent* 81:1968 N 11 '16  
 System of barn ventilation. W. E. Frudden. *Hoard's D* 55:198 F 22 '18  
 Value of pure air. L. Klima. *Kimball's D F* 15:815 N 15 '17  
 Ventilating a basement barn. F. M. White. *Breeder's Gaz* 69:523 Mr 2 '16  
 Ventilating the cow stable. F. W. Ives. *Ohio F* 142:33 JI 13 '18  
 Ventilating the stable. *Hoard's D* 55:248 Mr 1 '18  
 Ventilation and its principles. (*In Report, Quebec Dairymen's assn.*, 1916, p. 367-9) '17  
 Ventilation for barns in upper Michigan. R. G. Carr. *il Hoard's D* 54:867 Ja 11 '18  
 Ventilation in barns. H. E. Middleton and E. L. Merten. *Farm Eng* 5:14 F '17  
 Ventilating means a drier, more sanitary barn. *Kimball's D F* 13:801 Ja 1 '16  
 Ventilation of farm buildings. *Int R Sci & Prac Ag* 8, no 1:135-9 Ja '17  
 Ventilation of live stock buildings. *Ag Gaz of Canada* 3:598-600 JI '16  
 Ventilation of livestock buildings in Saskatchewan. W. J. Rutherford. *il Ag Gaz of Canada* 3:619-21 JI '16  
 Ventilation of stables. *Farm Eng* 3:166 F '16  
 Ventilation problem. E. Kammer. *Hoard's D* 51:203 F 25 '16

**Barns and stables, Concrete**

- Barns, sheds, silos of concrete. *il plans Concrete* (Telegraph bldg., Detroit, Mich. 20c) 13:23-4 JI '18  
 Cement for the dairy barn. W. J. Griffiths. *Penn State F* 11:167-8 My '18  
 Certified milk and concrete. H. C. Campbell. *il Kimball's D F* 16:600 Ag 1 '18  
 Concrete dairy barn. H. C. Campbell. *il plan Kimball's D F* 16:496+ S 15 '18  
 Concrete horse barn plans and construction. *il plans Concrete* (Telegraph bldg., Detroit, Mich. 20c) 11:8-9 JI '17  
 \* How to design a concrete dairy barn. H. C. Campbell. *plan Bldg Age* (243 W. 39th st, N.Y. 25c) 40:579-80 D '18  
 Large fireproof barn and silos built of concrete. *il plans Concrete* (Telegraph bldg., Detroit, Mich. 20c) 10:175-7 My '17  
 Masonry roof. W. G. Kaiser. *il Am Soc Ag Eng Trans* 10, no 2:68-72 '17  
 New concrete barn on Felter farm. O. Judd Farmer 60:18 Ap 1 '16

**Barnyards, Covered**

- Experience with the covered barnyard; symposium. *Ohio F* 139:737-8, 763 Je 2-9 '17  
 Plan for a covered barnyard. F. W. Ives. *Ohio F* 138:279 S 23 '16  
 Stanchion or covered barnyard. C. W. Ford. *il Ohio F* 137:298 F 26 '16  
 Umbrella for three hundred cattle. M. L. King. *il Power F* 26:9 Ag '17



**Barrels**

- Apple barrel situation. L. K. Kelley. Rural N Y 77:610 Ap 27 '18  
Tests of wooden barrels. J. A. Newlin. il U S Ag B 86:1-12 '14

**Laws**

- Federal standard barrel law. Ohio F 140:586 D 22 '17  
Rules and regulations promulgated under authority of the federal standard-barrel law. (C. 71) 8p '17 U.S. Bur. of standards, Washington, D.C.

**Barrenness.** See Sterility in animals

**Barton, Enos M., 1842-1916**

- Portrait. Breeder's Gaz 69:1011 My 11 '16

**Basidiomycetes**

- Basidiomycetes collected in Indo-China by C. B. Robinson. P. W. Graff. Mycol 8:214-17 Jl '16

**Basket work**

- Baskets for the porch. E. E. Gates. il Country Gent 81:1386 Jl 15 '16  
Pine-needle basketry in schools. W. C. A. Hammel. (B. 3) 18p il '17 U.S. Bur. of educ., Washington, D.C.  
Willows: commercial uses. S; B. Detwiler. il Am For 23:8-10 Ja '17  
See also Osiers

**Baskets**

- Basketry. J Ag (Quebec) 20:232 My '17  
Making baskets of pine-needles. A. Fearing. il Country Life 33:74+ Ja '18  
Native baskets. J. S. Busbee. il Country Gent 82:171 Ja 27 '17  
See also Basket work

**Bass, Tom**

- Tom Bass, the famous American trainer, rider and exhibitor of high school horses. W. L. Nelson. il Breeder's Gaz 71:209-10 F 1 '17

**Bates, Thomas, 1775-1849**

- Portrait. Breeder's Gaz 71:569 Mr 15 '17

**Bathrooms**

- Planning the bathroom. H. Bowen. O Judd Farmer 61:27 O 7 '16  
See also Wash rooms

**Baths**

- Bathing and bath conveniences. Mrs W. N. Hutt. Prog F 31:1154 S 30 '16

**Bats**

- Bats. E: T. Martin. il Country Life 31:102 F '17  
Flying fox. G. P. Darnell-Smith. il Ag Gaz of New South Wales 28:519-26 My '17  
Flying foxes. Cal State Comm Hort B v 6: 320 Jl '17  
Some aliens we do not want; why we do not want them, and how they may arrive; the flying fox. D. B. Mackie. il Cal State Comm Hort B v 7:466-70 Jl '18

**Battlefields**

- Flora of the Somme battlefield. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:200 Mr 30 '18

**Bayberry candles**

- Recipe for bayberry candles. Gard M 26:172 D '17

**Beads**

- Attractive gifts of paper. Mrs G. Halley. O Judd Farmer 63:16 D 22 '17  
Homemade colored beads. E. Seifert. Country Gent 81:134 Ja 15 '16

**Bean anthracnose**

- Anthrachnose of beans. Market Growers J 23: 165 N 1 '18  
Control of the bean anthracnose or pod spot disease. C. W. Edgerton. il La Ag Ext C 16 4p '16  
Experiments on varietal resistance to the bean and cotton anthracnose diseases. C. W. Edgerton and C. C. Moreland. il La Ag Exp B 155:1-24 '16  
Production of an anthracnose-resistant white marrow bean. W. H. Burkholder. Phyt 8: 353-9 Jl '18

**Bean beetles.** See Bean ladybirds

**Bean ladybirds**

- Bean beetle. D. E. Merrill. il N M Ag Exp B 106:1-30 '17

**Bean leaf beetles**

- Influence of cerotome trifurcata on the nitrogen-gathering functions of the cowpea. L. T. Leonard and C. F. Turner. il Am Soc Agron J 10:256-61 S '18

**Bean maggots**

- Bean-maggot in 1915. D. B. Whelan. Mich Ag Exp C 28:1-4 '16; Same. Mich Ag Ed Rep 1916:321-2

**Bean weevils**

- Bean and pea weevils. E. A. Back and A. B. Duckett. il Farmers' B 983:1-24 '18  
Bean weevils. T; J. Headlee. il N J Ag Exp C 91:1-6 '17  
How to destroy weevils in grain. Va Ag Dept B 131:11-12 Ag '18  
Mexican bean weevil. E. O. Amundsen. il Cal State Comm Hort B v 5:33-4 Ja '16  
Notes on the bean weevil (acanthoscelides [bruchus] obtectus Say). J. A. Manter. J Econ Entom 10:190-3 F '17  
Observations and experiments on the bean and pea weevils in Kentucky. H. Garman. il Ky Ag Exp B 213:307-33 '17  
Observations on acanthoscelides obtectus (bean weevil), in Italy. A. Razzauti. Int R Sci & Prac Ag 9,no 5:640-2 My '18  
Weevils in peas and beans. Z. P. Metcalf. Prog F 33:731 Je 22 '18

**Beans**

- Allow plenty of space for the beans. il Country Gent 83:48+ Mr 16 '18  
Another stizolobium from the Philippine Islands. F. A. Coffman. il Philippine Ag R 9,no 4:282-7 '16  
Bean culture. V. C. Bryant. Cal Ag Exp 4p n.d. (Mim.)  
Bean culture. A. L. Strausz. Wash Ag Exp Pop B 111:1-4 '17  
Bean culture in California, by G. W. Hendry; with appendix on composition of California varieties of beans, by M. E. Jaffa and F. W. Albro; and on insect and other enemies of beans, by E. R. deOng. il Cal Ag Exp B 294:287-347 '18  
Bean growing. A. T. Erwin. Ia Ag Ext B 54 4p n.d.  
Bean growing. F. S. Prince. N H Ag Ext Press B 68 1p '17  
Bean growing in Arkansas. W. H. Wicks and C. H. Heard. Ark Ag Exp C 41 4p '18  
Bean growing in eastern Washington and Oregon and northern Idaho. L. W. Fluhrty. il Farmers' B 907:1-16 '17  
Bean growing in Iowa. Wallaces' F 41:238 F 11 '16  
Bean growing in New Jersey. R. W. De Baun. Rural N Y 76:830 Je 30 '17  
Bean growing in western New York. D. E. Gray. Rural N Y 76:891 Jl 21 '17  
Bean growing in western New York. O. Lee, jr. Rural N Y 76:723 My 26 '17  
Bean production. J. W. Hencerceth and M. Ryder. (Soil improvement com. B. 19) 15p il n.d. Nat. fertilizer assn., Chicago  
Bean project. J. C. Hogenson and E. W. Stephens. Utah Ag Ext C v 6,no 9 4p '18  
Beans—a war bride. W. L. Nelson. il Country Gent 82:719 Ap 14 '17  
Beans an important crop. W. H. Olin. Better Fruit 11:15 N '16  
Beans as a field crop in Kansas. 18p '18 Kansas State hort. soc., Topeka  
Beans as easy money. R. J. Holliday. il Prac F 112:169 Ap 15 '16  
Beans as market-garden crop. H: M. Howard. Mass Ag Bd B 5:147-8 '18 (3d ed. rev.)  
Beans from California flood lands. R. E. Jones. il Country Gent 83:8 Je 8 '18  
Beans in Colorado and their diseases. A. Kezer and W. G. Sackett. il Colo Ag Exp B 226:1-31 '17  
Beans once a week. H. V. Davis. Country Gent 81:304 F 5 '16  
Beans specially adapted to Florida soil. Fla Ag Dept Quar B v 27:12-14 Jl '17  
Best methods with beans. J. N. McBride. Ohio F 138:206 S 2 '16

**Beans—Continued**

- Big bean boom. W. V. Woehlke. *il Country Gent* 82:1512-13 O 6 '17
- Bonavist, lablab, or hyacinth bean. C. V. Piper and W. J. Morse. *bibliog il U S Ag B* 318:1-15 '15
- Bush beans in the greenhouse; forcing this crop may be a practical possibility in Ohio. S. N. Green. *il Ohio Ag Exp B v* 3:16-20 Ja '18
- Butter beans. *Gard Chron (Lond)* 61:201 My 19 '17
- Climbing haricot beans. A. C. Bartlett. *Gard Chron (Lond)* 63:243; 64:4, 23 Je 15, Jl 6, 20 '18
- Competition for bean growers. O Judd Farmer 62:18 F 10 '17
- Cooking the tepary bean. M. E. Jaffa. *il Cal Ag Exp* 4p '17
- Culture of beans and potatoes. H. E. Cox. *Rural N Y* 77:551 Ap 13 '18
- Culture of navy or field beans. J. C. Whitten. *Mo Ag Bd B v* 15:28-31 Je '17
- Diminishing profits in beans. O Judd Farmer 63:8 N 24 '17
- Dried bean production in Illinois. C. E. Durst. *Ill Ag Exp C* 201:1-8 '17
- Environment of pods and seeds in beans. *il N J Ag Exp Rep* 1916:444-5 '17
- Experience with peas and beans. *Market Growers J* 22:140-1+ F 15 '18
- Extension circulars. *Mass Ag Ext C* 21, 35 '17
- Titles are: Plant beans in 1917; Bean diseases and insects
- Failure with beans as greenhouse crop. *il Market Growers J* 18:89 F 1 '16
- Few beans, prices higher. O Judd Farmer 61:7 N 11 '16
- Field bean; a promising crop for many Ohio farms. S. N. Green. *Ohio Ag Exp B v* 2:10-12 Ja '17
- Field bean culture. H. E. Bartram. *Vt Ag Ext C* 11:1-4 '18
- Field bean production. R. W. De Baun. *N J Ag Exp C* 70:1-4 n.d.
- Field bean production. E. V. Hardenburg. *il map Cornell Reading Course* 124:271-300 '17
- Field beans. A. C. Arney. *Wallaces' F* 42:897 Je 8 '17
- Field beans. G. R. Hyslop. *Ore Ag Ext B* 207:1-4 '17
- Field beans—a valuable food crop. F. W. Stemple. *W Va Ag Ext C* 129 4p '17
- Field beans as a war crop. T. Shaw. *Coop Manager & F* 7:69 Je '18
- Field beans as an orchard crop. *il Nat Stock & F* 40:80 Ap 15 '16
- Fifty acres of string beans. *Fruit-Grower* 27:331 Je 15 '16
- Food value of beans and peas. H. Mason. *Ohio F* 139:530 Ap 7 '17
- Grow beans. R. A. Moore. *Wis Ag Ext C* 71 4p '17; Same. *Hoard's D* 53:722 My 18 '17; Same cond. *Ag Digest* 2:487 Je '17
- Growing beans and sweet corn. P. B. Marien. *il Minn Hort* 44:172-6 Ap '16
- Growing field beans. *Ohio F* 139:223 F 17 '17
- Growing of field beans. *Prac F* 113:97 Mr 1 '17
- Growing string beans. *W Va Ag Ext C* 62 3p '16
- Growing string beans under glass. *Gard Chron Am* 20:149 Mr '16
- Growing the war bean. S. Fraser. *Country Gent* 83:24 Mr 30 '18
- Harvesting the bean. M. Champlin. O Judd Farmer 61:11 Ag 5 '16
- Horse beans. R. McKee. *il map Farmers' B* 969:1-12 '18
- Immense bean and pea acreages for feed and food. *Monthly Crop Rep* 3:100 O '17
- Increased food production; flageolet and haricot beans. H. E. Durham. *Gard Chron (Lond)* 64:31 Jl 27 '18
- Mexican bean a war bride. Z. E. Black. *il Country Gent* 81:1543 Ag 19 '16
- More and better beans. A. Kruhm. *il Ohio F* 137:302 F 26 '16
- Navy bean culture. F. C. Gaylord. *Purdue Ag Ext Leaflet* 95:1-6 '18
- Navy beans for southern Illinois. O Judd Farmer 64:3 Mr 2 '18
- New Jersey canning ways with beans. *Nat Stock & F* 41:446 Ag 4 '17
- New Mexico beans. F. Garcia. *il N M Ag Exp B* 105:1-56 '17
- Nomenclature of beans. H. E. Durham. *Gard Chron (Lond)* 64:125 S 28 '18
- Planting beans in hills. H. E. Cox. *Rural N Y* 77:432 Mr 30 '18
- Practical suggestions on bean growing. J. C. Moynan. *J Ag (Quebec)* 21:88 D '17
- Quantitative characters in beans. W. Brotherton. *Bot Gaz* 63:417-18 My '17
- Runner beans. R. W. Thatcher. *Gard Chron (Lond)* 63:213 My 25 '18
- Saving beans and peas for food and seedling purposes. J. P. Helyar. *N J Ag Exp C* 86:1-4 '17
- Short year in field beans. O Judd Farmer 61:5 S 23 '16
- Successful bean and wheat farm. H. S. Miller. *Ohio F* 139:739 Je 2 '17
- Use of beans. *Mass Ag Ext C* 67 3p '18
- See also Asparagus beans; Castor oil plants; Feeding and feeding stuffs—Beans; Kidney beans; Lima beans; Mung beans; Soybeans; Velvet beans

**Breeding**

- Adzuki beans and jimson weeds; favorable class material for illustrating the ratios of Mendel's law. A. F. Blakeslee and B. T. Avery. *il J Heredity* 8:125-31 Mr '17
- Colour of the seed in the descendants of a natural hybrid of two varieties of phaseolus vulgaris, in Sweden. J. Lundberg and A. Akerman. *Int R Sci & Prac Ag* 8,no 11:1091-3 N '17
- Inheritance of habit in the common bean. *Int R Sci & Prac Ag* 7,no 1:53 Ja '16
- Inheritance of length of pod in certain crosses. J. Belling. *bibliog il J Ag Research* 5:405-20 D 6 '15
- On the correlation between somatic characters and fertility; illustrations from phaseolus vulgaris. J. A. Harris. *bibliog Am J Bot* 1:398-411 O '14

**Composition**

- Some proteins from the jack bean; abstract. D. B. Jones and C. O. Johns. *J Franklin Inst (Franklin Institute, Philadelphia 50c)* 184:119-20 Jl '17

**Diseases and pests**

- Bean crop; how diseases may be fought. J. Thomas. *il Country Gent* 81:414 F 19 '16
- Bean disease introduced in diseased seeds. H. Garman. *il Ky Ag Exp C* 16:92-5 '17
- Beans in Colorado and their diseases. A. Kezer and W. G. Sackett. *il Colo Ag Exp B* 234:1-32 '18 (rev. ed. of B. 226)
- Common diseases of beans. M. T. Cook. *Market Growers J* 18:336 My 15 '16; Same. *N J Ag Exp C* 50:1-4 n.d.
- Common diseases of beans and peas. M. T. Cook. *il N J Ag Exp C* 84:1-8 '17
- Effect of soil temperature on the growth of bean plants and on their susceptibility to a root parasite. D. Reddick. *Am J Bot* 4:513-19 N '17
- Experiments on the control of bean anthracnose and bean blight. J. H. Muncie. *bibliog il Mich Ag Exp Tech B* 38:1-50 '17
- Girdling of bean stems caused by bact. phaseoli. J. H. Muncie. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:88-9 Jl 27 '17
- Insect and other enemies of beans. E. R. de Ong. *Cal Ag Exp* 4p '17
- Insects in beans. T. J. Headlee. *Rural N Y* 76:545 Ap 14 '17
- Record of the corn earworm attacking beans and a suggestion as to the reason of the outbreak. E. O. Essig. *il Cal State Comm Hort B v* 7:544-5 S '18
- Seed corn maggot and snails destroying beans. C. R. Crosby. *Rural N Y* 76:960 Ag 11 '17
- Some results of the New York state bean investigation. W. H. Burkholder and others. *N Y State Fruit Growers' Assn Pro* 1918:120-6
- Spraying beans and peas. W. C. O'Kane. *il Country Gent* 83:24 Ap 6 '18
- Sunscauld of beans. H. G. MacMillan. *il J Ag Research* 13:647-50 Je 17 '18



**Beans**—Diseases and pests—*Continued*

- Varieties of beans susceptible to mosaic. D. Reddick and V. B. Stewart. *Phyt* 8:530-4 O '18  
*See also* Bean anthracnose; Bean maggots; Bean weevils

**Seed**

- Beans for seed. F. S. Prince, Ohio *F* 140:342 O 20 '17  
 Growing peas and beans for seed in Idaho. F. W. Beckwith. *Market Growers J* 18:167 Mr 1 '16  
 Report of stocks of peas, beans, spring vetch and sweet corn. U S Seed Rep 1:6 Ap '18  
 Selecting improved bean seed. *Cal Univ Pub* (Ag Ext) 2p n.d.  
 Selecting resistant beans. M. G. Kains. *Fruit-Grower* 27:286 My 1 '16  
 Selecting seed beans. H. E. Cox. *Rural N Y* 76:1051 S 8 '17

**Statistics**

- Area, production, value, etc., in U. S. and other countries. *See* United States Department of agriculture Yearbooks  
 Commercial stocks of beans in the United States on August 31, 1917. *U S Ag C* 99:9-12 '18  
 Commercial stocks of beans, Jan. 1. *U S Food Surveys* 1:1-3 Jl 20 '18  
 Commercial stocks of beans, July 1. *U S Food Surveys* 2:2-4 O 1 '18  
 Edible bean production, 1917. *Monthly Crop Rep* 4:39 Ap '18  
 Field beans acreage estimates. *Monthly Crop Rep* 4:78 Jl '18  
 \* Peas and beans in Ontario. (*In* Report, Bur. of industries, 1917, p. 30) '18 Ontario ag. dept., Toronto

**Varieties**

- Beans in varieties. B. L. Putnam. *Nat Stock & F* 40:1278 F 24 '17  
 Best beans for the home garden. *Fruit-Grower* 27:299 My 15 '16  
 Different varieties of beans. E. S. Johnson. *Gard M* 27:46 F '18  
 Exit the string bean. A. Kruhm. *il Gard M* 23:284-6 Je '16  
 Five oriental species of beans. C. V. Piper and W. J. Morse. *bibliog il U S Ag B* 119:1-32 '14

**Beans, Burma**

- Importations of poisonous beans. *il Rural N Y* 76:852 Jl 7 '17  
 Prussic acid in Burma beans. F. J. Warth and Ko Ko Gyi. *Ag J of Iridia* 13:741-2 O '18

**Beard-tongues**. *See* Pentstemons

**Bearings (machinery)**

- Anti-friction bearings on farm machinery. F. N. G. Kranich. *Am Soc Ag Eng Trans* 11:104-9 '18  
 Bearings and babbit pouring. F. L. Peterson. *Country Gent* 82:1234 Ag 4 '17  
*See also* Automobiles—Bearings; Lubrication and lubricants

**Bear's Breast Peak**

- Rugged Bear's Breast Peak. G. E. Mitchell. *il Am For* 23:758 D '17

**Beauharnois district dairymen's association**

- Thirty-fifth annual meeting. *J Ag* (Quebec) 20:224 My '17  
 36th annual convention, Huntingdon, Quebec, Feb. 22. *J Ag* (Quebec) 21:155 Ap '18

**Beauty, Personal**

- Country woman's appearance. *Rural N Y* 75:1215 S 16 '16  
 Farm girls' beauty. M. M. Garrison. *Ohio F* 137:842 Je 24 '16  
 Garden medicines and beautifiers. *Prog F* 31:122 Ja 22 '16

**Beavers**

- Lure of the beaver. D. Lange. *il Am For* 23:600-10 O '17  
 Protection of beaver in Wisconsin. F. B. Moody. *il Am For* 22:220-4 Ap '16

**Bedbugs**

- Bedbug. C. L. Marlatt. *il Farmers' B* 754:1-15 '18 (rev.)

- Bedbug eradication. Wallaces' *F* 43:1292 S 13 '18  
 Household and camp insects. E. P. Felt. *il N Y State Museum* (Albany) B 194:38-40 F '17  
 Value of high temperature for controlling the common bedbug. A. Gibson. *il Ag Gaz of Canada* 5:949-51 O '18

**Bedding plants**. *See* Florists' plants

**Bedrooms**

- Bedroom comfort. *Power F* 26:36 Mr '17  
 Birthday bedroom. M. B. Castor. *Nat Stock & F* 40:1000 D 30 '16  
 Furniture to individualize the bedroom. *il Country Life* 34:90 O '18  
 Living room and bedrooms. N. K. Jones. *Country Gent* 81:1207 Je 10 '16  
 Personality in bedrooms. A. R. Fairman. *il Country Life* 33:41-3 N '17

**Bee**. *See* Bee culture; Bees

**Bee and honey houses**

- Advantages and disadvantages of a house-apary. B. C. Auten. *il Gleanings* 44:205-6 Mr 1 '16  
 Apiary buildings and their equipment. M. Pettit. *il Am Bee J* 58:127-8, 152-3 Ap-May '18  
 Complete specifications for a 12 by 24-foot building. H. Lyon. *Gleanings* 44:197-8 Mr 1 '16  
 Concrete work-shop, honey-house, and beecellar. D. Running. *il Gleanings* 44:190-2 Mr 1 '16  
 Corrugated-iron bee-sheds in Arizona. J. M. Herman. *Gleanings* 44:119-20 F 1 '16  
 Demountable extracting-house suitable for a hot climate. J. Gray. *Gleanings* 44:206-7 Mr 1 '16  
 Elevator in the honey-house. A. N. Clark. *Gleanings* 44:199 Mr 1 '16  
 Honey-house. *Am Bee J* 57:414 D '17  
 House apiaries; advantages and disadvantages. F. C. Pellett. *il Am Bee J* 57:79-81 Mr '17  
 Houses for bees. *il Country Gent* 82:1059 Je 23 '17  
 How best to store the honey and combs after the harvest. G. M. Doolittle. *Gleanings* 46:469 Ag '18  
 My house apiary. C. L. Hill. *il Gleanings* 44:976 O 15 '16  
 Roomy and convenient extracting-house on wheels. E. C. Biddick. *il Gleanings* 44:482 Je 15 '16  
 Side-hill honey-house. E. S. Miles. *il Gleanings* 44:202-4 Mr 1 '16  
 Strittmatter house apiary. F. J. Strittmatter. *Am Bee J* 56:238 Jl '16  
 Why I prefer the house-apary. E. C. Barber. *il Gleanings* 44:193-6 Mr 1 '16  
 Windows of the honey-house. B. Blackburne. *Gleanings* 44:200-2 Mr 1 '16

**Bee clubs**

- Bee-clubs for San Francisco boys. R. R. Bent. *Gleanings* 44:604 Jl 15 '16  
 Beekeeping clubs. S. R. Winters. *Country Gent* 81:1513 Ag 12 '16  
 Boys' and girls' club. J. H. Merrill. *Am Bee J* 58:48-9 F '18

**Bee culture**

- Among eastern beekeepers. C. P. Dadant. *il Am Bee J* 57:84-6, 120-1 Mr-Apr '17  
 Apiary experiences and weather conditions. D. Queen. *Am Bee J* 58:17 Ja '18  
 Apicultural don'ts. D. M. MacDonald. *Am Bee J* 58:297-8 S '18  
 Appeal to all beekeepers. *Gleanings* 45:329 My '17  
 As glimpsed through the camera; for the beginner in beekeeping. H. H. Root. *il Gleanings* 44:483-8 Je 15 '16  
 Banker who counts his honey. J. J. Moyers. *il Gleanings* 44:788 S 1 '16  
 Bee disease control. E. G. Carr. *il maps N J Ag Dept C* 3:1-30 '17  
 Bee-hive records. C. E. Fowler. *Gleanings* 44:1071-2 N 15 '16  
 Bee-keeper's column. *See* monthly numbers of Minnesota horticulturist

**Bee culture—Continued**

- Beekeeping, a discussion of the life of the honeybee and of the production of honey, by E. F. Phillips. Review. *J Econ Entom* 9:243-4 F '16
- Beekeeping and fruit growing. O. Kazmeier. *Better Fruit* 10:30 Ap '16
- Beekeeping and the war. E. F. Phillips. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 6:444-9 My '18
- Beekeeping as a prison industry. O. H. L. Wernicke. *Am Bee J* 56:311 S '16
- Beekeeping as a side line. G. Allen. *Gleanings* 45:203, 617-18, 776-7, 851-2, 930-1; 46:286-7 Mr, Ag, O-D '17, My '18
- Bee keeping for gardeners. E. I. Farrington. *Gard M* 27:88b Mr '18
- Bee keeping for profit. Green's *Am Fruit Grower* 38:17 Ja; 23 F '18
- Beekeeping for the disabled. *Am Bee J* 57:95 Mr '17
- Bee keeping for the fruit grower. E. J. Baxter. *Ill State Hort Soc Trans* 1916:342-53 '17
- Beekeeping for the fruit-grower and small rancher, or amateur. G. A. Coleman. *il Cal Ag Exp C* 185:1-11 '17
- Beekeeping for women. F. C. Pellett. *Country Gent* 81:704 Mr 25 '16
- Beekeeping for women. D. Q. Wright. *il Country Gent* 83:49 Ja 5; 58 F 2; 58 Mr 16 '18
- Beekeeping in war times. E. F. Phillips. *il Cal State Comm Hort B v* 7:177-81 Ap '18
- Bee-keeping—preparing for 1918. *J Ag (Quebec)* 21:19 Ag '17
- Bees and fruit together. E. R. Root. *il Gleanings* 45:332-4 My '17
- Bees and how to keep them. F. W. L. Sladen. 56p *il '16 Canada Ag*
- Bees and their work of great value. L. W. Lighty. *Nat Stock & F* 42:656 O 19 '18
- Bees drifting; cause and prevention. G. C. Greiner. *Gleanings* 44:235-7 Mr 15 '16
- Bees for the farm woman. L. E. Rowe. *Green's Am Fruit Grower* 38:22 Mr '18
- Bees for the farmer. J. Troop and W. A. Price. *il Ind Ag Exp C* 61:1-20 '17
- Bees for the winter cluster. B. M. Demuth. *Gleanings* 46:462-3 Ag '18
- Bees in the garden and orchard; with discussion. J. Kimball. *il Minn Hort* 46:95-100 Mr '18
- Bees on the general farm. F. C. Pellett. *il Country Gent* 82:163 Ja 27 '17
- Beginners' lessons. H. H. Root. *Gleanings* 45: 54, 132, 206-8, 285-6, 364-5, 457-9, 539-42, 619-20, 698-9, 778-9, 858-9 Ja-N '17
- Beginning with bees. A. F. Bonney. *il Ohio F* 141:282 F 23 '18
- \* Better bee-keeping. N. E. France. (*In Report*, 1917, p. 41-2) '18 *Ill. State beekeepers' assn., Springfield*
- Boy's start with bees. J. A. Allard. *Gleanings* 44:398 My 15 '16
- Business bee-keeping. F. C. Pellett. *il Wallaces' F* 42:293 F 16 '17
- Business man's bees. F. C. Pellett. *Country Gent* 82:1041 Je 16 '17
- Can bees be kept in an attic? J. P. True. *Gleanings* 45:355-6 My '17
- Clergymen as beekeepers. H. W. Watjen. *Gleanings* 44:399-400 My 15 '16
- Comb honey—few swarms. Mrs S. W. Frey. *il Gleanings* 45:253-5 Ap '17
- \* Comparisons; 100 colonies wintered outdoors, 100 wintered in the cellar, 100 two-pound packages of bees. E. Hassinger, jr. (*In Report*, 1917, p. 91-101) '18 *Ill. State beekeepers' assn., Springfield*
- Control bees and secure a crop of honey. E. R. Root. *il Green's Am Fruit Grower* 38:5 My '18
- Conversations with beekeepers. G. M. Doolittle. *Gleanings* 45:32 Ja '17
- Danger of robbing; increase for next year. E. Root. *Green's Am Fruit Grower* 38:12 Jl '18
- Does beekeeping pay? A. C. Miller. *il Country Gent* 81:1431 Jl 29 '16
- Does beekeeping pay? E. F. Phillips. *Prog F* 31:27 Ja 1 '16
- Drifting. *Gleanings* 44:1154 D 15 '16
- Efficiency in beekeeping. M. Pettit. *Am Bee J* 58:94 Mr '18
- Fall preparation for bees. E. R. Root. *il Am Fruit Grower* 38:6 S '18
- Forty-five years with bees. *il Wallaces' F* 43: 283 F 15 '18
- From four to one hundred colonies. C. Walker. *il Gleanings* 44:147-9 F 15 '16
- From 1 colony to 532. I. D. Bartlett. *il Gleanings* 45:178-80 Mr '17
- Fruitman's best friend. E. L. Ragsdale. *il Fruit-Grower* 28:188 Mr 15 '17
- Give bees room. *Weekly N L* 4:2 Je 20 '17
- Hand hive and system of bee-management. A. B. Trythall. *il J Ag New Zealand* 17:74-9 Ag '18
- Handling bees the first time. E. R. Root. *Green's Am Fruit Grower* 38:19 Ap '18
- Helping the honey bee help Hoover. *Rural N Y* 77:405 Mr 16 '18
- Honey and honey production. H. Mathewson. *il Gleanings* 44:790-2 S 1 '16
- Honey-money makers. R. Williams. *il Gleanings* 44:784-7 S 1 '16
- How bees help. C. H. Sapp. *Nat Stock & F* 40:450 Jl 29 '16
- How I became a beekeeper. C. T. Ohlinger. *Am Bee J* 56:20 Ja '16
- How to move hives of bees short distances. C. C. Miller. *Gleanings* 44:933-4 O 1 '16
- How to unite—spring and fall; two colonies united, with both queens retained. G. C. Greiner. *Gleanings* 46:270-1 My '18
- Importance of May work. E. R. Root. *Gleanings* 46:273-5 My '18
- In search of honey. J. Morse. *il Country Gent* 82:1807 N 17 '17
- Increase with little cost. F. C. Pellett. *Am Bee J* 57:344 O '17
- Instantaneous increase. J. M. Donaldson. *Gleanings* 45:450 Je '17
- Is a laying-worker colony worth saving? E. S. Miles. *Gleanings* 44:865 S 15 '16
- Is this failure? C. Scott. *il Gleanings* 44:1074-6 N 15 '16
- J. L. Byer, the bee man. E. R. Root. *il Gleanings* 45:107-9 F '17
- Keep a few bees. F. Hill. *il Country Gent* 81: 1063-9 My 20 '16
- Keep bees on the farm. L. H. Cobb. *Nat Stock & F* 40:1025 Ja 6 '17
- Keep your bees at work. G. R. Thomas. *Nat Stock & F* 42:248 Je 1 '18
- Laying workers caught. M. Johnstone. *Gleanings* 44:78 Ja 15 '16
- Laying workers not cleared out by shaking. M. Brennenman. *Gleanings* 44:20-1 Ja 1 '16
- Lesson in beekeeping. E. R. Root. *il Green's Am Fruit Grower* 38:23 Mr '18
- Lessons of fifty years. R. F. Holtermann. *il Gleanings* 45:673-5 S '17
- Maintenance of colonies from the close of the honey flow one year until its beginning the next. G. S. Demuth. *Am Bee J* 58:267-9, 305-6 Ag-S '18
- Making bees a business. F. C. Pellett. *Country Gent* 81:1486 Ag 5 '16
- Management of your bees in June. E. R. Root. *il Green's Am Fruit Grower* 38:5 Je '18
- Maximum crop of honey. H. Horner. *il Gleanings* 45:516-19 Jl '17
- Methods by which, with a few colonies of bees, honey may be had throughout the year. C. E. Sanborn. *il Okla Ag Ext C* 52 4p '17
- Money from honey. C. P. Dadant. *il Ill Farmers Inst Household Sci* 1917:171-6 '18
- More bees or greater intensity? A. C. Miller. *Am Bee J* 56:224 Jl '16
- More honey is wanted. *J Ag (Quebec)* 21:132 Mr '18
- My first season's experience as a beekeeper. A. P. Betts. *Gleanings* 44:287-8 Ap 1 '16
- My neighbor's garden. C. D. Stuart. *il Am Bee J* 58:411 D '18
- National problems. F. Jager. *Gleanings* 44: 1067-8 N 15 '16
- New experiences in beekeeping. G. B. Willis. *il Gleanings* 44:156-7 F 15 '16
- New hobby for girls. E. S. Brinton. *il Gleanings* 44:393-5 My 15 '16
- Only substitute for sugar. J. W. Love. *il Country Gent* 82:1813 N 24 '17
- Opportunity for bee-keepers. F. W. L. Sladen. *J Ag (Quebec)* 20:236 Je '17



**Bee culture—Continued**

Our greatest beekeeping problem; how to help solve it. G. H. Rea. *Gleanings* 44:1115-17 D 1 '16

Painting hive-bottoms. *Gleanings* 45:346-7 My '17

Perfect combs. D. M. Macdonald. *il Am Bee J* 57:238-9 J1 '17

Plan of fall increase; advantages claimed for it, and still another way to do it. R. F. Holtermann. *Gleanings* 46:467-8 Ag '18

Practical method of handling bees for the production of comb honey. W. G. Lawrence. *Ill Farmers Inst Rep* 1917:186-91 '17

Relation of temperature to bee activity. A. Latham. *Gleanings* 44:973-4 O 15 '16

Rosy possibilities of beekeeping. J. A. Allard. *Gleanings* 44:847-8 S 15 '16

Sanitary conditions in the beeyard. J. E. Jordan. *Gleanings* 44:1168 D 15 '16

Seventy years of beekeeping. C. P. Dadant. *il Am Bee J* 57:7-8, 48, 89-91, 151-3, 202, 235-7 Ja-Mr, My-J1 '17

Shortage of bees. E. I. Farrington. *Rural N Y* 77:579 Ap 20 '18

Small apiary management. O. H. L. Wernicke. *il Am Bee J* 57:414 D '17

Some of our short cuts. G. J. Yoder. *il Gleanings* 45:610 Ag '17

Sources of information on beekeeping. E. F. Phillips. *Prog F* 31:1285 N 4 '16

Spring care of bees. *Va Ag Dept B* 111:16 Ap '16

Spring care of bees. *Weekly N L* 4:10 My 2 '17

Spring management. E. R. Root. *il Gleanings* 46:206-8 Ap '18

Spring management of bees. Wallaces' *F* 41:375 Mr 3 '16

Spring management of bees. E. F. Atwater. *il Am Bee J* 57:195 Je '17

Spring management of bees. C. C. Miller. *Gleanings* 45:255-7 Ap '17

Spring management of bees. W. A. Price. *il Purdue Ag* 10:36-7 Mr '16

Spring manipulation of bees. E. F. Phillips. *Prog F* 31:327 Mr 4 '16

Spring work with bees. F. C. Pellett. *Country Gent* 82:559 Mr 17 '17

Starting with a small late swarm. J. White. *Gleanings* 44:397-8 My 15 '16

Successful beekeeping, the pivotal point—man. D. M. Macdonald. *Am Bee J* 57:305 S '17

Summer management of an apiary. E. L. Hofmann. *Minn Hort* 46:212-13 My '18

Swarming season is now over. E. R. Root. *Green's Am Fruit Grower* 38:6 Ag '18

System of extracted honey production; economy of time and labor an important consideration. *il Am Bee J* 56:7-10 Ja '16

Taking off honey rapidly. L. H. Scholl. *il Gleanings* 44:1031 N 1 '16

Talk for young folks. H. Lathrop. *Am Bee J* 58:125 Ap '18

Talks to beginners. *il Gleanings* 46:175, 239-41, 303-5, 367-8, 431-3, 494-5, 558-9, 623 Mr-O '18

Trading in live bees. E. I. Farrington. *il Am Bee J* 56:119 Ap '16

Transferring. *Gleanings* 44:301 Ap 15 '16

Transferring bees in Georgia. F. M. Baldwin. *Am Bee J* 58:353 O '18

Transferring colonies of bees from box hives to frames. R. G. Warry. *Ag Gaz of New South Wales* 28:41-5 Ja '17

Twenty-one years with bees. H. R. O'Brien. *il Country Gent* 83:7-8 Mr 23 '18

Two thousand pounds of honey in 1916. Mrs J. A. De Lamater. *Minn Hort* 45:202-3 My '17

Unprecedented season. G. C. Greiner. *il Gleanings* 44:310-12 Ap 15 '16

Usefulness of bees in horticulture, and the value of honey as a diet. C. P. Dadant. *il Ill Farmers Inst Rep* 1917:176-86 '17

Various thoughts from the bee-yard. G. C. Greiner. *Am Bee J* 56:416 D '16

Vocational opportunities in beekeeping. B. N. Gates. *Am Bee J* 56:269 Ag '16

Wasted sugar supply. E. F. Phillips. *il U S Ag Yearbook* 1917:395-400; Same. Separate 747

Weather and honey production. L. A. Kenoyer. *Ja Ag Exp B* 169:15-26 '17

When the bees start robbing. E. I. Farrington. *Country Gent* 81:1431 J1 29 '16

Where the bees keep the home. H. Hograve. *il Gleanings* 44:238-9 Mr 15 '16

Wholesale transferring. O. H. Gibbs. *Am Bee J* 58:412 D '18

Why wide spacing. T. W. Riggs. *Gleanings* 46:407 J1 '18

Winter work with bees. F. C. Pellett. *Country Gent* 82:6 Ja 6 '17

Working combination. *il Am Bee J* 56:151-2 My '16

*See also* Bee clubs; Beekeepers; Beekeepers' associations; Bees; Bees—Breeding; Bees—Breeds; Bees—Diseases and pests; Bees—Photographs; Bees—Transportation; Honey; Honey plants; also National conference on honey production

**Accounting**

Beekeepers' bookkeeping. C. R. Parks. *Gleanings* 46:278 My '18

**Bibliography**

Bees and honey; selected list prepared by A. L. A. committee on food information. 4p mim '18 Univ. of Ill., Coll. of ag., Urbana

**Comb foundation**

Drawn combs in sections. *Gleanings* 44:350 My 1 '16

Preserving frames of comb. *Gleanings* 44:53 Ja 15 '16

**Drones**

Elimination of drones. W. P. Southworth; E. R. Root. *il plans Gleanings* 46:210-12 Ap '18

How can I prevent so many drones? C. E. Dustman. *Gleanings* 44:723 Ag 15 '16

Value of drones. *Gleanings* 44:719 Ag 15 '16

**Exhibits**

About bee demonstrations. F. C. Pellett. *il Am Bee J* 57:18-19 Ja '17

Charter Oak fair. J. E. Crane. *Am Bee J* 57:411 D '17

\* Code of rules and standards for grading apiarian exhibits at fair as adopted by Illinois State bee-keepers' association. (*In Report*, 1917, p. 14-15) '18 Ill. State beekeepers' assn., Springfield

Extension work in apiculture at the Panama-Pacific international exposition. G. A. Coleman. *il Gleanings* 44:99-102 F 1 '16

Missouri apicultural society meeting, St Joseph. A. D. Wolfe. *Gleanings* 44:121-2 F 1 '16

Sane and sensible bee demonstration. J. Gray. *Gleanings* 44:926 O 1 '16

Texas fair exhibit. T. P. Robinson. *Am Bee J* 58:16 Ja '18

**Feeding of bees**

Beginners' lessons. H. H. Root. *il Gleanings* 45:778-9 O '17

British feeders and feeding D. M. McDonald. *il Am Bee J* 56:88 Mr '16

Candy feeding for bees. W. A. Sheppard. *Am Bee J* 57:8 Ja '17

Early feeding advisable. W. C. Mollett. *Gleanings* 44:983-4 O 15 '16

Feeding back to complete sections. *Gleanings* 44:528 J1 1 '16

Feeding dry sugar. W. J. Sheppard. *Gleanings* 44:65-6 Ja 15 '16

Feeding in two-quart jars over the brood-chamber. W. C. Mollett. *Gleanings* 44:930 O 1 '16

Feeding prevents bee starvation. *Better Fruit* 13:18 D '18

Feeding without robbing. J. L. Byer. *Gleanings* 46:17-18 Ja '18

Feeds of bees. W. K. Morrison. *Am Bee J* 57:88 Mr '17

Food famine for bees? J. W. Love. *il Country Gent* 83:44 F 23 '18

Fourteen dollars' worth of sugar every three days. S. H. Burton. *Gleanings* 44:153-5 F 15 '16

How to make increase by feeding; what feeder to use. *Gleanings* 44:496 Je 15 '16

**Bee culture—Feeding of bees—Continued**

- Importance of winter stores. B. M. Demuth. Gleanings 46:529-31 S '18  
 Making colonies by feeding syrup. P. Funk. Gleanings 44:930 O 1 '16  
 Novel feeder. il Am Bee J 56:339 O '16  
 Nutrition of the honeybee. R. A. Dutcher. Am Bee J 58:92-3, 129 Mr-Apr '18  
 Sugar for feeding bees now assured. Gleanings 46:139-40 Mr '18  
 Surplus combs of honey. Am Bee J 56:93 Mr '16  
 Value of sugar as food for bees. P. J. Baldensperger. Am Bee J 57:230-1 Jl '17  
 Watch for starvation in spring. G. C. Greiner. Am Bee J 58:55 F '18  
 Winter feeding and disturbance. Gleanings 46:140 Mr '18

See also Honey plants; Pollen plants

**History**

- How they came to us; a book with historical associations that throws some light on the introduction of Italians. E. F. Phillips. Gleanings 45:111-12 F '17  
 Some bee history. H. B. Parks. Am Bee J 57:201 Je '17

**Hives and appliances**

- Advantages of full sheets and bottom starters in sections. G. C. Greiner. Am Bee J 57:129 Ap '17  
 Advantages of large hives. C. P. Dadant. Am Bee J 58:367-9 N '18  
 Apiary appliances; with discussion. W. J. Craig. (In Report, Beekeepers' assn. of Ontario, 1917, p. 8-12) '18 Ontario ag. dept., Toronto  
 Apiary experiments at Ruakura; the deadman super cleaner system. A. B. Trythall. il J Ag New Zealand 16:203-5 Ap '18  
 Ascending hive; a new idea in hive building. E. Baker. il Gleanings 46:148 Mr '18  
 Beehives. Gleanings 44:1162 D 15 '16  
 Bee-keeping becoming specialized. il Mich Ag Bd Rep 1916:360-71  
 Beekeeping in California. P. C. Chadwick. Gleanings 44:523 Jl 1 '16  
 Bee-supplies used in Holland. J. H. J. Hamelberg. il Gleanings 44:1166-7 D 15 '16  
 Brood foundation—most economical weight to use. il Am Bee J 57:410 D '17  
 Cages of unusual merit; device whereby the queen is fully accepted by the bees before being liberated. J. E. Thompson. il Gleanings 46:463-5 Ag '18  
 Capping can—has it any value? C. P. Dadant. il Am Bee J 56:47 F '16  
 Certain hive fixtures. F. Greiner. Am Bee J 57:162 My '17  
 Cheap winter packing. E. R. Root. Gleanings 45:842-3 N '17  
 Collapsible single-colony winter case. J. H. Fisbeck. Gleanings 44:163 F 15 '16  
 Colonies in eight-frame hives. C. P. Henry. Gleanings 44:14-15 Ja 1 '16  
 Counting bees automatically. D. D. Brearley. il Gleanings 44:1126 D 1 '16  
 Crane's honey-board. J. E. Crane. il Am Bee J 58:56 F '18  
 Division-boards necessary only when wintering a nucleus. Gleanings 44:920 O 1 '16  
 Drifting swarms from box hives. F. Greiner. Gleanings 44:793-4 S 1 '16  
 Easily constructed electric wire-imbedder. E. L. Sechrist. il Gleanings 44:316 Ap 15 '16  
 Efficient home for the bee. il Wallaces' F 41:1399 O 27 '16  
 Entrances. A. C. Miller. Am Bee J 58:262 Ag '18  
 Evolution of the beehive. il Am Bee J 58:115, 151, 271 Ap-May, Ag '18  
 Freeing supers of bees in out-apiaries. J. A. Green. Gleanings 44:351-2 My 1 '16  
 Get ready for the honey flow. F. Greiner. il Am Bee J 56:198 Je '16  
 Getting better filled sections. T. D. Budd. il Am Bee J 56:268 Ag '16  
 Handy escape-board. E. F. Atwater. Gleanings 44:77-8 Ja 15 '16  
 Handy queen-cell cage. J. H. Rosser. il Gleanings 44:18-19 Ja 1 '16

- The hive. E. F. Phillips. il Prog F 31:201 F 5 '16  
 Hive entrance. A. F. Bonney. plan Am Bee J 58:308 S '18  
 Hives and methods applicable to the South. L. E. Webb. il Gleanings 45:689-90 S '17  
 Hives I use and why. J. L. Byer. il Gleanings 45:676-8 S '17  
 Hives used in central Europe. E. Tschudin. il Gleanings 44:25-8 Ja 1 '16  
 Homemade screens for beehives. E. I. Farrington. Country Gent 82:999 Je 9 '17  
 Imbedding wires; how electricity can be effectively and inexpensively used. H. H. Root. Gleanings 46:344 Je '18  
 Importance of full sheets of foundation in the broodnest. il Am Bee J 56:223-4 Jl '16  
 Let-alone hive idea. E. R. Root. il Gleanings 46:143-5 Mr '18  
 Making the work count. H. H. Root. il Gleanings 45:257-60 Ap 17  
 Many a beekeeper can make his own hives. E. E. Colien. il Gleanings 44:279-80 Ap 1 '16  
 Metal hive covers. E. G. Baldwin. Gleanings 44:472 Je 15 '16  
 Metal honeycomb. A. F. Bonney. Am Bee J 58:275 Ag '18  
 Method of wiring frames. S. A. Niver. il Gleanings 44:322 Ap 15 '16  
 Modern imbedding with a Ford. E. A. Winkler. il Gleanings 45:936-7 D '17  
 My folder and foundation-fastener. F. Markham. Gleanings 45:351 My '17  
 New hive with store chamber: the Sans Souci. M. Fournier. il Int R Sci & Prac Ag 8,no 8:1154-6 Ag '17  
 Notes from Holland; our bee-homes. J. H. J. Hamelberg. Gleanings 44:481 Je 15 '16  
 On the supply maker's trail; making hives and sections. F. C. Pellett. il Am Bee J 58:43-5 F '18  
 On the supply maker's trail; smokers and uncapping knives. F. C. Pellett. il Am Bee J 58:120-1 Ap '18  
 On the supply maker's trail;—the making of comb foundation. F. C. Pellett. il Am Bee J 58:266 Ag '18  
 Opening up the front of the hive during hot weather. W. J. Bailey. il Gleanings 44:1165 D 15 '16  
 Paint your hives every five or ten years. E. S. Miles. Gleanings 44:475 Je 15 '16  
 Power machinery for home-made supplies. R. C. Wilcox. Gleanings 46:26 Ja '18  
 \* Proper spacing of frames. C. P. Dadant. (In Report, 1917, p. 62-9) '18 Ill. State beekeepers' assn., Springfield  
 Quadruple vs. single row winter cases. G. C. Greiner. Am Bee J 58:85-6 Mr '18  
 Queen-excluders. W. C. Mollett. Gleanings 44:119 F 1 '16  
 Quin-compactness hive—supers beside the brood-chamber. W. F. McCreedy. il Gleanings 44:30-2 Ja 1 '16  
 Reducing city current for imbedding wires into foundations. J. Smith. Gleanings 45:937-8 D '17  
 Root winter case. E. R. Root. il Gleanings 45:181-2 Mr '17  
 Safety-first safety-valve. Gleanings 44:180 Mr 1 '16  
 Sectional hive. W. F. Geddes. il Am Bee J 56:307-8, 347 S-O '16  
 Sectional hive. F. Greiner. il Am Bee J 56:276 Ag '16  
 Sections and dividers (separators)—are they perfect in construction? F. Greiner. il Am Bee J 56:19 Ja '16  
 Sections plain or beeway? E. F. Atwater. Am Bee J 56:420 D '16  
 Some advantages of a bee-excluding frame. M. W. Moe. Gleanings 44:862 S 15 '16  
 Some ingenious appliances in a queen yard. E. G. Le Sturgeon. il Am Bee J 57:92 Mr '17  
 Spacing of brood-frames and its relation to wintering and swarm control. Gleanings 44:1155-6 D 15 '16  
 Straight combs without foundation. H. H. Kollster. Gleanings 44:737 Ag 15 '16  
 Taking care of and moving winter-sheds. G. C. Greiner. Am Bee J 57:87 Mr '17



**Bee culture**—Hives and appliances—*Continued*

- Ten-frame hive with super makes ideal brood-nest. L. K. Cole. *Gleanings* 44:611 J1 15 '16  
 To mark the hives. W. H. Laws. *Gleanings* 46:408 J1 '18  
 Transferring bees to modern hives. E. L. Sechrist. *il Farmers' B* 961:1-14 '18  
 250 long idea hives. F. E. Reeder. *il Gleanings* 46:16-17 Ja '18  
 Two-pound sections inside standard frames. W. F. Cox. *Gleanings* 44:798 S 1 '16  
 Uncommon hives. E. G. Carr. *il Gleanings* 44:62-3 Ja 15 '16  
 Ventilation of hives. I. Hopkins. *Am Bee J* 57:233 J1 '17  
 Waters patent hive. W. Waters. *il Gleanings* 44:112-14 F 1 '16  
 Wax-foundation making for the apiary F. A. Jacobsen. *il J Ag New Zealand* 13:114-20 Ag '16  
 Why and how I paint comb foundation. E. Hassinger, jr. *Am Bee J* 56:164-5 My '16  
 Winter case for holding four regulation single-walled hives. *Gleanings* 44:91-2 F 1 '16  
 Wire-reel and wiring-board. J. E. Jordan. *il Gleanings* 44:323 Ap 15 '16

*See also* Honey—Extraction

**Laws**

- Loi concernant les mesures pour prévenir et traiter les maladies contagieuses des abeilles au Canada. *Int Yearbook Ag Leg* 1916:776-7 '17  
 Loi n. 24 réglementant l'apiculture, visant à prévenir la propagation des maladies parmi les abeilles et visant aussi les fins s'y référant ou en résultant en Australie. *Int Yearbook Ag Leg* 1916:763-5 '17  
 \* State foul brood law. (*In* Report, 1917, p. 11-12) '18 Ill. State beekeepers' assn., Springfield  
 Texas foul brood law and foul brood regulations; superseding circulars no. 8, 11, 14. F. B. Paddock. *Tex Ag Exp C* 17:1-19 '16  
 West Virginia apiary law. W Va Ag Dept B 22:1-4 '16

*See also* Bee inspection

**Out-apiaries**

- Apiaries at long range. *Gleanings* 46:399-401 J1 '18  
 Centralizing bee-yard control. J. J. Wilder. *Am Bee J* 58:193 Je '18  
 Comb honey—few swarms. Mrs S. W. Frey. *il Gleanings* 45:336-9 My '17  
 Comb honey in a California out-apiary. C. T. Wise and M. B. Wise. *Gleanings* 44:456 Je 1 '16  
 Comb-honey production in out-apiaries. W. A. Latshaw. *Gleanings* 44:608 J1 15 '16  
 Control but do not prevent swarms in out-yards. F. W. Lesser. *Gleanings* 44:366-7 My 1 '16  
 Don't try to manage outyards without an automobile. R. F. Wixon. *Gleanings* 44:363-4 My 1 '16  
 Forty years of comb-honey production in out-apiaries. J. E. Crane. *Gleanings* 44:358-9 My 1 '16  
 Hundred colonies to the apiary. D. L. Woodward. *Gleanings* 44:359-61 My 1 '16  
 Ideal brood-nest for out-apiaries. J. J. Wilder. *Gleanings* 44:454-5 Je 1 '16  
 Locating your apiaries. *Am Bee J* 57:306 S '17  
 Location and arrangement of out-apiaries. C. E. Kinzie. *Gleanings* 44:401 My 15 '16  
 Long distance beekeeping. F. C. Pellett. *Am Bee J* 57:165-6 My '17  
 Motor cycle for the bee business. A. H. Bowen. *il Gleanings* 44:368 My 1 '16  
 My outyards exist in memory only. L. K. Smith. *Gleanings* 44:982 O 15 '16  
 One who succeeds with a home yard not always successful with outyards. F. P. Quinby. *Gleanings* 44:370 My 1 '16  
 Only two days a week required to manage a 400-colony bee business in three outyards located fifteen miles apart. E. S. Miller. *Gleanings* 45:339-42 My '17  
 Out-apiaries in Rhode Island. A. C. Miller. *Gleanings* 44:364-5 My 1 '16

- Out-apiary expenses. R. F. Holtermann. *Gleanings* 45:105-6 F '17  
 Out-apiary management. E. Williams. *Gleanings* 45:20-3 Ja '17  
 Producing comb honey in out-apiaries. A. Latham. *Gleanings* 44:362 My 1 '16  
 Summary of the season's trips to out-apiaries. J. W. Schlenker. *Gleanings* 44:354 My 1 '16  
 Use of automobiles for outapiary work. W. Foster. *il Am Bee J* 56:54-5 F '16  
 Visiting an out-apiary only four times a year. S. G. Crocker, jr. *Gleanings* 44:371 My 1 '16  
 What I do on my rounds of the outyards. M. C. Berry. *Gleanings* 44:789-90 S 1 '16

**Protective clothing**

- Beesting victim's idea of a bee-hat. G. R. Richardson. *il Am Bee J* 56:237 J1 '16

**Queens**

- Breeders of untested queens send out stock untested. L. E. Webb. *Gleanings* 44:74-5 Ja 15 '16  
 Breeding better bees. F. C. Pellett. *il Country Gent* 81:1967 N 11 '16  
 Breeding queens. A. Getaz. *Am Bee J* 56:234 J1 '16  
 Cages of unusual merit; device whereby the queen is fully accepted by the bees before being liberated. J. E. Thompson. *il Gleanings* 46:463-5 Ag '18  
 Clipping queens. R. F. Holtermann. *Gleanings* 44:309-10 Ap 15 '16  
 Clipping queens' wings detrimental to their progeny? *Gleanings* 44:474 Je 15 '16  
 Commercial queen rearing. *il Am Bee J* 57:43-5 F '17  
 Commercial queen-rearing in southern California. H. Mathewson. *il Gleanings* 44:857-9 S 15 '16  
 Curious adventures in queen introduction. J. H. Todd. *Gleanings* 44:328-9 Ap 15 '16  
 Difference between piping and quaking. J. D. Ellis. *Gleanings* 44:124 F 1 '16  
 Different method of queen introduction. C. C. Miller. *Am Bee J* 57:158-9 My '17  
 Discussion of queen problems. *il Gleanings* 46:334-7 Je '18  
 Distress (or smoke) method of introducing. A. C. Miller. *Gleanings* 44:107-9 F 1 '16  
 Doolittle answers a question about the egg-laying capacity of queens. G. M. Doolittle. *Gleanings* 46:151 Mr '18  
 Drone-comb vs. worker-comb. *Am Bee J* 57:379 N '17  
 Easy queen-rearing. A. Latham. *il Gleanings* 44:593-4 J1 15 '16  
 Fallacies in breeding. G. W. Phillips. *Gleanings* 45:27-8 Ja '17  
 Fasting vs. smoke. J. M. Buchanan. *Gleanings* 44:280-1 Ap 1 '16  
 Fertilization of queen bees. C. W. Howard and L. V. France. *il Am Bee J* 57:376 N '17; Same. *J Econ Entom* 11:265-7 Ap '18  
 Getting queen cells started. *Am Bee J* 57:276 Ag '17  
 Getting the queen to lay in wooden cells. J. Smith. *Am Bee J* 57:272 Ag '17  
 Handy queen-cell cage. J. H. Rosser. *il Gleanings* 44:18-19 Ja 1 '16  
 Honey method of introducing. E. G. Baldwin. *Gleanings* 44:525 J1 1 '16  
 Honey method of introducing—a new wrinkle. R. D. Tait. *Gleanings* 44:800 S 1 '16  
 How queens mark their hives. J. Smith. *il Gleanings* 46:405-6 J1 '18  
 Importance of good queens. *Minn Hort* 44:134 Mr '16  
 Introducing queens. J. White. *Am Bee J* 57:276 Ag '17  
 Introducing queens by smearing with honey. F. M. Baldwin. *Am Bee J* 58:200 Je '18  
 Introduction of queens. H. Spuhler. *Am Bee J* 56:160 My '16  
 My method of queen-cell production. W. H. Crawford. *Gleanings* 44:725-6 Ag 15 '16  
 Not all Italian queens good. E. C. Walker. *Gleanings* 46:272-3 My '18  
 Observations and suggestions on the smoke-in method. C. D. Cheney. *Gleanings* 44:109-11 F 1 '16  
 Points on queen mailing. G. Anderson. *il Am Bee J* 57:130 Ap '17

**Bee culture—Queens—Continued**

- Practical method of rearing queens in the average apiary. *il Am Bee J 56:226-7 Jl '16*  
 Practical queen rearing, by F. C. Pellett. Review. *Am Bee J 58:341 O '18*  
 Prolificness or longevity. *Gleanings 44:10 Ja 1 '16*  
 Queen efficiency. P. C. Chadwick. *Am Bee J 58:124 Ap '18*  
 Queen or mother bee. R. S. Walker. *Am Bee J 58:301 S '18*  
 Queen rearing. H. Brenner. *Am Bee J 56:56-7 F '16*  
 Queen-rearing—combination method. J. E. Hand. *il Am Bee J 57:161 My '17*  
 Queen-rearing for the beginner. J. E. Jordan. *Gleanings 44:412-14 My 15 '16*  
 Queen-rearing troubles. *il Gleanings 45:833-6, 914-20 N-D '17*  
 Queens mated by drones of the keeper's choice. J. A. Heberle. *Gleanings 44:29 Ja 1 '16*  
 Rearing queen bees; experiments at the University of Wisconsin. C. W. Aeppler. *il Gleanings 45:93-100 F '17*; Same cond. *Am Bee J 57:58 F '17*  
 Rearing queen bees in Porto Rico. R. H. Van Zwaluwenburg and R. Vidal. *il Porto Rico Ag Exp C 16:1-12 '18*  
 Rearing queens in England. A. H. Bowen. *il Am Bee J 58:413 D '18*  
 Smoke vs. the cage method of introducing queens. A. C. Miller. *Gleanings 44:63-4 Ja 15 '16*  
 Timely hints on queen-raising. J. Gray. *Gleanings 44:601-2 Jl 15 '16*  
 What constitutes a good queen. G. M. Doolittle. *Am Bee J 56:159 My '16*  
 What queens shall we breed from? and something about the drone problem. C. C. Miller. *Gleanings 44:914 O 1 '16*  
 Why I clip the wings of a queen on both sides. R. F. Holtermann. *Gleanings 44:491 Je 15 '16*  
 Wonderful story of a queen bee. *Am Bee J 57:407 D '17*

**Statistics**

- Honeybee report, May 1, 1917. *Monthly Crop Rep 3:41 My '17*  
 Honey bees and honey plants. *Monthly Crop Rep 4:112 S '18*

**Study and teaching**

- Annual school for beekeepers, Dalton, Massachusetts. A. E. Crandall. *il Gleanings 46:23-4 Ja '18*  
 Beekeeping in Massachusetts; what one state is doing for the advancement of honey producing industry. F. C. Pellett. *il Am Bee J 56:115-18 Ap '16*  
 Beekeeping work in Massachusetts. B. N. Gates. *J Econ Entom 9:417-19 Ag '16*  
 Bees for high-school students. A. H. Jacobs. *il Gleanings 44:595-6 Jl 15 '16*  
 Good things for beekeepers at the Massachusetts agricultural college. J. Morse. *il Gleanings 45:608-9 Ag '17*  
 How I won my bee honors. D. M. MacDonald. *Am Bee J 58:239 Jl '18*  
 Investigation and instruction in beekeeping. M. Pettit. *J Econ Entom 9:406-11 Ag '16*  
 Pioneer summer school of apiculture, Hawkesbury agricultural college. *il Ag Gaz of New South Wales 27:273-4 Ap '16*  
 Purpose of college beekeeping. E. F. Phillips. *J Econ Entom 9:413-17 Ag '16*  
 6th annual apicultural short course in Ontario. M. Pettit. *Gleanings 44:196-7 Mr 1 '16*  
 Winter school in beekeeping, Massachusetts agricultural college. B. N. Gates. *il Gleanings 44:12-13 Ja 1 '16*

**Swarm control**

- Among the busy bees. *il Fruit-Grower 28:305 Jl 1 '17*  
 Artificial swarming. C. C. Miller. *Country Gent 81:1129 My 27 '16*  
 Bee swarming. I. C. Mead. *il Purdue Ag 12:482-3 My '18*  
 Best swarm control plan. I. Fowls. *Gleanings 46:338-42 Je '18*

- Cause of swarming. P. C. Chadwick. *Gleanings 45:350, 530 My, Jl '17*  
 Clipping queens. J. L. Byer. *Am Bee J 56:161 My '16*  
 Control of bee swarming. H. M. Cubberley. *O Judd Farmer 60:2 Je 3 '16*  
 Control of swarming in out-apiaries. M. W. Harvey. *Gleanings 44:490-1 Je 15 '16*  
 Dadant's remarkable success in swarm control. *Gleanings 44:1129 D 1 '16*  
 Hives and swarms. T. Rayment. *Am Bee J 56:203 Je '16*  
 How young queens help. R. D. Tait. *Gleanings 45:354 My '17*  
 Killing queen cells. C. C. Miller. *Country Gent 82:743 Ap 14 '17*  
 Method of swarm control. P. C. Chadwick. *Gleanings 44:225 Mr 15 '16*  
 My system of swarm control for comb-honey colonies. G. C. Greiner. *Gleanings 44:453-4 Je 1 '16*  
 My way of heading off swarming. J. P. Blunk. *Gleanings 44:610 Jl 15 '16*  
 Natural swarming. *Gleanings 44:392 My 15 '16*  
 No swarming, tho the bees in the locality were swarm-mad. D. Pride. *Gleanings 45:451 Je '17*  
 No swarms except from occasional supercedure colonies. D. Running. *il Gleanings 44:152-3 F 15 '16*  
 Non-swarming system that gets results. J. M. Buchanan. *il Gleanings 44:355-6 My 1 '16*  
 Notes from Germany; is a non-swarming strain of bees desirable? J. A. Heberle. *Gleanings 44:869-70 S 15 '16*  
 Nurse bees as the cause of swarming. W. Beucus. *Gleanings 44:736-7 Ag 15 '16*  
 Prevention of swarming. C. P. Dadant. *Am Bee J 57:124-6 Ap '17*  
 Prevention of swarming in home and out-apiaries. R. F. Holtermann. *Gleanings 44:404-7 My 15 '16*  
 Results of experiments with variation of Demaree plan for swarm control during season of 1918. W. J. Sheppard. *il Am Bee J 58:412 D '18*  
 Screened ventilation at the bottom to control swarming. *il Gleanings 45:445-6 Je '17*  
 Swarm control. E. F. Phillips. *Prog F 31:483 Ap 1 '16*  
 Swarm control in South Texas. H. Brenner. *Am Bee J 56:18 Ja '16*  
 Swarm impulse; is it inherited? A. C. Miller. *Am Bee J 58:379 N '18*  
 Swarm prepares, issues, and travels to new home. P. C. Chadwick. *Gleanings 45:606 Ag '17*  
 Swarm prevention for comb honey. G. W. Stephens. *Am Bee J 56:163 My '16*  
 Swarm prevention in comb-honey apiaries. C. F. Bender. *Gleanings 44:738 Ag 15 '16*  
 Swarm prevention in out-apiaries run for comb honey. M. N. Cunningham. *Gleanings 44:804 S 1 '16*  
 Swarm prevention in war time. *Am Bee J 58:275 Ag '18*  
 Swarming of bees. A. B. Trythall. *J Ag New Zealand 15:217-20 O '17*  
 Swarming prevented by confining a queen with excluders. J. H. Burns. *Gleanings 44:483 Je 15 '16*  
 Swarming problem analyzed. J. E. Hand. *Gleanings 44:599 Jl 15 '16*  
 Wastefulness of swarming. *Better Fruit 12:20 Ag '17*  
 What to do with swarms galore. D. L. Blocher. *Gleanings 45:446-8 Je '17*  
 Wide spacing for swarm control. C. F. Bender. *Gleanings 45:186 Mr '17*

**Wintering**

- About wintering bees—some English methods. A. H. Bowen. *Am Bee J 57:341 O '17*  
 Ally to the sugar bowl. L. L. Rummell. *il Ohio F 142:272 S 21 '18*  
 Be sure to have enough. *Gleanings 44:972 O 15 '16*  
 Bee keeping for profit. E. R. Root. *il Am Fruit Grower 38:10 O '18*  
 Bees must be warm. *il Ohio F 138:256 S 16 '16*



**Bee culture—Wintering—Continued**

Best cellar wintering; some of the fundamentals as illustrated by the continued successes of big Michigan beekeepers. E. R. Root. *il Gleanings* 46:524-9 S '18

Best outdoor wintering. E. R. Root. *il Gleanings* 46:587-95 O '18

Cause of the heavy losses of bees during the winter of 1915-16 in British Columbia. W. J. Sheppard. *Am Bee J* 57:337-8 O '17

Cellar or out of doors. J. L. Byer. *Gleanings* 45:755-7 O '17

Cellar versus winter cases. J. J. Anderson. *Gleanings* 44:227-8 Mr '16

Cheap winter packing. E. R. Root. *Gleanings* 45:842-3 N '17

Danger-point in heating honey. G. Shiber. *Gleanings* 44:853 S '15 '16

Demuth's plan of wintering. E. R. Root. *il Gleanings* 45:921-3 D '17

Disturbing bees in winter. *Gleanings* 44:1018 N '1 '16

Economy of heat in the hive. H. Spuehler. *Am Bee J* 56:409 D '16

Fifty years ago; on wintering bees. R. Bickford. *Am Bee J* 58:410 D '18

Getting bees ready for winter. P. Funk. O Judd Farmer 61:14 N 4 '16

Hand's convertible hive. J. E. Hand. *il Gleanings* 44:276-7 Ap '1 '16

Honeybees; wintering, yields, imports and exports of honey. S. A. Jones. *U S Ag B* 325: 1-12 '15; Abstract. *Gleanings* 44:4 Ja 1 '16

Importance of keeping entrances free from ice. L. L. Winship. *il Am Bee J* 56:56 F '16

Importance of winter stores. B. M. Demuth. *Gleanings* 46:529-31 S '18

Inexpensive wintering. E. R. Root. *il Gleanings* 46:14-16 Ja '18

Keeping bees during winter. *J Ag (Quebec)* 20:115 N '16

Methods of obtaining strong stocks of bees for over-wintering. *J Bd Ag* 25:868-9 O '18

Myth of Daniel McFadyen wintering bees up toward the north pole in Canada. M. Pettit. *Gleanings* 44:850 S '15 '16

Now for winter quarters. *Am Bee J* 56:26 Ja '16

Outdoor vs. cellar wintering. *Gleanings* 44: 1066 N '15 '16

Outdoor wintering of bees. *Int R Sci & Prac Ag* 7,no 2:260-1 F '16

Packing big apiaries for winter. *il Am Bee J* 56:295-6 S '16

Paper winter case. A. F. Bonney. *Am Bee J* 58:344 O '18

Preparation of bees for outdoor wintering. E. F. Phillips and G. S. Demuth. *il map Farmers' B* 1012:1-22 '18

Preparation of bees for winter. E. F. Phillips. *Prog F* 31:1053 S 2 '16

Rearing brood in mid-winter in the cellar. G. H. Rea. *Gleanings* 44:207-8 Mr 1 '16

Root winter case. E. R. Root. *il Gleanings* 45: 181-2 Mr '17

Shipping pound packages south for the winter. F. M. Baldwin. *Am Bee J* 57:381 N '17

Spring—with the four-colony case. A. J. Knox. *il Gleanings* 44:228-30 Mr 15 '16

Stores necessary to winter bees outdoors. J. L. Byer. *Gleanings* 44:114-16 F 1 '16

Taking care of and moving winter-sheds. G. C. Greiner. *Am Bee J* 57:87 Mr '17

Temperature of the bee colony. B. N. Gates. *il U S Ag B* 96:1-29 '14

Temperature of the honeybee cluster in winter. E. F. Phillips and G. S. Demuth. *U S Ag B* 93:1-16 '14

To pack or not to pack. G. Allen. *Gleanings* 45:753-5 O '17

Twelve rules for the protection of bees wintered in cellars. *Weekly N L* 6:8 N 20 '18

Two-colony winter case. W. S. Wiggins. *il Gleanings* 44:916-17 O 1 '16

Using a capping-melter in the winter. J. L. Byer. *Gleanings* 45:935-6 D '17

Why I never lost a colony in winter. J. F. Kight. *Gleanings* 44:863 S '15 '16

Winter care of bees. *Weekly N L* 5:1 N 14 '17

Winter cases for northern latitudes. *il Am Bee J* 56:336-7 O '16

Winter losses less than two per cent. J. A. Stevens. *il Gleanings* 44:925 O 1 '16

Winter problems of the South. J. J. Wilder. *Am Bee J* 58:306 S '18

Winter protection in the Rockies. W. Foster. *plan Gleanings* 46:598-9 O '18

Winter protection of bees. T. K. Massie. *il Am Bee J* 58:307 S '18

Winter protection without loose packing. H. H. Smith. *Gleanings* 44:856 S '15 '16

Winter warmth in the colony. K. Brunnich. *Am Bee J* 56:298 S '16

Wintering bees. *il N J Ag Exp Rep* 1916:504-11 '17

Wintering bees. W. H. Lloyd. *il Purdue Ag* 11:34-5 N '16

Wintering bees in a quadruple winter case at Medina. E. R. Root. *il Gleanings* 44:54-6 Ja 15 '16

Wintering bees in California. J. E. Pleasants. *il Am Bee J* 56:298 S '16

Wintering bees in cellars. E. F. Phillips and G. S. Demuth. *il map Farmers' B* 1014:1-21 '18

Wintering bees in supers. J. E. Roebeling. *Gleanings* 44:61-2 Ja 15 '16

Wintering bees in Tennessee. C. E. Bartholomew. *il plan Tenn Ag Ext Pub* 53:1-8 '17

Wintering bees in Texas. F. B. Paddock. *Gleanings* 45:757-8 O '17

Wintering bees in Virginia. F. W. Gravely. *Gleanings* 44:32-3 Ja 1 '16

Wintering bees outdoors. J. H. Merrill. *Fruit-Grower* 27:476 N 1 '16

Wintering bees outside. E. I. Farrington. *il Country Gent* 82:1570 O 13 '17

Wintering in Ontario. R. B. Pettit. *il Am Bee J* 56:384-6 N '16

Wintering in single-walled hives. D. Barone. *Am Bee J* 56:411 D '16

Wintering in the south-central states. J. M. Buchanan. *il Gleanings* 45:769-70 O '17

Wintering in the West. W. Foster. *il Am Bee J* 56:296-7 S '16

Wintering in western Iowa. E. R. Root. *il Gleanings* 45:759-60 O '17

Wintering of bees. F. Jager. *Minn Hort* 44: 19-21 Ja '16

Wintering of bees in Ontario. M. Pettit. *il Ontario Ag Dept B* 256:1-24 '17

Wintering over empty combs. T. Rayment. *il Gleanings* 44:158-9 F 15 '16

Wintering problem analyzed. J. E. Hand. *Am Bee J* 57:86 Mr '17

Wintering the bees. Ohio F 142:204 Ag 31 '18

Wisconsin beekeepers' convention; outdoor wintering of bees. H. Lathrop. *il Gleanings* 44:21-4 Ja 1 '16

Within the winter chamber. B. M. Demuth. *Gleanings* 46:595-6 O '18

*See also* Bee culture—Feeding of bees

**Alabama**

Glimpses of southern beekeeping. J. S. Scott. *Am Bee J* 58:59 F '18

**Australia**

Bee-keeping. *Ag Gaz of New South Wales* 27:290-1 Ap '16

Bee-keeping in Victoria. F. R. Beuhne. *il J Dept Ag Victoria* 14:170-7, 244-9, 479-86, 687-93; 15:36-41, 113-16, 303-7; 16:107-9 Mr-Apr. Ag, N '16, Ja-F, My '17, F '18

**Austria-Hungary**

Beekeeping in Carniola. F. Rojina. *il Am Bee J* 57:128 Ap '17

**California**

Bee in a California bonnet. F. B. Richardson. *Gleanings* 44:395 My 15 '16

Beekeeping around San Francisco bay. E. D. Crowl. *Am Bee J* 58:309 S '18

Beekeeping in California. P. C. Chadwick. *Gleanings* 44:473 Je 15 '16

Beekeeping in the Imperial valley. H. Mathewson. *il Am Bee J* 57:54-5 F '17

California conditions. W. A. Pryall. *Am Bee J* 58:384 N '18

Caring for 1000 colonies of bees in Imperial valley. J. Gray. *Gleanings* 44:353-4 My 1 '16

Efficient production of extracted honey in California. G. W. Bercav. *Gleanings* 44: 489-90 Je 15 '16

**Bee culture—California—Continued**

- In California. M. C. Richter. *Gleanings* 46: 609 O '18  
 More business for the honeybee; how the automobile is used as conveyance and extracting-house. A. Marple. *il Gleanings* 46: 470-1 Ag '18  
 Mud houses and California bees. W. A. Pryal. *il Rural N Y* 76:1003 Ag 25 '17  
 San Joaquin valley. F. B. Richardson. *Gleanings* 45:109-10 F '17  
 Visit at Nivers. W. A. Pryal. *Am Bee J* 57:339 O '17

**Canada**

- Bee work at the Canadian government experimental farms. F. W. L. Sladen. *J Econ Entom* 9:411-13 Ag '16  
 Beekeeping in Ontario. G. F. Kingsmill. *Am Bee J* 56:379 N '16  
 Bees in the far north. F. D. Todd. *Am Bee J* 58:15 Ja '18  
 Glimpses of Ontario. *il Am Bee J* 56:367-9 N '16  
 In Ontario. J. L. Byer. *Gleanings* 46:611 O '18  
 Notes from Canada. J. L. Byer. See monthly numbers of *Gleanings* in bee culture  
 Recent work of the bee division. F. W. L. Sladen. *il Ag Gaz of Canada* 3:1041-5 D '16  
 Reminiscences of Canadian beekeeping. J. R. Black. *Am Bee J* 58:414 D '18  
 Report on apiary inspection and demonstration in Ontario for 1917. M. Pettit. *Am Bee J* 58:17 Ja '18; Same. (*In Report, Beekeepers' assn. of Ontario, 1917, p. 35-8*) '18 Ontario ag. dept., Toronto  
 Results of co-operative experiments in apiculture. M. Pettit. (*In Report, Ontario ag. and exp. union, 1916, p. 33-40*) *il '17 Ontario ag. dept., Toronto*  
 Skilled Canadian beekeepers; E. T. Bainard of Lambeth, Ontario. R. F. Holtermann. *il Gleanings* 44:1163-5 D 15 '16  
 Work of provincial apiarist. *il Am Bee J* 56: 382-3 N '16  
 Work of the bee division of the Dominion experimental farms. F. W. L. Sladen. *Am Bee J* 57:200, 228, 270 Je-Ag '17

See also Beekeepers' association of the province of Ontario

**Chile**

- Beekeeping in Chile. M. C. Richter. *il Am Bee J* 56:157, 197-8 My-Je '16

**China**

- Oddities of Chinese bees. B. Romain. *Gleanings* 44:1025-7 N 1 '16  
 Some of the reasons why beekeeping in China is difficult. C. A. Pierson. *Gleanings* 44:1028-30 N 1 '16

**Colorado**

- Among the Rockies. W. Foster. See monthly numbers of *Gleanings* in bee culture

**Connecticut**

- Beekeeping for Connecticut. A. W. Yates. *il Conn State Ag Exp B* 205:425-46 '18

**Denmark**

- Denmark beekeeping. A. Sommer. *Am Bee J* 58:276 Ag '18

**Dominican Republic**

- Beekeeping in Santo Domingo. H. Brenner. *Am Bee J* 58:86, 421 Mr, D '18  
 Santo Domingo conditions. H. Brenner. *Am Bee J* 58:194 Je '18

**Eastern states**

- Among eastern beekeepers. C. P. Dadant. *il Am Bee J* 56:374-5, 408-9; 57:12-13, 51-2 N '16-F '17  
 Beekeeping in the East. J. H. M. Cook. *il N Y Ag Dept B* 86:2584-92 Ag '16

**Florida**

- Bee flora of Florida. E. G. Baldwin. *Gleanings* 44:389 My 15 '16  
 Cycle of seasons in different apiaries. J. J. Wilder. *il Am Bee J* 58:122-3 Ap '18

- Florida a land of surprises. E. G. Baldwin. *Gleanings* 44:845 S 15 '16  
 Florida sunshine. E. G. Baldwin. *Gleanings* 45:874 N '17  
 Future of beekeeping in Florida. J. J. Wilder. *Am Bee J* 58:52 F '18  
 Other side to Florida beekeeping. H. Hewitt. *Gleanings* 46:21-2 Ja '18  
 Season in south Florida. A. E. Ault. *Gleanings* 44:806 S 1 '16

**Georgia**

- Cycle of seasons in different apiaries in Georgia. J. J. Wilder. *Am Bee J* 58:157 My '18  
 Trip in southern Georgia; the editor visits the Georgia apiaries of J. J. Wilder. *il Am Bee J* 58:259-61 Ag '18

**Great Britain**

- Bees on the heather. N. Tourneur. *Am Bee J* 56:418 D '16

**Hawaiian Islands**

- Conditions under which wax production alone is possible. L. Burr. *Gleanings* 44:433-4 Je 1 '16  
 Honey production as a business in the Hawaiian Islands. L. Burr. *Gleanings* 44:282-3 Ap 1 '16  
 Letter from Hawaii. W. L. Porter. *Am Bee J* 56:304 S '16  
 Malihini in the Hawaiian Islands. L. Burr. *il Gleanings* 44:58-60, 230-1 Ja 15, Mr 15 '16  
 Management of 300 yards. L. Burr. *il Gleanings* 45:839-41 N '17  
 Oswald St John Gilbert, a bee king. L. Burr. *il Gleanings* 44:795-7 S 1 '16

**Illinois**

- How an Illinois farmer succeeds with 500 hives. F. C. Pellett. *il Country Gent* 81:286 F 5 '16

**India**

- Bee-keeping in India. W. P. Thompson. *Ag J of India* 13:348-51 Ap '18  
 Domestication of the Indian honey-bee. L. V. Newton. *il Ag J of India* 12:44-57 Ja '17

**Indiana**

- Honey bees and the income tax; the methods of an Indiana man who has a \$20,000 honey crop. B. W. Douglass. *il Country Gent* 83:8 N 23 '18  
 Indiana beekeeping. *Purdue Ag* 13:68 N '18

**Iowa**

- Building up a bee business. F. C. Pellett. *il Country Gent* 81:1716 S 23 '16

**Kansas**

- Beekeeping in the Arkansas valley. F. C. Pellett. *il Am Bee J* 58:372-3 N '18

**Kentucky**

- Back lot buzzer, by H. L. Ramsey; Honey production, by J. A. Sheehan. *Ky Ag Dept Rep* 1916-1917:348-50, 350-1 '18

**Louisiana**

- Bee culture and honey-market conditions in Louisiana. J. F. Archdekin. *Gleanings* 44:75-6 Ja 15 '16  
 Bee culture in Louisiana; making increase. J. F. Archdekin. *Gleanings* 44:237-8 Mr 15 '16  
 Bee culture in Louisiana; some of the honey sources. J. F. Archdekin. *Gleanings* 44:159 F 15 '16

**Maryland**

- Maryland bee-man. S. Cushman. *il Gleanings* 45:100-4 F '17  
 See also Maryland state beekeepers' association

**Massachusetts**

- See also Massachusetts—Apiaries, Inspector of

**Mexico**

- Mexican beekeeping. F. C. Pellett. *il Am Bee J* 58:223-4 Jl '18



**Bee culture**—Mexico—*Continued*

Mexican bees and beekeeping. P. Provencal. il Am Bee J 57:375 N '17

**Michigan**

Bees in northern Michigan. F. C. Pellett. il Am Bee J 57:367-70 N '17

**Minnesota**

Bee-keeping in Minnesota. F. Jager. Minn Hort 44:179 Ap '16  
Comb honey, extracted honey, and increase. Minn Hort 44:232, 262, 296 My-Jl '16  
Experience with package bees 1917. C. W. Aeppler. il Am Bee J 58:12-13 Ja '18  
Minnesota snap shots. il Am Bee J 56:259-62 Ag '16

**Missouri**

Apiary investigations in Missouri. L. Hase-man. J Econ Entom 9:282-4 Ap '16

**Montana**

Possibilities of beekeeping in northern Mont-tana. L. E. Baldwin. Am Bee J 57:274 Ag '17

**Netherlands**

Bee-notes from Holland. J. H. J. Hamelberg. il Gleanings 44:407-9, 855 My 15, S 15 '16  
Bee-supplies used in Holland. J. H. J. Hamel-berg. il Gleanings 44:1166-7 D 15 '16

**New York**

Inspector W. D. Wright, successful New York beekeeper and state inspector. R. F. Holtermann. il Gleanings 45:912-13 D '17  
Visit to Charles E. Stewart, of Johnstown, N.Y. R. F. Holtermann. Gleanings 45:527-8 Jl '17  
Western New York field meeting. Gleanings 44:974-5 O 15 '16

**New Zealand**

Experimental work at Ruakura apiary. J Ag New Zealand 17:24-7 Jl '18  
Work for the coming month; the apiary. E. A. Earp. See monthly numbers of Journal of agriculture of New Zealand

**North Carolina**

Survey of beekeeping in North Carolina. E. G. Carr. U S Ag B 489:1-16 '16

**Northern states**

April beekeeping problems in the North. L. V. France. Am Bee J 57:127 Ap '17

**Ohio**

Ohio field meet at Medina. E. R. Root. il Gleanings 44:927-9 O 1 '16

**Palestine**

Beekeeping in Jerusalem. P. J. Baldensperger. il Am Bee J 58:195-6, 234-5 Je-Jl '18

**Paraguay**

Some of the honey-plants of Paraguay. J. Brown. Gleanings 44:807 S 1 '16

**Pennsylvania**

Report of the apiarist. H. C. Klinger. Pa Ag Dept B v 1:88-91 Ap '18

**Porto Rico**

Needs of the Porto Rican beekeeper. R. Vidal. il Gleanings 44:409-10 My 15 '16  
Porto Rico beekeeping. H: Brenner. il Am Bee J 58:51 F '18  
Rearing queen bees in Porto Rico. R. H. Van Zwaluwenburg and R. Vidal. il Porto Rico Ag Exp C 16:1-12 '18

**Russia**

Apiaries of the Caucasus. C. A. Gorbacheff. il Am Bee J 58:16 Ja '18

**Southern states**

Beekeeping in the South. il Am Bee J 57:295-7 S '17  
South seeks better honey market. Country Gent 82:1790 N 17 '17  
Southern beekeeping. N. L. Stapleton. il Am Bee J 57:273 Ag '17  
Sweet clover belt of the South. il Am Bee J 57:331-2 O '17

Venture into southern beekeeping. J. F. Arch-dekin. Am Bee J 56:59, 91-2 F-Mr '16

**Sweden**

Beekeeping in Sweden. J: A. Johnson. Am Bee J 57:81 Mr '17

**Switzerland**

About the combs. K. Brunnich. il Am Bee J 56:231 Jl '16  
Investigation into the returns of Swiss bee-keeping in 1914. Int R Sci & Prac Ag 7, no 1: 134-6 Ja '16  
Notes from German Switzerland. C. W. Aep-pler. Am Bee J 58:380 N '18  
See also Organization of the Swiss bee-keepers

**Tennessee**

Notes from Tennessee. il Am Bee J 56:331 O '16  
Tennessee state convention report. il J. M. Buchanan. Gleanings 44:232-4 Mr 15 '16

**Texas**

Beekeeping in the Southwest. L: H. Scholl. Gleanings 44:223, 390-1 Mr 15, My 15 '16  
Bees in the lower Rio Grande valley. F. C. Pellett. il Am Bee J 58:187-9 Je '18  
Cotton belt of Texas. F. C. Pellett. il Am Bee J 58:403-5 D '18  
Glimpses of southwest Texas. F. C. Pellett. il Am Bee J 58:295-6 S '18  
In Texas. F. B. Paddock. See monthly num-bers of Gleanings in bee culture  
Texas queen and package business. il Am Bee J 58:336-7 O '18  
Trip through Texas. il Am Bee J 56:194-5, 230, 266-7, 302-3 Je-S '16

**United States**

Agricultural situation for 1918; more honey needed. U S Ag C 87:1-8 '18  
Beekeeping at Washington; what Uncle Sam is doing for the beekeeper. il Am Bee J 56: 43-6 F '16  
Florida vs. Indiana. J. H. Collins. Glean-ings 45:178-80 Mr '17  
Honeybees and honey production in the United States. S. A. Jones. U S Ag B 685:1-61 '18  
Neglect of bees is one of the industrial shames of rural America. Current Opinion (63 W. 36th st, N.Y. 25c) 64:224-5 Mr '18  
\* Present and future bee-keeping in the United States. E. R. Root. (In Report, 1917, p. 42-4) '18 Ill. state beekeepers' assn., Springfield

**Virginia**

Bee culture in Virginia. il Va Ag Dept B 115: 141-9 '17

**West Virginia**

Beekeeping as I observe it in West Virginia. C: A. Reese. il Am Bee J 57:415-16 D '17  
Beekeeping for West Virginia. C: A. Reese. il W Va Ag Dept B 33:1-52 '17

**Western states**

Bees in the Middle West. E. R. Root. il Glean-ings 45:512-16 Jl '17  
Overstocking and the distance bees fly. W. Foster. Am Bee J 56:270-1 Ag '16

**Wisconsin**

Beekeeping in Wisconsin. N. E. France and L. V. France. il map Wis Ag Exp B 264:1-28 '16

**Bee houses.** See Bee and honey houses

**Bee inspection**

Apiary inspection vs. education. W. Foster. Gleanings 44:1118 D 1 '16  
Bee disease control. T: J. Headlee and E. G. Carr. N J Ag Dept B 17:148-52 '18  
Bee inspection in Arizona. Gleanings 44:219 Mr 15 '16  
Better foul-brood inspection. L: H. Scholl. Gleanings 44:143 F 15 '16  
Dangerous laws. Am Bee J 57:418 D '17  
Distribution of bee inspection in Colorado. map Gleanings 44:868 S 15 '16

**Bee inspection—Continued**

- Fighting foulbrood. F. D. Todd. *Am Bee J* 57:223 J1 '17
- Function of the apiary inspection section. E. F. Phillips. *J Econ Entom* 9:188-91 F '16
- Inspection work in Illinois. C. F. Bender. *Am Bee J* 57:117 Ap '17
- New Iowa law. F. C. Pellett. *Am Bee J* 57:194 Je '17
- Open letter to F. Dundas Todd. A. C. Ames. *Am Bee J* 58:236 J1 '18
- Outline of apiary inspection in Ontario. M. Pettit. *J Econ Entom* 9:196-9 F '16
- Problems of bee inspection. F. C. Pellett. *J Econ Entom* 10:200-3 F '17; Same. *Am Bee J* 57:92-3 Mr '17
- Report on apiary inspection and demonstration in Ontario for 1917. M. Pettit. *il Am Bee J* 58:17 Ja '18; Same. (*In Report, Beekeepers' assn. of Ontario, 1917, p. 35-8*) '18
- Ontario ag. dept., Toronto
- Results of apiary inspection. E. F. Phillips. *J Econ Entom* 10:204-10 F '17; Same cond. *Am Bee J* 57:163-4 My '17

**Bee-martins.** See Kingbirds

**Bee moths**

- Fighting apiary pests; the waxmoth. F. C. Pellett. *il Country Gent* 82:331 F 17 '17
- Habits of the waxmoth. *il Am Bee J* 56:403-4 D '16
- Moths. E. M. Wilson. *Am Bee J* 58:418 D '18

**Bee paralysis**

- Bee paralysis or Isle of Wight disease. I. Fowls. *Gleanings* 45:681 S '17
- Nosema apis, or bee paralysis. J. S. Cox. *Gleanings* 44:286-7 Ap 1 '18
- Representative from Great Britain investigating bee paralysis in the United States. *Gleanings* 44:583 J1 15 '16
- Simple cure for bee paralysis. H. E. Crowther. *Gleanings* 44:36 Ja 1 '16
- Two forms of bee paralysis in Jamaica. C. N. Eddowes. *Gleanings* 44:284-5 Ap 1 '16

See also Bees—Diseases and pests

**Beech**

- Is the beech lightning immune? E. S. Brinton. *il Gard M* 22:208-9 Ja '16

- \* Measures are being taken by the newly appointed Dutch Minister of Agriculture, industry, and commerce to increase the supply of edible oils in the Netherlands by making full use of the domestic beechnut crop. Between 2,000 and 2,500 metric tons of these nuts may be collected by school children if every effort is made, and from this amount of raw nuts 300,000 to 400,000 kilos of oil may be obtained. The *Zuipen Gazette* reports that a price of 25 florins per 100 kilos (about 5½ cents per pound at the present rate of exchange) will be paid to the gatherers. Owners of private lands from which beechnuts are gathered will receive compensation at the rate of five per cent of the sums paid to the gatherers, and they will also have the right to purchase cattle cake, prepared from the pulp of the nuts from their property, at 50 florins per 100 kilos.—*Sci Am Sup*

Uses of commercial woods of the United States; beech, birches and maples. H. Maxwell. *U S Ag B* 12:1-56 '13

**Beechnut oil**

- Beech-oil. A. Truelle. *Int R Sci & Prac Ag* 8,no 11:1145-6 N '17

**Beef**

- Beef. K. J. Seulke. *il Cornell Rural School Leaflet* v 11, no 1:100-8 '17
- Beef for home use and local market. *Rural N Y* 77:1345, 1374 D 7-14 '18
- Beef production for New England. S. R. Morrison. *il Rural N Y* 75:547-8 Ap 1 '16
- Cost of making beef. D. Casement. *Breeder's Gaz* 69:670 Mr 23 '16
- Essentials in the selection of beef. W. C. Coffey and E. K. Augustus. *il Ill Ag Exp C* 206:1-16 '17
- Farmers' beef club. P. F. Trowbridge. *il Mo Ag Exp C* 85:1-32 '18

Natural flesh in cattle demonstrated. *il Breeder's Gaz* 69:912 Ap 27 '16

See also Meat

**Composition**

Biochemical comparisons between mature beef and immature veal. W. N. Berg. *bibliog J Ag Research* 5:667-711 Ja 10 '16

**Preservation**

- Beef for home use and local market. *Rural N Y* 77:1374 D 14 '18
- Changes in fresh beef during cold storage above freezing. R. Hoagland and others. *bibliog U S Ag B* 433:1-100 '17; Excerpts and summary. *Int R Sci & Prac Ag* 8,no 6:934-7 Je '17
- Curing beef on the farm. *Prog F* 33:1287 N 23 '18
- Curing beef on the farm. A. Boss. *Breeder's Gaz* 69:50 Ja 6 '16
- Experiments made in Germany on the treatment and use of frozen beef. E. Kallert. *Int R Sci & Prac Ag* 8,no 3:463-5 Mr '17
- Home cured beef. *Fla Ag Dept Quar B v* 28:17-20 J1 '18

See also Beef, Corned; Meat canning

**Prices**

Prospective beef prices. *Wallaces' F* 42:1681 D 14 '17

**Statistics**

Commercial stocks of fresh beef; Commercial stocks of salted and cured beef, Jan. 1. *U S Food Surveys* 1:1-3, 17-19 Je 29 '18

Commercial stocks of salted and cured beef, July 1. *U S Food Surveys* 2:2-4 S 30 '18

**Beef, Corned**

Corned beef. *Wallaces' F* 41:524 Mr 31 '16

How to make corned beef. *Prog F* 33:1202 N 2 '18

**Beef cattle.** See Cattle, Beef

**Beehive exhibits.** See Bee culture—Exhibits

**Beekeepers**

- Among eastern beekeepers. C. P. Dadant. *il Am Bee J* 57:12-13 Ja '17
- Beemen of the present—M. H. Mendelson. W. A. Pryal. *il Am Bee J* 58:47-8 F '18
- New England beekeepers. *pors Am Bee J* 56:124-6 Ap '16
- Reminiscences of early and later days. G. C. Greiner. *Am Bee J* 58:191 Je '18
- Seventy years of beekeeping. *il Am Bee J* 57:7-8, 48, 89-91, 151-3, 202, 235-7 Ja-Mr, My-J1 '17
- Some prominent Ontario beekeepers. M. Pettit. *il Am Bee J* 56:370-1, 413-14 N-D '16
- Texas beekeeper—T. W. Burleson. T. P. Robinson. *il Am Bee J* 58:20-1 Ja '18
- Why some beekeepers fail. H. B. Parks. *Am Bee J* 57:159-60 My '17

See also Women as beekeepers; also Miller, Charles C.

**Directories**

- \* List of Illinois state bee-keepers (alphabetical) for 1918. (*In Report, 1917, p. 116-22*) '18 *Ill. state beekeepers' assn., Springfield*
- Beekeepers' association of the province of Ontario**
- 37th annual report, 1916. 62p *il '17 Ontario ag. dept., Toronto*
- \* 38th annual report, 1917. 56p '18 *Ontario ag. dept., Toronto*

**Beekeepers' associations**

- How to get 2 cents more for honey. C. Gano. *Am Bee J* 58:228 J1 '18
- Just how associations can help. R. Diemer. *Gleanings* 44:661 Ag 1 '16
- New England beekeepers' societies. J. Morse. *Am Bee J* 56:126-7 Ap '16
- What can be done through organization. *Am Bee J* 58:346 O '18
- Why honey producers should organize? R. C. Gano. *il Am Bee J* 56:306-7 S '16

See also Bee clubs; also Beekeepers' association of the province of Ontario; Idaho-Oregon honey producers' association; Imperial Valley beekeepers' association; Italian



**Beekeepers' associations—Continued**

beekeepers' federation; National beekeepers' association; National honey producers' association; New Zealand honey-producers' association; Organization of the Swiss beekeepers; Texas honey producers' association

**Beer**

Food value of beer. Rural N Y 76:1288 N 10 '17  
Sorghum or dari, a new substitute for malt used in brewing. J. Raux. Int R Sci & Prac Ag 9,no 5:613 My '18  
Study of American beers and ales. L. M. Tolman. U S Ag B 493:1-23 '17  
*See also* Liquors

**Analysis**

Beers. Assn Offic Ag Chem J 2,no 2, pt 2:249-51 Ag '16  
Report on beer. H. S. Paine. Assn Offic Ag Chem J 2:187 F '17

**Bees**

Angry bees. E. M. Cole. Am Bee J 56:310 S '16  
Are bees a source of infection in the transmission of blight on fruit-trees? Gleanings 44:584 J1 15 '16  
Are bees guided by scent or sight? B. Blackburne. Gleanings 44:793 S 1 '16  
Are certain animals immune to the stings of bees? Gleanings 44:298 Ap 15 '16  
At school with the bees. H. E. Taylor. il Outing (141 W. 36th st, N.Y. 25c) 72:13-15 Ap '18  
Avoiding being stung. Gleanings 44:432 Je 1 '16  
Bee hunting. il Am Bee J 57:130 Ap '17  
Bee in court. C. O. Tarbox. Gleanings 44:1030 N 1 '16  
Bee-keeping as an adjunct to gardening. A. Smith. Gard Chron Am 22:169-70 Je '18  
Bee keeping may increase the cotton crop. R. M. Meade. il J Heredity 9:282-5, 288 O '18  
Bees and apple-blossoms. Gleanings 44:307 Ap 15 '16  
Bees and flowers. J. D. Thomas. Gard Chron Am 20:312 J1 '16  
Bees and fruit production. Gard Chron (Lond) 63:168 Ap 20 '18  
Bees and how to keep them. F. W. L. Sladen. 56p il '16 Canada Ag  
Bees as pollinators in the orchard. E. A. Earp. J Ag New Zealand 14:395-6 My '17  
Bees for the fruit grower. E. P. Powell. Gard M 23:142 Ap '16  
Bees in the greenhouse. J. T. Rosa, jr. il Country Gent 82:2024 D 22 '17  
Bees in the orchard—more fruit. il Green's Fruit Grower 37:5 Ja '17  
Bees that help make fruit. F. C. Pellett. il Country Gent 83:52 Mr 9 '18  
Bees tried by fire. E. R. Root. il Gleanings 45:29 Ja '17  
Bees vs. smelters; a famous case comes to trial in the supreme court of Ontario, Can. E. R. Root. Gleanings 45:30-1 Ja '17  
Buying bees by the pound. E. I. Farrington. il Country Gent 81:458 F 26 '16  
Changes which occur in the egg of the honeybee. J. A. Nelson. il Gleanings 44:447-50 Je 1 '16  
Circumstances alter cases—and the distance bees fly. L. E. Webb. il Gleanings 44:400 My 15 '16  
Common honey bee as an agent in prune pollination. A. H. Hendrickson. il Cal Ag Exp B 274:127-32 '16  
Common honey bee as an agent in prune pollination. A. H. Hendrickson. il Cal Ag Exp B 291:215-36 '18  
Detection of arsenic in bees. E. B. Holland. J Econ Entom 9:364-6 Je '16  
Distance bees fly. L. Macey. Gleanings 44:1127 D 1 '16  
Distance bees fly after honey—smell vs. sight. G. S. Wheeler. Am Bee J 56:131 Ap '16  
Does the female osmia decide the sex of the egg. J. H. Lovell. Am Bee J 56:275 Ag '16  
Drone and worker comb in a hive. C. C. Miller. Am Bee J 56:235 J1 '16

\* Dual queens in a colony of honey bees. C. B. Thompson. Science (Science Press, Garrison, N.Y. 15c) n s 48:294-5 S 20 '18  
Establishing an apiary. O. Kazmeier. Ohio F 137:187 F 5 '16  
Evolution of the honeybee. A. Latham. Gleanings 44:848 S 15 '16  
Flight of a bee. J. E. Crane. Am Bee J 57:53 F '17  
From a California standpoint; pollination of citrus trees. M. C. Richter. Gleanings 44:271 Ap 1 '16  
Hive and honey dew mediums for distributing fire blight; with discussion. H. A. Gossard. il J Econ Entom 9:59-67 F '16  
Honey-bee in its relation to fireblight. J. Troop. il Purdue Ag 11:34-6 D '16  
Honey-bee savings bank. T. C. Potter. il Country Life 31:90+ Ap '17  
Honeybees and spraying. T. J. Talbert. Am Bee J 57:128 Ap '17  
Honey-bees in relation to horticulture. B. N. Gates. Mass Hort Soc Trans 1917, pt 1:71-88 '17  
Honey bees to save sugar. S. E. Howard. il Country Life 34:66-7 Je '18  
How bees die. Am Bee J 57:309-10 S '17  
How bees recognize each other. J Heredity 8: 285-6 Je '17  
How far bees will go for honey. L. B. Smith. Am Bee J 58:261 Ag '18  
How products of the hive may be increased. J. E. Crane. Am Bee J 57:165 My '17  
How the bees helped to produce a record crop of apples. G. H. West. Gleanings 44:317 Ap 15 '16  
How to move hives of bees short distances. C. C. Miller. Gleanings 44:933-4 O 1 '16  
Importance of bees in horticulture. L. H. Pammel. Am Bee J 57:14-15 Ja '17  
Importance of honey production. E. R. Root. Mass Ag Bd Yearbook 1917,pt 2:66-73 '18  
Influence of bees on fruit crops. F. A. Jacobsen. J Ag New Zealand 16:205-9 Ap '18  
Just how important is the work of the bee? J. E. Crane. Gleanings 44:272 Ap 1 '16  
Life of the bee; photographs. Ag Digest 2: 494-5 Je '17  
Many conditions control the distance bees fly. J. E. Crane. Gleanings 44:722 Ag 15 '16  
Money in bees. F. Tate. Prog F 31:376 Mr 11 '16  
Moths destroy bees. Country Gent 81:391 F 19 '16  
My neighbor's garden. C. D. Stuart. il Am Bee J 57:231 J1 '17  
Number of colonies needed to pollinate properly a citrus orchard. Gleanings 44:92 F 1 '16  
Odors emitted by bees. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:8 Ja 5 '18  
Perfect pollination of citrus groves. E. G. Baldwin. Gleanings 44:269-71 Ap 1 '16  
Pollination by bees. A. Bowman. Better Fruit 12:19 S '17  
Pollination of alfalfa by bees of the genus megachile. F. W. L. Sladen. il Ag Gaz of Canada 5:125-6 F '18  
Professor Gossard's theory on fireblight transmission. E. F. Phillips. J Econ Entom 9: 362-3 Je '16  
Proof that bees fly long distances in California. P. C. Chadwick. Gleanings 44:149-51 F 15 '16  
Role of insects as carriers of fire blight. H. A. Gossard. il Gleanings 44:605-7 J1 15 '16  
Scent-producing organ of the honey-bee. Scientific Am Sup (233 Broadway, N.Y. 10c) 85: 22 Ja 12 '18  
Secret of bee control. F. C. Pellett. il Country Life 30:82 My '16  
Sense of the honeybee. N. E. Mc Indoo Am Bee J 56:195-6, 232-3 Je-J1 '16  
Sense organs of the mouth parts of the honeybee. Am Bee J 56:83 Mr '16  
Serious effect of stings. W. S. Pangburn. Am Bee J 56:277 Ag '16  
Speeding up the busy bee. E. I. Farrington. il Independent (119 W. 40th st, N.Y. 10c) 92: 420 D 1 '17  
Success after failure. E. R. Root. il Gleanings 45:433-6 Je '17

**Bees—Continued**

- Temperature of the bee's body. *Am Bee J* 58: 309-11 S '18
- Three bee-trees having top ventilation. *W. H. Crawford. Gleanings* 44:797 S 1 '16
- Unfortunate theory; bees as carriers of fire-blight. *Gleanings* 44:384-5 My 15 '16
- Value of bees in the orchard. *Rural N Y* 77: 831 Je 29 '18
- Value of honey bees in the orchard. *J. W. Love. il Prac F* 112:457 D 15 '16
- Variation in colonies of bees. *Gleanings* 44: 846 S 15 '16
- Virgil, the poet of beedom. *D. M. McDonald. Am Bee J* 58:274-5 Ag '18
- When the bees begin to rob. *E. I. Farrington. Country Life* 34:102 Je '18
- White clover and its distribution. *J. H. Lovell. il Gleanings* 44:476-8 Je 15 '16
- See also Bee culture; Honey; Honey plants; Pollen plants
- Breeding**
- Breed from the best. *C. C. Miller. Gleanings* 45:436-8 Je '17
- Breed from the best; by a tested queen. *C. C. Miller. Am Bee J* 56:228 Jl '16
- Breeding queens. *A. Getaz. Am Bee J* 56:234 Jl '16
- Building up a strain of bees. *G. M. Doolittle. Am Bee J* 57:122 Ag '17
- Can this be done? *il Gleanings* 45:40-2, 120-2, 200-1, 280-1, 368-9, 439, 522 Ja-Jl '17
- Desirability of breeding from queens having a pedigree. *G. M. Doolittle. Gleanings* 46:343 Je '18
- Fabre on parthenogenesis. *C. P. Dadant. Am Bee J* 58:156-7 My '18
- Fertilization of queen bees. *C. W. Howard and L. V. France. il Am Bee J* 57:376 N '17; Same. *J Econ Entom* 11:265-7 Ap '18
- Improve your stock of bees. *E. F. Phillips. Prog F* 31:833 Jl 1 '16
- Improving the bees. *Gleanings* 44:654 Ag 1 '16
- Laying workers which produce female offspring. *J. Anderson. Am Bee J* 58:192 Je '18
- Lost opportunity in bee-breeding. *E. R. Root. il J Heredity* 7:46-7 Ja '16
- Parthenogenesis. *Am Bee J* 56:13 Ja '16
- Parthenogenesis among the solitary bees. *J. H. Lovell. Am Bee J* 58:270 Ag '18
- Study of the factors which govern mating in the honey bee. *G. D. Shafer. il Mich Ag Exp Tech B* 34:1-19 '17
- Why dequeen the cell-builders? *F. M. Alley. Gleanings* 45:186 Mr '17
- See also Bee culture—Queens
- Breeds**
- Best bees. *Gleanings* 44:268 Ap 1 '16
- Conversations with Doolittle. *G. M. Doolittle. Gleanings* 45:603 Ag '17
- Different races. *E. F. Atwater. il Am Bee J* 57:232 Jl '17
- Different races of bees and their characteristics. *H. W. Jones. J Ag (Quebec)* 20:4 Jl '16
- Domestication of the Indian honey-bee. *L. V. Newton. il Ag J of India* 12:44-57 Ja '17
- Goldens vs. the leather-colored Italians; symposium. *Gleanings* 44:319-22 Ap 15 '16
- Is it best to have one dominant race of bees only? *T. T. Taylor. Gleanings* 44:1171-2 D 15 '16
- Is the black bee the stronger? *W. Beucus. Gleanings* 44:117-18 F 1 '16
- Italian bee—history of its importation. *C. P. Dadant. Am Bee J* 58:415 D '18
- Italian bees in Liguria. *V. Oreggia. map Am Bee J* 56:159 My '16
- Punics and parthenogenesis. *P. J. Baldensperger. Am Bee J* 58:375-6 N '18
- Puzzles; the curse of goldens. *A. C. Miller. Gleanings* 44:146-7 F 15 '16
- Classification**
- \* Erroneous generic determinations of bees. *C. Robertson. Science (Science Press, Garrison, N.Y. 15c) n s* 48:368-9 O 11 '18
- Diseases and pests**
- Advice of Job's friends. *R. F. Holtermann. Gleanings* 44:801-3 S 1 '16
- Among eastern beekeepers; Isle of Wight disease. *C. P. Dadant. il Am Bee J* 57:84-6 Mr '17
- Argentine ant. *Am Bee J* 58:410 D '18
- \* Bee disease. *Nature (St Martin's st, London, W. C. 6d)* 101:47-8 Mr 21 '18
- \* Bee disease; reply. *D. Ellis. Nature (St Martin's st, London, W. C. 6d)* 101:103-4 Ap 11 '18
- Bee disease control. *E. G. Carr. il maps N J Ag Dept C* 3:1-30 '17
- Bee diseases and enemies. *E. F. Phillips. Prog F* 31:1185 O 7 '16
- Bee paralysis. *Major Shallard. Gleanings* 44: 721-2 Ag 15 '16
- Cures and immunity of the Isle of Wight disease. *G. W. Bullamore. Gleanings* 44:783-4 S 1 '16
- Destruction of germs of infectious bee diseases by heating. *G. F. White. U S Ag B* 92:1-8 '14
- Diagnosis of bee diseases by laboratory methods. *A. H. McCray and G. F. White. bibliog il U S Ag B* 671:1-15 '18
- Disappearing bee disease. *R. F. Holtermann. Gleanings* 45:766 O '17
- Disappearing disease. *E. J. Ladd. Gleanings* 46:85-6 F '18
- \* Foul brood and other diseases of bees. (*In Report, 1917, p. 16-22*) '18 Ill. State beekeepers' assn., Springfield
- Is it a new or old trouble? *W. C. Mollett. Gleanings* 44:864 S 15 '16
- Is the Isle of Wight disease new? *C. E. Bartholomew. Gleanings* 44:720 Ag 15 '16
- Isle of Wight bee disease. *Gard Chron (Lond)* 64:90 Ag 31 '18
- Isle of Wight disease. *Gard Chron (Lond)* 60: 273 D 2 '16
- Isle of Wight disease in bees. *J Bd Ag* 24:1266-7 F '18
- Isle of Wight disease of bees. *G. P. Darnell-Smith. Ag Gaz of New South Wales* 27:731-2 O '16
- Isle of Wight disease or bee plague in Ohio. *Gleanings* 44:711-12 Ag 15 '16
- Isle of Wight disease shows various symptoms. *B. Blackbourne. il Gleanings* 44:451-2 Je 1 '16
- Losses in southern beekeeping. *J. C. Scott. Am Bee J* 58:348 O '18
- New bee disease and cure. *A. A. Clarke. Gleanings* 44:285-6 Ap 1 '16
- New bee disease in the West; symptoms and cure; symposium. *Gleanings* 44:69-74 Ja 15 '16
- New bee disease; more light wanted. *G. W. Bullamore. Gleanings* 44:314-15 Ap 15 '16
- New or old bee-disease; Isle of Wight disease and bee paralysis. *Gleanings* 44:47-8 Ja 15 '16
- Nosema apis in Victoria. *F. R. Beuhne. J Dept Ag Victoria* 14:629-32 O '16
- Nosema vs. Isle of Wight disease. *G. W. Bullamore. Gleanings* 44:721 Ag 15 '16
- Open letter to F. Dundas Todd. *A. C. Ames. Am Bee J* 58:236 Jl '18
- Paralysis and the Isle of Wight disease; are they the same? *F. R. Beuhne. Gleanings* 44: 313-14 Ap 15 '16
- Sacbrood. *G. F. White. bibliog il U S Ag B* 431:1-54 '17; Abstract. *Am Bee J* 57:406 D '17
- Sacbrood more disastrous to colonies than has been generally supposed. *B. N. Gates. Gleanings* 44:913 O 1 '16
- Suggested new antiseptic treatment for bee diseases. *W. J. Sheppard. Am Bee J* 58:89 Mr '18
- Widespread bee disorder. *il Am Bee J* 56:14 Ja '16
- See also Bee moths; Bee paralysis; Foul brood
- Exhibits**
- See Bee culture—Exhibits
- Feeding**
- See Bee culture—Feeding of bees



Bees—Continued

Photographs and photography

- As glimpsed thru the camera. H. H. Root. *il* Gleanings 44:67-9, 105-7, 860-1 Ja 15-F 1, S 15 '16  
Common and uncommon sights among the bees. H. H. Root. *il* Gleanings 44:402-4 My 15 '16  
Putting bees into the movies. E. A. Dench. Gleanings 44:534 Jl 1 '16

Statistics

- Honeybee report, May 1, 1918. Monthly Crop Rep 4:53 My '18

Transportation

- Bees in combless packages. *il* Am Bee J 57: 223-5; 58:58 Jl '17, F '18  
Bees in pound packages; symposium. *il* Gleanings 45:172-7 Mr '17  
Cage that will do it. E. R. Root. *il* Gleanings 46:531-2 S '18  
California man sends bees by the pound. Gleanings 44:137-8 F 15 '16  
Faults of the express companies. J. F. Archdekin. Am Bee J 58:117 Ap '18  
Motor-car trailer for moving bees. E. A. Earp. *il* J Ag New Zealand 13:279-80 O '16  
Moving bees. *il* Am Bee J 58:93 Mr '18  
Moving bees. L. L. Andrews. Am Bee J 57:123 Ap '17  
Moving bees. F. C. Pellett. *il* Country Gent 82:1790 N 17 '17  
Moving bees by wagon and automobile. W. Foster. *il* Am Bee J 57:94 Mr '17  
My experience in purchasing bees in pound packages. F. L. Barber. Am Bee J 57:91 Mr 17  
Points on queen mailing. G. Anderson. *il* Am Bee J 57:130 Ap '17  
Pound package experience. J. H. Peterson. Gleanings 46:149 Mr '18  
Shipping bees by express in combless packages. Gleanings 44:136-7 F 15 '16  
Shipping bees in packages without combs. M. C. Berry. *il* Am Bee J 57:49 F '17  
Shipping full colonies and nuclei. H. D. Murry. Am Bee J 57:52 F '17

Wintering

See Bee culture—Wintering

Beeswax

- Amateur wax rendering. G. C. Greiner. Am Bee J 57:303 S '17  
Bartlett-Miller capping-melter. H. H. Root. *il* Gleanings 44:324-5 Ap 15 '16  
Capping and comb-melters up to date. H. Bartlett-Miller. Gleanings 44:164-6 F 15 '16  
Collection and exportation of the wax of wild bees in African colonies. A. S. Ashton. Gleanings 44:445 Je 1 '16  
Common and uncommon sights among the bees. H. H. Root. *il* Gleanings 44:442-3 Je 1 '16  
Conditions under which wax production alone is possible. L. Burr. Gleanings 44:433-4 Je 1 '16  
Giving wax the main track where the cost of getting honey to market is prohibitory. W. G. Hewes. Gleanings 44:436 Je 1 '16  
Handy device for melting beeswax. J. H. Todd. *il* Gleanings 44:111-12 F 1 '16  
Intensive wax rendering. H. H. Root. *il* Gleanings 46:77-83 F '18  
New wrinkle in wax rendering. H. H. Root. *il* Gleanings 44:1019-23 N 1 '16  
Preparing wax for market. H. W. Jones. J Ag (Quebec) 19:255 Je '16  
Production of wax by honey bees. D. A. Davis. *il* Am Bee J 58:338-9 O '18  
Production of wax in Cuba. F. Reiman. Gleanings 44:435-6 Je 1 '16  
Profitable production of beeswax. J. Gray. *il* Gleanings 44:444 Je 1 '16  
Race between honey and wax. A. J. Wright. Gleanings 44:441 Je 1 '16  
Rendering beeswax; with discussion. J. Newton. (*in* Report, Beekeepers' assn. of Ontario, 1917, p. 18-23) '18 Ontario ag. dept., Toronto

- Rendering cappings into marketable wax. J. L. Byer. *il* Gleanings 44:438-9 Je 1 '16  
Rendering foul-brood combs into wax. E. F. Townsend. Gleanings 44:439 Je 1 '16  
Saving the waste beeswax. G. L. Emerson. Gleanings 46:76-7 F '18  
Unheated wax presses. O. Ritland. *il* Gleanings 46:83-4 F '18  
Wax-press which never chills. F. J. Severin. *il* Gleanings 46:84 F '18  
Wax production a specialty, not a side line. Gleanings 44:425 Je 1 '16

Beet. See Beets

Beet industry. See Beets; Sugar industry

Beet juice

- Acetic acid and acetone from beets. Scientific Am (233 Broadway, N.Y. 10c) 118:223 Mr 9 '18

Beet leafhoppers. See Leaf hoppers

Beet pulp. See Feeding and feeding stuffs—Beets

Beet sirup

- Homemade beet sirup. Rural N Y 76:902 Jl 21 '17  
Homemade sugar beet sirup. Ohio F 142:513 N 23 '18  
Making beet sirup at home. Rural N Y 77: 1210 O 26 '18  
Making sugar beet sirup. A. N. Clark. Rural N Y 77:695 My 18 '18  
Making sugar beet sirup at home. C. H. Sharp. Rural N Y 77:640 My 4 '18  
Sugar-beet sirup. C. O. Townsend and H. C. Gore. *il* Farmers' B 323:9-13 '17  
Sugar beets for sirup. Wallaces' F 43:1236 Ag 30 '18

Beet sugar industry. See Sugar industry

Beetles

- Scolytid beetles observed in Oregon. W. J. Chamberlin. *Int R Sci & Prac Ag* 9,no 1:121-3 Ja '18  
Studies on the life-history of two Kansas scarabæidæ (Coleop.). W. P. Hayes. *biolog J Econ Entom* 11:136-44 F '18  
Troublesome household pest (attagenus plebius Sharp) of Hawaii. J. F. Illingworth. *il J Econ Entom* 10:340-4 Je '17  
See also Alder flea-beetles; Asparagus beetles; Barkbeetles; Bean leaf beetles; Bud weevils; Calosoma beetles; Carpet beetles; Carrot beetles; Cherry leaf beetles; Cleridae; Cone beetles; Cornstalk beetles, Rough-headed; Cranberry rootworms; Cucumber beetles; Cucumber beetles, Striped; Desert corn flea-beetles; Eggplant tortoise beetles; Elm leaf beetles; Flea-beetles; Fungus beetles; Grape root-worms; Hickory bark beetles; Ladybirds; Mustard beetles; Powder post beetles; Rhinoceros beetles; Spinach carrion beetles; Tiger beetles; Tobacco beetles; Violet rove beetles; Weevils; White grubs

Beets

- Beet as a substitute for cotton in the manufacture of nitrocellulose. Scientific Am (233 Broadway, N.Y. 10c) 116:575 Je 9 '17  
Beet sugar. W. L. Williams. J Dept Ag Victoria 16:416-19 Jl '18  
Beet sugar industry in the United States and Europe. Economic World (128 Water st., N. Y. 25c) n s 13:627-8 My 5 '17  
Beet-sugar production; northwestern Ohio farms adapted to beet culture. C. E. Thorne. Ohio Ag Exp B v 3:77-8 Mr '18  
Beeting the sugar famine. R. H. Moulton. *il* Am Coop J 13:325-6 Ap '18  
Beets. Market Growers J 19:292-3+ D 15 '16  
Behaviour of bolting beets. O. Munerati and T. V. Zapparoli. *Int R Sci & Prac Ag* 8,no 5:723-6 My '17  
Cold-frame beets. J. T. Rosa, jr. *il* Country Gent 82:1694 N 3 '17  
Experiences of growers; symposium. Market Growers J 23:97+ S 1 '18  
Experiments in connection with the assimilation of potassium and sodium ions by the sugar beet. J. Stoklasa. *Int R Sci & Prac Ag* 7,no 8:1102-3 Ag '16

**Beets—Continued**

- Experiments in transplanting sugar beets. F. J. Pritchard and L. E. Longley. *il Am Soc Agron J* 8:106-10 Mr '16
- Experiments on fertilising sugar beets with manganese. *Int R Sci & Prac Ag* 7,no 1:76 Ja '16
- Fertilizing sugar beets for profit. J. W. Henceroth and C. A. Waugh. (Soil improvement com. Pamph. 24) 15p *il n.d. Nat. fertilizer assn., Chicago*
- Filling the sugar bowl. E. E. Weir. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:288-9 O 20 '17
- Growing of sugar beet. *J Bd Ag* 22:1210-14 Mr '16
- Growing peas and beets. *W Va Ag Ext C* 63 3p '16
- Growing sugar beets under humid conditions. C. O. Townsend. *il Farmers' B* 568:1-24 '18 (rev.)
- Growing worth-while beets. A. Kruhm. *il Ohio F* 137:262-3 F 19 '16
- Home garden; the beet is an easy crop to raise. *il Country Gent* 83:24 Mr 2 '18
- How to succeed with sugar beets. J. F. Wojta and A. H. Wright. *map Wis Ag Ext C* 103 4p '18
- Increased sugar beet acreage important. *Irr Age* 32:122 Je '17
- Increased sugar beet area. *O Judd Farmer* 60:8 My 6 '16
- Influence of manganese on the nitrogen content of sugar beets; experiments in Germany. K. Ulrich. *Int R Sci & Prac Ag* 8, no 5:742-3 My '17
- Influence of the lime: magnesia ratio in the soil on the yield in seed of sugar-beets. O. Fallada and L. K. Greisenegger. *Int R Sci & Prac Ag* 8,no 1:81-2 Ja '17
- Irrigation of sugar beets. F. S. Harris. *il Utah Ag Exp B* 156:1-24 '17
- Keep up sugar crop. *Weekly N L* 5:7 N 21 '17
- Sugar beet. H. Hart. *J Dept Ag S Australia* 21:218-21 O '17
- Sugar beet culture. M. J. Pllice. *Purdue Ag* 12:356-7 Mr '18
- Sugar beet culture. R. L. Stewart. *il N M Ag Exp B* 107:1-30 '17
- Sugar-beet growers urged to increase yields this year. *Weekly N L* 5:1 Je 5 '18
- Sugar-beet growing under irrigation. C. O. Townsend. *il Farmers' B* 567:1-28 '18 (rev)
- Sugar-beet sirup. C. O. Townsend and H. C. Gore. *il Farmers' B* 323:1-13 '17
- Sugar beet supremacy. G. F. Stratton. *il Country Gent* 83:13-4 Ja 5 '18
- Sugar beets. C. A. Zavitz and A. W. Mason. *il Ontario Ag Dept B* 262:1-12 '18
- Sugar beets for a sure market. G. F. Stratton. *il Country Gent* 82:1482-3 S 29 '17
- Sugar beets: preventable losses in culture. H. B. Shaw. *il U S Ag B* 238:1-21 '15
- Thrips as pollinators of beet flowers. H. B. Shaw. *il U S Ag B* 104:1-12 '14
- Use of checks and repeated plantings in varietal tests. F. H. Pritchard. *Am Soc Agron J* 8:65-81 Mr '16
- When beets appear. D. B. Haines. *Country Gent* 81:1096 My 20 '16
- See also* Beet sirup; Feeding and feeding stuffs—Beets; Mangels

**Analysis**

- Determination of the dry matter in beets. R. K. Kristensen. *Int R Sci & Prac Ag* 8,no 1:42-7 Ja '17

**Breeding**

- Some recent investigations in sugar-beet breeding. F. J. Pritchard. *Bot Gaz* 62:425 65 D '16; Abstract. *Int R Sci & Prac Ag* 8,no 3:365-70 Mr '17

**Diseases and pests**

- Bacillus morulans* n. sp. a bacterial organism found associated with curly top of the sugar beet. P. A. Boncquet. *il Phyt* 7:269-89 Ag '17
- Bacterium causing a disease of sugar-beet and nasturtium leaves. N. A. Brown and C. O. Jamieson. *il J Ag Research* 1:189-210 D '13

Beet leafhopper and the curly-leaf disease that it transmits. E. D. Ball. *bibliog il map Utah Ag Exp B* 155:1-56 '17

Diseases and pests of the sugar-beet observed in Austria-Hungary, during 1915. O. Fallada. *Int R Sci & Prac Ag* 8,no 1:172-4 Ja '17

Field studies of cercospora beticola. M. B. McKay and V. W. Pool. *il Phyt* 8:119-36 Mr '18

Field studies of the crown-gall of sugar beets. C. O. Townsend. *il map U S Ag B* 203:1-8 '15

Histological relations of sugar-beet seedlings and phoma betae. H. A. Edson. *il J Ag Research* 5:55-8 O 4 '15

Mosaic disease in beets. J. Lind. *Int R Sci & Prac Ag* 7,no 5:747 My '16

New disease of beets, probably of a physiological nature, in the north of France. *Int R Sci & Prac Ag* 7,no 1:151 Ja '16

Notes on the beet leafhopper, *eutettix tenella* Baker. H. H. Severin and W. Thomas. *J Econ Entom* 11:308-12 Je '18

Obtaining beet leafhoppers nonvirulent as to curly-top. C. F. Stahl and E. Carsner. *J Ag Research* 14:393-4 Ag 26 '18

Phoma betae on the leaves of the sugar beet. V. W. Pool and M. B. McKay. *il J Ag Research* 4:169-78 My '15

Rheosporangium aphanidermatus, a new genus and species of fungus parasitic on sugar beets and radishes. H. A. Edson. *il J Ag Research* 4:279-92 Ji '15

Seedling diseases of sugar beets and their relation to root-rot and crown-rot. H. A. Edson. *bibliog il J Ag Research* 4:135-68 My '15

Spinach carrion beetle. R. A. Cooley. *il J Econ Entom* 10:94-102 F '17

Wild vegetation as a source of curly-top infection of sugar beets. P. A. Boncquet and C. F. Stahl. *il J Econ Entom* 10:392-7 Ag '17

*See also* Sugar-beet leafspot; Sugar-beet nematodes; Sugar-beet root-lice; Sugar-beet thrips

**Prices**

- Bitter complaints of beet growers. H. Myrick. *O Judd Farmer* 62:4 Je 23 '17
- Ten cent sugar, \$10 beets? *O Judd Farmer* 60:11 Ja 1 '16

**Seed**

- Present status of the sugar-beet seed industry in the United States. C. O. Townsend. *il U S Ag Yearbook* 1916:399-410; Same. Separate 695
- Production of seed of sugar beet in Russia. *Int R Sci & Prac Ag* 8,no 3:370-3 Mr '17
- We can raise sugar-beet seed. R. Stewart. *il Country Gent* 81:72 Ja 8 '16

**Statistics**

- Area of sugar beets planted, 1918. *Monthly Crop Rep* 4:76 Ji '18
- Heavy reduction in the 1918 sugar beet acreage in the United States. *Economic World* (128 Water st., N.Y. 25c) n s 16:232 Ag 17 '18
- Sugar beets and beet sugar, 1917. *Monthly Crop Rep* 3:119 D '17
- Sugar beets: area planted, 1913-1917. *Monthly Crop Rep* 3:59 Ji '17

**Storage**

- Loss in tonnage of sugar beets by drying. H. B. Shaw. *il U S Ag B* 199:1-12 '15

**Sugar content**

- Correlations between morphological characters and the saccharine content of sugar beets. F. J. Pritchard. *il Am J Bot* 3:361-76 Ji '16; Abstract. *Int R Sci & Prac Ag* 8,no 2:240-4 F '17
- Effect of removal of the leaves upon the sugar content of individual beets. *Int R Sci & Prac Ag* 7,no 1:75-6 Ja '16
- Formation and disappearance of saccharose in the beet. H. Colin. *Int R Sci & Prac Ag* 8,no 6:850-1 Je '17



**Beets**—Sugar content—*Continued*

Increase in sucrose content of sugar beets after their removal from the soil. F. G. Weichmann (Sugar (Chicago) 19, no. 6:220-4 '17). Exp Sta Record 38, no 6:536 '18

**Australia**

Some considerations on the advisability of endeavoring to establish the sugar beet industry in South Australia. A. J. Perkins. J Dept Ag S Australia 21:547-70 F '18

**Bohemia**

Chemical and biological researches on sugar beets, in Bohemia. G. Urban. Int R Sci & Prac Ag 9, no 5:566-8 My '18

**California**

Fundamentals of sugar beet culture under California conditions. R. L. Adams. il Cal Ag Exp C 165:1-22 '17

**Canada**

Sugar beets grown on the Dominion experimental farms, 1915. (*In* Experimental farms, 1916. v. 1, p. 109-15) 45c '17 Canada Ag

**Colorado**

Child labor in the sugar-beet fields of Colorado. E: N. Clopper and L: W. Hine. (Pamph. 259) 25c 34p il '16 Nat. child labor com., 105 East 22d st., N.Y.

**France**

Experiments on sugar-beet growing in the south-west of France. H. Pouygues. Int R Sci & Prac Ag 7, no 4:540 Ap '16

**Michigan**

Dollars and beets; how the Michigan beet growers saved nearly one and a half million dollars through organization. Am Coop J 12: 621 My '17

**Minnesota**

Cost of producing sugar beets. F. W. Peck. map il Minn Ag Exp B 154:1-35 '16

**Montana**

Farm practice in growing sugar beets in the Billings region of Montana. S. B. Nuckols and E. L. Currier. il map U S Ag B 735: 1-37 '18

**Netherlands**

Netherlands beet-sugar industry. F. W. Mahin. (Commerce Reports no. 152) p 1218-19 (Je 28) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Russia**

Russian sugar and the superphosphate difficulty. Am Fert 46:44+ F 17 '17  
Sugar industry in Russia. N. A. Krioukov. Int R Sci & Prac Ag 8, no 3:452-5 Mr '17

**South Dakota**

Sugar beets in South Dakota. il S D Ag Exp B 173:592-620 '17

**United States**

Beet-sugar industry in the United States. C. O. Townsend. bibliog il U S Ag B 721:1-54 '18

Farm practice in growing sugar beets for three districts in Utah and Idaho, 1914-15. L. A. Moorhouse and others. il map U S Ag B 693:1-43 '18

Report on the beet sugar industry in the United States. 164p '17 Federal trade commission, Washington, D.C.

**Washington**

Possibilities of sugar beet culture in Washington. I. D. Cardiff. Wash Ag Exp Pop B 105:1-8 '16

**Bee-you-tiful** Pecanutte. F. Tilden. il Country Gent 83:10-11+ S 7 '18

**Begonias**

*Begonia epirus*. J: S. Doig. il Gard Chron Am 22:57 F '18

*Begonia Evansiana*. il Gard Chron (Lond) 64: 209 N 23 '18

*Begonia parva*. il Gard Chron (Lond) 64:77 Ag 24 '18

Endemic *begonia* of Hawaii. V. MacCaughy. Bot Gaz 66:273-5 S '18

Growing *begonia* Glorie de Lorraine. J. Taylor. Gard Chron Am 20:144 Mr '16

New hybrid winter-flowering *begonias*. il Gard Chron Am 21:92-3 Mr '17

Raising of winter-flowering *begonias*. J: Heal. Gard Chron (Lond) 60:96 Ag 26 '16

Starting the bedding *begonia* from seed. il Country Gent 83:37 My 18 '18

Winter-flowering *begonias*. Gard Chron (Lond) 59:62 Ja 29 '16

Winter flowering *begonias*. A. Jackson. il Gard Chron Am 21:431 D '17

**Behavior.** See Conduct of life

**Belgian hares**

Belgian hare. C. Wagner. Am P Advocate 25: 426 Ap '17

Belgian hare. M. A. Young. il Am P Advocate 24:468-9 Ap '16

Belgian hares. F. V. Funk. Am P Advocate 26:543 Ag '18

Belgian hares. E. C. Ware. Rural N Y 77:207 F 9 '18

Belgian hares for me. B. F. Coleman. Am P Advocate 25:144 Ja '17

Boy's experience with Belgian hares. L. P. Haist. Am P Advocate 25:634 S '17

Brief talk on Belgian hares. Rural N Y 75: 1140 Ag 26 '16

Care and breeding of the Belgian hare. F. T. Wiberg. Prac F 112:50 F 1 '16

Cut down the butcher's bill by raising Belgian hares. Am P Advocate 25:634 S '17

How I raise Belgian hares. F. L. Van Wegen. Am P Advocate 25:244 F '17

Keeping Belgian hares. W. R. Kiefer. Am P Advocate 25:554 Jl '17

My experience with Belgian hares. G. C. Baggerly. Am P Advocate 25:482 My '17

My experience with Belgian hares. H. F. Pearson. Am P Advocate 24:396-7 Mr '16

Now they sit up and take notice. Mrs C. E. Cooper. Am P Advocate 24:248 F '16

One woman's experience with Belgian hares. S. Matteson. Am P Advocate 25:518 Je '17

Raising and breeding Belgians. F. Sowers. Am P Advocate 24:560 My '16

Raising Belgian hares. E. F. Hill. Am P Advocate 24:754 S '16

Raising Belgian hares. G. Hupp. Am P Advocate 24:814 O '16

Raising Belgian hares. W: L. Scheidt. Am P Advocate 24:875 N '16

Raising Belgian hares. M. E. Tilton. Am P Advocate 25:62 D '16

Raising Belgian hares and other rabbits. D: E. Lantz. il Farmers' B 496:1-16 '17 (rev)

Raising Belgian hares as a business. F. A. Pinkley. Am P Advocate 24:162 Ja '16

Raising Belgian hares for a living. F. Wiberg. il Country Life 29:88 Ap '16

Why and how I raise Belgian hares. C. A. Carter. Am P Advocate 24:612 Je '16

**Belgians (horses)**

Background of the Belgian draft horse. E. H. Joye. il Breeder's Gaz 70:1198 D 21 '16

Belgian. E. S. Akin. il N Y Ag Dept Rep 1916, pt 2:82-90 '17

From N Y Ag Dept Bulletin 76

Belgian, Clyde and Shire. Wallaces' F 42: 1623 N 30 '17

Belgian horses. R. A. Hayne. il Nat Stock & F 41:402 Jl 21 '17

Belgians as related to future breeding. F. B. Holbert. Breeder's Gaz 72:1267 D 27 '17

Belgians at the International. Breeder's Gaz 70:1126a D 14 '16

Case of the Belgian. H. M. Brown. il Breeder's Gaz 71:1018-19 My 17 '17

For me it was the Belgian. R. Hagler. il Breeder's Gaz 72:1142 D 20 '17

Man and his Belgians. Breeder's Gaz 72:176 Ag 9 '17

Modern type in the American Belgian horse. H. W. Vaughan. il Field 11 27:613 Ag '17

**Belgians (horses)—Continued**

She made him prosperous. W: R. Butler. *il* Country Gent 82:686 Ap 7 '17  
 Success with purebred Belgians. C. M. McConnell. *il* Ohio F 142:6 Jl 6 '18

**Belgians in the United States**

Belgian farmer in America. F. Byers. Hoard's D 52:246 S 15 '16

**Belgium**

Dwellers in the free forest forced to flee before the German guns. *Am For* 24:204 Ap '18

See also subhead Belgium under Agricultural cooperative credit association; Agricultural credit; Agricultural education; Agriculture; Agriculture, Cooperative; Food supply; Horticulture

**Description and travel**

Background of the Belgian draft horse. E. H. Joye. *il* Breeder's Gaz 70:1198 D 21 '16

**Belladonna**

Breeding for atropine. L. W. Army. *il* J Heredity 8:164-7 Ap '17

Common medicinal plants. A. Retlas. *Ohio F* 137:744 My 27 '16

Cultivation of belladonna in California. A. Schneider. *il* Cal Ag Exp B 275:135-60 '16

**Alkaloid content**

Individual variation in the alkaloidal content of belladonna plants. A. F. Sievers. *J Ag Research* 1:129-46 N '13

Some effects of selection on the production of alkaloids in belladonna. A. F. Sievers. *U S Ag B* 306:1-20 '15

**Bellflowers.** See Campanulas

**Belting**

Belting the tractor. F. N. G. Kranich. *Country Gent* 83:53 Ja 19 '18

Care of farm belting. R. H. Smith. *il* Rural N Y 77:1257-8 N 9 '18

Care of thresher belts. P. T. Hines. *Country Gent* 82:1299 Ag 18 '17

Good way to mend a cut canvas belt. J. Francis. *Power F* 27:11 My '18

Good way to test cotton belts. J. Francis. *Power F* 27:50 F '18

Harnessing the farm engine; belt speeds must be right if the machinery is to deliver full power. P. S. Rose. *il* Country Gent 83:10-11+ Ag 17 '18

How to lay out and put up a lineshaft. R. H. Smith. *Power F* 26:9 N '17

Pointers on the lacing of belts. *Power F* 26:47 Mr '17

Proper methods of lacing leather and canvas belts with wire and leather laces. *il* Country Gent 83:30 Je 29 '18

Right way to run leather belts. J. B. Winslow. *Power F* 27:13 S '18

Running belts crosswise; what are the disadvantages and how may the necessity be avoided? *N Y Prod R* 46:82 My 15 '18

Sprocket wheels for detachable link belting. F. N. G. Kranich. *Am Soc Ag Eng Trans* 9:115-26 '16

See also Pulleys

**Benches, Work.** See Workbenches

**Benefit societies**

Mutual insurance societies in Finland in 1913. *Int R Ag Econ* 63:58-66 Mr '16

Trade unions and co-operative and mutual societies in Belgium. *Int R Ag Econ* 63:7-8 Mr '16

**Bengal grain.** See Chick peas

**Bennettites**

Roots in bennettites. M. C. Stopes. *il* Ann Bot 31:257-9 Ap '17

**Benton (N.Y.) cooperative company**

Farmers' co-operative company. W. G. Kipp. *Rural N Y* 75:32 Ja 8 '16

**Benzene**

Toxicity of various benzene derivatives to insects. W: Moore. *bibliog J Ag Research* 9:371-81 Je 11 '17

**Benzoic acid**

Agricultural source of benzoic acid. P. J. Maloney and F. T. Shutt. *Ag Gaz of Canada* 5:1130-2 D '18

Presence of some benzene derivatives in soils. E. C. Shorey. *J Ag Research* 1:357 F '14

**Benzoin aestivale.** See Spice bush

**Berberi**

Berberi and cottonseed poisoning in pigs. G: M. Rommel and E: B. Vedder. *J Ag Research* 5:489-93 D 13 '15

Known and unknown with regard to the etiology and prevention of berberi, by E: B. Vedder; Berberi, estudio epidemiológico y experimental, by M. G. Lebrede; Concerning the chemical nature of the vitamins, by R. R. Williams. (*In* Pan American scientific congress Pro., 1915, v. 10, p. 22-9, 29-39, 39-47) '17

**Berkshires (swine)**

Berkshire business. *Country Gent* 81:449 F 26 '16

Berkshire hogs in the East. R: L. Faux. *Breeder's Gaz* 74:264 Ag 22 '18

Berkshire oldest and most aristocratic of the swine breeds. H. T. Morgan. *il* Country Gent 81:1897 O 28 '16

Berkshire prices. H. Karl. *Breeder's Gaz* 73:1088 My 23 '18

Berkshire victories at the International. W. N. Lovejoy. *Breeder's Gaz* 72:1260 D 27 '17

Berkshires and ideals. L. Ogilvy. *Breeder's Gaz* 74:186 Ag 8 '18

Berkshires at the National. *Swine World* 5:12 N '17

Berkshires at the National swine show; list of awards. J. A. Frost. *Swine World* 6:29 N 18

Feeding and fitting Berks for the show ring. A. E. Wright. *il* Field II 26:120-1 F '16

High-priced Berkshire boars. J: Y. Beaty. *Breeder's Gaz* 74:46 Jl 11 '18

Managing a Berkshire herd as a business. C: M. Talmadge. *Breeder's Gaz* 72:1156 D 20 '17

Quality Berkshires on exhibit. *il* Field II 27:878 N '17

Revolution of the Berkshires. F. R. Steele. *Breeder's Gaz* 73:1199 Je 6 '18

Strong Berkshire classes at Inter-state fair, Trenton, N.J. F: C. Minkler. *il* Field II 26:939 N '16

Suicide of the Berkshires. H. Karl. *Breeder's Gaz* 73:702 Ap 4 '18

Suicide of the Berkshires again. H. W. Gosard. *Breeder's Gaz* 73:861 Ap 25 '18

Values of undeveloped Berkshire boars. E. E. Hyatt. *Breeder's Gaz* 74:10 Jl 4 '18

Why Berkshires for the East? H: Fielden. *Field II* 26:613 Jl '16

Why I breed Berkshires. F. J. Curtin. *il* Field II 28:571 Ag '18

See also National Berkshire congress association

**Price lists**

Berkshires reign at New Brunswick. *Field II* 26:224-5+ Mr '16

Sale at Hood farm, Lowell, Mass. *Breeder's Gaz* 69:563 Mr 9 '16; *Field II* 26:334 Ap '16

**Bermuda.** See Potatoes—Bermuda; Poultry—Bermuda

**Bermuda grass**

Bermuda grass. S: M. Tracy. *map Farmers' B* 814:1-19 '17

Bermuda grass a good feed, but troublesome as weed. *Weekly N L* 6:1 N 20 '18

Bermuda our great pasture grass. *Prog F* 33:1251 N 16 '18

Bermuda the best pasture grass. *Prog F* 31:341 Mr 4 '16

Bluegrass of the South. E. E. Miller. *Hoard's D* 52:327 S 29 '16

Making Bermuda grass pasture. J. F. Duggar. *Prog F* 31:418 Mr 18 '16

Starting the Bermuda pasture. L. A. Markham. *Prog F* 31:602 Ap 29 '16



**Bermuda grass—Continued**

**Seed**

Hastening the germination of Bermuda grass seed by the sulfuric acid treatment. W. E. Bryan. *il Am Soc Agron* 10:279-81 O '18

**Berries**

Berry land worth \$2,000 per acre. *il Wallaces'* F 41:127 Ja 28 '16

Building a berry patch. C. N. Crottsenburg. *il Fruit-Grower* 27:158+ Mr 1 '16

Culture of small fruits on irrigated sandy land. R. W. Allen. *il Ore Ag Exp* B 142:1-14 '17

Fertilizers for small fruits. W. J. Green. *Ohio F* 139:554 Ap 14 '17

Finds berries pay. J. F. Fitzgerald. *Fruit-Grower* 27:205 Mr 15 '16

First fruits of victory. M. G. Kains. *Gard M* 27:232 Je '18

Growing bush fruits. W. Walton. *il Fruit-Grower* 27:158-9 Mr 1 '16

Growing of small fruits. C. J. Stuart. *Better Fruit* 10:26 My '16

Growing the small fruits. *Fruit-Grower* 27:163 Mr 1 '16

History and status of small fruits. S. J. Bole. *Am Fruit Grower* 38:8 N '18

Irrigation practice in growing small fruits in California. W. A. Hutchins. *il Cal Ag Exp* C 154:1-35 '16

Jersey berry crop. M. K. Boyer. *Am P Advocate* 26:133 Ja '18

Latest ideas in berry culture. L. J. Farmer. *il Am Fruit Grower* 38:5-6 D '18

Little garden of bush fruits. F. A. Waugh. *il Country Gent* 83:12 Mr 23 '18

Persistent fruits. E. E. Shaw. *il Country Life* 29:42 Ja '16

Plant any plant at any time in the growing season. L. B. Pierce. *Nat Stock & F* 40:285 Je 10 '16

Present outlook for small fruits. W. Hotaling. *N Y State Fruit Growers' Assn Pro* 1918: 168-73

Project to improve berries. W. Brink. *il Green's Am Fruit Grower* 38:28 Mr '18

Pruning cane fruits. J. S. Underwood. *Green's Fruit Grower* 36:8 My '16

Pumps water for berries. E. H. Favor. *Fruit-Grower* 27:363 Jl 15 '16

Raspberries, blackberries, currants, grapes and gooseberries. *il Country Gent* 81:454-5 F 26 '16

Six months of home grown berries. M. G. Kains. *il Country Life* 33:65-7 Ap '18

Small fruit culture. T. G. Bunting. *il J Ag (Quebec)* 21:148 Ap '18

Small fruit culture in California. A. H. Hendrickson. *il Cal Ag Exp* C 164:1-24 '17

Small fruits. A. J. Olney. *Ky Ag Dept Rep* 1916-1917:471-3 '18

Small fruits. W. H. Paulhamus. *Better Fruit* 12:13 Je '18

Small fruits a profitable side line. C. O. Warford. *il Prac F* 114:24 Ja 15 '18

Small fruits for home and market; starting and caring for strawberries, raspberries and blackberries. W. J. Green. *il Ohio Ag Exp* B v 3:113-20 Ap '18

Small fruits for the general farmer. *Prac F* 114:177 My 1 '18

Small fruits pay. A. A. Eastman. *Green's Am Fruit Grower* 37:8 D '17

Successful methods with cane berries. B. V. Egbert. *il Market Growers J* 19:153-4 O 1 '16

Varieties and culture of cane fruits in western Washington. J. L. Stahl. *Western Wash Ag Exp* B v 5:144-8 Ja '18

*See also* Blackberries; Blueberries; Cranberries; Currants; Dewberries; Gooseberries; Loganberries; Mulberry; Raspberries; Rubus; Strawberries

**Diseases and pests**

Common diseases of berries. M. T. Cook. *il N J Ag Exp* C 88:1-11 '17

Common diseases of the brambles. A. S. Colby. *Green's Am Fruit Grower* 38:9 Jl '18

Crown gall on raspberries and blackberries. P. Thayer. *Ohio Ag Exp* B v 1:218 Jl '15

Few insects and diseases common to small fruits. F. H. Dudley. *Maine Ag Dept B v* 17:22-7 S '13

**Marketing**

Marketing berries and cherries by parcel post. C. C. Hawbaker and C. A. Burmeister. *il U S Ag B* 688:1-17 '18

New departure in marketing small fruits. F. E. Cutting. *il Minn Hort* 46:217-20 Je '18

*See also* Central California berry growers

**Packing**

Handling the berry crop. J. S. Underwood. *il Green's Fruit Grower* 36:22 Je '16

**Statistics**

Total acreage and yield of small fruits in New York state, by counties. *N Y Ag Dept B* 79,pt 2:1397-8 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1397-8 '17

**Berry industrial school, Rome, Ga.**

Unique farm school. H. B. Arbuckle. *Am Sheep B & W* 36:282 My '16

**Berry picking**

Berry picking vacations. *Rural N Y* 76:897 Jl 21 '17

**Berseem**

Berseem or Egyptian clover. R. T. McKenzie. *J Dept Ag Victoria* 15:374 Je '17

Work in connection with bersim in 1915. B. G. C. Eolland. *Egypt Ag Tech & Sci B* 8:4-5 '16 (5c)

**Seed**

Egyptian clover seed. *Ag Gaz of New South Wales* 27:408 Je '16

**Bertrand, Edouard, 1832-1917**

Sketch. *por il Am Bee J* 57:197-9 Je '17

**Bessey, Charles Edwin**

Brief sketch of the life and work of Charles Edwin Bessey; with partial list of writings. R. J. Poole. *por Am J Bot* 2:505-18 D '15

**Betulaceae**

Anatomy and phylogenetic position of the betulaceae. C. S. Hoar. *bibliog il Am J Bot* 3:415-35 O '16

**Beverages**

Beverages, good and harmful. H. Mason. *Ohio F* 139:700, 729 My 19-26 '17

Cooling drinks from the South. M. B. Foulks. *il Country Gent* 81:1421 Jl 22 '16

Cooling drinks that are different. R. Lampman. *il Rural N Y* 75:941 Jl 1 '16

Warm weather drinks. *Wallaces' F* 41:952 Jl 7 '16

*See also* Buttermilk; Coffee; Grape juice; Liquors; Tea

**Bibio abbreviatus.** *See* March flies

**Bible plants**

Story of Easter in plants. *il Gard Chron Am* 20:178-80 Ap '16

**Bibliography**

Agricultural chemistry; government publications for sale by superintendent of documents, Washington, D.C. (Price list 40—8th ed) 13p '16 Supt. of doc., Washington, D.C.

Agriculture; Cotton and cottonseed; Tobacco; 1912-1916; Forest products. (*In* Circular of information concerning census publications, 1790-1916, p 37-42, 73-80) '17 U.S. Census bureau, Washington, D.C.

Animal industry; farm animals, poultry and dairying; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 38—10th ed) 25p '18 Supt. of doc., Washington, D.C.

Animal industry; United States public documents pertaining to farm animals, poultry, and dairying, for sale by the Superintendent of documents, Washington, D.C. (Price list 38-8th ed) 34p '16 Supt. of doc., Washington, D.C.

Annotated list of references on dehydrated foods. Technology dept., N. Y. Public library, 6p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 30c)

**Bibliography—Continued**

- Azofication; references. *Soil Sci* 6:207-17 S '18
- Bees and honey; selected list prepared by A. L. A. committee on food information. 4p mim '18 Univ. of Ill., Coll. of ag., Urbana
- Best books—new and old; authoritative books and publications; with list. E. R. MacIntyre and C. S. Hean. *Ag Digest* 1:198-9, 238-40 N-D '16
- Bibliographical work, special indexes, directories and lists of publications in progress in the Department of agriculture. (Lib. notes, no. 6) 8p mim '18 U S Ag
- Bibliography of books and magazine articles on national park subjects, Sept. 1916-Oct. 1917; Mount McKinley national park; National park publications. (*In* Report. Director of national parks, 1917, p. 231-49) U.S. Dept. of interior, Washington, D.C.
- Bibliography of food economy. State Coll of Washington Lib (Pullman) B (Home econ.) sup no 1:1-8 '17 (Mim.)
- Supplement to accompany Bulletin 3, entitled Food economy for the housewife
- Bibliography of food economy for the housewife. Wash State Coll Lib (Pullman) B 5: 1-59 Mr '18 (2d ed 25c)
- Bibliography of home economics. See monthly numbers of *Journal of home economics*
- Bibliography of rural sociology. N Y Farms & Markets Dept Ag B 97:127-35 J1 '17
- Bibliography of school lunches. L. Condell, comp. 25p '17 U.S. Bur. of educ., Washington, D.C.
- Bibliography of the Mass. ag. college; pt. 1, The institution. (Semicentennial pub., no. 2) 69p '18 Mass. ag. coll., Amherst
- Bird study in the rural school. 3d ed T; L. Hankinson. *Normal School B* (Eastern Illinois state normal school, Charleston) 53:1-19 J1 '16
- Birds and wild animals; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 39-7th ed) 14p '17 Supt. of doc., Washington, D.C.
- Books and bulletins on food conservation; supplementing the list on economical cookery. E. L. Bascom. *Wis Lib* (Madison) B v 14:115-17 Ap '18
- Books country girls should read. *Rural Manhood* 7:143-4 O '16
- Books for farm home. 15p il '16 Globe-Wernicke co., Cincinnati, O.
- Books for housewives in war time. *Mass Ag Ext Lib Leaflet* 28 1p '17
- Books for the farmer's library. W. Davis. *Prog F* 31:1479 D 23 '16
- Books on agriculture and household science. O. J. Stevenson. *Ontario Ag Dept B* 259: 1-14 '18
- Books on the farm and garden. 4p '18 Public library, South Bend, Ind.
- Books on vegetable gardening for the small library. E. L. Bascom. *Wis Lib* (Madison) B v 14:82-3 Mr '18
- Brief list of books suggested for reading and study in landscape architecture. 2p '18 Harvard univ., School of landscape architecture lib., Cambridge, Mass.
- Brief list of references on state and municipal farm colonies. U.S. Library of Congress. 3p '16
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)
- Brief list of references on wheat rust. U.S. Library of Congress. 2p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 10c)
- Bulletins on food conservation. (Home economics letter no. 26) 3p mim (Ag 31) '17 U.S. Bur. of educ., Washington, D.C.
- Bulletins we should know about; U.S. Dept. of agriculture bulletins on growing herbs and roots. *Prog F* 31:1291 N 4 '16
- Canning, preserving, drying, and storage of fruits, vegetables, and meats. G: A. Deveau. 3p mim '18 U.S. Food administration for Illinois, Urbana
- Cattle & dairying in California; a selective list of articles on cattle and dairying in California in the California state library. V. Clowe, comp. 24p '17 Cal. library school, Sacramento
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew \$1.20)
- Classified list of available Farmers' bulletins. *Mass Ag Ext C* 14 2p '17
- Conditions detrimental to seed production; bibliography. J. B. S. Norton and C. E. Leathers. *Md Ag Exp B* 216:216-26 '18
- Conservation in clothing and clothing materials; selected list of references prepared for the Library directors for Illinois and Ohio United States food administration. M. Mitchell and others. 5p mim '18 U.S. Food administration for Illinois, Urbana
- Country life and rural problems; a study outline. M. K. Reely. 39p 25c '18 The H. W. Wilson Co., 958 University av., N.Y.
- Course in food economies for the housekeeper. (Home Econ. C. 6) 8p '18 U.S. Bur. of educ., Washington, D.C.
- Dehydrated foods; a list of references to material in the N.Y. public library. P. Jones. (Reprinted from the Bul. of the N.Y. public library, Oct. 1917) 13p 5c '17 New York public library, N.Y. city
- Economic biology; literature relating to entomology, botany, floriculture, horticulture, agriculture, forestry. (Catalog no. 37) 64p '17 Franklin bookshop, 920 Walnut st., Philadelphia
- \* Economics of textiles and clothing. L. M. Clatworthy and S. J. Swenson, comps. *Wash State Coll Lib* (Pullman) B 6:1-44 Ag '18 (25c)
- Entomological record, 1917. A. Gibson. (*In* Report. Entom. Soc. of Ontario, 1917, p. 99-103) '18 Ontario ag. dept., Toronto
- Extraction of potash from complex mineral silicates, such as feldspar, leucite and glauconite (greensand marl). E. C. Buck. *Metalurgical & Chemical Eng* (10th av at 36th st, N.Y. 25c) 18:33-7, 90-5 Ja 1-15 '18
- Farm management, farm accounts, credits, marketing, homes, and statistics; list of publications for sale by Superintendent of documents, Washington, D.C. (Price list 68-2d ed) 20p '18 Supt. of doc., Washington, D.C.
- Farmers' bulletins, department bulletins, yearbooks, *Journal of agricultural research*, for sale by the superintendent of documents, Washington, D. C. (Price list 16-11th ed) 46p '17 Supt. of doc., Washington, D. C.
- Farmers' bulletins you ought to have; classified list. *Prog F* 33:202 F 16 '18
- Fishes; list of publications relating to fishes, for sale by the superintendent of documents, Washington, D.C. (Price list 21-5th ed) 27p '17 Supt. of doc., Washington, D.C.
- Food conservation bibliography. 8p '18 U.S. Food administration, Washington, D.C.
- Foods and cooking; canning and cold storage; publications relating to the above subjects, for sale by the superintendent of documents. (Price list 11-8th ed) 16p '17 Supt. of doc., Washington, D.C.
- Forestry, tree planting, wood tests, and lumber industries; list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 43-11th ed) 19p '17 Supt. of doc., Washington, D.C.
- Forests and forestry; a selected list of important books in library. Carnegie Lib of Pittsburgh B 22:372-84 My '17
- Garden writings in America. L. Barron. *Mass Hort Soc Trans* 1916, pt 1:71-88 '16
- Gardening books. A. O. Jeffery. *Ontario Library Review* (Toronto) 1:65-7 F '17
- Glance at the garden books of the year. *Gard M* 26:156 D '17
- Government publications of interest to home economic teachers and students. (Home Econ. C. 5) 8p '18 U.S. Bur. of educ., Washington, D.C.
- Green manuring; tabular summary of American experiment station literature. A. J. Pieters. *Am Soc Agron J* 9:173-90 Ap '17



**Bibliography—Continued**

- Guide to reading in English. Rural N Y 77: 775, 797 Je 8-15 '18
- Helpful books for farmers and agricultural workers. N C Ag Ext Farm-News v 4 1p F 23 '18
- Home economics publications issued by the Bureau of education. 2p mim (Ag 15) '17
- U.S. Bur. of educ., Washington, D.C.
- Home garden; thrift gardens and flower gardens. K. T. Moody, comp. St Louis Pub Lib B p 67-70 F '18
- Index to American mycological literature. See bimonthly numbers of *Mycologia*
- Indian forest records; a further note on the antiseptic treatment of timber. R. S. Pearson. p 123-8 il 4s, 6d '18 Indian government printing co., Calcutta
- Influence of ammonium sulfate on germination and growth. I. Wolkoff. Soil Sci 5:468-79 Je '18
- Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D: A. Coleman. Soil Sci 4:423-32 N '17
- Insects; list of publications relating to bees, honey, and insects injurious to man, animals, plants, and crops, for sale by the Superintendent of documents, Washington, D.C. (Price list 41—8th ed.) 27p '18 Supt. of doc., Washington, D.C.
- International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 57-86 My '18 Int. inst. of ag., Rome
- Irrigation, drainage, and water power (exclusive of Pacific states); list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 42—9th ed.) 21p '18 U.S. Supt. of doc., Washington, D.C.
- Libraries and the food campaign. H. W. Sewall. Minn Lib Notes and News (Pub. lib. comm., St Paul) 5:112-15 D '17
- List of agricultural publications in India. See Agricultural journal of India, issues of April and October of each year
- List of best books, papers and pictures. Prog F 31:222 F 12 '16
- List of books about roses. H. Yeargain, comp. St Louis Pub Lib B p 70-2 F '18
- List of books for the farmer's library. Ill Univ B v 13, no 24 22p '16
- \* List of books on forestry for a small library. 14p mim '18 U.S. Forest service, Washington, D.C.
- List of federal documents especially useful to librarians and citizens at the present time. 3p mim '17 U. S. Library of Congress, Washington, D.C.
- These documents deal chiefly with agricultural subjects, including food supply, food conservation and preservation
- List of publications dealing with the growing of apples. Mass Ag Bd B 2 (5th ed):236-50 '16
- \* List of recent references on agricultural credit. 8p '18 U.S. Lib. of Congress, Division of bibliography, Washington, D.C.
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 40c)
- \* List of recent references on cost of living. 9p '18 U.S. Lib. of Congress, Washington, D.C.
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 45c)
- List of references on botanical gardens. U. S. Library of Congress. 6p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 30c)
- List of references on boycott of foodstuffs. U. S. Library of Congress. 2p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 10c)
- List of references on community kitchens. 9p mim (My 18) '18 U.S. Library of Congress, Division of bibliography, Washington, D.C.
- \* List of references on food in relation to health, food rationing, dietetics, etc. 15p mim '18 U.S. Lib. of Congress, Division of bibliography, Washington, D.C.
- List of references on government insurance of farm buildings, crops, etc. (does not include livestock insurance). U.S. Lib. of Congress. 4p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 20c)
- List of references on government regulation of prices (supplementary to duplicated list, July 3, 1917). 6p mim (Jl 15) '18 U.S. Library of Congress, Division of bibliography, Washington, D.C.
- List of references on land tenure in Mexico. U.S. Library of congress. 3p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)
- List of references on the flaxseed industry. U. S. Library of Congress. 3p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)
- List of references on the milk industry. H. H. B. Meyer. Special Libraries (Indianapolis, Ind. 25c) 8:10-22 Ja '17
- List of references on the mobilization of farm labor for war service. 9p typew '18 U. S. Library of Congress, Division of bibliography, Washington, D.C.
- \* List of references on the potash industry. 13p '18 U.S. Lib. of Congress, Division of bibliography, Washington, D.C.
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 65c)
- List of references on the utilization of waste. U.S. Library of congress. 9p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 45c)
- Contains references to many subjects of interest, i.e. Cotton waste, Garbage as fertilizer, Wood waste, Wool waste, and the utilization of other farm products
- List of references on war bread. U.S. Lib. of Congress. 4p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 20c)
- \* List of references to periodical articles, and also to patents, which have appeared since July 1, 1914, on products of commercial value, produced by microorganisms. 22p typew '18 U.S. Bur. of chemistry library, Washington, D.C.
- Contents: Alcoholic fermentation; Glycerin Acetone; Yeasts; Vinegar; Lactic acid; Foods and feeding-stuffs; Nitrification and fixation of free nitrogen by bacteria; Miscellaneous
- Literature on plant diseases. E. R. Oberly and F. P. Smith. See monthly numbers of Phytopathology
- Marketing farm products; selected list of books and pamphlets in Wisconsin legislative reference library. Wis. Lib. comm. Legislative reference dept. 9p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 45c)
- Marketing of milk; a contribution to a bibliography. E. D. Orr, comp. 23p (Je) '18 Univ. of Wisconsin library school, Madison
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew \$1.15)
- Masterpieces of American economic entomology. W. Lochhead. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 12-18) '17 The Society, J. M. Swaine, sec., Macdonald college, Ottawa
- New lights on feeding problems. F. Rose. N Y Farms & Markets Dept Ag B 97:104-7 Jl '17
- North American varieties of the strawberry; bibliography of North American literature of the strawberry. Va Ag Exp Tech B 11: 104-26 '16

## Bibliography—Continued

- Old French gardening books. C. H. Payne. Gard Chron (Lond) 63:215 My 25 '18
- Pedagogical literature dealing with home economics. School Review (Univ. of Chicago Press 20c) 26:215-24 Mr '18
- Physiology of fungi. D. H. Rose. Bot Gaz 65: 112-15 Ja '18
- Plants; publications relating to culture of fruits, vegetables, grain, grasses and seeds, for sale by the Superintendent of documents, Washington, D.C. (Price list 44-10th ed) 44p '18 Supt. of doc., Washington, D.C.
- Potato wilt, leaf-roll and related diseases. W. A. Orton. U S Ag B 64:44-8 '14
- Poultry books for public libraries. Ontario Library Review (Toronto) 1:71-3 F '17
- Poultry husbandry; a selected bibliography prepared for A. L. A. committee on food information. G. A. Deveneau. 5p mim '17 Univ. of Ill. Coll. of ag., Urbana
- Practical books on agriculture which everyone should read. 24p map '17 International harvester co., Agricultural extension dept., Chicago
- Problem of agricultural labor; a contribution to a bibliography. I. M. Newman. 18p '18 Univ. of Wisconsin library school, Madison
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 90c)
- Public domain; government publications concerning public lands, conservation, railroad land-grants, etc. (Price list 20—8th ed) 16p '17 Supt. of doc., Washington, D.C.
- Publications available for distribution by the Publications branch, Department of agriculture, Ottawa. 10p '16 Canada Ag
- \* Publications of Department of agriculture classified for the use of teachers under following subjects: Agricultural education; Birds and other animals; Animal husbandry; Agronomy; Rural engineering; Dairy- ing; Farm management and rural economy; Horticulture; Home economics. Prepared in Office of Agricultural instruction, U.S. States relations service, Washington, D.C.
- \* Publications of the Forest service, classified for teachers and students. F. Burns. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:716-22 N '18
- Publications of the Imperial department of agriculture in India. See quarterly issues of Agricultural journal of India
- Publications on food in foreign languages. 4p typew '18 U.S. Food administration, Washington, D.C.
- Published sources of information about farm women. Assn Am Ag Coll & Exp Pro 1916: 90-107 '17
- Reading list on sheep husbandry. G. A. Deveneau. 2p mim '18 U.S. Food administration for Illinois, Urbana
- Reading matter for farm women. Prog F 32: 417 Mr 31 '17
- Report of committee to assemble current literature on subject of nutritional disorders, the result of so-called devitalized foods. S. J. Crumline. Assn Am Dairy Food & Drug Offic Pro 1916:80-6
- Review of investigations in soil protozoa and soil sterilization. N. Kopeloff and D. A. Coleman. Soil Sci 3:248-69 Mr '17
- Road dust preventives; references to books and magazine articles. 39p 5c '16 Carnegie library of Pittsburg, Pittsburg, Pa.
- Roads; United States government publications for sale by the superintendent of documents, Washington, D. C. (Price list 45—7th ed) 8p '16 Supt. of doc., Washington, D. C.
- Scientific writings of Thomas J. Burrill. C. E. Janvrin, comp. Ill State Hort Soc Trans 1917:195-201 '18
- \* Select bibliography on cost of living in the United States. H. G. Estey, comp. Special Libraries (70 5th av, N.Y. 25c) 9:203-9 N '18 (to be cont)
- Selected bibliography of papers on fish, mollusks and crustacea as food; prepared for the Food information committee of the American library association. R. MacDonald. 5p mim '18 U.S. Food administration for Illinois, Urbana
- \* Selected list of publications on the marketing of farm products. M. E. Griffith. 9 pts mim '18 U.S. Bur. of markets lib., Washington, D.C.
- This bibliography includes only material printed in English, exclusive of periodical references, except reprints, and proceedings of associations. It is issued in nine parts dealing with special crops or special phases of the marketing question
- Shade trees and gardening. 10p '17 Detroit public library, Detroit, Mich.
- Small fruits; list of references prepared by John Crerar library and Library, College of agriculture, University of Illinois in cooperation with S. J. Bole, 4p mim n.d. Univ. of Ill., College of ag., Urbana
- Soils and fertilizers; list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 46—11th ed.) 22p '18 Supt. of doc., Washington, D. C.
- Some recent magazine articles on the standard of living. L. Perry. J Home Econ 10:9-17 Ja '18
- Structural service department; farm buildings, accessories and rural engineering. Am Inst Architects J (The Octagon, Washington, D. C. 50c) 5:655 D '17
- Successful farm life; a suggestive list of books. 37p '17 Brumback library of Van Wert county, Van Wert, Ohio
- Taxation of woodlots. K. W. Woodward. N H Ag Ext C 39:1-19 '18
- Textbooks and reference works; agriculture and domestic economy. (In Library and laboratory equipment for classified high schools. W. F. Doughty) (B. 55) p 36-9, 41-4 '16 Texas Dept. of educ., Austin
- \* Texts and references for secondary schools; lists, frequently revised, of secondary school texts and manuals on agricultural subjects, elementary school texts of same kind, and sources of teaching material and supplies. U.S. States relations service, Office of ag. instruction, Washington, D.C. (Typew)
- Torrens system; single tax. 3p '17 Public library, Detroit, Mich.
- Transportation of perishable products. (In Pan American scientific congress Pro., 1915, v. 3, p. 423-5, 449-51) '17
- United States Department of agriculture; list of publications issued since July 1, 1913 (revised to Dec. 31, 1916). 114p '17 U S Ag
- Valuable books and bulletins on home economics. 1a Ag Ext Home Econ C 6:1-8 '17-'18
- Vegetable gardening; a bibliography prepared by the committee on food information. J. W. Lloyd and C. E. Durst. 6p mim '17 Univ. of Ill., Coll. of ag., Urbana
- War gardens. F. W. Jenkins, comp. (no. 28) 4p '18 Russell Sage foundation lib., 130 E. 22d st, N.Y.
- Weather; publications of the United States government relating to climate, earthquakes, floods, etc., for sale by superintendent of documents, Washington, D.C. (Price list 48—8th ed) 36p '16 Supt. of doc., Washington, D.C.
- Woman on the farm. H. C. Bullock, 25p '17 Syracuse univ. Lib. school
- Obtained only thru Public affairs information service, 958-964 University av., N.Y. (Typew \$1.25)
- Working bibliography of the cost of producing milk. H. E. Horton. 13p typew '17 H. E. Horton. Agricultural comr., American steel and wire co., 203 S. La Salle st, Chicago
- See also Indexes
- Biculba oil**  
Biculba oil. Scientific Am (233 Broadway, N.Y. 10c) 118:244 Mr 16 '18
- Bicycles**  
Bicycle claiming its own again. Farm Eng 3:240 Ap '16



- Bidens**  
Studies in the genus *bidens*; contributions from the Hull botanical laboratory. E. E. Sherff. *il Bot Gaz* 61:495-506; 64:21-41 *Je* '16, *Jl* '17
- Bilharzia haematobia.** See *Flukes*
- Billboards**  
Iniquitous billboard. A. F. Loomis. *il Country Life* 29:60 *Ja* '16
- Billbugs.** See *Corn billbugs*
- Billings** beats the Bolsheviks; story. L. A. Knight. *il Country Gent* 83:1+ *S* 28 '18
- Billings** demonstrates; story. L. A. Knight. *il Country Gent* 83:10-11+ *N* 2 '18
- Bills of lading**  
Advantages of the new bill of lading; the Pomerene act. *Coop Manager & F* 6:28 *F* '17  
Bill of lading revised. *N Y Prod R* 42:396 *Je* 28 '16  
Conference in Washington to favor Pomerene bill and discuss bill of lading matters. *N Y Prod R* 41:1074 *Ap* 19 '16  
Hearing on bill of lading by Interstate commerce commission. *N Y Prod R* 41:529 *Ja* 26 '16  
Hearings before Interstate commerce commission. *N Y Prod R* 41:482 *Ja* 12 '16  
Loi concernant les bulletins de chargement pour le commerce intérieur ou extérieur. aux États-Unis d'Amérique. *Int Yearbook Ag Leg* 1916:433-41 '17  
Michigan under-billing case. *N Y Prod R* 42:1130 *O* 25 '16  
New bill of lading act. *N Y Prod R* 42:1026 *O* 11 '16  
Original section 21 of Pomerene bill. J. C. Scales. (*In* Nat. league of commission merchants. 1917 convention, p 124-30) n.d. 90 W. Broadway, N.Y.
- Pomerene bill; objection to recent house amendments. J. C. Scales. *N Y Prod R* 42:702 *Ag* 23 '16
- Recommendations of merchants' association, New York to Interstate commerce commission. *N Y Prod R* 41:590 *F* 2 '16
- Binder twine**  
Binder twine—a holdup. E. B. Fussell. Non-partisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:4 *N* 22 '17  
Binder twine for harvesting. *Coop Manager & F* 7:27 *Mr* '18  
Binder twine for 1918. *Wallaces' F* 43:780 *My* 10 '18; Same. *Weekly N L* 5:4 *My* 22 '18  
Binder twine from flax straw. *Power F* 27:31 *F* '18  
How about binder twine? *Ag Digest* 1:13 *My* '16  
Our grain crops threatened by demoralization in Yucatan. E. I. Bell. *Rural N Y* 76:1467 *D* 29 '17  
Scrub palm and the binder twine problem. R. S. Walker. *il Country Life* 31:66 *Ja* '17  
State and the farmer. D. C. Smith. *Rural N Y* 76:1011 *Ag* 25 '17  
Why was twine high? *Ag Digest* 1:149 *O* '16  
See also *Sisal hemp*
- Prices**  
Prices for 1918 binder twine. *Power F* 27:54 *Ap* '18
- Binders, Grain.** See *Grain binders*
- Bindweed**  
Bindweed. *Nat Stock & F* 40:229 *My* 27 '16  
Salt sure cure for bindweed. *Wallaces' F* 42:989 *Jl* 6 '17
- Binocular microscopes.** See *Microscopes and microscopy*
- Biological chemistry**  
Measurement of oxidation potential and its significance in the study of oxidases. G. B. Reed. *Bot Gaz* 61:523-7 *Je* '16  
Proteolysis of streptococcus erysipalatis and streptococcus lacticus compared under different hydrogen ion concentration. A. Itano. *Mass Ag Exp B* 167:178-85 '16
- Relation of hydrogen ion concentration of media to the proteolytic activity of bacillus subtilis. A. Itano. *Mass Ag Exp B* 167:139-77 '16  
See also *Chemotropism; Physiological chemistry; Soil microbiology*
- Biological laboratories**  
See also *Cold Spring Harbor biological laboratory, Long Island*
- Biology**  
Principles of biology. F. D. Kern. *Rural N Y* 75:60 *Ja* 8 '16  
See also *Color of animals; Correlation (biology); Embryology; Enzymes; Heredity; Hybridization; Individuality (physiological); Longevity; Regeneration (botany); Species; Variation (biology)*
- Bioplasm.** See *Protoplasm*
- Birch**  
American birches. F. A. Waugh. *il Gard Chron (Lond)* 60:302 *D* 23 '16  
Birches. S. B. Detwiler. *il Am For* 22:195-8 *Ap* '16  
Effect of incomplete distillation on the yield of products in the destructive distillation of birch. R. C. Palmer. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:260-2 *Ap* '18  
Products and uses of birch. *il Am For* 22:198-201 *Ap* '16  
Trees of Vermont; the birches. G. P. Burns and C. H. Otis. *il Vt Ag Exp B* 194:96-105 '16  
Uses of commercial woods of the United States; beech, birches and maples. H. Maxwell. *U S Ag B* 12:1-56 '13
- Diseases and pests**  
Cambium miner in river birch. C. T. Greene. *il J Ag Research* 1:471-4 *Mr* '14  
See also *Bronze birch borers*
- Birch oil**  
Natural birch oil. J. S. Illick. *il Country Gent* 82:399 *F* 24 '17
- Bird baths**  
Bird bath on a rock. J. W. Sherman. *il Country Gent* 81:1271 *Je* 24 '16  
Mrs St Gaudens's bird-bath. L. R. McCabe. *il Country Life* 32:64 *Je* '17
- Bird day**  
Alabama bird day book. 96p *il* '17 Ala. dept. of game and fish, Montgomery  
\* Arbor and bird day. E. H. Forbush and H. A. Reynolds. (B. 122) 8p *il* plans '18 Mass. forestry assn., Boston  
Arbor and bird day manual for April, 1917. Conn. School Doc no 6—1917 (whole no 416) 16p '17 Conn. State bd. of educ., Hartford  
Arbor and bird day manual for April, 1918. (School doc. no. 2—1918; Whole no.—422) 15p '18 Conn. State bd. of educ., Hartford  
\* Arbor and bird days. H. T. Swift. (C. 128) 74p *il* '18 Ill. Dept. of public instruction, Springfield  
Conservation, bird and arbor day. (B. 19) 30p *il* '17 Cal. state bd. of educ., Sacramento  
Ohio arbor day and bird annual 1917. J. C. Hambleton. 80p *il* '17 Ohio State dept. of pub. instruction, Columbus
- Bird dogs**  
Field trials of bird dogs. G. Kobbé. *il Country Gent* 82:1968 *D* 15 '17  
Sweetbrier at the trials. W. A. Dyer and H. B. Rathbone. *il Country Life* 31:21-5 *Ja* '17
- Bird houses**  
Bird houses. *il O Judd Farmer* 64:29 *Mr* 9 '18  
Bird houses. S. F. Aaron. *il Country Gent* 81:472 *F* 26 '16  
Bird houses and how to build them. N. Dearborn. *il Farmers' B* 609:1-21 '18 (rev.)  
Birds around the farm. L. Carr. *Hoards D* 51:398 *Mr* 24 '16  
Boys of St Paul, Minnesota, public schools with their bird houses; picture. *Country Gent* 81:1104 *My* 27 '16  
Do something for the birds. M. G. Feint. *Prac F* 112:209 *My* 15 '16

**Bird houses—Continued**

- Grow a crop of bird boxes. J. G. Sholl. il Country Gent 81:1234 Je 17 '16  
 Houses for the birds. M. G. Feint. il Ohio F 137:576 Ap 15 '16  
 How to attract the summer birds—bird houses. A. A. Allen. il Am For 22:146-9 Mr '16  
 My bird bungalow. H. W. Myers. il Country Life 32:130 My '17  
 Preservation of bird life. il Ag Gaz of Canada 3:472-3 My '16  
 Your friends the birds. J. A. Loring. il Country Gent 82:422-3 Mr 3 '17

**Bird song**

- Environment and the songs of birds. A. Chandler. Country Life 31:71-3 Ap '17

**Bird study**

- Bird study. E. M. Tuttle. il Cornell Rural School Leaflet v 11, no 1:32-40 '17  
 Bird study in the rural school. 3d ed T: L. Hankinson. Normal School B (Eastern Illinois state normal school, Charleston) 53:1-19 J1 1 '16  
 How to study birds. il Country Life 30:52 Ap '16

**Birds**

- Amateur bird study in kill-deer land. N. B. Gosnell. Ohio F 139:491, 524 Mr 31-Apr 7 '17  
 Anomalies to be found among ordinary birds. R. W. Shufeldt. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:245-6 Ap 20 '18  
 Attracting birds to public and semipublic reservations. W. L. McAtee. il U S Ag B 715:1-12 '18  
 Autumn birds and their message; molting. A. A. Allen. il Am For 22:537-40 S '16  
 Bird in the hand. F. M. Seabury. il Country Life 30:88 O '16  
 Bird lovers' number; so many letters about birds. Nat Stock & F 40:1325 Mr 3 '17  
 Birds and business; what happened in Jamaica. L. Hasbrouck. il Nat Stock & F 40:406 J1 15 '16  
 Birds in cemeteries. W. Falconer. Gard Chron Am 20:284 Je '16  
 Birds of Porto Rico. A. Wetmore. bibliog il map U S Ag B 326:1-140 '16  
 Birds of the corn-field. E. S. Jones. Ohio F 137:310 F 26 '16  
 Birds to be recognized in 1917-1918. A. A. Allen and E. G. Allen. il Cornell Rural School Leaflet v 11, no 1:53-66 '17  
 Coloration of birds. A. A. Allen. il Am For 22:464-7 Ag '16  
 Cultivating an acre to birds. O. Crooker. il Gard M 23:328-9 J1 '16  
 Enemies of birds. A. A. Allen. il Am For 22:405-9 J1 '16  
 Fruit-bearing plants for the birds and ornamentation; list of trees, etc. L. P. Jensen. Gard Chron Am 20:72 F '16  
 How to attract birds in northeastern United States. W. L. McAtee. il map Farmers' B 621:1-16 '17  
 How to attract birds in northwestern United States. W. L. McAtee. il map Farmers' B 760:1-13 '18 (rev.)  
 How to attract birds in the east central states. W. L. McAtee. il map Farmers' B 912:1-14 '18  
 How to attract birds in the Middle Atlantic states. W. L. McAtee. il map Farmers' B 844:1-15 '17  
 How to know birds. C. O. Handley. Nat Stock & F 40:117 Ap 22 '16  
 How to study birds. il Country Life 30:52 Ap '16  
 Implements of birds. A. A. Allen. il Am For 22:82-5 F '16  
 Making friends with the birds. A. A. Allen. il Am For 23:484-8 Ag '17  
 Nesting of the birds. A. A. Allen. il Am For 22:354-8 Je '16  
 Nesting season. P. B. Riis. Gard Chron Am 20:283 Je '16  
 Ornithological field work in 1917. Science (Science Press, Garrison, N.Y. 15c) n s 47: 63-4 Ja 18 '18  
 Our bird friends. Nat Stock & F 40:1162 F 3 '17

- Our friends, the birds. Mrs M. G. Feint. Ohio F 141:776 Je 15 '18  
 Our neglected friends the birds. W. P. Eaton. il Harper's (Franklin sq., N.Y. 35c) 136: 701-13 Ap '18  
 Planting to attract birds. A. A. Allen. il Am For 22:209-12 Ap '16  
 Preliminary census of birds of the United States. W. W. Cooke. map U S Ag B 187: 1-11 '15  
 Public parks as bird sanctuaries. P. B. Riis. Gard Chron Am 20:134 Mr '16  
 Rendezvous for birds and their friends; the new field headquarters of the National Audubon society at Amston, Mass. il Country Life 34:56-7 Je '18  
 Return of the birds. A. A. Allen. il Am For 22:273-6 My '16  
 Second annual report of bird counts in the United States, with discussion of results. W. W. Cooke. map U S Ag B 396:1-20 '16  
 Some problems with everyday birds. A. A. Allen. il Am For 22:718-22 D '16  
 Spring in Saskatchewan. H. H. Pitman. il Canadian Magazine (200 Adelaide st, West, Toronto 25c) 51:42-7 My '18  
 Studying the birds in winter. W. Packard. Gard Chron Am 20:33 Ja '16  
 Summer back-door neighbors. C. S. Thoms. il Country Life 34:66 Ag '18  
 Value of birds on the farm. K. F. King. il Mo Ag Bd Yearbook 1916:382-7  
 What a suburban community can do for the birds. A. Fearing. il Country Life 34:80 Je '18  
 When the birds come back. E. L. Ragsdale. il Green's Am Fruit Grower 38:11 My '18  
 Where our birds come from. L. S. Crandall. Sci Am Sup (233 Broadway, N.Y. 10c) 86:37 J1 20 '18  
 Winning the birds. Gard Chron Am 20:198 Ap '16  
*See also* Bird houses; Game birds; Nests; Poultry; Water birds; also Blue jays; Buntings; Canaries; Catbirds; Chickadees; Chimney swifts; Chipping sparrows; Cowbirds; Crows; Cuckoos; Eagles; English sparrows; Flickers; Flycatchers (birds); Grackles; Gulls; Hawks; Herons; Humming birds; Indigo buntings; Juncos; Kingbirds; Kingfishers; Larks; Loons; Mergansers; Mockingbirds; Night herons; Nighthawks; Nuthatches; Orioles; Owls; Peafowl; Pigeons; Purple martins; Quails; Rails (birds); Redstarts; Roadrunners; Sparrow hawks; Sparrows; Swallows; Swans; Swifts; Tanagers; Thrashers; Thrushes; Veeries; Vireos; Vultures; Warblers; Waxwings; Whippoorwills; Woodpeckers; Wrens; Yellow-breasted chats; also Massachusetts—Ornithologist, State

**Bibliography**

- Bird study in the rural school. 3d ed T: L. Hankinson. Normal School B (Eastern Illinois state normal school, Charleston) 53: 1-19 J1 1 '16  
 Birds and wild animals; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 39—7th ed) 14p '17 Supt. of doc., Washington, D.C.

**Economic value**

*See* Birds, Injurious and beneficial

**Food**

- Feed the birds. F. H. Sweet. Green's Fruit Grower 36:5 F '16  
 Food of the robins and bluebirds of the United States. F. E. L. Beal. U S Ag B 171: 1-31 '15  
 Food of West Virginia birds. E. A. Brooks. il W Va Ag Dept B 15:1-74 '16  
 Food plants to attract birds and protect fruit. E. H. Forbush. il Mass Ag Bd C 49:1-21 '16; Same. Mass Ag Bd Yearbook 1916, pt 2:191-209 '17  
 How birds eat in winter. L. Eichhorn. Nat Stock & F 40:1325 Mr 3 '17  
 How the birds get through the winter. T. G. Pearson. il Country Life 31:64-5 F '17



**Birds—Food—Continued**

Reports on the food of the rook, starling and chaffinch. J Bd Ag 23:162-3 My '16  
Some recent investigations on the food of certain wild birds. W. E. Collinge. bibliog J Bd Ag 25:668-91 S '18

**Migration**

Aspect of the relation between abundance, migration and range in birds. J. T. Nichols. Science (Science Press, Garrison, N.Y. 15c) n s 48:168-70 Ag 16 '18  
Bird migration. W. W. Cooke. maps U S Ag B 185:1-47 '15  
Bird migration in its international bearing. J. Grinnell. Sci Monthly (Science Press, Garrison, N.Y. 30c) 7:166-9 Ag '18  
Bird visitation. T. G. Pearson. Country Life 32:92 O '17  
Distribution and migration of North American gulls and their allies. W. W. Cooke. il U S Ag B 292:1-70 '15  
Distribution and migration of North American rails and their allies. W. W. Cooke. maps U S Ag B 128:1-50 '14  
Migration impulse of our avifauna. P. B. Riis. Gard Chron Am 20:436 O '16  
Migration of birds. A. A. Allen. Cornell Rural School Leaflet v 11, no 1:41-7 '17  
Spring bird procession. J. Burroughs. Atlantic Monthly (3 Park st., Boston 35c) 121:486-95 Ap '18

**Photographs and photography**

Among the winged builders with a camera. S. M. Kane. il Country Life 30:62 Jl '16  
Birds and the camera. A. A. Allen. il Am For 23:154-7 Mr '17  
Snapshots of a bird log; photographs. A. A. Allen. Country Life 29:38-9 Ja '16

**Protection**

Agriculture appropriation bill, 1917 (protection of migratory birds); hearings before the U.S. Senate committee on agriculture and forestry on H. R. 12717. (May 22, 1916.) 42p '16 Apply to congressmen  
Annual report of the Commissioners of birds. 12p '17 Commissioners of birds, Providence, R.I.  
Bird and game laws of Rhode Island, revised to June 1, 1917. 29p n.d. R. I. comrs. of birds, Providence  
Bird protection and propagation. L. P. Jensen. Gard Chron Am 22:260 O '18  
Bird protection and the definite results obtained. P. B. Riis. Gard Chron Am 21:111-12 Mr '17  
Bringing back the game. A. A. Allen. il Am For 23:15-18 Ja '17  
Cincinnati's invitation to the birds. A. Fearning. il Country Life 30:30-1 Ag '16  
Efforts to save the birds. R. W. Shufeldt. il Am For 23:103-4 F '17  
Eleven important wild-duck foods. W. L. McAtee. il maps U S Ag B 205:1-25 '15  
Encouraging the birds. A. Lounsberry. il Gard M 26:153-5 D '17  
Essential points in bird conservation. P. B. Riis. il Gard Chron Am 21:148-50 Ap '17  
Federal protection of birds. A. A. Allen. il Am For 22:607-9 O '16  
Five important wild-duck foods. W. L. McAtee. il maps U S Ag B 58:1-19 '14  
Food of West Virginia birds; protection of useful birds. E. A. Brooks. il W Va Ag Dept B 15:23-9 '16  
Government as a game warden. T. G. Pearson. il Country Life 31:40-1 Ja '17  
Is the farmer the bird's worst enemy? C. Carpenter. il Am Coop J 13:328+ Ap '18  
Migratory bird treaty, act, and regulations; convention between the United States and Great Britain for the protection of migratory birds in the United States and Canada. (Service and regulatory announcements—B. S. 23) 12p '18 U S Ag  
Natural enemies of birds. E. H. Forbush. il Mass Ag Bd Yearbook 1916, pt 2:210-63 '17  
\* New food industry. D. W. Huntington. il Independent (119 W. 40th st, N.Y. 10c) 96: 130-1 O 26 '18

Preservation of bird life. il Ag Gaz of Canada 3:573-4 Je '16  
Protection given migratory birds by amendments to bird-treaty act. Weekly N L 6:4 N 20 '18  
Protection of migratory birds; hearings before the Committee on foreign affairs. H. R. 20080 (Feb. 3 & 6, 1917). (pt. 2). 42p '17 Apply to congressmen  
Protection of migratory birds; report no. 243 of the U.S. House Committee on foreign affairs, to accompany S. 1553. 5p '17 Apply to congressmen  
Regulations for the protection of migratory birds; by the President of the United States of America, a proclamation. (Service and regulatory announcements. Biological survey 11) 6p '16 U S Ag  
Regulations regarding migratory birds. Ag Gaz of Canada 5:551-3 Je '18  
Right hobby. N. K. Jones. il Country Gent 82: 623 Mr 24 '17  
Systematic bird protection in Forest park, St Louis, Mo. L. P. Jensen. Gard Chron Am 22:92 Mr '18  
See also Bird houses

**Directories**

Directory of officials and organizations concerned with the protection of birds and game, 1918. (B. S. Doc. 109) 17p '18 U S Ag

**Song**

See Bird song

**Birds, Flightless**

Anomalies of the animal world. R. W. Shufeldt. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:4-5, 68-9, 168-70 Ja 5, F 2, Mr 16 '18

**Birds, Injurious and beneficial**

Birds and their relation to horticulture. W. E. Saunders. (In Ontario horticultural societies, 11th annual report, 1916, p. 39-47) '17 Ontario ag. dept., Toronto, Canada  
Birds as carriers of the chestnut-blight fungus. F. D. Heald and R. A. Studhalter. bibliog il J Ag Research 2:405-22 S '14  
Birds in relation to agriculture. W. H. McNairn. il (In Report, Ontario ag. societies, 1917, p. 28-35) Ontario ag. dept., Toronto  
Birds in relation to the alfalfa weevil. E. R. Kalmbach. il map U S Ag B 107:1-64 '14  
Birds—the farmers' friends. Purdue Ag 10:34 F '16  
Boys, guns, birds and trees. il Am For 22: 483-4 Ag '16  
Common birds of southeastern United States in relation to agriculture. F. E. L. Beal and others. il map Farmers' B 755:1-39 '16  
Cooperation between farmers and birds. C. Carpenter. il Ag Digest 3:29 Jl '18  
Crop of a wood pigeon. il J Bd Ag 25:584-5 Ag '18  
Crows eating fruit. H. O. Mead. Rural N Y 77:328 Mr 2 '18  
Destroying the crow and his cousins. il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:184-5 S 22 '17  
Economic status of wild birds. W. E. Collinge. Royal Hort Soc J 42, pt 1:1-6 O '16  
Food of West Virginia birds. E. A. Brooks. il W Va Ag Dept B 15:1-74 '16  
Food plants to attract birds and protect fruit. E. H. Forbush. il Mass Ag Bd C 49:1-21 '16; Same. Mass Ag Bd Yearbook 1916, pt 2:191-209 '17  
Friends and foes of the fruit grower. F. C. Pellett. il Wallaces' F 41:703 My 5 '16  
Friends of our forests. H. W. Henshaw. il Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D.C. 25c) 31:297-321 Ap '17  
How birds affect the orchard. F. E. Beal. J Ag (Quebec) 21:x Ag '17  
Is the bird the farmer's best friend? C. Carpenter. il Am Coop J 13:421+ Jl '18  
Minnesota birds; their economic relations to the agriculturist. F. L. Washburn. (In Report State entomologist, 1915-1916, p 160-83) '16 Minn. ag. exp. station, St Paul

**Birds, Injurious and beneficial—Continued**

- Most efficient insecticide. Fruit-Grower 27: 209 Mr 15 '16
- Need of cooperation between farmers and birds. C: Carpenter. il Am Coop J 13:275 Mr '13
- Our winter birds and what they do for us. A. A. Allen. il Am For 22:38-40 Ja '16
- Pheasants and agriculture. A. F. C.-H. Evershed and C. Warburton. J Ag Sci 9:63-91 Ag '18
- Report of the ornithologist; Who is neighbor to the birds? with discussion. J. Kalbfus. Pa Ag Dept B 278:106-16 '16
- Robin redbreast and the cherries. Rural N Y 77:228 F 16 '18
- Some common birds useful to the farmer. F. E. L. Beal. il Farmers' B 630:1-27 '16
- Some recent investigations on the food of certain wild birds. W. E. Collinge. bibliog J Bd Ag 25:668-91 S '18
- \* Some useful birds found in Minnesota: their economic relations to the agriculturist. F. L. Washburn. (C. 43) 46p il '17 Minn. State entomologist, St Paul
- Stomach contents of Australian birds. J. B. Cleland. Ag Gaz of New South Wales 27: 263-9 Ap '16
- \* Value of insectivorous birds; with discussion by H. Maxwell. W. E. Collinge. Nature (St Martin's st, London, W. C. 6d) 101:407-9, 464 Jl 25, Ag 15 '18
- Your friends the birds. J. A. Loring. il Country Gent 82:369 F 24 '17
- See also Crows; English sparrows; Hawks; Herons

**Birds, Water. See Water birds****Birds and agriculture. See Birds, Injurious and beneficial****Birds' eggs**

- Wild birds' eggs. J Bd Ag 24:1238-41 F '18
- See also Ostrich eggs

**Bird's nest ferns. See Aspleniums****Birds' nests. See Nests****Birds of prey. See Eagles; Hawks; Owls; Vultures****Birth, Multiple**

- Degree of resemblance of parents and offspring with respect to birth as twins for registered Shropshire sheep. H. L. Rietz and E. Roberts. J Ag Research 4:479-510 S '15

- Is twinning hereditary? C. H. Danforth. il J Heredity 7:194-202 My '16

- Unusual in breeding. W. S. Anderson. il Country Gent 83:38 Ja 12 '18

**Birth control**

- Constructive aspect of birth control. R. J. Sprague. J Heredity 8:58-62 F '17
- Religion and birth control. J Heredity 7:450-1 O '16

**Birth rate**

- Birth rate of Methodist clergymen. J Heredity 8:455-9 O '17
- German suggestions for constructive eugenics. J Heredity 7:262 Je '16
- Harvard and Yale birth rates. J: C. Phillips. J Heredity 7:565-9 D '16
- Sizes of family and farming in Iowa county, Wisconsin. Monthly Crop Rep 3:15 F '17
- Some English suggestions for eugenics. J Heredity 7:288 Je '16
- Urban sterilization. J Heredity 8:268-9 Je '17
- See also Vital statistics

**Bisulphid of carbon. See Carbon disulphid****Bitartrate of potassium. See Cream of tartar****Bits**

- Bad and good bits. R. Augsbury. O Judd Farmer 60:20 Ja 8 '16

**Bitter rot. See Apple rot****Bitterweed**

- Honey from bitterweed. J. S. Scott. Am Bee J 58:386 N '18

**Bituminous materials**

- Toughness of bituminous aggregates. C: S. Reeve and R: H. Lewis. il J Ag Research 10:319-30 Ag 13 '17

**Testing**

- New penetration needle for use in testing bituminous materials. C: S. Reeve and F. P. Pritchard. il J Ag Research 5:1121-6 Mr 13 '16

**Black carpet beetles. See Carpet beetles****Black cherry aphids**

- Black cherry aphids. W: A. Ross. (In Report, Entom. Soc. of Ontario, 1917, p. 59-68) bibliog il '18 Ontario ag. dept., Toronto; Same cond. Ag Gaz of Canada 5:13-16 Ja '18

**Black cod. See Sablefish****Black disease. See Sheep—Diseases and pests****Black forest, Germany**

- Has the Black forest gone? J: B. Woods. il Am For 23:481-3 Ag '17

**Black leg. See Anthrax, Symptomatic****Black poplar. See Poplars****Black rootrot. See Apple black rootrot****Black Siberian hares**

- Black Siberian hare. R. H. Cowan. Am P Advocate 24:249. F '16; Same cond. Breeder's Gaz 69:103 Ja 13 '16
- Black Siberian hare; name under which certain rabbits are being exploited as valuable fur producers. Weekly N L 4:2 F 14 '17
- Black Siberian hares or Canadian black giants. W: H. Nobbs. Am P Advocate 26: 230 F '18

**Black spruce. See Spruce****Black stem rust. See Rusts****Black walnut. See Walnut****Blackberries**

- Blackberries. L. M. Weir. Purdue Ag 10:38 Ja '16
- Blackberries and blackcap raspberries. Rural N Y 76:37 Ja 13 '17
- Blackberries and dewberries. O. M. Taylor. il N Y Ag Dept B 79,pt 2:1371-7 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1371-7 '17
- Blackberries as a commercial fruit. A. Durand. il Minn Hort 46:63-5 F '18
- Blackberries benefitted by mulching. L. T. Powers. Green's Fruit Grower 37:18 My '17
- Blackberries—East and West. il Country Gent 83:40 Jl 27 '18
- Blackberries for southern Indiana. il Purdue Ag 11:19 Mr '17
- Blackberry. Prac F 112:191 My 1 '16
- Blackberry culture. G: M. Darrow. il Farmers' B 643:1-16 '18 (rev.)
- Bramble berries for your home garden. J. R. Mattern. il Gard M 22:194-5 Ja '16
- The brambles. W. S. Brown. Ore Ag Ext B 192:1-8 '17
- Culture of blackberries. Green's Fruit Grower 37:3 Ja '17
- Forty acres of blackberries. Ky Ag Dept Rep 1916-1917:455-9 '18
- Grow the blackberry. F. E. Simmonds. Green's Fruit Grower 36:9 Jl '16
- Growing cane berries in western Pennsylvania. B. V. Egbert. il Market Growers J 18:307 My 1 '16
- Himalaya blackberry. J. S. Knox. Market Growers J 19:9 Jl 1 '16
- How to grow blackberries. Green's Fruit Grower 36:7 Ag '16
- Irrigates his blackberries. O Judd Farmer 64: 9 Ja 26 '18
- Irrigation for blackberries. Fruit-Grower 28: 236 Ap 15 '17
- Persistence and blackberries. L. Matthews. il Fruit-Grower 28:161 Mr 1 '17
- Points on blackberry culture. Market Growers J 18:67 Ja 15 '16
- Pruning raspberry and blackberry plants. W. J. Green. Ohio F 137:767 Je 3 '16
- Raspberries, blackberries and dewberries (C. 33). O. M. Taylor. N Y State Ag Exp Rep 1915:637-16 '16
- Self-sterility in dewberries and blackberries. L. R. Detjen. il N C Ag Exp Tech B 11:1-37 '16; Same. N C Ag Exp Rep 1917:1-37
- Space-saving device for fruit. G. Brown. Gard M 23:320 Je '16
- Success with blackberries. il Green's Fruit Grower 37:3 Ap '17



**Blackberries—Continued**

- Success with blackberries. J. E. Fitzgerald. Market Growers J 18:142 F 15 '16  
Training the blackberry and raspberry. W. A. Graham. Ohio F 138:3 J1 1 '16  
Varieties of blackberries and raspberries with notes on their care. J. Oskamp. il Ind Ag Exp B 201:1-12 '17

See also Dewberries

**Diseases and pests**

- Orange rust of raspberries and blackberries. H. E. Mern. Ohio F 138:119 Ag 12 '16

**Blackberry bushes**

- Blackberry nuisance and destruction. J Ag New Zealand 14:52-4 Ja '17

**Blackbirds**

- Blackbirds and orioles. il Am For 22:673 N '16

**Blackhead in turkeys.** See Turkeys—Diseases and pests

**Blackleg.** See Anthrax, Symptomatic

**Blackquarter.** See Anthrax, Symptomatic

**Blacksmithing**

- Where are the smiths of yesterday? E. L. D. Seymour. il Country Life 30:34-5 Je '16

See also Horseshoeing

**Bladder nuts.** See Staphyleas

**Blankets**

- Navajo blanket. Irr Age 33:54 Ap '18

**Blasting**

- Blasting for tree holes. Green's Am Fruit Grower 38:12 Ag '18

- Method and cost of clearing cut over land with powder. il Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:505-7 D 19 '17

See also Dynamite in agriculture

**Blastophaga.** See Fig wasps

**Bleaching, Grain.** See Grain bleaching

**Bliss, R. K.**

- Portrait. Wallaces' F 42:16 Ja 5 '17

**Blister canker.** See Apple canker

**Blister rust.** See Pine blister rust

**Blood**

- Biological investigations of eosinophilia. M. Weinberg and P. Séguin. Am Vet M Assn J 48:752-3 Mr '16

- Effects of muscular exercise and the heat of the sun on the blood and body temperature of normal pigs. C. C. Palmer. bibliog J Ag Research 9:167-82 My 7 '17

- Morphology of normal pigs' blood. C. C. Palmer. J Ag Research 9:131-40 Ap 30 '17

- Preparation of culture media from whole blood. R. A. Kelsner. J Bact 1:615-17 N '16

- Preserved blood for food. Scientific Am (233 Broadway, N.Y. 10c) 116:175 F 17 '17

See also Hematoporphyrin; Hemoglobin

**Blood as fertilizer**

- Fertilizer materials statistics; blood. (In Am. fertilizer hdbk., 1917, p. 25-6) \$1 '17  
Ware bros. co., 1010 Arch st., Philadelphia

**Bloodhounds**

- Maligned bloodhound. W. A. Dyer. il Country Life 31:38-9 N '16

**Bloodroot**

- Common medicinal plants. A. Retlas. Ohio F 137:657 My 6 '16

- Early saxifrage, bloodroot, and jack-in-the-pulpit. R. W. Shufeldt. il Am For 23:83-7 F '17

**Blossom blight.** See Fire blight

**Blossoming of fruit.** See Fruit, Blossoming of

**Blue grass**

- Blue grasses in New York state. O. W. Dynes. N Y Ag Dept B 87:2808-11 S '16

- Grazing industry of the bluegrass region. L. Carrier. il map U S Ag B 397:1-18 '16

- History of Kentucky bluegrass and white clover in the United States. L. Carrier and K. S. Bort. Am Soc Agron J 8:256-66 J1 '16

- Is there difference in bluegrass. W. E. Bowers. Hoard's D 53:889 Je 22 '17

- Kentucky blue grass. il Hoard's D 51:676 My 12 '16

**Seed**

- Blue grass for seed. il Wallaces' F 42:983 J1 6 '17

- Curing of blue-grass seeds as affecting their viability. H. Garman and E. C. Vaughn. il Ky Ag Exp B 198:27-39 '16

- Kentucky bluegrass seed. U S Seed Rep 1:3 N '17

- Kentucky blue-grass seed situation. U S Seed Rep 2:5 J1 '18

**Blue jays**

- Plea for the blue jay. il Country Life 30:12b Ag '16

**Blue spruce.** See Spruce

**Blueberries**

- Blueberry culture. E. C. White. (In Pro. N.J. state hort. soc., 1916, p 100-6) '17 H. G. Taylor, sec., Riverton, N.J.

- Blueberry in New Hampshire. J. H. Gourley. bibliog il N H Ag Exp C 18:1-12 '17

- Blueberry lady. H. W. Collingwood. il Country Life 30:38-9 S '16

- Culture of the blueberry. il Rural N Y 76:314, 370 Mr 3-10 '17

- Directions for blueberry culture, 1916. F: V. Coville. U S Ag B 334:1-16, pl 1-17 '16

- Taming the wild blueberry. F: V. Coville. Mass Hort Soc Trans 1916, pt 1:103-23 '16

**Bluebirds**

- Food of the robins and bluebirds of the United States. F. E. L. Beal. U S Ag B 171: 1-31 '15

**Boards of health.** See Health boards

**Boards of trade**

- Décret n 12 du ministère de l'agriculture et du commerce réglementant l'exécution de la loi concernant les chambres de commerce au Japon. Int Yearbook Ag Leg 1916:450-5 '17

- Farmer vs. the board of trade. J: R. Mauff. Coop Manager & F 7:26-7 F '18

- What one chamber of commerce is doing. E. Simpson. Prog F 31:1331 N 18 '16

See also Chicago board of trade; Sioux City board of trade

**Boats and boating**

- Waterman's manual. L. Perry. il Country Life 32:19-32 J1 '17

See also Motor boats

**Bobwhites.** See Quails

**Body blight.** See Fire blight

**Bog gardens**

- Bog gardening with native plants. N. Taylor. il Gard M 26:89-91 O '17

- Creating the bog garden. A. Smith. Gard Chron Am 20:361 Ag '16

**Bog water**

- Physical properties of some toxic solutions. G: B. Rigg and others. bibliog Bot Gaz 61: 408-16 My '16

- Toxicity of bog water. G: B. Rigg. bibliog Am J Bot 3:436-7 O '16

**Bogs.** See Marsh lands

**Bohemians in the United States**

- New Bohemia, Virginia; colony of alien farmers. R. G. Carroll. il map Country Gent 81: 1290-1 J1 1 '16

**Boiler scale**

- Graphite for removing boiler scale. A. Carr. Power F 25:60 Mr '16

- Keeping the boiler safe. W. R. Starr. Power F 25:14 My '16

- Scale and foaming troubles. Power F 25:19 D '16

- Scale trouble in the gas engine. H. A. Von Nieda. Power F 27:33 N '18

**Boiler water.** See Feed water

**Boilers**

- Boiler room economies. W. A. Lailer. N Y Prod R 44:958+ O 10 '17

- Economical stoking. Gard Chron (Lond) 62: 195 N 17 '17

- When the boiler needs attention. il Power F 25:42-3 Ja '16

See also Boiler scale; Injectors

**Bokhara.** See Clover, Sweet

**Boletaceae**

Comparative histology of certain Californian boletaceae. H. S. Yates, bibliog Cal Univ Pub Botany v 6, no 10 221-74p, 21-25pl '16 (50c)

Structure of the boleti. G. F. Atkinson. Bot Gaz 62:328-30 O '16

**Boll weevils**

Boll weevil and fertilizer sales. Am Fert 46: 29 Mr 31 '17

Boll-weevil control. Weekly N L 5:6 S 5 '17

Boll weevil in Alabama. W. E. Hinds. il map Ala Ag Exp B 188:23-64 '16

Boll weevil inquiry. T. Butler. Prog F 33:855 Ag 3 '18

Boll weevil problem. B. L. Moss. Prog F 32: 278, 332, 350, 386, 440+, 472, 530, 556, 582, 605, 650 Mr 3-Ap 14, 28-May 19, Je 2 '17

Boll-weevil problem with special reference to means of reducing damage. W. D. Hunter. il map Farmers' B 848:1-40 '17

Boll weevil quarantine regulations. map Ga Entom Bd C 25:1-11 '18

Boll weevil, report of the South Carolina boll weevil commission. W. M. Riggs. (U.S. 64th Cong., 2d sess. Senate doc. 701) 20p il '17 U.S. Congress, Washington, D.C.; Same. S C Ag Ext B 20:1-24 n.d.

Boll weevil situation in Arkansas. C. O. Carpenter Prog F 31:1213; 32:1180 O 14 '16, N 10 '17

Boll-weevil warning. Weekly N L 5:5 Mr 13 '18

Boll weevils hibernating in cotton seed. H. B. Brown and R. W. Harned. Miss Ag Ext C 2 4p '16

Chance at the weevil; the Department of agriculture has a poison remedy for cotton's worst foe. J. E. Pickett. il Country Gent 83: 9-10 Ag 31 '18

Collection of weevils and infested squares as a means of control of the cotton boll weevil in the Mississippi delta. B. R. Coad and T. F. McGehee. il U S Ag B 564:1-51 '17

Cotton boll-weevil control in the Mississippi delta, with special reference to square picking and weevil picking. B. R. Coad. bibliog U S Ag B 382:1-12 '16

Cotton production under boll weevil conditions. L. E. Rast. il Ga Ag Coll (Ext) B 115:1-32 D '16 (2d ed Mr '17)

Cotton variety tests for boll-weevil and wilt conditions in Georgia. A. C. Lewis and C. A. McLendon. il Ga Entom Bd B 46:1-34 '17

Destroying cotton stalks in boll weevil territory. T. Butler. Prog F 31:1143 S 30 '16

Experiences in fighting the boll weevil. Prog F 33:534 Ap 27 '18

Feeding habits of the boll weevil on plants other than cotton. B. R. Coad. J Ag Research 2:235-45 Je '14

Growing cotton in spite of the boll weevil. J. A. Evans. Am Fert 46:41-2+ Ja 20 '17

History of an invasion. Outlook (381 4th av., N.Y. 10c) 115:222 F 7 '17

How to fight the boll weevil. B. L. Moss. Prog F 31:1259 O 28 '16

How to grow cotton in spite of the boll weevil. I. W. Williams. il Ga Entom Bd B 47: 1-48 '17

Make a hot mulch for the boll weevil. J. A. Wade. Prog F 31:894 Jl 15 '16

Making cotton despite the boll weevil. J. A. Wade. Prog F 31:340 Mr 4 '16

Menacing march of the boll weevil. B. L. Moss. map Prog F 31:1169 O 7 '16

Methods of growing cotton under boll-weevil conditions. (Doc. 36) 8p '17 U.S. States relations service, Washington, D.C.

Mexican cotton boll weevil. W. D. Pierce. il Cal State Comm Hort B v 6:291-5 Jl '17

Minimizing boll weevil damage through proper cultivation and fertilization. A. M. Soule. il Ga Ag Coll B 116:1-12 D '16

Negro, the boll weevil and farm management. Prog F 31:98 Ja 15 '16

Nip the boll weevil in the bud. J. A. Wade. Prog F 31:688 My 20 '16

Occurrence of a cotton boll weevil in Arizona. W. D. Pierce. il J Ag Research 1:89-98 N '13

Outwitting the boll weevil. J. Blake. Prog F 32:113 Ja 27 '17

Quarantine regulations and recommendations, Georgia. map Ga Entom Bd C 18 10p '16

Recent experimental work on poisoning cotton-boll weevils. B. R. Coad. il U S Ag B 731:1-15 '18

Recent studies of the Mexican cotton boll weevil. B. R. Coad. map U S Ag B 231:1-34 '15

Relation of the Arizona wild cotton weevil to cotton planting in the arid West. B. R. Coad. il U S Ag B 233:1-12 '15

Reorganization of farms in boll weevil territory. J. R. Fain and S. H. Starr. il Ga Ag Coll (Ext) B 117:1-16 Ja '17

Sky-high cotton; the weevil as a disguised blessing and as a curse. B. W. Currie. il map Country Gent 82:182-3 F 3 '17

Speech by J. M. Taylor. Ga Ag Coll (Ext) C 54 8p '17

Start early to control the boll weevil. D. N. Barrow. Prog F 31:693 My 20 '16

Starve the boll weevil. J. G. Oliver. il Ga Ag Coll (Ext) C 63:1-4 '17

Studies of the Mexican cotton boll weevil in the Mississippi valley. R. W. Howe. il U S Ag B 358:1-32 '16

Studies on the biology of the Arizona wild cotton weevil. B. R. Coad. il U S Ag B 344: 1-23 '16

Tenant question as affected by the boll weevil. J. F. Dugger. Prog F 31:1075 S 9 '16

We must learn how to live with the boll weevil. W. A. McKrae. il Fla Ag Dept Quar B v 26:13-22 O '16

**Bollworms, Cotton.** See Corn earworms

**Bollworms, Pink**

Bollworm menace. Weekly N L 5:5 O 3 '17

Cotton. J. Young and others. Congressional Record (Washington, D.C.) 56:1340-2 Ja 25 '18

Distribution and extermination of the pink bollworm in Mexico. Congressional Record (Washington, D.C.) 56:1683-8 F 1 '18

Fumigation of imported baled cotton. il Textile World (461 8th av. at 34th st., N.Y. \$3 per yr) 52:628+ Ja 13 '17

Life history of gelechia gossypiella from the time of the cotton harvest to the time of cotton sowing. L. Gough. Egypt Ag Tech & Sci B 4:1-16 '16 (5c)

Loi n. 26 édictant des mesures en vue de la destruction du ver rose de la graine du coton en Egypte. Int Yearbook Ag Leg 1916: 862-3 '17

Machines for the treatment of cotton seed against pink boll worm. G. Storey. Egypt Ag Tech & Sci B 14:1-29 '17 (10c)

Nature of the damage done by the pink boll worm. L. Gough. Egypt Ag Tech & Sci B 2:1-6 '16 (5c)

Neutral zone in the campaign against an insect pest. Scientific Am (233 Broadway, N.Y. 10c) 117:92 Ag 4 '17

Note on a machine to kill gelechia larvae by hot air, and the effects of heat on gelechia larvae and cotton seed. L. Gough. Egypt Ag Tech & Sci B 6:1-15 '16 (10c)

\* Origin of the pink bollworm. C. L. Marlatt. Science (Science Press, Garrison, N.Y. 15c) n s 48:309-12 S 27 '18

Pink bollworm. (In Report, 1917, Federal horticultural bd., p. 5-8) '17 U S Ag

Pink boll worm. Weekly N L 4:2 Jl 4 '17

Pink boll worm. W. D. Hunter. Science (Science Press, Garrison, N.Y. 15c) n s 45:293-4 Mr 23 '17

Pink bollworm (gelechia gossypiella) in Egypt. H. A. Ballou. J Econ Entom 11:236-45 Ap '18

Pink boll worm in Texas. Scientific Am (233 Broadway, N.Y. 10c) 118:63 Ja 12 '18

Pink bollworm invasion. C. L. Marlatt. Textile World (461 8th av at 34th st., N.Y. \$3 per yr.) 53:4364b Mr 23 '18

Pink bollworm of cotton. H. S. Smith. il Cal State Comm Hort B v 7:196-8 Ap '18

Pink bollworm, pectinophora gossypiella. A. Busck. bibliog il J Ag Research 9:343-70 Je 4 '17

Pink bollworm problem in the United States. W. D. Hunter. il Fla State Plant Bd Quar B v 2:139-49 Ap '18



**Bollworms, Pink**—*Continued*

- Pink bollworm situation. (Service and regulatory announcements—Fed. Hort. Bd. 45) p 119-20 '17 U S Ag
- Pink bollworm situation. (Service and regulatory announcements—Fed. Hort. Bd. 49) p 11-16 '18 U S Ag
- Pink bollworm situation. (Service and regulatory announcements—Fed. Hort. Bd. 50) p 25-9 '18 U S Ag
- Pink bollworm situation. (Service and regulatory announcements—Fed. Hort. Bd. 51 & 52) p 39-42, 53-63 '18 U S Ag
- Pink bollworm situation. Weekly N L 5:2 O 17 '17
- Pink bollworm situation in Texas and Mexico. C. L. Marlatt. (Service and regulatory announcements—Fed. Hort. Bd. 46) p 135-7 '18 U S Ag
- Pink bollworm situation; present status in Texas and Mexico. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 87-8 '18 U S Ag
- Pink bollworm spreading. Weekly N L 5:3 S 12 '17
- Pink bollworm will be exterminated in Texas. campaign report forecasts. Weekly N L 6:5 D 11 '18
- Pink boll worm with special reference to steps taken by the Department of agriculture to prevent its establishment in the United States. W. D. Hunter. bibliog il U S Ag B 723:1-27 '18
- Rate of increase of the pink boll worm in green bolls in the period July to November 1916. L. H. Gough. Egypt Ag Tech & Sci B 13:1-20 '17 (10c)
- Simon's hot-air machine for the treatment of cotton seed against pink boll worm. G. Storey. Egypt Ag Tech & Sci B 11:1-7 '16 (5c)
- Terrible pink Hun. J. Roland. il Country Gent 83:1+ JI 6 '18
- Texas farmers will stop growing cotton if that is only way to keep out pink boll worm. Weekly N L 5:6 Ag 8 '17

**Bolster springs.** See Springs (mechanism)

**Bombyx pini.** See Pine moths

**Bonds**

- Bonds or mortgages as investments. J. R. Milligan. Ohio F 138:246 S 16 '16
- Farm loan bond as an investment. Review of Reviews (30 Irving Place, N.Y. 25c) 55: 558-9 My '17
- Federal land bank bonds as investments. J. F. Ebersole. (In Minnesota farmers' institute annual, 1916, p 103-9) '16 Extension division, University Farm, St Paul
- 4½% farm loan bonds. (B. 2) n.p. '17 Federal land bank, Springfield, Mass.
- Industrial bonds. J. R. Milligan. Ohio F 138: 139 Ag 19 '16
- Land bank bonds. L. Pendelton. Country Gent 82:1165 JI 21 '17
- Public utility bonds. J. R. Milligan. Ohio F 138:169 Ag 26 '16
- Various classes of bonds. J. R. Milligan. Ohio F 138:42 JI 15 '16
- See also Drainage bonds; Investments; Irrigation bonds; Municipal bonds; Railroads—Securities; Stocks

**Bonds, Drainage.** See Drainage bonds

**Bone meal**

More about bone meal for abortion. Hoard's D 51:18 Ja 28 '16

**Bones**

Repair of bones in adults. Am Vet M Assn J 52:643-6 F '18

**Diseases**

See also Osteosarthyrosis

**Bones as fertilizer**

- Fertilizer materials statistics. (In Am. fertilizer hdbk., 1917, p. 28-30) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Pribilofs can supply bone. Am Fert 44:32-3 Mr 18 '16
- Pribilofs supply bone fertilizers. Ag Digest 1: 16 My '16

**Boneset**

Glimpses of southern beekeeping—boneset. J. S. Scott. Am Bee J 58:267 Ag '18

**Bonham, L. N., 1830-1918**

Portrait. Breeder's Gaz 73:649 Mr 28 '18

**Bonus system**

Sliding scale bonuses in the sugar-cane plantations of Hawaii. Int R Ag Econ 9,no 3: 258-60 Mr '18

**Book-plates**

Book-plates of country dwellers. S. Allard. il Country Life 31:50-1 N '16

**Bookbinding**

How to bind Gleanings. M. H. Teisberg. il Gleanings 44:123-4 F 1 '16

**Bookkeeping**

Grain elevator men study the government system of bookkeeping. Coop Manager & F 7:36-7 Ag '18

See also Farm bookkeeping

**Books and reading**

- Better reading for farmers. A. W. Foreman. Rural N Y 75:40 Ja 8 '16
- Books and bulletins. Prog F 31:1496 D 30 '16
- Books as Christmas presents. Nat Stock & F 42:832 D 14 '18
- Books for farm folks. A. C. Wortman. Green's Am Fruit Grower 38:2 Ag '18
- Farmer and farm books. T. Shaw. Breeder's Gaz 70:312 Ag 31 '16
- Farmer and his books. P. C. Manley. Nat Stock & F 40:468 Ag 5 '16
- Farmer needs a library. L. W. Lighty. Nat Stock & F 40:838 N 18 '16
- Farmer's library. K. B. Wells; W. Davis. Prog F 32:541 Ap 28 '17
- Farmers' reading and music. F. M. Wood. il Ohio F 137:312 F 26 '16
- Food for the mind. Wallaces' F 41:561 Ap 7 '16; Same. J Ag (Quebec) 20:116 N '16
- Free books for country boys. S. Morse. Rural Manhood 7:22-7 Ja '16
- Making of a home library. M. F. Emerson. J Home Econ 8:597-602 N '16
- Natural way to start reading and spelling. E. F. Lynch. Country Gent 81:769 Ap 1 '16
- On the road of progress. H. Quick. Country Gent 81:505 Mr 4 '16
- Reading in the farm home. L. Bone. il Purdue Ag 11:49-50 Ja '17
- Reading matter for the home. Prog F 33:414 Mr 30 '18
- Rural school and the reading habit. H. N. Sanborn. (In Pro., Nat. educ. assn., 1916, p. 626-32) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Silent companions. Rural N Y 75:1338 O 21 '16
- See also Children's reading; Libraries; Text-books

**Bibliography**

- Books country girls should read. Rural Manhood 7:143-4 O '16
- Books for the farm home. 15p il '16 Globe Wernicke co., Cincinnati, O.
- Graded list of library books for supplementary reading in elementary schools. (In Million dollar appropriation country schools. W. F. Doughty.) (B 54) p 46-65 '16 Texas Dept. of educ., Austin
- Guide to reading in English. Rural N Y 77: 775, 797 Je 8-15 '18
- List of best books, papers and pictures. Prog F 31:222 F 12 '16
- Reading matter for farm women. Prog F 32: 417 Mr 31 '17
- Boots and shoes**
- Your poor feet. M. H. Talbott. Country Gent 81:610 Mr 11 '16

**Bordeaux mixture**

- Back-yard Bordeaux. P. S. Lovejoy. il Country Gent 83:27 Je 22 '18
- Bordeaux-mixture stains removed. M. G. Kains. Country Gent 81:1161 Je 3 '16
- Bordeaux spray for tip burn and early blight of potatoes. A. T. Erwin. il Ia Ag Exp B 171:63-75 '17
- Commercial Bordeaux mixtures; how to calculate their values. E. Wallace and L. H. Evans. il Farmers' B 994:1-11 '18

**Bordeaux mixture—Continued**

- Cost of Bordeaux mixture. Fruit-Grower 27: 126 F 15 '16
- Delayed ripening of tomatoes caused by spraying with Bordeaux mixture. C. W. Edgerton. *il* La. Ag Exp B 164:1-16 '18
- Formula and directions for making. Prog F 31:215 F 12 '16
- How Bordeaux controls fungi. J. G. Boyle. Country Gent 81:1119 My 27 '16
- How to make Bordeaux for small acreages. Mich Ag Exp Spec B 77:8 '16
- How to make Bordeaux mixture. Market Growers J 18:249 Ap 1 '16
- How to mix Bordeaux mixture. J. J. Gardner. Better Fruit 11:29 My '17
- Influence of Bordeaux mixture on the rates of transpiration from abscised leaves and from potted plants. W. H. Martin. bibliog J Ag Research 7:529-48 D 18 '16
- Lime-sulphur vs. Bordeaux mixture as a spray for potatoes. M. T. Munn. *il* N Y State Ag Exp B 421:311-17 '16
- Lime-sulphur vs. Bordeaux mixture as a spray for potatoes (B. 397). M. T. Munn. *il* N Y State Ag Exp Rep 1915:291-301 '16
- Making Bordeaux mixture. G. E. Saunders. Ag Gaz of Canada 5:239-40 Mr '18
- Making the Bordeaux mixture. Rural N Y 77: 763 Je 8 '18
- Preparation of Bordeaux. J. G. Boyle. Country Gent 81:975 My 6 '16
- Prevention of field and storage rot of potatoes by Bordeaux mixture. P. A. Murphy. *il* Ag Gaz of Canada 4:942-4 N 1 '17
- Spray potatoes. Weekly N L 5:1 Ag 8 '17
- Studies on Bordeaux mixture. B. F. Lutman. bibliog *il* Vt Ag Exp B 196:1-80 '16; Same. (*In* Vt Ag Exp Report, 1915-1916) '16
- See also* Ammonia Bordeaux

**Analysis**

- Report on Bordeaux mixture. R. C. Roark. Assn Offic Ag Chem J 3:178-83 My '17

**Borders, Garden.** *See* Garden borders**Borers (animals)**

- Field tests made on oil treatment of wood against marine borers. C. H. Teesdale and L. F. Shackell. *il* Eng News-Record (10th av at 36th st. N.Y. 15c) 79:333-7 N 1 '17; Same. Railway Age (Woolworth bldg., N.Y. 15c) 63:801-4 N 2 '17
- Teredo destroys improperly treated piles. H. von Schrenk. *il* Railway Age (Woolworth bldg., N.Y. 15c) 63:657-8 O 12 '17

**Borers (insects)**

- Dig out the borers. C. M. Weed. *il* Nat Stock & F 41:722 O 27 '17
- Discouraging the borers. J. Smith. Fruit-Grower 28:286 Je 1 '17
- Medicine for borers. J. R. Mattern. Country Gent 81:410 F 19 '16
- Wax as protection against borers. S. Goodley, jr. Country Gent 82:967 Je 2 '17
- Will nicotine kill borers? E. H. Favor. Fruit-Grower 27:20 Ja 1 '16

*See also* Ambrosia beetles; Apple root borers; Barkbeetles; Bronze birch borers; Chestnut borers. Two-lined; Clover root borers; Cornstalk beetles. Roughheaded; Cornstalk borers. Lesser; Cottonwood borers; Elm borers; Flat-headed borers; Grain borers. Lesser; Hemlock borers; Locust borers; Parandra borers; Peach tree borers; Peach tree borers. Lesser; Plum borers; Poplar and willow borers; Potato stem borers; Powder post beetles; Round-headed apple-tree borers; Sinate pear borers; Squash borers; Sugar-cane beetle borers; Sugar-cane moth borers; Sugar-cane root borers; Sugar maple borers; Sweet potato root borers; Three-lined fig-tree borers; Twig pruners

**Boron**

*See also* Plants, Effect of boron on

**Borrowing**

- Borrowed plows and gear and things. W. H. Dean. *il* Country Gent 82:1761 N 17 '17

**Borzoi**

- Hound of the czars. W. A. Dyer. *il* Country Life 30:52 O '16

**Bosnia**

*See also* subhead Bosnia under Agricultural credit; Agriculture; Forests and forestry

**Boston**

*See also* Food supply—Boston

**Parks**

*See also* Boston Common

**Boston Common**

- Boston Common, past and present. D. Morrell. Ohio F 137:822 Je 17 '16

**Boston ferns.** *See* Ferns**Boston market gardeners' association**

- Boston market gardeners' field meeting. Rural N Y 75:276 F 19 '16
- Boston market gardeners meeting, April 1. Rural N Y 75:557 Ap 1 '16
- Round-up of market gardeners. Rural N Y 75:1603 D 30 '16

**Boston students' union**

- Problem of housing women in large cities. Mrs K. Osborne. J Home Econ 8:475-8 S '16

**Botanical chemistry**

- Arsenic and manganese in plants. Scientific Am Sup (233 Broadway, N.Y. 10c) 82:371 D 9 '16
- Biochemistry of plants. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:56 Ja 26 '18
- Chemistry as an aid in the identification of species. A. W. Schorger. Soc Am For Pro 11:33-9 Ja '16
- Copper in the flora of a copper-tailing region. W. G. Bateman and L. S. Wells. bibliog Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39: 811-19 Ap '17
- Determination of phytin phosphorus in plant products. J. B. Rather. Ark Ag Exp B 135:1-15 '17
- Evidence of the action of oxidases within the growing plant. J. H. Kastle and G. D. Buckner. Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39:478-82 Mr '17
- Manganese content of the ash of certain drugs. L. E. Westman and R. M. Rowat. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:558-61 Mr '18
- Physical chemistry in the service of phyto-geography. J. A. Harris. Science (Science Press, Garrison, N. Y. 15c) n s 46:25-30 Jl 13 '17
- Physiological rôle of calcium in plants. T. Robert. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:290-1 My 12 '17
- Report on inorganic plant constituents. A. J. Patten. Assn Offic Ag Chem J 3:153-6 My '17
- Some energy relations of plants. G. B. Rigg. Science (Science Press, Garrison, N.Y. 15c) n s 48:125-32 Ag 9 '18

*See also* Plants, Chemical analysis of

**Botanical gardens**

- Arboretum of M. P. de Vilmorin at Pezanin (Saône-et-Loire, France), and the results obtained there. S. Mottet. Int R Sci & Prac Ag 9,no 4:462-5 Ap '18
- Bartram's garden. B. A. Clark. *il* House Beautiful (3 Park st., Boston 25c) 41:205-7 Mr '17
- Californian arboretum. D. H. Campbell. *il* Scientific Monthly (Science Press, Garrison, N. Y. 30c) 4:289-300 Ap '17
- Frederick's (Md.) educational garden. Gard Chron Am 20:32 Ja '16
- Ideals and opportunities for a botanic garden. C. S. Gager. Science (Science Press, Garrison, N.Y. 15c) n s 45:648-53 Je 29 '17
- Social, educational, and scientific value of botanic gardens. J. M. Coulter. Science (Science Press, Garrison, N.Y. 15c) n s 45: 643-7 Je 29 '17
- See also* Arnold arboretum; Brooklyn botanic garden; Kew botanical garden; Missouri botanical garden; United States botanic garden



**Botanical gardens—Continued**

**Bibliography**

List of references on botanical gardens. U.S. Library of Congress. 6p '17  
Obtainable only thru Public affairs information service, 958-964 University av., N. Y. (Typew 30c)

**Botanical laboratories**

New laboratories at Wilsey. il plans Royal Hort Soc J 42,pt 1:115-21 O '16

See also Field crops laboratories

**Botanical literature**

Formal organization of Committee on botanical abstracts to formulate a program for a journal of botanical abstracts. Phyt 8:172-4 Ap '18

**Botanical research**

Botany as a national asset. J: M. Coulter. Science (Science Press, Garrison, N.Y. 15c) n s 45:225-31 Mr 9 '17

Near future of botany in America. C. S. Gager. Science (Science Press, Garrison, N.Y. 15c) n s 47:101-15 F 1 '18

**Botanists**

Brief history of botany. Gard Chron Am 22:7-8+ Ja '18

Need for organization of American botanists for more effective prosecution of war work. G. R. Lyman. Science (Science Press, Garrison, N.Y. 15c) n s 47:279-85 Mr 22 '18

See also Gwynne-Vaughan, D. T.; Hasse, H. E.; Hooker, Joseph D.; Sargent, Ethel

**Botany**

Application of botanical science to agriculture. A. Howard. Ag J of India Sci Congress No 1916:14-26 '16; Abstract. Int R Sci & Prac Ag 7,no 10:1423-6 O '16

Botanical merry-go-round. E. E. Shaw. il Gard M 23:192 Ap '16

Botany and better agriculture. E. J. Petry. Purdue Ag 11:21-2 Je '17

Kingdom of the plants; comprising lessons I-IV, inclusive, extension course in gardening for boys and girls clubs. C: A. Norcross and P. A. Lehenbauer. il Nev Ag Ext B 8:1-23 '16

Near future of botany in America. C. S. Gager. Science (Science Press, Garrison, N.Y. 15c) n s 47:101-15 F 1 '18

Position and prospects of botany. W. L. Crozier. Science (Science Press, Garrison, N.Y. 15c) n s 48:193-4 Ag 23 '18

Studying plants in winter. R. W. Shufeldt. il Am For 22:731-6 D '16

See also Alpine plants; Annuals (plants); Aquatic plants; Botanists; Botany, Economic; Botany, Medical; Buds; Bulbs; Chlorosis (botany); Climbing plants; Color of flowers; Color of plants; Fertilization of plants; Floriculture; Flowers; Flowers—Measurement; Forests and forestry; Fruit; Fungi; Gardening; Geographical distribution of animals and plants; Geotropism; Glands (botany); Hybridization; Vegetable; Insectivorous plants; Leaves; Mendelism; Nature study; Nectar secretion; Paleobotany; Parasitic plants; Perennials; Phylogeny (botany); Plants; Protoplasm; Sap; Seedlings; Seeds; Shrubs; Spermatogenesis in plants; Trees; Tropical plants; Variation (biology); Vegetables; Weeds; also headings beginning Botanical and Plant, and names of plants, and of divisions, orders, etc., of the vegetable kingdom

**Anatomy**

Additional notes upon the angiosperms tracentron, trochodendron, and drimys, in which vessels are absent from the wood. I. W. Bailey and W. P. Thompson. bibliog il Ann Bot 32:503-12 O '18

Anatomical study of gymnosporangium galls. A. Stewart. bibliog il Am J Bot 2:402-17 O '15

Anatomy and phylogenetic position of the betulaceae. C. S. Hoar. bibliog il Am J Bot 3:415-35 O '16

Anatomy of a hybrid equisetum. H. Holden. il Am J Bot 2:225-37 My '15

Anatomy of certain goldenrods. E. S. Whitaker. il Bot Gaz 65:250-60 Mr '18

Anatomy of the potato plant, with special reference to the ontogeny of the vascular system. E. F. Artschwager. bibliog il J Ag Research 14:221-52, 27-47pl Ag 5 '18

Anatomy of the six epiphytic species of the New Zealand orchidaceae. K. M. Curtis. bibliog il Ann Bot 31:133-49 Ja '17

Axillary cleistogenes in some American grasses. A. Chase. il Am J Bot 5:254-8 My '18

Chemistry and histology of the glands of the cotton plant, with notes on the occurrence of similar glands in related plants. E. R. Stanford and A. Viehoveer. bibliog il J Ag Research 13:419-35 My 20 '18

Columella in marichantia polymorpha. J. E. Cribbs. il Bot Gaz 65:91-6 Ja '18

Conservatism and variability in the seedling of dicotyledons. E. W. Sinnott. il Am J Bot 5:120-30 Mr '18

Dysmorphococcus variabilis. H. Takeda. Ann Bot 30:151-6 Ja '16

Experimental investigations on the genus drimys. E: C. Jeffrey and R. D. Cole. Ann Bot 30:359-68 Jl '16

Histology of the phloem in certain woody angiosperms. L. H. MacDaniels. bibliog il Am J Bot 5:347-78 Jl '18

Independent evolution of vessels in gnetales and angiosperms. W. P. Thompson. bibliog il Bot Gaz 65:83-90 Ja '18

Note on the vegetative anatomy of phorophaera Fitzgeraldi. F. v. M. P. Groom. il Ann Bot 30:311-14 Ap '16

Notes on equisetum debile. Roxb. Shiv Ram Kashyap. il Ann Bot 31:439-45 Jl '17

\* Notes on some North American conifers based on leaf characters. L. W. Durrell. (Contribution 66) 519-82p bibliog il '17 Ia. state coll. Dept. of botany, Ames

Notes on the anatomy of the young tuber of ipomoea batatas Lam. F. A. McCormick. bibliog il Bot Gaz 61:388-98 My '16

Observations on the anatomy of teratological seedlings. H. S. Holden and D. Bexon. bibliog il Ann Bot 32:513-30 O '18

Observations on the anatomy of the leaf in the osmundaceae. D. T. Gwynne-Vaughan. il Ann Bot 34:487-93 O '16

Of the recognition of apples—Truelle's line. H. E. Durham. il Gard Chron (Lond) 60: 239-40 N 18 '16

On some climbing davallias and the petiole of lygodium. D. T. Gwynne-Vaughan. il Ann Bot 30:495-507 O '16

On the anatomy of two palaeozoic stems from India. R. Holden. bibliog il Ann Bot 31:315-26 Jl '17

On the vascular anatomy of the young epicotyl in some ranalean forms. K. B. Blackburn. il Ann Bot 31:51-80 Ja '17

Permeability of certain plant membranes to water. F. E. Denny. bibliog il Bot Gaz 63:373-97 My '17

Permeability of membranes as related to their composition. F. E. Denny. bibliog Bot Gaz 63:468-85 Je '17

Phyllode theory of the monocotyledonous leaf, with special reference to anatomical evidences. A. Arber. bibliog Ann Bot 32:465-501 O '18

Physiological anatomy of spartina Townsendii. G: K. Sutherland and A. Eastwood. bibliog il Ann Bot 30:333-51 Ap '16

Pityostrobus macrocephalus, L. and H., a tertiary cone showing ovular structure. C. P. Dutt. bibliog il Ann Bot 30:529-49 O '16

Pollination of the pomaceous fruits; gross vascular anatomy of the apple. E. J. Kraus and G. S. Ralston. bibliog il Ore Ag Exp B 138:1-12 '16

Seedling anatomy of certain amentiferae. A. J. Davey. bibliog il Ann Bot 30:575-99 O '16

Some features in the anatomy of the malvales. C. C. Forsaith. il Am J Bot 2:238-49 My '15

Structure of wood in blueberry and huckleberry. E. M. Flint. il Bot Gaz 65:556-9 Je '18

**Botany—Anatomy—Continued**

- Study in the anatomy of hazel-wood with reference to conductivity of water. M. G. Holmes. *Ann Bot* 32:553-67 O '18
- Vascular anatomy of piper methysticum. R. E. Hoffstadt. *bibliog il Bot Gaz* 62:115-32 Ag '16
- See also* Cambium; Inflorescence; Plant cells and tissues; Pollen tubes

**Classification**

- \* Allies of *selaginella rupestris* in the south-eastern United States. G. P. Van Eseltine. (U.S. Nat. herbarium, Contributions, v. 20, pt. 5) 159-72p il '18 Smithsonian inst., Washington, D.C.
- Current taxonomic literature. *Bot Gaz* 62: 509-16 D '16
- Cyrtandreae hawaiienses*, sect. *crotonocalyces* Hillebr. J. F. Rock. *Am J Bot* 5:259-77, 18-23 pl My '18
- Generic types with special reference to the grasses of the United States. A. S. Hitchcock. *Am J Bot* 5:248-53 My '18
- Genetic relationship of parasites. F. D. Kern. *Am J Bot* 2:116-31 Mr '15
- Genus calthia* in the southern hemisphere. A. W. Hill. *il Ann Bot* 32:421-35 Jl '18
- Genus espeletia*. P. C. Standley. *il Am J Bot* 2:468-86 N '15
- Indigen and cultigen. L. H. Bailey. *Science* (Science Press, Garrison, N. Y. 15c) n s 47: 306-8 Mr 29 '18
- Key to the families and genera of the wild plants of Austin, Texas. M. S. Young. *Tex Univ (Austin) B* 1754:1-71 '17
- Modern systematist. L. H. Bailey. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:623-9 D 28 '17
- Morphology as a factor in determining relationships. J. M. Greenman. *Am J Bot* 2: 111-15 Mr '15
- On the identity of Blanco's species of *bambusa*. E. D. Merrill. *Am J Bot* 3:58-64 F '16
- Osbeck's dagbok öfwer en Ostindsk resa. E. D. Merrill. *Am J Bot* 3:571-88 D '16
- Perennial scapose drabas of North America. E. B. Payson. *Am J Bot* 4:253-67 My '17
- Revision of the Hawaiian species of the genus *cyrtandra*, section *cylindrocalyces* Hillebr. J. F. Rock. *il Am J Bot* 4:604-23 D '17
- Specificity of proteins and carbohydrates in relation to genera, species and varieties. E. T. Reichert. *Am J Bot* 3:91-8 Mr '16
- Taxonomic characters of the genera *alternaria* and *macrosporium*. J. A. Elliott. *bibliog il Am J Bot* 4:439-76 O '17
- Taxonomic study of *setaria italica* and its immediate allies. F. T. Hubbard. *Am J Bot* 2: 169-98 Ap '15
- Taxonomic value and structure of the peach leaf glands (B. 365). C. T. Gregory. *bibliog il Cornell Ag Exp Rep* 1916:183-222 '17
- Taxonomy of the agaricaceae. W. A. Murrill. *Am J Bot* 4:315-26 Je '17
- Western plant studies. A. Nelson and J. F. Macbride. *Bot Gaz* 61:30-47; 62:143-52; 65: 58-70 Ja, Ag '16, Ja '18

**Bibliography**

- Taxonomic notes. *Bot Gaz* 63:243-4, 329-30, 421-2, 527-8; 64:83-4, 174-5, 260-1, 340-2, 439-40, 527-8 Mr-D '17

**Ecology**

- Age and area hypothesis and the problem of endemism. E. W. Sinnott. *Ann Bot* 31:209-16 Ap '17
- Aquatic weeds of the Godavari and Pravara canals of the Bombay presidency—a problem in applied ecology. W. Burns. *il Ag J of India Sci Congress No* 1916:65-71 '16
- Climate and plant growth in certain vegetative associations. A. W. Sampson. *U S Ag B* 700:1-72 '18
- Contrast in the floras of eastern and western Newfoundland. M. L. Fernald. *maps Am J Bot* 5:237-47 My '18
- Cron centers of the United States. A. E. Waller. *bibliog maps Am Soc Agron J* 10: 49-83 F '18
- Distribution of species in New Zealand. J. C. Willis. *Ann Bot* 30:437-57 Jl '16

- Distribution of the plants of the outlying islands of New Zealand. J. C. Willis. *map Ann Bot* 31:327-33 Jl '17
- Ecological significance of soil aeration. W. A. Cannon and E. E. Free. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:178-80 F 23 '17
- Ecology of the Santa Catalina mountains. G. D. Fuller. *Bot Gaz* 62:75-8 Jl '16
- Evolution of species in Ceylon, with reference to the dying out of species. J. C. Willis. *Ann Bot* 30:1-23 Ja '16
- Further evidence for age and area; its applicability to the ferns, etc. J. C. Willis. *bibliog Ann Bot* 31:335-49 Jl '17
- Geographic affinities of the vascular floras of New England, the maritime provinces and Newfoundland. M. L. Fernald. *maps Am J Bot* 5:219-36 My '18
- Leaf size in plant geography. A. L. Bakke. *Bot Gaz* 63:242 Mr '17
- Lysichiton camtschatcense* (L.) Schott, and its behavior in sphagnum bogs. G. Turesson. *bibliog il Am J Bot* 3:189-209 Ap '16
- Morphology and anatomy of the genus *statice* as represented at Blakeney Point. E. de Fraine. *il Ann Bot* 30:239-82 Ap '16
- On endemism and the mutation theory. H. N. Ridley. *Ann Bot* 30:551-74 O '16
- Osmotic concentration of the tissue fluids of Jamaican montane rain-forest vegetation. J. A. Harris and J. V. Lawrence. *bibliog Am J Bot* 4:268-98 My '17
- Phytogeography of Manoa valley, Hawaiian islands. V. MacCaughey. *il maps Am J Bot* 4:561-603 D '17
- Plant ecology and its relation to agriculture. W. G. Waterman. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:223-8 S 7 '17
- Quadrat studies in a mountain grassland. F. Ramaley. *Bot Gaz* 62:70-4 Jl '16
- Rate of growth and ecesis in lichens. B. Fink. *Mycol* 9:138-58 My '17
- Relation between evaporation and plant succession in a given area. F. C. Gates. *il Am J Bot* 4:161-78 Mr '17
- Relative age of endemic species and other controversial points. J. C. Willis. *bibliog Ann Bot* 31:189-208 Ap '17
- Some ecological adaptations of certain fern prothallia—*camptosorus rhizophyllus* Link., *asplenium platyneuron* Oakes. F. L. Pickett. *il Am J Bot* 1:477-98 N '14
- Sources and distribution of the New Zealand flora, with a reply to criticism. J. C. Willis. *bibliog Ann Bot* 32:339-67 Jl '18
- Structure and development of the plant association; ecological terms. *J For* 16:460-2 Ap '18
- Study in physiographic ecology in northern Florida. L. Gano. *bibliog il Bot Gaz* 63:337-72 My '17
- Succession as a factor in range management. A. W. Sampson. *J For* 15:593-6 My '17
- Units of vegetation and their classification. G. D. Fuller. *Bot Gaz* 66:385-7 O '18
- Vegetation of Northern Cape Breton Island, Nova Scotia. G. E. Nichols. (Trans., v. 22, p. 249-467) *il* \$2.40 '18 Conn. academy of arts & sciences, New Haven
- See also* Desert vegetation; Forest ecology; Plants, Effect of light on; Plants, Effect of temperature on

**Embryology**

- Anomalies in the ovary of *senecio vulgaris*. J. Small. *Ann Bot* 30:191-2 Ja '16
- Development of embryo sac and embryo in *euphorbia preslii* and *e. splendens*. W. Weniger. *bibliog il Bot Gaz* 63:266-81 Ap '17
- Development of the sorus and sporangium and the prothallus of *peranema cyatheoides*. R. C. Davie. *bibliog il Ann Bot* 30:101-10 Ja '16
- Observations on an *achlya* lacking sexual reproduction. W. H. Weston. *bibliog il Am J Bot* 4:354-67 Je '17
- Structure of the ovule of *larix leptolepis*. J. Doyle. *Ann Bot* 30:193-5 Ja '16
- Studies of the development of the piperaceae; structure and seed-development of *peperomia hispida*. D. S. Johnson. *bibliog il Am J Bot* 1:357-97 O '14



**Botany—Embryology—Continued**

- Studies on the embryo sac and fertilization in *Oenothera*. M. Ishikawa. bibliog il Ann Bot 32:279-317 Ap '18  
 Supersolator and early embryo of *Pinus*. J. T. Buchholz. bibliog il Bot Gaz 66:185-228 S '18

**Histology**

See Botany—Anatomy; Plant cells and tissues

**Morphology**

- Archegonium and sporophyte of *Trebisia insignis* Goebel. D. H. Campbell. il Am J Bot 3:261-73 Je '16  
 Classification of the varieties of cultivated oats. W. C. Etheridge. bibliog il Cornell Ag Exp Memoir 10:85-172. pl 1-22 '16  
 Comparative study of winter and summer leaves of various herbs. J. P. Stober. Bot Gaz 63:89-109 F '17  
 Contribution to the life history of *Impatiens sultani*. A. M. Ottley. bibliog il Bot Gaz 66:289-317 O '18  
 Contribution to the study of the *Marattiaceae*. C. West. bibliog il Ann Bot 31:361-414 J1 '17  
 Correlation between the external and internal morphology and the length of the vegetative period of some varieties of *Trifolium pratense*; research-work in Russia. V. Jolkevitch. Int R Sci & Prac Ag 8,no 1: 66-9 Ja '17  
 Correlations between morphological characters and the saccharine content of sugar beets. F. J. Pritchard. il Am J Bot 3:361-76 J1 '16; Abstract. Int R Sci & Prac Ag 8,no 2:240-4 F '17  
 Development of the ascocarp of *Rhizina undulata* fr. H. M. Fitzpatrick. bibliog il Bot Gaz 63:282-96 Ap '17  
 Development of the conceptacle in *Fucus*. M. L. Roe. bibliog il Bot Gaz 61:231-46 Mr '16  
 Embryo sac of *Richardia africana* kth. M. R. Michell. bibliog il Bot Gaz 61:325-36 Ap '16  
 Investigations on the phylogeny of the angiosperms. E. W. Sinnott and I. W. Bailey. il Am J Bot 1:441-53 N '14  
 Investigations on the phylogeny of the angiosperms; the anatomy of the node as an aid in the classification of angiosperms. E. W. Sinnott. bibliog Am J Bot 1:303-22, pl 30-5 J1 '14  
 Morphology and affinities of *Gnetum*. W. P. Thompson. bibliog il Am J Bot 3:135-84 Ap '16  
 Morphology and anatomy of the genus *Statice* as represented at Blakeney Point. E. de Fraine. il Ann Bot 30:239-82 Ap '16  
 Morphology and cytology of the sexual organs of *Phytophthora erythroseptica*. Pethyb. P. A. Murphy. bibliog il Ann Bot 32:115-53 Ja '18  
 Morphology and systematic position of *Podomitrium*. D. H. Campbell. il Am J Bot 2:199-210 My '15  
 Morphology as a factor in determining relationships. J. M. Greenman. Am J Bot 2:111-15 Mr '15  
 Morphology of *Keteleeria Fortunei*. A. H. Hutchinson. bibliog il Bot Gaz 63:124-34 F '17  
 Morphology of *Phylloglossum Drummondii*. Kunze. K. Sampson. il Ann Bot 30:315-31 Ap '16  
 Morphology of the barley grain with reference to its enzym-secreting areas. A. Mann and H. V. Harlan. il U S Ag B 183:1-32 '15  
 Morphology of the monocotyledonous embryo and of that of the grass in particular. W. C. Worsdell. bibliog il Ann Bot 30:509-24 O '16  
 Nature of the inflorescence and fruit of *Pyrus malus*. C. A. Black. bibliog il N H Ag Exp Tech B 10:519-47 '16  
 On the haustoria of *Pedicularis vulgaris*. Tournef. A. C. Maybrook. bibliog il Ann Bot 31:499-511 J1 '17  
 Origin of the endodermis in the stem of *Hip-puris*. K. Barratt. Ann Bot 30:91-9 Ja '16  
 Phyllode theory of the monocotyledonous leaf, with special reference to anatomical evidences. A. Arber. bibliog Ann Bot 32:465-501 O '18

Preliminary note on the morphology of *Gnetum*. W. P. Thompson. Am J Bot 2:161 Ap '15

Some points in the morphology of the stipules in the *Stellatae*, with special reference to *Galium*. H. Takeda. il Ann Bot 30:197-214. 601-3 Ap. O '16

Sporangia of *Thissmia americana*. N. E. Pfeiffer. bibliog il Bot Gaz 66:354-63 O '18

Structure of mesoxylon multirame. D. H. Scott. bibliog il Ann Bot 32:437-57 J1 '18

Structure of the bordered pits of conifers and its bearing upon the tension hypothesis of the ascent of sap in plants. I. W. Bailey. il Bot Gaz 62:133-42 Ag '16

Studies of the development of the *Piperaceae*; the structure and seed-development of *Peperomia hispida*. D. S. Johnson. il Am J Bot 1:323-39. 357-97 J1. O '14

Studies on the morphology of wheat. G. H. Jensen. bibliog il Wash Ag Exp B 150:1-21 '18

Study of development in the genus *Cortinarius*. G. E. Douglas. il Am J Bot 3:319-35. 8-13pl Je '16

See also Mitochondria; Plant cells and tissues

**Nomenclature**

- \* Ancient plant-names. Nature (St Martin's st. London, W.C. 6d) 101:186 My 9 '18  
 Botany and common names of plants. W. N. Clute. Science (Science Press, Garrison, N.Y. 15c) n s 46:483-4 N 16 '17  
 Notes on some methods and terms employed in studying the *Uredinales*. H. R. Rosen. Phyt 8:581-3 N '18  
 Report of the committee of the American society of agronomy on varietal nomenclature. Am Soc Agron J 8:391-4; 9:419-27 N '16, D '17  
 Rules of botanical nomenclature. H. J. Elwes. Gard Chron (Lond) 59:3 Ja 1 '16  
 When is wintergreen not wintergreen? Scientific Am (233 Broadway, N. Y. 10c) 117:94 Ag 11 '17

See also Plant names, Popular

**Pathology**

See Plants—Diseases and pests

**Physiology**

- Action of non-nitrogenous reserve substances in trees. E. Antevs. Int R Sci & Prac Ag 8,no 4:572-4 Ap '17  
 Apple culture in Victoria. J. Farrell. il J Dept Ag Victoria 15:24-35. 140-57. 277-94. 333-44. 385-403. 457-69. 542-53. 577-88 Ja, Mr, My-O '17  
 Behavior of certain gels useful in the interpretation of the action of plants. D. T. MacDougal and H. A. Spoehr. Science (Science Press, Garrison, N.Y. 15c) n s 45: 484-8 My 18 '17  
 Biochemical and physiological study of the rest period in the tubers of *Solanum tuberosum*. C. O. Appleman. bibliog il Bot Gaz 61:265-94 Ap '16  
 Chemical basis of axial polarity in regeneration. J. Loeb. Science (Science Press, Garrison, N.Y. 15c) n s 46:547-51 D 7 '17  
 Chemical changes accompanying abscission in *Coleus blumei*. H. C. Sampson. bibliog Bot Gaz 66:32-53 J1 '18  
 Cryoscopic constants of expressed vegetable saps as related to the local environmental conditions in the Arizona deserts. J. A. Harris and J. V. Lawrence. Int R Sci & Prac Ag 8,no 5:708-11 My '17  
 Direct assimilation of organic carbon by *Ceratodon purpureus*. W. J. Robbins. bibliog il Bot Gaz 65:543-51 Je '18  
 Effects of acids and salts on bio-colloids. D. T. MacDougal and H. A. Spoehr. Science (Science Press, Garrison, N.Y. 15c) n s 46: 269-72 S 14 '17  
 Epidermal cells of roots. E. A. Roberts. bibliog Bot Gaz 62:488-506 D '16  
 Liebig's law of the minimum in relation to general biological problems. H: D. Hooker, jr. Science (Science Press, Garrison, N.Y. 15c) n s 46:197-204 Ag 31 '17

**Botany—Physiology—Continued**

Microchemical studies in the progressive development of the wheat plant. S. H. Eckerson. Wash Ag Exp B 139:1-20 '17

On the correlation between somatic characters and fertility; illustrations from *Phaseolus vulgaris*. J. A. Harris. bibliog Am J Bot 1: 398-411 O '14

Plant and its food. B. L. Hartwell. Gard Chron Am 20:273-5 Je '16

Senile changes in leaves of *vitis vulpina* l. and certain other plants. H. M. Benedict. For Quar 14:81-3 Mr '16

Simplified apparatus for measuring the conductivity of electrolytes. R. P. Hibbard and C. W. Chapman. bibliog il Mich Ag Bd Rep 1916:556-91

Two types of variable pubescence on plants. P. L. Ricker. Am J Bot 3:470-3 O '16

See also Cambium; Fertilization of plants; Fruit, Ripening of; Germination; Growth (plants); Plant cells and tissues; Plants—Transpiration; Plants, Chemical analysis of; Plants, Effect of chemicals, gases, minerals, etc., on; Plants, Nutrition of; Roots; Secretions (botany); Translocation

**Bibliography**

Physiology of fungi. D. H. Rose. Bot Gaz 65: 112-15 Ja '18

**Study and teaching**

\* Botany laboratory equipment. W. N. Clute. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:492-4 Je '18

\* Opportunity and obligation in botanical teaching. J. E. Kirkwood. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:579-87 O '18

**Africa**

Mosses collected by the Smithsonian African expedition 1909-10. H. N. Dixon. (Misc. coll. v. 69, no. 2; Pub. 2494) 28p bibliog il '18 Smithsonian inst., Washington, D. C.

New East African plants. P. C. Standley. (Smithsonian Inst. Pub. 2477) 20p '17 Smithsonian Institution, Washington, D.C.

Uganda mosses collected by R. Dümmer and others. H. N. Dixon. (Misc. coll., v. 69, no. 8; Pub. 2522) 10p il '18 Smithsonian inst., Washington, D. C.

**Arizona**

Cryoscopic constants of expressed vegetable saps as related to the local environmental conditions in the Arizona deserts. J. A. Harris and J. V. Lawrence. Int R Sci & Prac Ag 8, no 5:708-11 My '17

Ecology of the Santa Catalina mountains. G. D. Fuller. Bot Gaz 62:75-8 Jl '16

**California**

Notes on some southern California plants. S. B. Parish. Bot Gaz 65:334-43 Ap '18

Species novae vel minus cognitae. T. S. Brandegee. Cal Univ Pub Botany v 6, no 12 357-61p '16 (5c)

**Canada**

Flora of Canada. J. M. Macoun and M. O. Malte. (Museum B. 26; Biol. ser. no. 6) 14p il '17 Canada Geological survey, Ottawa

Vegetation of the Selkirk. C. H. Shaw. map Bot Gaz 61:477-94 Je '16

**Central America**

New or noteworthy plants from Colombia and Central America. H. Pittier. (Contributions from U.S. Nat. herbarium, v. 20, pt. 3) 95-132p il '18 U.S. Nat. museum, Washington, D.C.; Supt. of doc.

Undescribed plants from Guatemala and other Central American republics. J. D. Smith. Bot Gaz 61:373-87 My '16

**Ceylon**

Age and area hypothesis and the problem of endemism. E. W. Sinnott. Ann Bot 31:209-16 Ap '17

Evolution of species in Ceylon, with reference to the dying out of species. J. C. Willis. Ann Bot 30:1-23 Ja '16

On endemism and the mutation theory. H. N. Ridley. Ann Bot 30:551-74 O '16

Relative age of endemic species and other controversial points. J. C. Willis. bibliog Ann Bot 31:189-208 Ap '17

**China**

Arbores fruticesque Chinenses novi. C. Schneider. Bot Gaz 63:398-405, 516-23; 64: 70-8, 137-48 My-Ag '17

Flora of the Chinese-Tibet border-land. G. Forrest. Gard Chron (Lond) 62:105 S 15 '17

Notes on the flora of north-western Yunnan. G. Forrest. il Royal Hort Soc J 42, pt 1:39-46 O '16

Osbeck's dagbok Ofwer en Ostindsk resa. E. D. Merrill. Am J Bot 3:571-88 D '16

Plant collecting in China. G. Forrest. Gard Chron (Lond) 63:31-2 Ja 26 '18

Report of work in 1914 in Kansu and Tibet. R. Farrer. il map Royal Hort Soc J 42, pt 1:47-114 O '16

Report of work in 1915 in Kansu and Tibet. R. Farrer. map Royal Hort Soc J 42, pts 2-3:324-48 S '17

**Colombia**

New or noteworthy plants from Colombia and Central America. H. Pittier. (Contributions from U.S. Nat. herbarium, v. 20, pt. 3) 95-132p il '18 U.S. Nat. museum, Washington, D.C.; Supt. of doc.

**Colorado**

\* Successions of vegetation in Boulder Park, Colorado. W. W. Robbins. bibliog il maps Bot Gaz 65:493-525 Je '18

**Costa Rica**

Uredinales of Costa Rica based on collection by E. W. D. Holway. J. C. Arthur. Mycol 10:111-54 My '18

**Florida**

Noteworthy lejeuneae from Florida. A. W. Evans. il Am J Bot 5:131-50 Mr '18

On the osmotic concentration of the tissue fluids of phanerogamic epiphytes. J. A. Harris. bibliog Am J Bot 5:490-506 N '18

**Formosa**

Botany of Formosa. A. Henry. Gard Chron (Lond) 60:55 Jl 29 '16

**France**

Flora of the Somme battlefield. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:200 Mr 30 '18

**Guam**

Fungi and lichens from the island of Guam. P. W. Graff. bibliog Mycol 9:4-22 Ja '17

**Guatemala**

Undescribed plants from Guatemala and other Central American republics. J. D. Smith. Bot Gaz 61:373-87 My '16

Uredinales of Guatemala based on collections by E. W. D. Holway. J. C. Arthur. Am J Bot 5:325-36, 420-46, 462-89 Je-N '18

**Hawaiian Islands**

Algae of the Hawaiian archipelago. V. MacCaughey. Bot Gaz 65:42-57, 121-49 Ja-F '18

Botanical trip to the Hawaiian islands. A. S. Hitchcock. il map Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:323-49, 419-32 O-N '17

Endemic begonia of Hawaii. V. MacCaughey. Bot Gaz 66:273-5 S '18

Gunnera petaloidea Gaud., a remarkable plant of the Hawaiian islands. V. MacCaughey. Am J Bot 4:33-9 Ja '17

Photogeography of Manoa valley, Hawaiian islands. V. MacCaughey. il maps Am J Bot 4:561-603 D '17

Revision of the Hawaiian species of the genus *Cyrtandra*, section *cylindrocalyces* Hillebr. J. F. Rock. il Am J Bot 4:604-23 D '17

Sandalwoods of Hawaii; a revision of the Hawaiian species of the genus *santalum*. J. F. Rock. il Hawaii Ag Bd Bot B 3:1-43 '16



**Botany—Hawaiian Islands—Continued**

Survey of the Hawaiian land flora. V. MacCaughy. *il Bot Gaz* 64:89-114 Ag '17  
Vegetation of Hawaiian lava flow. V. MacCaughy. *il diag Bot Gaz* 64:386-420 N '17

**Jamaica**

On the osmotic concentration of the tissue fluids of phanerogamic epiphytes. J. A. Harris. *bibliog Am J Bot* 5:490-506 N '18  
Osmotic concentration of the tissue fluids of Jamaican montane rain-forest vegetation. J. A. Harris and J. V. Lawrence. *bibliog Am J Bot* 4:268-98 My '17

**Japan**

New Japanese fungi. T. Tanaka. *Mycol* 10: 86-92, 285-8 Mr, N '18

**Massachusetts**

New species of russula from Massachusetts. G. S. Burlingham. *Mycol* 10:93-6 Mr '18

**Mexico**

*Plantae Mexicanae purpusianae*. T. S. Brandegee. *Cal Univ Pub Botany* v 6, no 13 363-75p '17 (15c)

**New York**

Growth-forms of the flora of New York and vicinity. N. Taylor. *Am J Bot* 2:23-31 Ja '15  
Report of the State botanist 1916. *il N Y State Museum (Albany)* B 197:1-122 My '18

**New Zealand**

Age and area hypothesis and the problem of endemism. E. W. Sinnott. *Ann Bot* 31:209-16 Ap '17  
Distribution of endemic species in New Zealand. H. de Vries. *Science (Science Press, Garrison, N.Y. 15c)* n s 45:641-2 Je 22 '17  
Distribution of species in New Zealand. J. C. Willis. *Ann Bot* 30:437-57 Jl '16  
Distribution of the plants of the outlying islands of New Zealand. J. C. Willis. *map Ann Bot* 31:327-33 Jl '17  
Relative age of endemic species and other controversial points. J. C. Willis. *bibliog Ann Bot* 31:189-208 Ap '17  
Sources and distribution of the New Zealand flora, with a reply to criticism. J. C. Willis. *bibliog Ann Bot* 32:329-67 Jl '18

**Newfoundland**

Contrast in the floras of eastern and western Newfoundland. M. L. Fernald. *maps Am J Bot* 5:237-47 My '18

**North Carolina**

Vegetation of Shackleford bank. I. F. Lewis. (Econ. paper no. 46) 40p *il map* '17 N. C. geological and econ. survey, Raleigh

**Nova Scotia**

Vegetation of Northern Cape Breton Island, Nova Scotia. G. E. Nichols. (Trans., v. 22, p. 249-467) *il \$2.40* '18 Conn. academy of arts & sciences, New Haven

**Porto Rico**

Distribution of fungi in Porto Rico. B. Fink. *Mycol* 10:58-61 Mr '18  
Uredinales of Porto Rico based on collections by H. H. Whetzel and E. W. Olive. J. C. Arthur. *Mycol* 9:55-104 Mr '17

**South America**

Botany and plant products of northern South America. *Science (Science Press, Garrison, N.Y. 15c)* n s 48:156-7 Ag 16 '18  
\* Islands of Juan Fernandez. C. Skottsberg. *il maps Geographical R. (Broadway & 156th st, N.Y. 50c)* 5:362-83 My '18  
New or noteworthy plants from Colombia and Central America. H. Pittier. (Contributions from U.S. Nat. herbarium, v. 18, pt. 6) 225-59p *il* '17 U.S. National museum, Washington, D.C.; 10c Supt. of doc.

**Syria**

On the botany and physical geography of the Holy Land. J. G. Baker. *Gard Chron (Lond)* 62:245-6, 260 D 22-29 '17

**Texas**

Key to the families and genera of the wild plants of Austin, Texas. M. S. Young. *Tex Univ (Austin)* B 1754:1-71 '17  
Texas parasitic fungi. B. C. Tharp. *Mycol* 9:105-24 Mr '17

**United States**

American botany and the great war. N. E. Stevens. *Science (Science Press, Garrison, N.Y. 15c)* n s 48:177-9 Ag 23 '18  
Californian arboretum. D. H. Campbell. *il Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 4:289-300 Ap '17  
Flora of the vicinity of New York. N. Taylor. *map Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 4:548-53 Je '17  
Western plant studies. A. Nelson and J. F. Macbride. *Bot Gaz* 61:30-47; 62:143-52; 65: 58-70 Ja, Ag '16, Ja '18

**West Indies**

Grasses of the West Indies. A. S. Hitchcock and A. Chase. (Contributions from U.S. Nat. herbarium, v. 18, pt. 7) 361-471p '17  
U.S. National museum, Washington, D.C.; 30c Supt. of doc.

**Botany, Economic**

\* Agriculture or botany, which? V. Holt. *School Sci and Math (2059 E. 72d Place, Chicago 30c)* 18:505-6 Je '18  
\* Fundamental relation of botany to scientific agriculture. H. D. Waggoner. *School Sci and Math (2059 E. 72d Place, Chicago 30c)* 18: 11-15 Ja '18  
Plant products for every purpose. *Scientific Am (233 Broadway, N.Y. 10c)* 117:190+ S 15 '17  
*See also* Agricultural exploration; Botany, Medical; Parasitic plants; Plants, Food; Poisonous plants; Weeds; also names of agricultural and forest products

**Botany, Geographic.** *See* Geographical distribution of animals and plants

**Botany, Medical**

American medicinal flowers, fruits, and seeds. A. Henkel. *il U S Ag B* 26:1-16 '13  
Cultivation of medicinal plants. *J Bd Ag* 23: 1103-4 F '17  
Drug growers cautioned. *Am Flor* 47:163 Ag 12 '16  
Experiments in the cultivation of medicinal plants at the agricultural station of Bezenchuk, Russia, in 1916. I. Koulchitzky. *Int R Sci & Prac Ag* 8,no 12:1227-8 D '17  
Genus *strychnos* in India and the Far East. A. W. Hill. *Int R Sci & Prac Ag* 8,no 12: 1229-30 D '17  
Growing medicinal plants in America. A. S. Cushman. *il J Franklin Inst (Franklin Inst., Philadelphia 50c)* 186:267-78 '18  
Indian *hyoscyamus*. J. H. Barnes. *Ag J of India* 11:85-8 Ja '16  
Indian medicines made from trees. H. Maxwell. *il Am For* 24:205-11 Ap '18  
Medicinal herbs. A. R. Horwood. *Gard Chron (Lond)* 59:207 Ap 15 '16  
Medicinal herbs: their cultivation and preparation in Great Britain. E. M. Holmes. *Royal Hort Soc J* 42,pt 1:133-44 O '16  
Medicinal plants and herbs. *Gard Chron Am* 21:436 D '17  
Medicinal plants in England. *J Bd Ag* 23:67-70 Ap '16  
New experiments carried out in 1914 at the medicinal plant experiment station at Kolozsvár (Hungary). B. Páter. *Int R Sci & Prac Ag* 7,no 3:378-9 Mr '16  
Note on the alkaloids of some Egyptian *solanaceae*. F. Hughes. *Egypt Ag Tech & Sci B* 3:1-5 '16 (5c)

Official plants. T. G. B. Osborn. *J Dept Ag S Australia* 20:980-1 Jl '17

Poisonous, suspected and medicinal plants of New Zealand. B. C. Aston. *J Ag New Zealand* 16:324-8; 17:6-9 Je-Jl '18 (to be cont)

Preliminary work at Soukhoum experiment station, Caucasus, on the extraction of medical substances from local plants. M. N. Kozlov. *Int R Sci & Prac Ag* 7,no 11:1621-2 N '16

**Botany, Medical—Continued**

- Principal problems in relation to medicinal plants and their active principles. *Int R Sci & Prac Ag* 7, no 6:836-8 Je '16
- Production of medicinal plants in Italy. F. Cortesi. *Int R Sci & Prac Ag* 7, no 7:976-7 Jl '16
- Profitable herb growing and collecting, by A. B. Teetgen. *Review. Gard Chron (Lond)* 60:282 D 9 '16
- Raising medicinal roots, seeds, and flowers. G. E. Walsh. *Country Life* 30:60 S '16
- Results of the inter-ministerial conference in 1915 on the production and improvement of medicinal plants in Russia. F. Sazyperov. *Int R Sci & Prac Ag* 8, no 2:246-8 F '17
- Solandra longiflora*: a new drug plant. E. N. Ward. *Ag Gaz of New South Wales* 28:670 S '17
- Use and chemical composition of the seeds of *hydnocarpus venenata*, *h. alcala*, and *pangium edule*. C. H. Brill. *Int R Sci & Prac Ag* 8, no 12:1230-3 D '17
- See also* Belladonna; Bloodroot; Comfrey; Drug farming; Ginger; Ginseng; Hellebore; Jimson weed; Licorice; Lilies of the valley; Lovage; May apples; Mustard; Wormwood

**Bibliography**

- Bulletins we should know about; U.S. Dept. of agriculture bulletins on growing herbs and roots. *Prog F* 31:1291 N 4 '16

**Botany, Structural.** *See* Botany—Morphology**Botflies**

- Auto-inoculation and early development of the larva of the horse-bot (*gastrophilus intestinalis*) in the membranes of the mouth cavity. E. Roubaud. *Int R Sci & Prac Ag* 8, no 5:757-8 My '17
- Notes in regard to bots. M. C. Hall. *Am Vet M Assn J* 52:177-84 N '17
- Some biological and control studies of *gastrophilus haemorrhoidalis* and other bots of horses. W. E. Dove. *biolog il U S Ag B* 597:1-51 '18

*See also* Warble flies

**Botryomycosis**

- Botryomycosis. R. W. Gannett. *biolog Am Vet M Assn J* 49:523-7 Jl '16

**Botryosphæria**

- Method to induce sporulation in cultures of *botryosphæria berengeriana*. J. Matz. *il Phyt* 6:387-9 O '16

**Botrytis**

- On cell-generation in *botrytis cinerea*. W. B. Briery. *il Ann Bot* 32:601-4 O '18
- Studies in the physiology of parasitism; infection by *botrytis cinerea*. V. H. Blackman and E. J. Welsford. *biolog il Ann Bot* 30:389-98 Jl '16
- Studies in the physiology of parasitism; on the distribution of cytase in cultures of *botrytis cinerea*. W. Brown. *Ann Bot* 31:489-98 Jl '17

**Bottled water.** *See* Water, Bottled**Botulism**

- Canned food safe. *Weekly N L* 5:6 N 21 '17
- Danger of poisoning from vegetables canned by the coldpack method. E. C. Dickson (J. Am. Medical Assn. 69, no 12:966-8 '17). *Exp Station Rec* 37:669-70 N '17

**Bounties**

- Bounty system. *Nat Wool Grower* 7:42 My '17
- Brief for the salaried trapper; opposed to bounty system. S. H. Hill. *Am Sheep B & W* 36:197 Ap '16
- Exterminating predatory animals. G. J. Joyce. *Breeder's Gaz* 70:91 Jl 20 '16
- Report of uniform bounty committee adopted by National wool growers' convention. *Nat Wool Grower* 7:23 Ja '17
- Texas demands more efficient methods of predatory animal control. *Am Sheep B & W* 36:70-1 F '16
- To kill or not to kill; bounty question. F. C. Pellett. *il Country Gent* 81:380 F 19 '16

**Bowfins**

- Bowfin: an old-fashioned fish with a new-found use. R. E. Coker. (*Econ. C.* 26) 4p il '17 U.S. Bur. of fisheries, Washington, D.C.

**Bowker, Horace**

- Portrait. *Am Fert* 45:41 Jl 22 '16

**Bowker, William Henry, d. 1916**

- Biographical sketch. F. R. Miller. *por Am Fert* 44:27-33 Ja 22 '16
- Late W. H. Bowker. *por Am Fert* 44:27 Ja 8 '16
- Sketch. *por Rural N Y* 75:80 Ja 15 '16

**Box-barberry**

- Hardy, dwarf hedge plant. *Am Flor* 49:420 S 8 '17

**Box elder****Diseases and pests**

*See also* Box elder aphid

**Box elder aphid**

- Box elder aphid. R. L. Webster. *biolog il Ia Ag Exp B* 173:95-121 '17

**Box lye**

- Box lye usually worthless as a source of potash for fertilizer. C. B. Williams. *Prog F* 31:251 F 19 '16

**Boxes**

- Making box boards from sawmill waste. P. L. Buttrick. *For Quar* 14:39-45 Mr '16
- Uses of wood. H. Maxwell. *il Am For* 24:533-41 S '18

*See also* Paper containers

**Boxwood**

- Giant box bush more than 200 years old. B. C. Maercklein. *il Country Life* 31:116 Ap '17
- Propagating boxwood. *Rural N Y* 76:921 Jl 28 '17

**Diseases and pests**

- Boxwood and its enemies. B. Butterton. *Gard Chron Am* 20:242 My '16

**Boy scouts**

- Boy scouts in the country called pioneer scouts. Wallaces' *F* 42:64 Ja 12 '17

**Boys**

- Boy and his room. C. T. Herrick. *Rural Manhood* 8:193-5 My '17
- Boy culture and agriculture. A. D. Chandler. *Outlook* (381 4th av, N.Y. 10c) 117:645-6, 682-3; 118:28-9 D 19 '17-Ja 2 '18
- Boys and farms. W. D. Winthrop. *Survey* 38:386-91 Ag 4 '17
- Boys' day in Sunday schools. H. H. Smith. *Rural Manhood* 7:31-3 Ja '16
- Boys' military bands to meet war needs. A. V. Chamberlain. *Rural Manhood* 9:151-3 Ap '18
- Boys' work in the counties this fall. L. K. Hall. *Rural Manhood* 9:297-8 S '18
- California agriculture as an occupation for city-bred boys. (School pub. no. 5) 12p '17
- Los Angeles city school district, Los Angeles, Cal.
- City boys as farm workers. J. D. Pearmain. *Rural N Y* 77:577 Ap 20 '18
- City boys on the farm. R. S. Dunham. *Farm Eng* 7:14 Mr '18
- Country boy, and the personal interview. G. C. Hendry. *Rural Manhood* 9:167-8, 218-19 Ap-May '18
- County conferences on life work; the purpose, plan and program. R. P. Anderson. *Rural Manhood* 9:53-4 F '18
- Education of city boys on the land. J. J. Findlay. *J Bd Ag* 24:21-32 Ap '17
- Efficiency tests for boys. *Rural Manhood* 7:66-8 Ap '16
- \* Employment of boys in agriculture and the rural exodus. R. Lennard. *Econ J* (St Martin's st, London, W.C. 5s) 27:559-61 D '17
- Farm labor and boy camps. *Country Life* 32:68 Ag '17
- Free books for country boys. S. Morse. *Rural Manhood* 7:22-7 Ja '16
- Helping to keep up the back lines. C. K. Matson. *il Rural Manhood* 9:189-90 My '18
- High school boy and agricultural production; with discussion. L. H. Dennis. *Pa Ag Dept B v* 1:136-42 Ap '18
- Other side of boy labor. I. B. Squire. *il Rural N Y* 77:761 Je 8 '18



**Boys—Continued**

- Religious nature of boys. C. Holbrook. Rural Manhood 8:72-3, 112-15, 158-60 F-Ap '17
- Report of the Committee on mobilization of high school boys for farm service. 60p '17
- Mass. Com. on pub. safety, Boston
- School boys to help labor shortage. O Judd Farmer 63:1 D 1 '17
- Those city boys. Nat Stock & F 42:384 JI 20 '18
- See also Boys' clubs; Farm boys; also United States boys' working reserve
- Boys' agricultural clubs.** See Agricultural clubs
- Boys are marching;** story. H. W. Ashby. Wallaces' F 43:980 Je 23 '18
- Boys' camps**
- Day at camp. C: A. Gammons. Rural Manhood 7:130-3 O '16
- Boys' clubs**
- Accomplishments of boys' and girls' clubs in food production and conservation. O. H. Benson. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:147-57 N '17
- Americanizing fifty-fifty. O. E. Washburn. Rural Manhood 9:238-9 Je '18
- Beef men of tomorrow. il Wallaces' F 41:1199 S 15 '16
- Boys' club champions. Wallaces' F 41:1071 Ag 11 '16
- Boys' club work in Florida. G. L. Herrington. il Fla Ag Ext B 8:1-16 '17
- Boys' clubs, 1916. J. K. Giles and J. E. Downing. il Ga Ag Coll (Ext) B 118:1-20 '17
- Boys' clubs; report on boys' club work in Mississippi. C. A. Cobb. (In Agricultural extension, p. 72-4) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Cash and character the returns on boys' club work in the South. Weekly N L 6:20 D 4 '18
- Community with eleven groups. R. G. Cole. Rural Manhood 9:240 Je '18
- Farm boys' club work. il Tex Ag Ext B B-31: 1-12 '16
- Farm boys' county hikes and camps. C. W. Clemmer. il Prac F 112:355+ O 1 '16
- Hand book for boys agricultural clubs. J: E. Swaim. il Okla Ag Ext C 74:1-55 '18 (rev.)
- Local club organization. J: E. Swaim. Okla Ag Ext C 58:1-15 '17
- Report of boys' club work in North Carolina; Arithmetic problems based upon agricultural club work. N C Ag Ext C 8:1-15 '16
- Value and management of boys' club work. F. M. Shanklin. Breeder's Gaz 70:92 JI 20 '16
- When boys have a chance. L. L. Rummell. il Ohio F 142:289+ S 28 '18
- See also Agricultural clubs; Farm boy cavaliers
- Boys' exhibitions**
- Rural fair in city limits; Broadview boys' fall fair. il Ag Gaz of Canada 3:89-92 Ja '16
- Boys' working reserve, United States.** See United States boys' working reserve
- Brachysm.** See Variation (biology)
- Braden, George**
- Portrait. Am Fert 45:40 JI 22 '16
- Brahmas (poultry)**
- Faithful breeder of light brahmas for half a century. A. F. Hunter. il Reliable P J 23:1197 F '17
- Light brahma. A. V. Prescott. il Fruit-Grower 27:83 F 1 '16
- Light brahma breed; adaptability as capons. F. S. Jacoby and A. Bayes. il Ohio F 138: 360 O 14 '16
- Light brahma—one of the oldest and best standard fowls. W: A. Hendrickson. Reliable P J 24:139-40+, 259-61+ Ap-May '17
- Light brahmas. W. H. Card. il Country Gent 81:123 Ja 15 '16
- Pin money by raising light brahmas. Mrs W. G. Robinson. il Reliable P J 23:203-4+ Ap '16
- Return of the light brahma. L. E. Keyser. Am P Advocate 24:350 Mr '16
- Brakes (ferns)**
- Bracken a source of potash. J Dept Ag Victoria 16:180-1 Mr '18

- Bracken as a source of potash. R. A. Berry and others. J Bd Ag 25:1-11 Ap '18
- Bracken poisoning in cattle. Ag Gaz of New South Wales 29:665-6 S '18
- Further observations on the wound reactions of the petioles of pteris aquilina. H. S. Holden. Ann Bot 30:127-34 Ja '16
- Potash in agriculture. B. C. Aston. J Ag New Zealand 14:443-6 Je '17
- So-called staggers in horses caused by the ingestion of pteris aquilina, the common bracken. S. Hadwen. Am Vet M Assn J 50: 702-4 F '17
- Use of bracken roots and fronds. J Bd Ag 23: 1252-5 Mr '17

**Brakes, Automobile**

- Construction, care and operation of the brakes. A. Johnston. Country Life 32:72 JI '17
- Proper use of automobile brakes. I. W. Dickerson. Wallaces' F 43:1416 O 4 '18

**Bran**

- What shall we do with wheat bran; is its use for human food the most efficient utilization of its mineral constituents? A. D. Holmes. Sci Am (233 Broadway, N.Y. 10c) 119:106 Ag 10 '18
- Who shall eat the bran? H. A. Vaughan. Sci Am (233 Broadway, N. Y. 10c) 119:229 S 21 '18
- See also Feeding and feeding stuffs—Bran

**Composition**

- Concerning the organic phosphorus compound of wheat bran and the hydrolysis of phytin (Tech B. 40). R. J. Anderson, bibliog N Y State Ag Exp Rep 1915:333-61 '16
- Brandeis, Louis Dembitz, 1856-**
- Brandeis as judge. Wallaces' F 41:158 F 4 '16
- Branding.** See Cattle—Branding
- Branding devices**
- Dehorning and branding chute. W. C. Barnes. il Breeder's Gaz 71:63 Ja 11 '17

**Brandy**

- Palm fruit used for flavouring brandy. C. Griebel and E. Barnes. Int R Sci & Prac Ag 7, no 8:1182-4 Ag '16
- See also Cider brandy; Liquors

**Laws**

- Règlement de la loi sur l'eau-de-vie à l'Équateur. Int Yearbook Ag Leg 1916:649-51 '17

**Brazil**

- See also subhead Brazil under special subjects, e.g., Agriculture—Brazil, Plants—Brazil

**Agriculture, Department of**

- Décret n. 11998 portant nouveau règlement du service d'agriculture pratique. Int Yearbook Ag Leg 1916:772-81 '17

**Industries and resources**

- Markets for agricultural implements and machinery in Brazil. F. H. von Motz. (Special agents ser. no. 140) 59p il '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.; 10c Supt. of doc.
- South American markets for fresh fruits. W. Fischer. (Special agents ser. no. 131, p. 9-55) il '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.

**Law**

- Loi n. 3071 sanctionnant le code civil des États-Unis du Brésil. Int Yearbook Ag Leg 1916:1176-91 '17

**National museum**

See National museum (Brazil)

**Brazil cherries.** See Surinam cherries

**Bread**

- About homemade bread. Power F 26:29 Ap '17
- Alimentary aspects of whole-meal bread. E. Bertarelli. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:11 Ja 6 '17
- Almost wheatless egg breads. Ohio F 141:604 Ap 27 '18
- Art of breadmaking. M. E. Underwood. Kimball's D F 15:802 N 1 '17

**Bread—Continued**

- Barley for bread. W. H. Olin. *il Country Gent* 82:1303 Ag 18 '17
- Bran flours for breadmaking. Power F 26:32 Je '17
- Bread and bread making. Green's Fruit Grower 37:13 Je '17
- Bread and bread making in the home. C. L. Hunt and H. L. Wessling. *il Farmers' B* 807:1-25 '17
- Bread and bread mixers. M. Blue. Kimball's D F 15:362 My 15 '17
- Bread and fancy breads. Mrs. L. Guest. 48p \*25c '17 John Lane company, N.Y.
- Bread and flour. F. Fox. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:169-70 S 15 '17
- Bread from underground grain. *Scientific Am* (233 Broadway, N.Y. 10c) 116:17 Ja 6 '17
- Bread: how to make. *Nat Stock & F* 41:289 Je 9 '17
- Bread making. *Ill State Hort Soc Trans* 1916: 407-12 '17
- Bread making. H. Atwater. *Va Ag Dept B* 109:187-91 '16
- Bread making. M. C. McDonald. *il N D Ag Ext B* 7:1-16 '17
- Bread making in France. *Scientific Am* (233 Broadway, N.Y. 10c) 118:395 Ap 27 '18
- Breadmaking trials in France by the war administration. *Int R Sci & Prac Ag* 8,no 9: 1301-2 S '17
- \* Bread rationing in France. *Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.)* 6:368-70 F '18
- Bread substitutes. *Illustrated World* (Drexel av and 58th st, Chicago 15c) 28:632 D '17
- Bread-substitutes order, Canada. *Better Business* (605 Ashdown blk., Winnipeg, Manitoba 15c) 2:39-40 Ag '18
- Breads: good breads that will save wheat. H. E. Minch. *N J Ag Ext B v 1*, no 17:1-7 '17
- Breakfast bread. *Rural N Y* 76:467 Mr 24 '17
- Cause of mustiness in bread. A. M. Wright. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:403 D 23 '16
- Cheaper breadstuffs. *Rural N Y* 75:1598 D 30 '16
- Comparative cost of homemade and baker's bread. *J Home Econ* 8:387-91 Jl '16
- Comparative cost of homemade and baker's bread. A. Marsh. *J Home Econ* 8:40-1 Ja '16
- Corn and rye bread, etc. *Ohio F* 141:22 Ja 5 '18
- Corn meal bread. Mrs. F. L. Stevens. *J Home Econ* 9:376 Ag '17
- Cost of bread. E. S. Burnham. *J Home Econ* 8:383-5 Jl '16
- Degree of bolting: food value and digestibility of bread, better utilisation of wheat. L. Lapique; G. Bertrand. *Int R Sci & Prac Ag* 8,no 11:1143-4 N '17
- Digestibility of bread: erythrodextrin in starch hydrolysis. J. C. Blake. *Am Chemical Soc J* (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:623-36 Ap '18
- Digestibility of bread: salivary digestion in vitro. J. C. Blake. *Am Chemical Soc J* (C. L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 38:1245-60; 39:315-20 Je '16, F '17
- Economical griddle cakes. *Prac F* 113:322 S 15 '17
- Economy in bread-making. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:363 D 8 '17
- \* Eggless breakfast breads. F. Spring. *il Good Housekeeping* (119 W. 40th st, N.Y. 20c) 67:55 D '18
- Emergency breads for boys' and girls' clubs. G. L. King and M. Peck. *Purdue Ag Ext Leaflet* 88:1-4 '18
- Entirely wheatless hot breads. A. G. Vestal. *Power F* 27:36 O '18
- Flour and war bread. J. Cox. *Utah Ag Ext C v 6*, no 16 8p '18
- Food preparation club; bread making. M. B. Richardson. *il Ia Ag Ext Junior C* 37:1-24 '16
- Food value of different types of bread. A. Pugliese. *Int R Sci & Prac Ag* 7,no 3:427-8 Mr '16
- French solution of the bread problem. E. Sellers. 19th Century (249 W. 13th st., N.Y. 50c) 81:1028-42 My '17
- "G.R." flour. T. Johnson. *il J Dept Ag Ireland* 17,no 2:264-77 '17
- Gluten of bread. *il J Heredity* 8:350-4 Ag '17
- Good bread. *Prog F* 33:413 Mr 30 '18
- Good bread recipe. E. Irving. *Nat Stock & F* 42:812 D 7 '18
- Good breads that will save wheat. *Country Life* 33:100 N '17
- Good light bread; recipes for making it and for using it in other dishes. S. L. Kinsey. *Tenn Ag Ext Pub* 14 (Home econ. ser. 7) 1-11 '16
- Hand gristmill in the home. J. Atkinson. *il Country Gent* 83:40 O 12 '18
- Homemade bread. *Weekly N L* 4:7 My 23 '17
- Home-made bread with substitutes. *J Ag* (Quebec) 22:83 N '18
- How to select foods; cereal foods. C. L. Hunt and H. W. Atwater. *il Farmers' B* 817:1-22 '17
- Improving war bread with lime-water. *Scientific Am* (233 Broadway, N.Y. 10c) 118: 131 F 9 '18
- In place of bread—what? G. V. Gray. *Farm Eng* 7:28 Ap '18
- It has been officially announced by the Royal Norwegian Provisions department that recent experiments at Bergen to produce bread containing 20 per cent of fish roe have been proved successful. The state will purchase the necessary machinery for the preparation of a flour made from cod roe, which will be mixed with bread grain in order to make the rations larger. The bread prepared in this manner is said to be good and palatable
- Liberty breads. E. Gamble. *Purdue Ag Ext Leaflet* 92 4p '18
- Liberty breads to save wheat and meat. *Minn Hort* 45:358-9 S '17
- Liberty recipes. *Hoards D* 54:125 Ag 24 '17
- Likes her bread mixer. M. C. Blue. *Ohio F* 140:230 S 15 '17
- Making light bread. A. D. Root. *Mo Ag Ext C* 11:1-11 '16
- Making war breads. *Ohio F* 141:278 F 23 '18
- Oats, wheat and rye recipes. *Prog F* 33:915 Ag 17 '18
- Other experiments on the comparative cost of homemade and baker's bread. M. B. Van Arsdale and D. Monroe. *J Home Econ* 8: 380-2 Jl '16
- Other kinds of bread. A. E. Hunt. *Wis Ag Ext C* 89:1-8 '17
- Our daily bread. *Nat Stock & F* 41:753 N 3 '17
- Our daily bread. Mrs. T. Powell. *il Country Gent* 83:33 S 7 '18
- Over the top in baking. M. Corbould. *il Ohio Ag Exp B v 3*:303-8 O '18
- \* Le pain, premier besoin du peuple. L. Lindet. *Revue Scientifique* (41 rue de Châteaudun, Paris 90c) 56:261-71 My 4 '18
- Partial substitutes for wheat in bread making. H. L. Wessling. (Doc. 64) 11p '17 U. S. States relations service, Washington, D.C.
- \* Patriotic loaf. M. J. Crosby. *il Good Housekeeping* (119 W. 40th st, N.Y. 20c) 67:50 N '18
- \* Physical chemistry of bread making. E. J. Cohn and L. J. Henderson. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:501-5 N 22 '18
- Potato bread and rolls. Wallaces' F 41:1445 N 3 '16; Same. *Rural N Y* 76:49 Ja 13 '17
- \* Prevention of rope in bread. L. J. Henderson. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:247-8 S 6 '18
- Quick baking powder breads. V. C. Lee. O Judd Farmer 60:30 Mr 25 '16
- Quick breads without wheat. *Mass Ag Ext C* 74 4p '18
- Reducing bread cost. *Weekly N L* 4:7 Je 6 '17
- Salt-rising bread. H. A. Kohman. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:212-13 O 6 '17
- Saving wheat. A. R. Van Meter and G. Linder. *il Ohio Ag Ext B v 13*, no 9 15p '17-'18
- Shall we eat whole wheat bread? F. W. Christensen. *N D Ag Exp Spec Food B v 5*, no 4 p 75-7 '18
- Some points in the making and judging of bread. I. Bevier. *il Ill Univ (Urbana) B v* 10:1-35 Mr 17 '13 (3d ed '16)



**Bread —Continued**

- Some specially desirable war breads. M. G. Feint. Rural N Y 76:1454 D 22 '17
- Southern corn breads. M. B. Foulks. il Country Gent 82:1015 Je 9 '17
- Standard flour and bread in Europe. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:295 My 12 '17
- Study of yeast bread with substitute flours. E. Sprague. il J Home Econ 10:272-9 Je '18
- \* Substitute bread. K. Heppel. il Sci Am (233 Broadway, N.Y. 10c) 119:415 N 23 '18
- Substitute breads, biscuits and muffins. B. M. Terrill. Vt Ag Ext C 13:1-8 '18
- \* Les succédanés du blé dans le pain de munition. Balland. Revue Scientifique (41 rue de Châteaudun, Paris 90c) 56:353-6 Je 15 '18
- Success with oatmeal breads. Ohio F 142:38 Jl 13 '18
- Surplus milk for bread. Kimball's D F 16: 265 Ap 1 '18
- Tennessee corn and rye notes. Rural N Y 76:1063 S 8 '17
- Tennessee corn notes. Rural N Y 76:1014 Ag 25 '17
- Toxic bread and flour; detection and estimation of sapotoxins. L. Stoecklin. Int R Sci & Prac Ag 9,no 4:410-11 Ap '18
- Until the next harvest use wheatless breads and cakes. J Home Econ 10:185-6 Ap '18
- Use of calcium glucosates in bread-making. G. A. Le Roy. Int R Sci & Prac Ag 8,no 11: 1145 N '17
- Use of chestnuts in breadmaking. Int R Sci & Prac Ag 8,no 12:1282-3 D '17
- Use of potatoes in bread making. Prac F 113: 323 S 15 '17
- Use of wheat flour substitutes in baking. H. L. Wessling. Farmers' B 955:1-22 '18
- Use up stale bread. Weekly N L 4:7 My 2 '17
- Varieties of bread. Wallaces' F 42:848 My 25 '17
- Victory bread; experimental formulas. 4p '18 U.S. Food administration, Washington, D.C.
- Wanted, a new bread. il Pan Am Union B (17th & B sts., Washington, D.C. 25c) 14: 188-205 Ag '17
- Article discusses wheat substitutes suitable for bread, such as corn, potatoes, bananas, manioc, sweet potatoes, dasheens, rice, taro, and many others. These can all be used with 75% wheat flour. The problem is to make satisfactory bread from the substitutes alone
- War bread. G. Erickson. Md Ag Ext Letter no 9a:1-6 n. d.
- War bread. E. I. Spriggs. Sci Am Sup (233 Broadway, N.Y. 10c) 86:7 Jl 6 '18
- War bread recipes. Ill Ag Ext C 13:1-8 '17
- War bread recipes. G. Erickson. Md Ag Ext Letter no 9:1-5 '18
- War bread recipes; general directions for mixing and baking breads. Del Ag Ext C 5 4p n.d.
- War bread (unsalted lime bread). R. Dubois. Int R Sci & Prac Ag 9,no 1:14 Ja '18
- War breads. E. M. Chapman. Ontario Ag Dept B 254:1-16 '17
- War breads. W. Windsor. Mo Ag Ext C 25: 1-4 '17
- War breads and meat substitutes. M. B. Vail. 23p '17 Dept. of home econ., Mills college, Oakland, Cal.
- We study wheat breads and war breads. M. C. Hessler. Country Gent 82:1470 S 22 '17
- Wheat conservation. Kimball's D F 16:130 F 15 '18
- Wheat flour economy in baking. Prac F 113: 289 Ag 15 '17
- Wheat-flour substitutes. M. K. Corbould. il Ohio Ag Exp B v 2:213-14 Jl '17
- Wheat substitutes and how to use them. E. E. Walker. Wash Ag Ext Ser 1,no 38 4p '18
- \* Whole-wheat bread. R. A. Dutcher. Science (Science Press, Garrison, N.Y. 15c) n s 48: 116-17 Ag 2 '18
- Wide-awake girls learn to make good bread. Mrs W. N. Hutt. Prog F 31:296 F 26 '16
- Will corn become the base food? Pan Am Union B (17th and B sts, N.W., Washington, D.C. 25c) 46:483-90 Ap '18

Yeast bread and its variations. J. R. Bear. Tex Univ (Austin) B 1731:1-18 Je 1 '17

See also Corn meal; Flour; Sorghum meal

**Analysis**

- Chemical analysis of wheat-flour substitutes and of the breads made therefrom. J. A. Le Clerc and H. L. Wessling. il U S Ag B 701:1-10 '18
- Experiments with bread. Conn State Ag Exp B 200:113-38 '17

**Bibliography**

- List of references on war bread. U.S. Lib. of Congress. 4p '17
- Obtained only thru Public affairs information service, 958-964 University av., N.Y. (Typew 20c)

**Costs**

- Cost to the consumer of a pound loaf of bread. Ohio F 142:256 S 14 '18

**Preservation**

- Methods for preserving bread for French prisoners in Germany. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:144 Mr 3 '17

**Bread, Bakers'**

- Summary of report of investigation in the cost and practices, wholesale, in bread making. 5p mim '17 U.S. Food administration, Washington, D.C.
- Toledo's bread ordinance sustained. Toledo City J (Commission of publicity & efficiency, Toledo, O. 5c) 2:2-4 D 29 '17
- United States food administration; policies and plan of operation; wheat flour and bread. 171p '17 U.S. Food administration, Washington, D.C.

**Costs**

- Cost of production and weight of loaves of bread. (B. 9) 109-20p '16 Mass. Dept. of weights and measures, Boston

**Prices**

- Bread weights. (B. no. 228, Retail prices, 1907-1916, p. 24-8) '17 U. S. Bur. of labor statistics, Washington, D.C.
- City opinion of farm profits; how it is manufactured. Rural N Y 77:609 Ap 27 '18
- Five cent bread loaf. Rural N Y 76:1183 O 31 '17
- \* Retail prices of bread in the District of Columbia. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 4:954-7 Je '17

**Standardization**

- Government regulation of bakeries went into effect Dec. 11, 1917. Standardized loaves will weigh either sixteen or twenty-four ounces and contain less wheat than the old loaves. Bakers not conforming to the regulations will lose the federal license
- Standard loaf; conclusions based on investigation of Federal trade commission; licensing of bakeries. (B. 11) 8p '17 U.S. Food administration, Washington, D.C.
- Standardization of the baker's bread. 8p mim N 11 '17 U.S. Food administration, Washington, D.C.

**Weights**

- Cost of production and weight of loaves of bread. (B. 9) 109-20p '16 Mass. Dept. of weights and measures, Boston

**Bread cards**

- Bread cards in France. C. W. A. Veditz. (Commerce Reports no. 5) p 79 (Ja 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Bread crumbs**

- Make every crumb count. W. Moses. Cornell Reading Course Farm Home 116:21-4 '18

**Breadfruit**

- Breadfruit. C. D. Mell. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:99 Ag 18 '17
- Bread fruit and its possible uses. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:84 F 9 '18

**Bread-making contests**

- Bread-making contest. il Minn Ag Ext Spec B 17:1-14 '17

**Breakfast porches**

Breakfast porch. A. R. Fairman. *il Country Life* 33:41-3 Mr '18

**Breakfasts**

Foods and food values; home breakfast. E. B. Rutter. *J Ag (Quebec)* 20:177 F '17  
For breakfast. C. B. Williams. *Nat Stock & F* 40:1162 F 3 '17

Wide-awake girls learn what is good for breakfast and how to serve it. Mrs W. N. Hutt. *Prog F* 31:544 Ap 15 '16

See also Cereal foods

**Breeder** in the making; story. F. D. Thomson. *J Ag (Quebec)* 22:xi S '18

**Breeding**

Aberhalden test for pregnancy in animals. C. A. Zell. *Am Vet M Assn J* 52:39-47 O '17

Advantages of community breeding. O. Kercher. *Breeder's Gaz* 70:534 S 28 '16

Age as a factor—animal breeding. F. B. Mumford. *Mo Ag Bd Yearbook* 1916:526-9

Art of breeding live-stock. J. L. Bruce. *il J Ag New Zealand* 13:431-45 D '16

Artificial hybrids between pike and pickerel. G. C. Embody. *il J Heredity* 9:253-6 O '18

Better livestock for Ohio. B. E. Carmichael. *Ohio F* 138:70 Jl 22 '16

Blight of the scrub sire. D. N. Barrow. *Prog F* 32:499 Ap 21 '17

Breeder. B. O. Severson. *il Wallaces' F* 41:669 Ap 28 '16

The breeder. B. O. Severson. *Penn State F* 9:316+ F '16

Breeding for individuality and production; with discussion. F. G. Benham. *N Y Ag Dept B* 94:14-21 Ap '17

Breeding problem—the secret of the master breeder. L. J. Brosemer. *Reliable P J* 24:146-7 Ap '17

Breeding problems. H. D. Bergman. *Ia Ag Coll Offic Pub v* 14,no 36:206-17 '16

Breeding purebreds for general farmers. W. A. Martin. *Ohio F* 140:136 Ag 25 '17

Breeding tables. *Prog F* 33:215 F 16 '18

Bull terrier breeding. R. D. Coombs. *il J Heredity* 8:314-19 Jl '17

Come to Canby and buy a pig. B. Ostrolenk. *Country Gent* 81:1503 Ag 12 '16

Community cooperation in stock breeding. C. M. McConnell. *Breeder's Gaz* 71:388 F 22 '17

Community livestock breeding. S. T. Simpson. *Mo Ag Ext C* 33:144 '17

Constructive live stock breeding. E. Davenport. *Breeder's Gaz* 69:1202 Je 8 '16

Co-operation in live stock breeding. W. H. Tomhave. *il Prac F* 112:307+ Ag 15 '16

Distribution of male animals. *Ag Gaz of Canada* 5:565-72 Je '18

Experimental inbreeding; test with rats. *il J Heredity* 7:70-6 F '16

Fascinations of live stock breeding. H. B. Arbuckle. *Am Sheep B & W* 36:226-7 Ap '16

Federation among provinces and communes of Italy for the advance of zootechnology. *Int R Ag Econ* 9,no 1:79-80 Ja '18

Few principles of breeding. *J Ag (Quebec)* 21:xi Je '18

Fundamentals in breeding. W. T. McDonald. (*In* 16th Report, Farmers' institutes of British Columbia, p. 74-80) '16

Getting a start with pure breds. W. E. Wiecking. *Country Life* 31:136 Mr '17

Heredity and sex. *J Heredity* 7:9-11 Ja '16

Illustration of line breeding. R: H. Wood. *Ag Digest* 1:387 Ap '17

Improvement of live stock in England and Wales, 1916. *J Bd Ag* 23:417-25 Ag '16

Improvement of live stock in England and Wales, 1917. *J Bd Ag* 24:497-503 Ag '17

Improvement of live stock in England and Wales; report for the year 1917-1918. *J Bd Ag* 25:541-9 Ag '18

Improvement thru purebred livestock. *Ohio F* 139:826 Je 30 '17

Inbreeding. D. K. Davis. *Hoard's D* 53:746 My 18 '17

Inbreeding does not cause degeneration. *J Ag (Quebec)* 20:x Mr '17

Inbreeding not injurious. W. C. Jeffries. *Ohio F* 137:629 Ap 29 '16

Insects as material for studies in heredity.

W. Lochhead. (*In* Report, Entomological soc. of Ontario, 1916, p. 66-72) bibliog '17

Ontario ag. dept., Toronto

Keep the aged sire. C: McIntire. *il Ohio F* 138:122 Ag 12 '16

Linebreeding. R: H. Wood. *J Heredity* 7:555-6 D '16

Line breeding—what it is and why used. R: H. Wood. *Am P J* 48:753 Je '17

Meaning of purebred. H. P. Miller. *Ohio F* 139:578 Ap 21 '17

Mendelian-bred cats and cattle. H. L. Atkinson. *Nat Stock & F* 40:498 Ag 12 '16

More Cruickshanks and fewer Barnums. H. W. Vaughan. *Ag Digest* 3:15 Jl '18

More pure-bred sires. *Country Gent* 81:1648 S 9 '16

Mule breeding. G. T. Branaman. *Purdue Ag* 11:24 O '16

Mules that breed. O. Lloyd-Jones. bibliog *il J Heredity* 7:494-502 N '16

Opportunities of the small breeder. D. O. Thompson. *il O Judd Farmer* 64:1 F 9 '18

Parents of great men. *J Heredity* 8:400-8 S '17

Pedigree live-stock; development of breeding in New Zealand. J. L. Bruce. *J Ag New Zealand* 17:65-70 Ag '18

Profit in pure bred livestock. E. N. Wentworth. *il Field* 11 26:1009-1011 D '16; Same cond. *Int R Sci & Prac Ag* 8,no 3:416-19 Mr '17

Prospects for American purebreds. E. N. Wentworth. *il Field* 11 27:182-3 Mr '17

Pure-bred pays. W. Jack. *Prac F* 112:35 Ja 15 '16

Pure-breds. Wallaces' *F* 42:1092 Ag 3 '17

Purebreds versus grades. H. P. Miller. *Ohio F* 141:280 F 23 '18

Pure seed and pure bred stock. J. R. Shinn. *Coop Manager & F* 6:108 Mr '17

Science and the breeder. F. S. Hultz. *il Field* 11 28:567+ Ag '18; Same cond. *Penn State F* 11:268+ F '18

Selecting breeding stock. C. B. Lee. Wallaces' *F* 41:1119 Ag 25 '16

Selection of breeding stock. H. E. Sharp. Kimball's *D F* 14:580 S 15 '16

Service of the sire. F. A. Hays. *il Country Gent* 81:862 Ap 15 '16

Sex control. H. E. Sharp. Kimball's *D F* 14:224 Ap 1 '16

Sex in livestock breeding. E. N. Wentworth. bibliog *J Heredity* 7:29-31 Ja '16

Sharpening the point in selection. E. N. Wentworth. *il Breeder's Gaz* 71:967 My 10 '17

Sign posts for young breeders. J. A. McLean. *Field* 11 27:274 Ap '17

Skunk breeding. *il J Heredity* 8:452-4 O '17

Small breeders' opportunity. *Purdue Ag* 12:419-20 Ap '18

Some breeding statistics. R. Branford. *Ag J of India* 12:573-8 O '17

Some commonly neglected factors underlying the stock breeding industry. R. Pearl. *Maine Ag Exp B* 258:1-28 '17; Same. *Maine Ag Exp Rep* 1917:1-28

Sound reasons for pure breds. B. O. Severson. *il Field* 11 26:670-2 Ag '16

Statement with respect to the loan of rams and boars to farmers' associations. T. R. Arkell. *Ag Gaz of Canada* 3:409-10 My '16

Teaching breed history to advanced students. H. W. Mumford. *Am Soc Animal Production Pro* 1915-1916:252-9 '17

Technical courses and animal breeding. O. Lloyd-Jones. *Breeder's Gaz* 72:1258 D 27 '17

Use of breeding. Wallaces' *F* 41:1089 Ag 18 '16

Useful kind. *Breeder's Gaz* 73:1030 My 16 '18

Value of a pedigree. H. W. Mumford. *il Field* 11 26:1025-6 D '16

Value of a well bred sire. R. B. Rushing. *Prac F* 114:80 F 15 '18

Value of community breeding. F. B. Nichols. *il Field* 11 26:592 Jl '16

Value of good sires. J. K. Wright. *il Mo Ag Bd B v* 14:1-86 S '16

What community breeding does. R. Baker. *il Country Gent* 81:1358 Jl 15 '16

What they say about inbreeding in Europe. *il J Heredity* 7:204-7 My '16



**Breeding—Continued**

You and your neighbor. C. A. Stannard. Am Sheep B & W 38:380-2 Je '18

See also Cattle breeding; Fruit breeding; Heredity; Horse breeding; Hybridization; Mendelism; Plant breeding; Poultry breeding; Sex—Cause and determination; Sheep breeding; Sterility in animals; Swine breeding; also American society of animal production

**Record books**

Card system for simplifying farm records. W. A. Cook. il System on the Farm 1:180-1 Jl '17

Herd and stud books of the Argentine rural society. Int R Sci & Prac Ag 8,no 3:413-15 Mr '17

Herd books of the Argentine rural society. J. De Anchorena. Int R Sci & Prac Ag 9,no 3:352-4 Mr '18

Registration of pedigrees. W. Dinsmore. Breeders' Gaz 70:881-2 N 9 '16; Abstract. Int R Sci & Prac Ag 8,no 1:105-8 Ja '17

System in naming cattle. Wallaces' F 42:1462 O 26 '17

See also Cattle breeding—Record books; Swine breeding—Record books

**Brewing industries**

Brewing industry and grain. Rural N Y 76:789 Je 16 '17

Development of the brewing industry in the United States during the last 25 years. C. Rach. Int R Sci & Prac Ag 8,no 4:646-7 Ap '17

**Bridge grafting.** See Grafting

**Bridges**

Better bridges on the country place. F. Steele. il Country Life 31:53-6 Ap '17

Building the farm bridge. E. V. Laughlin. Farm Eng 3:254 My '16

Construction and maintenance of roads and bridges from July 1, 1913, to Dec. 31, 1914. U S Ag B 284:1-64 '15

See also Culverts

**Bridges, Concrete**

Concrete bridge. Farm Eng 5:8 D '17

**Brigham, Elbert S.**

Best farmer in Vermont. F. Tilden. Country Gent 83:6-7 N 30 '18

Farmer commissioner of agriculture. Hoard's D 54:289 S 28 '17

**Bright, John, 1864-1917**

Sketch. por Ag Gaz of Canada 4:361 My '17

**Brimstone**

Burning brimstone in pyrites equipment. plan Am Fert 46:24-6 Je 9 '17

**Brisket disease.** See Cattle—Diseases and pests

**Bristletail.** See Silverfish

**British Columbia**

See also subhead Canada under special subjects

**Agriculture, Department of**

Loi concernant le département de l'agriculture. Int Yearbook Ag Leg 1916:801-3 '17

**British Columbia college of agriculture**

New premises of the College of agriculture. J. A. McLean. il Ag Gaz of Canada 5:707-9 Jl '18

University and agricultural instruction. V. S. Klinck. Ag Gaz of Canada 4:973-4 N '17

**British Columbia dairymen's association**

Annual convention, Chilliwack. J. Pawtuck-away. Hoard's D 55:336 Mr 15 '18

11th annual convention, Nanaimo, Jan. 25-26, 1917. T. A. F. Wiancko. Hoard's D 53:195 F 23 '17

Summer meeting, Kelowna, June 22-23, 1917. T. A. F. Wiancko. Hoard's D 53:1026 Jl 20 '17

**British Columbia fruit-growers' association**

27th annual report for the year ending December 31st, 1916; synopsis of proceedings of the annual convention, February 13-14, 1917. 58p '17 British Columbia Dept. of ag., Victoria

**British Columbia goat breeders' association**

First annual meeting, Vancouver, Jan. 26. Am Sheep B & W 38:153 F '18

**British Columbia poultry association**

Directory of poultry-breeders in British Columbia. (B. 6) 11p '17 The Association, J. R. Terry, sec., Dept. of agriculture, Victoria, B.C.

**British Guiana**

See also Agriculture—British Guiana

**Industries and resources**

Field and forest resources of British Guiana. J. B. Harrison and C. K. Bancroft. Int R Sci & Prac Ag 7,no 3:333-6 Mr '16

**Brittleness of bones.** See Osteopsathyrosis

**Broccoli.** See Cauliflower

**Brockton fair**

Big eastern dairy cattle show. Breeder's Gaz 70:656+ O 12 '16

Brockton fair. H. G. Gulliver. il Field 11 27:867 N '17

44th Brockton, Mass., fair. Breeder's Gaz 72:613 O 11 '17

**Bromcresol purple**

Substitute for litmus for use as an indicator in milk cultures. W: M. Clark and H. A. Lubs. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:182-3 S 22 '17

**Bromegrass**

**Seed**

Study of chaff in grass seed with special reference to bromegrass. O. A. Stevens. Assn Office Seed Analysts Pro 1916-1917:66-7 '17

**Broncos**

Broncho. R. A. Hayne. il Nat Stock & F 41:363 Jl 7 '17

Broncho's good points. H: H. Knibbs. il Country Gent 81:1646-7 S 9 '16

**Bronze birch borers**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16, no 26:46-9 '16

Two destructive shade tree borers. C. B. Hutchings. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 65-70) il '17

**Brooders, Poultry.** See Poultry brooders

**Brook trout.** See Trout

**Brooklyn**

See also Prospect park, Brooklyn, N.Y.

**Brooklyn botanic garden**

Brooklyn botanic garden. il plan Scientific Monthly (Science Press, Garrison, N. Y. 30c) 5:380-3 O '17

Dedication exercises of the completed laboratory building and plant houses. Science (Science Press, Garrison, N.Y. 15c) n s 45:509-10 My 25 '17

Ideals and opportunities for a botanic garden. C. S. Gager. Science (Science Press, Garrison, N.Y. 15c) n s 45:648-53 Je 29 '17

**Brooks**

Making a brook from the city water supply. E. F. Coe. il Country Life 29:54-5 Mr '16

**Broom.** See Tagasaste

**Broom corn**

Broom corn experience. A. O. Hard. Ohio F 142:423 N 2 '18

Broom corn production in Iowa. C. McKee. 1a Ag Exp C 49 3p '18

Changes in broom corn industry. il O Judd Farmer 63:3 S 8 '17

\* Cultivation of broom corn in Argentina. R. S. Barrett. (Commerce Reports no. 265) p 569 (N 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Dwarf broom corns. B. E. Rothgeb. il map Farmers' B 768:1-16 '16

Growing broom corn. E. V. Laughlin. Country Gent 81:934 Ap 29 '16

Standard broom corn. B. E. Rothgeb. il map Farmers' B 958:1-20 '18

**Broom rape**

Broom-rape. il J Bd Ag 23:478-81 Ag '16

**Brown, James**

Portrait. Breeder's Gaz 70:973 N 23 '16

**Brown horn-tail.** See Pigeon tremex**Brown rot**

Brown rot disease in plums. F. H. Ballou.

Rural N Y 76:1172 O 13 '17

Brown-rot in cherries controlled. G. H. Cunningham.

J Ag New Zealand 16:33 Ja '18

Brown rot of apples. H. Wormald. il J Bd Ag

25:299-302 Je '18

Brown-rot of fruit. G. Esam. J Ag New Zealand

15:84-9 Ag '17

Brown-rot of prunes and cherries in the Pacific Northwest. C. Brooks and D. F. Fisher.

il U S Ag B 368:1-10 '16

Brown rot of solanaceae on ricinus. E. F. Smith and G. H. Godfrey. Science (Science Press, Garrison, N.Y. 15c) n s 48:42-3 J1 12

'18

Control of brown-rot. J. A. Campbell. J Ag New Zealand 16:221-8 Ap '18

Control of brown rot of plums and plum pocket. E. C. Stakman and A. G. Tolaas. il Minn Hort 46:182-6 My '18

Control of brown-rot; peach-orchard experiments at Henderson. J. W. Collard. J Ag New Zealand 16:275-83 My '18

Experiments on the control of brown rot in stone fruits. G. P. Darnell-Smith. Ag Gaz of New South Wales 29:663-4 S '18

Look out for brown rot. C. P. Halligan. Country Gent 81:61 Ja 8 '16

Pests in plum trees. A. S. Dodson. O Judd Farmer 60:9 Je 10 '16

Some effects of the brown-rot fungus upon the composition of the peach. L. A. Hawkins. bibliog Am J Bot 2:71-81 F '15

Spraying plums for brown rot. E. C. Stakman. il Minn Hort 44:148-55 Ap '16

Study of the brown rot fungus in northern Vermont. H. E. Bartram. bibliog Phyt 6:71-8 F '16

Varietal resistance of plums to brown-rot. W. D. Valleau. bibliog il J Ag Research 5:365-96 N 29 '15

Varieties of plums; brown rot a controlling factor. D. Cook. Minn Hort 44:142-7 Ap '16

**Brown stink bugs.** See Stink bugs**Brown Swiss cattle**

Breeds of dairy cattle. il Farmers' B 893:12-16 '17

Brown Swiss and official test. H. E. Goode. il Kimball's D F 15:633 S 15 '17

Brown Swiss at the National dairy show. Hoard's D 56:478 N 1 '18

Brown Swiss cattle of Speedwell farms. J. W. Titcomb. il Hoard's D 51:94 F 11 '16

Brown Swiss in a modern barn. M. S. Yoder. il Kimball's D F 15:139 Mr 1 '17

Brown Swiss in the province of Quebec. il J Ag (Quebec) 22:57 O '18

Brown Swiss records showing estimated production and feed consumed; tabulation. N J Ag Exp Rep 1916:219 '17

College Bravura 2d 2577. A. C. Anderson. il Kimball's D F 14:94 F 15 '16

Distinguished Brown Swiss producers. I. Inman. il Hoard's D 52:768 D 22 '16

**Brown-tail moths**

Brown-tail moth. Purdue Ag 11:36 N '16

Gipsy moth and the brown-tail moth. H. S. Smith. il Cal State Comm Hort B v 6:311-15 J1 '17

Gipsy moth and the brown-tail moth and their control. A. F. Burgess. il Farmers' B 845:1-23 '17

Introduction and establishment in Canada of the natural enemies of the brown-tail and gipsy moths. map Ag Gaz of Canada 3:20-1, 111-16 Ja-F '16

Present status of the gipsy and brown-tail moths in Connecticut. I. W. Davis. J Econ Entom 10:193-5 F '17

Rearing the parasites of the brown-tail moth in New England for colonization in Canada. L. S. McLaine. il Ag Gaz of Canada 3:22-5 Ja '16

Solid-stream spraying against the gipsy moth and the brown-tail moth in New England. L. H. Worthley. il U S Ag B 450:1-15 '17

Suppression of the gipsy and browntail moths and its value to states not infested. A. F. Burgess. il U S Ag Yearbook 1916:217-26; Same. Separate 706

Suppression work against the gipsy and browntail moths. W. E. Britton and I. W. Davis. map Conn State Ag Exp B 203:246-58 '18

Two important introduced parasites of the brown-tail moth. C. F. W. Muesebeck. bibliog il J Ag Research 14:191-206 J1 29 '18

**Brussels sprouts**

Brussels sprouts. Gard Chron (Lond) 59:174 Mr 25 '16

Brussels sprouts from the gulf coast. J. W. Wilkinson. il Country Gent 82:1838 N 24 '17

Success with Brussels sprouts. C. H. Chesley. Market Growers J 21:55 Ag 1 '17

**Bryophyllum**

Chemical basis of correlation; production of equal masses of shoots by equal masses of sister leaves in bryophyllum calycinum. J. Loeb. Bot Gaz 65:150-74 F '18

Further experiments on correlation of growth in bryophyllum calycinum. J. Loeb. il Bot Gaz 62:293-302 O '16

Healthy and sick specimens of bryophyllum calycinum. J. Loeb. Bot Gaz 66:69 J1 '18

Influence of the leaf upon root formation and geotropic curvature in the stem of bryophyllum calycinum and the possibility of a hormone theory of these processes. J. Loeb. il Bot Gaz 63:25-50 Ja '17

Regeneration of bryophyllum calycinum. E. L. Braun. il Bot Gaz 65:191-3 F '18

**Bryophyta**

See also Anthoceros; Lejeuneae

**Bubble fountains.** See Drinking fountains**Bucculatrix thurberiella.** See Cotton leaf perforators**Buckeye.** See Horse chestnut**Buckeye rot.** See Tomato buckeye rot**Buckeyes (poultry)**

Buckeye. W. H. Card. il Country Gent 81:1125 My 27 '16

**Buckwheat**

Argument for buckwheat. Rural N Y 76:788 Je 16 '17

Buckwheat. J. L. Stone. il Cornell Reading Courses 5, no 110:143-55 '16; Same. Cornell Ag Exp Rep 1916, v 2:1037-48 '17

Buckwheat a profitable crop. Gleanings 45:591 Ag '17

Buckwheat as a farm crop. J. E. Read. Ohio F 137:759 Je 3 '16

Buckwheat culture. C. G. Williams. Ohio Ag Exp B v 2:211-12 J1 '17; Same. Ohio F 139:739 Je 2 '17

Buckwheat for bee food. Rural N Y 76:1344 N 24 '17

Buckwheat on Kentucky farms. W. C. Wilson. Ky Ag Dept Rep 1916-1917:347-8 '18

Buckwheat production in North Carolina. C. C. Logan. il N C Ag Ext C 75:1-12 '18

Comparative study of salt requirements for young and for mature buckwheat plants in sand cultures. J. W. Shive. bibliog Soil Sci 6:1-32 J1 '18

Comparative study of salt requirements for young and for mature buckwheat plants in solution cultures. J. W. Shive and W. H. Martin. bibliog J Ag Research 14:151-75 J1 22 '18

Comparison of salt requirements for young and for mature buckwheat plants in water cultures and sand cultures. J. W. Shive and W. H. Martin. Am J Bot 5:186-91 Ap '18

Cultivation of buckwheat. J Bd Ag 22:1128-34; 25:81-4 F '16, Ap '18

Culture of buckwheat. J. B. Morman. Country Gent 81:1267 Je 24 '16

Grow buckwheat. Weekly N L 4:2 My 30 '17

Growing buckwheat. Hoard's D 55:805 My 31 '18

Growing buckwheat. Prac F 113:269 Ag 1 '17

Growing buckwheat. Wallaces' F 41:907 Je 23 '16

Growing buckwheat. O. M. Kile and J. W. Henceroth. (Soil improvement com. Pamph. 17) 7p n.d. Nat. fertilizer assn., Chicago



**Buckwheat—Continued**

- How we raise buckwheat in Pennsylvania. J. W. Ingham. Hoard's D 52:633 N 24 '16  
Influence of the mechanical composition of the soil on the availability of nitrate of soda and dried blood. il N J Ag Exp Rep 1916: 369-80 '17  
Raising buckwheat. J. W. Ingham, Hoard's D 51:772 Je 2 '16; Same cond. Rural N Y 75: 916 Je 24 '16  
Study of physiological balance for buckwheat grown in three-salt solutions. J. W. Shive. bibliog N J Ag Exp B 319:1-63 '17  
Why not buckwheat. R. A. Moore. Wis Ag Ext C 75 4p '17  
Why not more buckwheat? S. B. Haskell. Prac F 113:182 My 1 '17  
*See also* Feeding and feeding stuffs—Buckwheat

**Laws**

- Ordonnance n. 5296 concernant la sarrasin et le millet en Allemagne. Int Yearbook Ag Leg 1916:56-60 '17

**Seed**

- Buckwheat stocks and prices. U S Seed Rep 1:4 My '18

**Statistics**

- Commercial stocks of buckwheat. U S Food Surveys 1:13 Jl 20 '18  
\* Rye and buckwheat in Ontario. (In Report. Bur. of Industries, 1917, p. 31) '18 Ontario ag. dept., Toronto  
Statistics of buckwheat. See United States Department of agriculture Yearbooks

**Buckwheat flour**

**Statistics**

- Commercial stocks of buckwheat flour, Jan. 1. U S Food Surveys 1:14-16 Jl 20 '18  
Commercial stocks of buckwheat flour, July 1. U S Food Surveys 2:10-12 O 1 '18

**Bud-moths**

- Eye-spotted bud-moth. E. M. DuPorte. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 118-37) il '17  
Lesser bud-moth. E. W. Scott and J. H. Paine. bibliog il U S Ag B 113:1-16 '14; Excerpt. J Ag Research 2:161-2 My '14  
Verbena bud moth. D. E. Fink. bibliog il U S Ag B 226:1-7 '15

**Bud selection.** See Plant propagation

**Bud weevils**

- Bud weevils and other bud-eating insects of Washington. M. A. Yothers. bibliog il Wash Ag Exp B 124:1-43 '16

**Buddleias**

- Chinese buddleias. Am Flor 45:1346 Ja 8 '16

**Budget**

- Application of statistics to budget making for lunch rooms. R. H. Vivian. J Home Econ 8:19-28 Ja '16  
Making of a budget. W. M. Cole. J Home Econ 8:17-18 Ja '16

**Budget, Household.** See Domestic finance

**Buds**

- Apple-bud selection; apple seedlings from selected trees. C. S. Crandall. il Ill Ag Exp B 211:181-264 '18  
Apple fruit-bud development. Gard Chron (Lond) 61:40 Ja 27 '17  
Flower buds and leaf buds. il J Heredity 8: 236-9 My '17  
Freezing of fruit buds. F. L. West and N. E. Edlefsen. bibliog il Utah Ag Exp B 151:1-24 '17  
Fruit-bud formation related to orchard practice. E. J. Kruse. il Better Fruit 12:6-8+ O '17  
Further observations on the effects of pruning, root pruning, ringing and stripping on the formation of fruit buds on dwarf apple trees. A. W. Drinkard, jr. il Va Ag Exp Tech B 17:137-46 '17; Same. Va Ag Exp Rep 1915-1916:137-46 '17  
How the apple forms its buds. F. C. Bradford. Better Fruit 11:23 O '16

- Influence of summer pruning on bud development in the apple. J. R. Magness. bibliog il Ore Ag Exp B 139:46-77 '16  
Lessons from apple buds. C. H. Chesley. Ohio F 141:338 Mr 2 '18  
Lessons taught by the fruit buds. il Va Ag Dept B 109:84-6 '16  
Making annual bearers of biennials. R. H. Roberts. Green's Am Fruit Grower 38:7 Ap '18  
Purple bud sport on pale flowered lilac (syringa persica). F. Cobb and H. H. Bartlett. il Bot Gaz 65:560-2 Je '18  
Studies in fruit bud formation. J. R. Magness. (In 8th annual report, 1916, p. 98-105) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Same. Better Fruit 12: 22 Ja; 25 F '18  
Vegetation and reproduction with special reference to the tomato. E. J. Kraus and H. R. Kraybill. bibliog il Ore Ag Exp B 149:1-90 '18  
Which are the fruit buds? il Rural N Y 77: 272 F 23 '18  
Will the trees flower? look at the buds! il Gard M 23:94 Mr '16  
Winter aspect of the buds of plums. E. A. Bunyard. il Gard Chron (Lond) 63:23 Ja 19 '18

**Buffalo carpet beetle.** See Carpet beetles

**Buffalo clover.** See Clover, Buffalo

**Buffalo gnats**

- Five North American buffalo gnats of the genus simulium. A. W. Jobbins-Pomeroy. bibliog il U S Ag B 329:1-48 '16

**Buffalo moths**

- Buffalo moth a serious problem. Nat Stock & F 42:582 S 21 '18

**Buffalo tree hoppers**

- Ravages of the buffalo tree hopper. A. G. Ruggles. il Minn Hort 44:98 Mr '16

**Buffaloes**

- Buffalo for the market. W. Gentry. il Country Gent 81:1900 O 28 '16  
Ganeshkhind dairy herd. Willingdon. il Ag J of India 13:1-9 Ja '18  
Hand-feeding and management of buffalo calves at a dairy. R. G. Allan and J. V. Takle. Ag J of India 11:223-37 Jl '16  
Last buffalo hunt. M. J. Cheney. Breeder's Gaz 70:1102 D 14 '16  
Longhorns and buffaloes. W. C. Barnes. il Breeder's Gaz 70:1020 N 30 '16

*See also* Catalogs

**Diseases and pests**

- Traumatic carditis in a buffalo bull. W. G. Gillman. Am Vet M Assn J 51:229-31 My '17

**Building**

- Building and the war. H: H. Saylor. Country Life 34:53 My '18  
Farmer his own builder. H. A. Roberts. Country Gent 82:93-4, 312, 418+, 587+, 1784 Ja 20, F 17, Mr 3, 24, N 17 '17  
Getting the most for your money in barn construction. C. I. Griffith. il Hoard's D 53:420+ Mr 30 '17  
How to build fire-safe with wood. R. S. Whiting. Hoard's D 54:577 N 16 '17  
Restrictions on building operations and how they affect farmers. H. R. Hendon. Prog F 33:1172 O 26 '18  
This is the best time to do farm building. J. R. Stone. Power F 26:20 D '17  
*See also* Architecture; Carpentry; Chimneys; Concrete construction; Farm buildings; Fireproof construction; Floors; Roofs; Tile construction

**Building and loan associations**

- Building and loan associations. J. M. McKay. Ohio F 139:336 Mr 10 '17  
Loans from the national pension fund to societies for the provision of cheap dwelling houses. Int R Ag Econ 61:77 Ja '16

**Building moving**

- Moving a stove silo. C. H. Sapp. il Ohio F 141: 673 My 18 '18

**Bulbils.** See Fungi

**Bulbs**

Bulb culture on Pacific Coast. W. J. Van Aalst. *il* Am Flor 48:5-6 Ja 20 '17

Bulb garden. Gard Chron (Lond) 62:108 S 15 '17

Bulb garden: liliun Brownii. R. W. Wallace. Gard Chron (Lond) 63:155 Ap 13 '18

Bulb growing in the United States; a California farm that rivals the best in Holland. A. L. Dahl. *il* Sci Am Sup (233 Broadway, N.Y. 10c) 86:36 Jl 20 '18

Bulb rearing in Lincolnshire. Gard Chron (Lond) 62:38 Jl 23 '17

Bulb show in London. Am Flor 47:339 S 2 '16

Bulbous flowers from Thanksgiving to Easter. M. G. Kains. *il* Gard M 24:89-91 O '16

Bulbs and the war. E. A. S. Peckham. *il* Gard M 23:140 Ap '16

Bulbs for Easter blooming. H. E. Thorp. Prog F 31:301 F 26 '16

Bulbs for fall planting. J. H. Sperry. Country Gent 81:1554 Ag 19 '16

Bulbs for the rock garden. Gard Chron Am 21:48 F '17

Bulbs for twelve months, indoors and outside. W. C. McCollom. *il* Gard M 26:43-6 S '17

Bulbs in grass land. Rural N Y 75:1539 D 16 '16

California plants and bulbs. Am Flor 49:150 Ag 11 '17

Choice bulbs for the rock garden. Gard Chron Am 21:340 S '17

Conference on bulb cultivation in Britain. Gard Chron (Lond) 60:80-1 Ag 12 '16

Conference on bulb-growing in the British Isles. *il* Royal Hort Soc J 42,pts 2-3:296-304 S '17

Crocus iridiflorus; Blindness in the double white narcissus. E. H. Jenkins. Gard Chron (Lond) 64:158 O 19 '18

Cultural notes on forcing bulbs. Gard Chron Am 21:396 N '17

Dutch bulbs for food. Am Flor 46:968 My 20 '16

Early spring bulbs; the best varieties, methods of planting and their care. M. Bentley. *il* O Judd Farmer 60:43 Mr 4 '16

Effect of frost on liliun bulbs. A. Grove. Gard Chron (Lond) 61:159 Ap 21 '17

Experiments in bulb growing at the United States bulb garden at Bellingham. P. H. Dorsett. *il* U S Ag B 28:1-21 '13

Fibre and water grown bulbs. *il* Gard Chron Am 22:251 O '18

Flowers for the windows. C. M. Weed. *il* Country Gent 82:1663 O 27 '17

Forcing bulbs in a greenhouse. Gard M 26:60 S '17

Foreign bulb trade of the Netherlands. Am Flor 48:1088 Je 2 '17

French bulb crops. Am Flor 47:270 Ag 19 '16

Government bulb farm. Am Flor 46:1016 My 27 '16

Growing bulbs in water, sand and moss. Gard Chron Am 21:408 N '17

Growing of bulbs in the home. E. H. Jones. J Ag (Quebec) 20:53 S '16

Home garden; growing flowers from bulbs indoors. *il* Country Gent 83:31 N 2 '18

Home-grown bulbs of liliun. E. H. Jenkins. Gard Chron (Lond) 63:127 Mr 23 '18

New wrinkle in bulb growing. M. H. Clark. *il* Gard M 24:46-7 S '16

Novelties in summer flower-roots and bulbs. *il* Gard M 25:240-2 My '17

Planting bulbs. O Judd Farmer 61:20 S 30 '16

Planting bulbs for next spring. Gard Chron Am 21:372 O '17

Planting bulbs for spring flowers. Prac F 113:365 N 1 '17

Planting fall bulbs. Rural N Y 77:1139 O 5 '18

Plants for Easter sale. G. W. Kerr. Country Gent 81:1842 O 14 '16

Small-flowered bulb plants. J. H. Sperry. *il* Country Gent 81:1912 O 28 '16

Starting bulbs for winter flower. N. R. Allen. *il* Gard M 24:44-6 S '16

Summer flower-roots for present planting. G. W. Kerr. *il* Gard M 25:225-7 My '17

Tariff decisions; bulbs classified as dutiable. Am Flor 46:594 Ap 8 '16

Three cheap and pretty autumn crocuses. F. Denis. *il* Gard Chron (Lond) 62:167 O 27 '17

Tulips and narcissus. L. A. Buckshorn. Rural N Y 75:616 Ap 15 '16

*See also* Calochortuses; Narcissus; Nerines

**Diseases and pests**

Disease of spring flowering bulbs. G. P. Darnell-Smith. Ag Gaz of New South Wales 28:141-2 F '17

**Bulgaria**

*See also* subhead Bulgaria under Agricultural education; Food supply; Forests and forestry

**Description and travel**

Rose garden of Europe. H. Cowley. *il* Gard Chron Am 20:59 F '16

**Bull associations.** *See* Cattle breeders' societies

**Bull bats.** *See* Nighthawks

**Bull stalls.** *See* Barns and stables—Bull stalls

**Bull terriers**

Bull terrier breeding. R. D. Coombs. *il* J Heredity 8:314-19 Jl '17

White cavalier. W. A. Dyer. *il* Country Life 30:46 S '16

**Bulls**

Bull as a disseminator of contagious abortion. F. B. Hadley and H. Lothe. Am Vet M Assn J 50:143-56 N '16; Abstract. Hoard's D 53:217 F 23 '17

Bulls for the range. R. H. Williams. Field II 28:643 S '18

Buy bulls co-operatively. L. A. Higgins. Kimball's D F 16:305 Ap 15 '18

Buying the herd sire. J. Bower. Hoard's D 55:472 Ap 5 '18

Care of the dairy sire. I. J. Mathews. Ohio F 138:664 D 30 '16

Caring for and feeding the dairy herd bull. L. A. Higgins. Prog F 33:1237 N 9 '18

Certificate-of-record bulls. W. M. Singleton. *il* J Ag New Zealand 12:356-60, 451-5; 13:126-8 My-Je, Ag '16

Death of Sultana's Golden Jolly. *il* Jersey B 35:598 Ap 19 '16

Exercise for bulls. I. M. Avery. *il* Hoard's D 53:180 F 23 '17

Exercise for bulls. A. G. Morrell. *il* Country Gent 81:1753 S 30 '16

Farm bull is important. H. L. Spooner. Jersey B 37:1813 O 30 '18

Greatest bull in the world. A. O. Smoot. Jersey B 37:1982 N 27 '18

Handling an ugly bull. F. A. Snow. Rural N Y 77:204 F 9 '18

Handling the bull necessitates care. Jersey B 35:1886 N 29 '16

Have high-priced bulls made good? W. S. Robbins. Breeder's Gaz 73:1196 Je 6 '18

Henry county bull association. C. R. George. Purdue Ag 12:505 My '18; Same. Jersey B 37:809 My 22 '18

Herd bull. *il* Hoard's D 56:456 O 25 '18

How is a good sire to be known? H. W. Vaughan. Breeder's Gaz 73:969 My 9 '18

How to care for the head of the dairy herd. T. Butler. Prog F 33:640 My 25 '18

How to select a dairy sire. T. Butler. Prog F 33:558 My 4 '18

How to select the beef sire. A. L. French. Prog F 33:932 Ag 24 '18

Importance of good sires. A. O. Smoot. Jersey B 37:554 Ap 10 '18

Influence of a great shorthorn sire. C. W. McCampbell. Breeder's Gaz 73:1332 Je 27 '18

Influence of a sire. Wallaces' F 42:1626 N 30 '17

It's the proven sire that gets results. W. W. Swett. *il* Jersey B 36:1101-2 Jl 18 '17

Judging dairy cattle—bulls. J. A. McLean. *il* Field II 28:319 My '18

Leading imported sires. J. R. Sibley. *il* Jersey B 37:467 Mr 27 '18

Management of range bulls. G. W. Barnes. *il* Ariz Ag Ext C 10:1-4 '16

Management of the bull. L. S. Corbett. Jersey B 36:584 Ap 18 '17

Masculinity in Aberdeen-Angus bulls. L. Ogilvy. Breeder's Gaz 74:262 Ag 22 '18



**Bulls—Continued**

- More attention to the dairy sire. M. Coverdell. Kimball's D F 14:534 S 1 '16
- One man's benefit to his community. F. G. Swoboda. il Hoard's D 56:585 N 22 '18
- Outlet for pure bred bulls. Jersey B 37:234 F 13 '18
- Pedro 3187, a ten-thousand-dollar bull. T. S. Cooper. Jersey B 37:432 Mr 20 '18
- Perfectly safe bull. M. C. Smith. Hoard's D 54:699 D 7 '17
- Prepotency of a dairy bull. Ohio F 142:585 D 14 '18
- Profits in dairy sires. W. C. Jeffries. Ohio F 142:168 Ag 24 '18
- Pure bred dairy sire and his relation to profits. W. O. Mills. Purdue Ag Ext B 69:1-7 '18
- Pure-breds for scrubs in Wexford county, Michigan. Wallaces' F 42:268 F 9 '17
- Record price for Jersey bull; Golden Fern's Noble. il Jersey B 35:1342 Ag 30 '16
- Register of merit progress; leading native sires. J. R. Sibley. il Jersey B 37:425 Mr 20 '18
- Right dairy sire and how to manage him. D. S. Bullock. il Hoard's D 55:184 F 22 '18
- Rower in his new home. E. Butler. Jersey B 37:483 Mr 27 '18
- Save the prepotent sire. R. R. Granes. il Purdue Ag 12:273-4+ F '18
- Selecting a dairy sire. J. Underwood. Prac F 114:313 S 15 '18
- Selecting dairy bulls by performance. W. E. Carroll. Utah Ag Exp B 153:1-19 '17
- Selecting the herd sire. M. O. Maughan. Jersey B 36:1785 N 14 '17; Same. Hoard's D 54:847 Ja 4 '18
- Selection and management of the dairy bull. C. H. Eckles. Mo Ag Ext C 51:1-4 '18
- Selection of a herd sire. W. R. Proctor. Jersey B 36:1596 O 17 '17
- Selling the aged bull. J. Ryan. Kimball's D F 16:37 Ja 15 '18
- \$61,650 worth of beef bulls. il Country Gent 83:2 S 14 '18
- Story of six dairy sires. Wallaces' F 43:1426 O 4 '18
- Testing the herd sire. G. H. Campbell. Hoard's D 53:465 Ap 6 '17
- Testing the value of a bull. C. M. Baker. il Hoard's D 52:504 N 3 '16
- \$31,000 Hereford bull Ardmore. C. B. Smith. Breeder's Gaz 73:11 Ja 3 '18
- Trotting bull. H. Smith. il Rural N Y 75:108 Ja 22 '16
- \$25,000 purchase; Golden Fern's Noble. Kimball's D F 14:528 S 1 '16
- Use a good sire. Hoard's D 51:658 My 12 '16
- Value of a pure-bred dairy sire. R. R. Kerr. J Dept Ag Victoria 15:166-8 Mr '17
- Value of the herd sire. Wallaces' F 43:589 Mr 29 '18
- What is a bull worth. Hoard's D 51:584 Ap 28 '16
- Which is the greatest sire? R. Wylie. Jersey B 37:468 Mr 27 '18
- Why a \$10,000 bull is a profitable investment. A. M. Bowman, jr. Jersey B 36:1600 O 17 '17
- Why top bulls bring top prices. F. F. Field. Breeder's Gaz 73:548 Mr 14 '18; Same. Ag Digest 2:921-2 Ap '18

**Bulrushes**

See also Tule

**Bumblebees**

- Bumblebee flowers. J. H. Lovell. il Am Bee J 57:264-6 Ag '17
- First humble-bees in New Zealand. I. Hopkins. J Ag New Zealand 13:142-3 Ag '16

**Bungalows**

- Architect's bungalow. A. R. Ross. il Country Life 30:58 Jl '16
- Building an American home in the Philippines. M. M. McLean. il plan Country Life 32:73-5 My '17
- Building bungalows. R. W. Haddon. il plans Am For 23:244-5 Ap '17
- Farmer's bungalow. W. E. Frudden. il Hoard's D 50:779 Ja 7 '16
- \$2000 bungalow. J. S. Long. il Country Gent 81:559 Mr 11 '16

**Buntings**

- Dickcissel. E. S. Jones. Ohio F 137:632 Ap 29 '16

**Buprestidae.** See Chrysophana placida; Flat-headed borers

**Bur clover.** See Clover, Bur

**Burbots**

- Burbot; fresh-water cousin to the cod. (Econ. C. 25) 4p il '17 U.S. Bur. of fisheries, Washington, D.C.

**Burglar alarms**

- Country house burglar alarm. Country Life 33:80 F '18
- Home made electric alarm that will protect the henhouse. P. Stephens. Country Gent 82:1152 Jl 14 '17

**Buried fortune; story.** M. Archer. O Judd Farmer 64:520+ My 11 '18

**Burlap**

- Burlap bag scarcity. Am Fert 47:33 Ag 18 '17
- Burlap contracts and prices. Am Fert 49:27 N 23 '18
- Burlap situation. Am Fert 47:58 D 8 '17
- Economy in burlap. Am Fert 47:79-82 Jl 21 '17
- Help avoid burlap shortage. Kimball's D F 16:881 N 15 '18; Same. Hoard's D 56:665 D 6 '18
- Importation of burlap, burlap bags and jute. Am Fert 49:33 N 9 '18

**Burlington, Vermont.** See Milk supply—Burlington

**Burma.** See Gardens—Burma; Land tenure—Burma

**Burma beans.** See Beans, Burma

**Burpee, W. Atlee, co.**

- Burpee's Fordhook farms inspection. W. F. Therkildson. Am Flor 51:93 Ag 3 '18

**Burpee, Washington Atlee, 1858-1915**

- Sketch. por Gard M 22:174 Ja '16

**Burrill, Thomas Jonathan, 1839-1916**

- Appreciation. W. Trelease. por Bot Gaz 62:153-5 Ag '16
- Dr. Thomas Jonathan Burrill memorial address; life and bibliography of works. E. Davenport. por Ill State Hort Soc Trans 1916:67-98 '17
- In memoriam Thomas J. Burrill. E. F. Smith. por J Eact 1:269-71 My '16
- Sketch. J. T. Barrett. por Phyt 8:1-4 Ja '18

**Bibliography**

- Scientific writings of Thomas J. Burrill. C. E. Janvrin, comp. Ill State Hort Soc Trans 1917:195-201 '18

**Burros.** See Asses and mules

**Burtis, Walter J.**

- Best farmer in Kansas. J. E. Pickett. il por Country Gent 83:14-15 Ja 26 '18

**Bush clover.** See Lespedeza

**Bush rabbits.** See Rabbits

**Bushings**

- Bushings. C. H. Willey. il Country Gent 83:21 O 12 '18

**Business**

- Business and commercial problems, now and after the war. W. S. Kies. Coop Manager & F 6:89-93 Ag '17
- Business increase must break all records. Am Flor 49:1211 D 22 '17
- Business outlook for the coming years. Am Fert 49:33 N 23 '18
- Conditions after the war. W. F. Morgan. N Y Prod R 43:550 Ja 31 '17
- See also Advertising; Mail order business; Merchants

**Business correspondence.** See Commercial correspondence

**Business letters.** See Commercial correspondence

**Butter**

- Boosting butter. J. K. Morrison. Country Gent 81:632 Mr 18 '16
- Butter a necessary food. Hoard's D 55:607 Ap 26 '18

**Butter—Continued**

- Butter and cottonseed oil. Hoard's D 55:333 Mr 15 '18
- Butter as a food. C. A. Willson. Jersey B 36:996 Je 27 '17
- Butter, butter-fat and overrun. H. H. Dean. Prac F 112:322 S 1 '16
- Butter for winter. Wallaces' F 42:1225 S 7 '17
- Butter in Peru. W. H. Handley. N Y Prod R 43:549 Ja 31 '17
- Butter quality. M. Mortensen. N Y Prod R 47:150-1 D 4 '18
- Butter shrinkage. E. S. Guthrie. J Dairy Sci 1:136-8 Jl '17
- Butter that will sell itself. G. F. E. Story. il Country Gent 83:20 Je 22 '18
- Butterfat overrun. H. F. Judkins. Rural N Y 75:341 F 26 '16
- Cheese vs. butter. N Y Prod R 44:82 My 16 '17
- Cheese versus butter. I: Motes. Jersey B 35:1318 Ag 23 '16
- Concerning rancidity of butter. E. S. Guthrie. bibliog J Dairy Sci 1:218-34 S '17
- Country butter. J. L. Ashlock. il Country Gent 81:58 Ja 8 '16
- Country butter. D. F. Mattson. Ohio F 138:144 Ag 19 '16
- Cream grading. J. D. Frandsen. N Y Prod R 43:386-4 Ja 3 '17
- Creamery butter in the South. Creamery 5:41 D '16
- Crumbly, brittle butter. N Y Prod R 43:646 F 21 '17
- Definitions of butter. Hoard's D 55:495 Ap 5 '18
- Effect of ripening cream on keeping quality and effect of freezing cream. E. S. Guthrie. N Y Prod R 41:800 Mr 8 '16
- Effects of feeding cottonseed products on the composition and properties of butter. C. H. Eckles and L. S. Palmer. bibliog Mo Ag Exp Research B 27:1-44 '16
- Estimated butter question. E: A. Grombacher. Jersey B 36:1066 Jl 11 '17
- Facts as they are. R. G. Miller. Kimball's D F 15:487 Jl 15 '17
- Facts regarding butter fat for food. J. H. Frandsen. Jersey B 37:244 F 13 '18
- Five millions lost. Country Gent 82:870 My 12 '17
- Good farm butter. Kimball's D F 16:121 F 15 '18
- How about country butter? G: D. Black. Ohio F 141:310 Mr 2 '18
- Income of my own. Mrs D. Smith. Country Gent 81:615 Mr 11 '16
- Irish butter control. N Y Prod R 42:726 Ag 30 '16
- Keeping qualities of butter. pts 4 & 5 C: W. Brown and K. Peiser. bibliog Mich Ag Exp Tech B 29:1-20; 30:1-18 '16; Same. Mich Ag Bd Rep 1917:531-57
- Make better butter. R. Robinson. Kimball's D F 16:625 Ag 15 '18
- Making butter for the navy. H. F. Judkins. il Rural N Y 77:1008 Ag 24 '18
- Margarine butter war in France. F. M. Mansfield. Jersey B 35:1274-5 Ag 16 '16
- Marking butter. N Y Prod R 42:686 Ag 23 '16
- Milk and butter in the home. A. J. Reed. N C Ag Ext C 7:15-20 '16
- Milk-blended butter: should the prohibitive tax and branding laws against it be modified? N Y Prod R 45:366 Ja 16 '18
- New butter defect arising from improper care of milking machines. A. D. Lynch. N Y Prod R 47:112 N 27 '18
- Notes on the quality of the 1918 winter pool butter. A. M. Brown. Ag Gaz of New South Wales 29:651-2 S '18
- Pasteurization of sour, farm-skimmed cream for buttermaking. O. F. Hunziker and others. Ind Ag Exp B 208:1-76 '17; Excerpts. N Y Prod R 45:372, 438, 548; 46:640; 47:50 Ja 16, 30, F 20, Ag 28, N 13 '18; Summary. Ind Ag Exp Rep 1917:33-5 '18
- Pioneer dairying in Wisconsin. C. P. Goodrich. Hoard's D 52:870 Ja 12 '17
- Preventing shrinkage between creamery and market. N Y Prod R 46:246+ Je 12 '18
- Quality and consumption. F. C. Charles. Hoard's D 53:553 Ap 20 '17
- Quality of Wisconsin butter. C. E. Lee. N Y Prod R 42:12 Ap 26 '16
- Relative nutritive value of oleomargarine and butter. J Home Econ 9:229 My '17
- Secret of fine flavor in butter. E. E. Rockwood. Hoard's D 51:487 Ap 7 '16
- Shrinkage in butter. N Y Prod R 44:386 Jl 4 '17
- Siberian butter production. Creamery 4:22 Ap '16
- Some differences in butter. H. F. Judkins. Hoard's D 53:231 Mr 2 '17
- Story of our American butter. L. A. Congdon. Creamery 4:18-19 Jl '16
- Tallowy butter—its causes and prevention. O. F. Hunziker and D. F. Hosman. bibliog J Dairy Sci 1:320-46 N '17
- Temperature of butter. N Y Prod R 44:346 Je 27 '17
- Undesirable butter flavors. C. S. Anderson. Kimball's D F 15:561 Ag 15 '17
- Undesirable flavors in dairy butter. Hoard's D 56:23 Jl 26 '18
- Unfit cream. N Y Prod R 44:1122 O 31 '17
- Whey butter to be labeled. C. E. Lee. Hoard's D 53:859 Je 15 '17
- Wisconsin April butter. E. H. Farrington. N Y Prod R 42:60 My 3 '16
- Wisconsin butter. C. E. Lee. Hoard's D 51:638 My 5 '16
- See also* Butter, Renovated; Butter, Unsalted; Butter boxes; Butter inspection; Butter making; Butter trade; Butterfat; Buttermakers; Buttermilk; Cream; Dairy products

**Adulteration**

Sugar an adulterant. N Y Prod R 45:374 Ja 16 '18

**Analysis**

- Detection of lime used as a neutralizer in dairy products. H. J. Wichmann. U S Ag B 524:1-22 '17
- Giving a list of the analyses of samples of butter and other food products made under the direction of the Dairy and food commissioner with the approval of the Secretary of the Department of agriculture. See monthly bulletin of the Pennsylvania department of agriculture, Dairy and food bureau
- List of the analyses of samples of butter and other food products made under the direction of the dairy and food commissioner. Pa Ag Dept Dairy B v 15:114-63 Jl '17
- Samples of butter and other food products. Pa Ag Dept Dairy B v 16:129-59 Ap '18

**Coloring**

- Detection of added color in butter or oleomargarine. H. A. Lubs. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:436-9 Je '18
- Measurement and specification of the physical factors which determine the saturation of certain tints of yellow. I. G. Priest and C. G. Peters. (Technologic Papers 92) 11p '17 U. S. Bur. of standards, Washington, D. C.
- Uniform color; precautions necessary to insure it—keeping check on color variations. N Y Prod R 44:542 Ag 1 '17
- Use of butter coloring. C. S. Anderson. Kimball's D F 15:518 Ag 1 '17
- See also* Carotin

**Composition**

- Composition and market qualities of butter when corn silage is fed with cotton-seed meal. L. S. Palmer and D. P. Crockett. J Dairy Sci 1:235-45 S '17
- Controlling composition. N Y Prod R 43:198+ N 29 '16

**Costs**

- Basis of cost for limitation of profit on stored butter. N Y Prod R 46:370 Jl 3 '18
- Reducing cost of butter. G. L. McKay. N Y Prod R 44:192 My 30 '17; Same. Hoard's D 53:872 Je 15 '17
- See also* Butter—Prices



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**Exhibits**

- Butter exhibit at N. C. B. A. N Y Prod R 44:1030-1 O 17 '17  
 Butter judging contest rules in Oregon. O. G. Simpson. N Y Prod R 43:272 D 13 '16  
 Buttermaking contests. R. P. Speer. Country Gent 81:838 Ap 15 '16  
 California educational contest. L. M. Davis. N Y Prod R 42:270 Je 7 '16  
 California scoring contest. S. L. Denning. N Y Prod R 47:200 D 11 '18  
 Clean raw material results in high scoring butter. C. E. Lee. N Y Prod R 41:652 F 16 '16  
 Comments on the Iowa buttermakers exhibit. H. D. Reynolds. Creamery 5:38 Je '17  
 Creameries booth at the provincial exhibition, Halifax. W. A. Mackay. il Ag Gaz of Canada 3:993-4 N '16  
 Educational scoring. N Y Prod R 42:430 Jl 5 '16  
 1st annual western dairy show; with list of scores. N Y Prod R 41:910-11 Mr 22 '16  
 Habitual prize winner. J. W. Engel. N Y Prod R 41:1080 Ap 19 '16  
 Iowa educational test; new features for 1916 exhibits. M. Mortensen. N Y Prod R 41:1004 Ap 5 '16  
 Michigan educational test. H. D. Wendt. N Y Prod R 42:620 Ag 9 '16  
 Michigan educational test. H. D. Wendt. N Y Prod R 43:652 F 21 '17  
 New York state fair scores. N Y Prod R 42:838 S 20 '16  
 North Dakota butter. P. Miller. Hoard's D 51:670 My 12 '16  
 Prize winning creamery butter at the Canadian national exhibition. Ag Gaz of Canada 5:1063-6 N '18  
 Vermont educational scorings. N Y Prod R 45:370 Ja 16 '18  
 Wisconsin butter scoring. N Y Prod R 43:1066 Ap 25 '17  
 Wisconsin educational test. N Y Prod R 41:696 F 23 '16  
 See also Southeastern states butter and cheese show

**Grading**

- Butter grading. L. T. MacInnes. Ag Gaz of New South Wales 29:397-405 Je '18  
 \* Butter grading. 1917. J. H. Scott. (In Report, Dairymen's assns., 1917, p. 102-5) '18 Ontario ag. dept., Toronto; Excerpts. Ag Gaz of Canada 5:275-6 Mr '18  
 Cream and butter grading in Saskatchewan. K. G. MacKay. Hoard's D 53:473 Ap 6 '17  
 Grade and value. N Y Prod R 43:10 N 1 '16  
 Grading of creamery butter. C. Marker. n.p. il '16 Alberta ag. dept., Calgary  
 Grading problems. F. Herns. (In Reports, Dairymen's assns., 1916, p. 127-30) '17 Ontario ag. dept., Toronto  
 Michigan butter grading. H. D. Wendt. N Y Prod R 44:586 Ag 8 '17  
 Minnesota grading commission. N Y Prod R 45:926 Ap 24 '18  
 Official butter grading in Ontario. J. H. McKenney. Hoard's D 55:233 Mr 1 '18  
 Standardization of American butter. M. Mortensen. Creamery 7:33-4 Ja '18  
 To keep up the butter supply. H. Vanderhoof. Jersey B 36:92 Ja 17 '17  
 Uniform grades for butter and eggs. N Y Prod R 44:257+ Je 13 '17

**Judging**

- Butter judging; how butter is judged—methods best suited to commercial practice. N Y Prod R 44:866 O 3 '17

**Marketing**

- Branding butter. N Y Prod R 44:930 O 10 '17  
 Butter market situation in New England. M. R. Tolstrup. Hoard's D 56:421 O 18 '18  
 Butter marketing problems. Creamery 5:37+ D '16

- Buttermaker's duty in the proper marketing of creamery butter. C. H. Benkendorf. Creamery 5:45+ D '16  
 Co-operative marketing and distribution of butter—history of Minnesota co-operative dairies association. N Y Prod R 45:20 N 7 '17  
 Co-operative marketing of creamery butter—are conditions favorable for an extension of the idea? N Y Prod R 46:700 S 11 '18  
 Dairy branch enlarges its marketing operations. Hoard's D 52:36 Ag 4 '16  
 Difficulties in marketing butter. W. E. Turner. Creamery 4:51+ Ap '16  
 Government marketing in Saskatchewan. N Y Prod R 42:396 Je 28 '16  
 Making farm butter profitable in Alabama. J. T. McKee. Hoard's D 52:237 S 15 '16  
 Marketing butter and cheese by parcel post. L. B. Flohr and R. C. Potts. il Farmers' B 930:1-12 '18; Same. Hoard's D 56:4-5 Jl 26 '18; Same cond. N Y Prod R 46:294-5 Je 19 '18; Same cond. Jersey B 37:1045-6 Jl 3 '18  
 Marketing butter in the city by parcel post. Mrs. W. H. Alexander. Prog F 31:498 Ap 8 '16; Same. Hoard's D 51:970 Jl 14 '16  
 Marketing creamery butter. H. D. Wendt. N Y Prod R 41:472, 498 Ja 12-19 '16  
 Marketing creamery butter. R. C. Potts and H. F. Meyer. il U S Ag B 456:1-37 '17  
 Marketing farm products. Power F 25:17 S '16  
 Marketing of Kansas butter. T. Macklin. il maps Kan Ag Exp B 216:1-79 '17; Same cond. Hoard's D 53:716-17+ My 18 '17; Summary. N Y Prod R 44:476 Jl 18 '17  
 Marketing of print butter. C. W. Sly. N Y Prod R 42:586 Ag 2 '16  
 Marketing of Wisconsin butter. B. H. Hibbard and A. Hobson. il maps Wis Ag Exp B 270:1-69 '16; Summary. N Y Prod R 43:314+ D 20 '16; Excerpt. N Y Prod R 43:502 Ja 24 '17  
 Marketing practices of Wisconsin and Minnesota creameries. R. C. Potts. il U S Ag B 690:1-15 '18; Same abr. N Y Prod R 46:642-3, 888+ Ag 28, O 9 '18  
 Packing butter and a Virginia market bureau. J. F. Fooshe. Hoard's D 52:581 N 17 '16  
 Private butter business. Wallaces' F 43:729 Ap 26 '18  
 Private butter customers. C. H. Sapp. Ohio F 138:468 N 11 '16  
 Quality as a factor in the sale of butter. G. C. Larsen. N Y Prod R 41:1088 Ap 19 '16  
 Selling farm butter. Rural N Y 77:258 F 16 '18  
 Story of a nationally advertised butter. C. Gano. Hoard's D 54:688 D 7 '17  
 Suggestions for the manufacture and marketing of creamery butter in the South. R. C. Potts and W. White. bibliog U S Ag C 66:1-12 '16  
 Wise marketing brings more for butter. Prog F 32:780 Jl 14 '17  
 See also Oregon cooperative dairy exchange

**Moisture content**

- After excess moisture. N Y Prod R 41:529+ Ja 26 '16  
 Butter moisture law. G. J. McKay. N Y Prod R 41:582 F 2 '16  
 Crescent creamery wins. N Y Prod R 42:341 Je 21 '16  
 Farm manufactured butter; its moisture content; and some factors which influence it. E. E. Ash. J Dept Ag Victoria 14:633-4 O '16  
 Moisture content of butter. J. K. Cohen. N Y Prod R 42:1062 O 18 '16  
 Moisture control. N Y Prod R 43:50 N 8 '16  
 Moisture control in butter. Creamery 5:22-3 F '17; Same abr. N Y Prod R 43:540 Ja 31 '17  
 Moisture in butter. Country Gent 81:888 Ap 22 '16  
 Moisture in dairy farm butter. H. L. Judkins. Rural N Y 75:792 My 20 '16  
 Moisture tests; when, how and how often should they be used in the creamery? N Y Prod R 43:234+ D 6 '16

**Butter—Moisture content—Continued**

Uneven moisture in different parts of the same churning. N Y Prod R 46:126 My 22 '18  
 Warns against over-moisture. G. L. McKay. N Y Prod R 46:263 Je 12 '18  
 Water—40 cents a pound. S. P. Keyes. Hoard's D 52:226 S 8 '16

**Packing**

Butter package. N Y Prod R 45:194-5 D 12 '17  
 Packing butter in cubical boxes. G. L. McKay. Breeder's Gaz 72:80 J1 19 '17  
 Packing government butter. N Y Prod R 46:400 J1 10 '18  
 Packing tub butter. N Y Prod R 41:650+ F 16 '16  
 Parchment liners; how should they be handled and placed in tubs? N Y Prod R 46:732 S 18 '18

**Pasteurization**

See also Cream—Pasteurization

**Preservation**

New method of preserving butter. J. J. Dunne. Hoard's D 55:52 F 1 '18; Same cond. N Y Prod R 45:854 Ap 10 '18

**Prices**

Basis of cost for limitation of profit on stored butter. N Y Prod R 46:370 J1 3 '18  
 Butter (maximum prices) order, 1917. J Bd Ag 24:678-80 S '17  
 Butter order, 1918. J Bd Ag 25:759-60 S '18  
 Control of price of butter in New Zealand. J Ag New Zealand 13:423-8 N '16  
 Danish butter regulations. N Y Prod R 45:449 Ja 30 '18  
 English trade restrictions. N Y Prod R 43:978 Ap 11 '17  
 High point since 1869; fine fresh butter reaches 50c. N Y Prod R 45:145 D 5 '17  
 Making quotations. N Y Prod R 42:470-1 J1 12 '16  
 Monthly butter profits and losses of past ten years; chart. Appears in Wallaces' farmer each month, usually the first issue  
 New York butter market. W. B. Liverance. Hoard's D 56:663 D 6 '18  
 Price of storage butter 47c. N Y Prod R 45:391 Ja 23 '18  
 Prices turn upward. N Y Prod R 46:237 Je 12 '18  
 Reasons for higher prices. W. S. Moore. N Y Prod R 44:318+ Je 20 '17  
 Seeking for clarity; a study of butter profit restrictions with suggestions of certain needs for elucidation. N Y Prod R 46:787+ O 2 '18  
 Special regulations governing manufacturers, dealers, brokers and commission merchants in butter. Creamery 7:24-24a N '18  
 Statistics of milk cows and prices of milk and butter. Creamery 7:30-1 Mr '18  
 Storage prices fixed; food administration asks that 46c be maximum rate on held butter until January 15. N Y Prod R 45:257 D 26 '17  
 Study of prices and quality of creamery butter. G. P. Warber. map U S Ag B 682:1-22 '18; Excerpt. N Y Prod R 47:14-15 N 6 '18  
 Thirty-one years of butter profits and losses. Wallaces' F 42:1154 Ag 24 '17  
 Who gets the money? Hoard's D 52:875 Ja 12 '17

**Standards**

Butter standard. O. F. Hunziker. N Y Prod R 44:354+ Je 27 '17; Same. Creamery 5:35-8 J1 '17  
 Butter standard. M. Mortensen. N Y Prod R 44:398 J1 4 '17  
 Butter standard; should it be based on butterfat or water content? N Y Prod R 46:10 My 1 '18  
 Butter standards. N Y Prod R 42:152 My 17 '16  
 Butter standards. N Y Prod R 46:956+ O 16 '18  
 Butter standards. E. H. Farrington. N Y Prod R 42:230 My 31 '16  
 Dairy laboratory established at Chicago by American association of creamery butter manufacturers. G. W. McKay. N Y Prod R 43:70 N 8 '16

Facts about butter and suggestions for a standard. G. L. McKay. N Y Prod R 45:780-1 Mr 27 '18  
 Fat standard for butter. Hoard's D 55:389 Mr 22 '18  
 For Iowa butter. Kimball's D F 14:100 F 15 '16  
 For standardization in N. D. J. R. Keithling. N Y Prod R 46:260 Je 12 '18  
 For Wisconsin state brand; text of bill. N Y Prod R 46:606 Ag 21 '18  
 Free advertising for Michigan trade mark butter. N Y Prod R 41:544 Ja 26 '16  
 Hearing on butter standards. Creamery 7:18 J1 '18  
 Iowa butter trade-mark. Wallaces' F 41:25 Ja 7 '16  
 Iowa butter trade mark. W. B. Barney. N Y Prod R 41:664 F 16 '16  
 Legal limits for butter. B. D. White. J Dairy Sci 1:378-9 Ja '18  
 McKay on standards; remarks on the quality of hand separator, neutralized cream butter and the question of branding. G. L. McKay. N Y Prod R 47:44+ N 13 '18  
 Michigan state brand plans. N Y Prod R 41:938 Mr 29 '16  
 Minnesota state brand. N Y Prod R 41:693 F 23 '16  
 Minnesota's brief to joint committee on definitions and standards; urge labelling of neutralized cream butter. N Y Prod R 46:734-5 S 18 '18  
 Nat'l commission's suggestions; comments of club members on system of butter grading and control. N Y Prod R 43:970+ Ap 11 '17  
 Special conference of Wisconsin makers endorses 80 per cent fat. G. H. Benkendorf. N Y Prod R 45:738 Mr 20 '18  
 Standardizing butter. G. L. McKay. Hoard's D 51:290-1 Mr 10 '16  
 State and national brands for butter and cheese. M. Mortensen. J Dairy Sci 1:383-99 Ja '18; Same cond. Creamery 6:21-2 D '17; 7:33-4 Ja '18  
 State brand for Michigan butter. Hoard's D 52:669 D 1 '16  
 State scores analyzed. M. H. Myer. N Y Prod R 43:238 D 6 '16  
 Statement of Secretary Meyer; announcing work done on behalf of National creamery buttermakers' association. N Y Prod R 46:740 S 18 '18  
 Suggestions for a standard for butter presented on behalf of Swift & co. to the Joint committee on definitions and standards, representing food control officials of the United States and of the several states. 75p bibliog '17 Swift & co., Union Stock Yards, Chicago; Same cond. N Y Prod R 45:160+ D 5 '17  
 Tentative butter standards. N Y Prod R 47:38 N 13 '18; Same. Creamery 7:35 D '18

**State brands**

See Butter—Standards

**Storage**

Carl Lee's views as to the seriousness of the mould evil and methods of prevention. N Y Prod R 46:412 J1 10 '18  
 Cause of mold. F. L. Odell. N Y Prod R 45:274 D 26 '17  
 Cold storage butter. Int R Sci & Prac Ag 9, no 4:513 Ap '18  
 Cold storage butter rules; special regulations of profits imposed by United States Food administration. Creamery 7:20-1 J1 '18; Same. N Y Prod R 46:355 J1 3 '18  
 Danish preventives against moldy butter. J. J. Dunne. Hoard's D 53:246 Mr 2 '17  
 Enzymes of milk and butter. R. W. Thatcher and A. C. Dahlberg. bibliog J Ag Research 11:437-50 N 26 '17  
 Home preserving of butter. N Y Prod R 44:739 S 5 '17  
 Influence of salt on the changes taking place in storage butter. R. M. Washburn and A. C. Dahlberg. bibliog J Dairy Sci 1:114-26 J1 '17; Summary. N Y Prod R 45:302 Ja 2 '18  
 Keeping butter. E. E. Rockwood. Hoard's D 54:278 S 21 '17



**Butter—Storage—Continued**

- Keeping butter sweet. M. E. Underwood. Kimball's D F 15:384 Je 1 '17
- Lessons from the winter butter storage scheme. M. A. O'Callaghan. Ag Gaz of New South Wales 27:860-2 D '16; Same abr. N Y Prod R 44:394 J1 4 '17
- Making for storage. N Y Prod R 46:206 Je 5 '18
- Mold in butter; its causes and prevention—total loss it causes is enormous. N Y Prod R 46:544+ Ag 7 '18
- Mold; precautions that should be taken to prevent its appearance in tub butter. N Y Prod R 42:650 Ag 16 '16
- Moldiness in butter. C. Thom and R. H. Shaw. bibliog J Ag Research 3:301-10 Ja '15
- Moldy butter. G. L. McKay. Hoard's D 52:8 J1 28 '16
- New process for preserving butter over long periods. T. Paul. Int R Sci & Prac Ag 8,no 4:654-5 Ap '17
- Preventing mold; a timely but well worn subject again reviewed. N Y Prod R 44:618 Ag 15 '17
- Progressive oxidation of cold-storage butter. D. C. Dyer. bibliog il J Ag Research 6:927-52 S 11 '16; Excerpts. Creamery 5:24-5 D '16
- Relation of oidium lactis and penicillium to the keeping qualities of butter. W. B. Combs and C. H. Eckles. J Dairy Sci 1: 347-55 N '17

**Testing**

- Chemical and bacteriological research laboratory. G. L. McKay. Hoard's D 52:42 Ag 4 '16; Same cond. N Y Prod R 42:580 Ag 2 '16
- Co-operative laboratory, for chemical and bacteriological tests. G. L. McKay. N Y Prod R 42:580 Ag 2 '16
- Danish butter tests. H. C. Thorkilsen. N Y Prod R 46:255 Je 12 '18
- Grading creamery butter in the prairie provinces. G. H. Barr. Ag Gaz of Canada 3:511-12 Je '16
- Simple salt test for use in the creamery in determining quantity in butter. F. W. Bouska. J Dairy Sci 1:279-83 S '17; Same. N Y Prod R 45:942 Ap 24 '18

**Transportation**

- One way to send butter and eggs to market. E. D. Abernethy. Hoard's D 53:972 J1 13 '17

**Weights**

- Butter shrinkage. C. Johnson. N Y Prod R 42:18 Ap 26 '16
- Errors in the weight of print butter; their causes and prevention. H. Runkel and H. M. Roesser. il U S Ag C 95:1-14 '18
- Marking weights on butter and cheese packages. N Y Prod R 46:336 Je 26 '18
- Print butter; precautions necessary to insure full marked weight without excessive loss. N Y Prod R 46:668 S 4 '18
- Testing butter weights. N Y Prod R 46:404 J1 10 '18

**Butter, Renovated**

- Blowing renovated butter oil at pasteurizing temperature. R. H. Shaw and R. P. Norton. J Dairy Sci 1:127-35 J1 '17
- List of licenses for the manufacture and sale of oleomargarine and renovated butter granted by Department of agriculture. See monthly bulletin of the Pennsylvania department of agriculture, Dairy and food bureau

**Butter, Substitutes for**

- Butter—its substitutes. J. D. Leclair. (In Report, Quebec Dairymen's assn., 1916, p. 284-8) '17
- Potato butter. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:191 Mr 23 '18
- Strange substitutes for butter. L. L. De Bra. Hoard's D 55:618 Ap 26 '18
- See also Oleomargarin

**Butter, Unsalted**

- Trade in sweet or unsalted butter. N Y Prod R 41:1072 Ap 19 '16
- Unsalted butter. N Y Prod R 41:906+ Mr 22 '16

**Butter contests. See Butter—Exhibits**

**Butter handling**

- Handling butter from time it enters tubs till shipped from creamery. N Y Prod R 46: 980 O 23 '18

**Butter inspection**

- Market inspection of creamery butter. N Y Prod R 43:1010+ Ap 18 '17
- Sampling butter. Hoard's D 51:782 Je 2 '16

**Butter makers. See Buttermakers**

**Butter making**

- Acidity and butter. F. W. Bouska. N Y Prod R 44:890+ O 3 '17
- Acidity of cream. N Y Prod R 44:686 Ag 29 '17
- Adding starter; when and in what proportion should it be used. N Y Prod R 46:540 Ag 7 '18
- \* Address at the meeting of the Dairymen's association of eastern Ontario. H. H. Dean. (In Report, Dairymen's assns., 1917, p. 55-62) '18 Ontario ag. dept., Toronto; Excerpt. Ag Gaz of Canada 5:156-8 F '18
- Another butter brief; further contribution to the discussion of butter standards and status of neutralized cream butter. O. F. Hunziker and others. N Y Prod R 46:876-7 O 9 '18
- As to neutralizers. N Y Prod R 46:944 O 16 '18
- Banishing sour cream. H. E. Forester. N Y Prod R 46:804 O 2 '18
- Butter. E. S. Guthrie. Cornell Rural School Leaflet v 11,no 1:97-100 '17
- Butter composition control; factors to consider in regulating moisture. E. Oman. N Y Prod R 43:426 Ja 10 '17
- Butter makers' conference. E. S. Guthrie. N Y Ag Dept B 93:40-3 Mr '17
- Butter making. Prog F 31:881 J1 15 '16
- Buttermaking as a trade. N Y Prod R 43:606+ F 14 '17
- Butter making at home. R. C. Scott. il Country Gent 81:1671 S 9 '16
- Buttermaking methods. N Y Prod R 45:170 D 5 '17
- Buttermaking on the farm. G. H. Barr. 16p il '17 Canada Ag
- Butter man's story. il Hoard's D 55:296 Mr 8 '18
- Cause and control of streaks in butter. E. E. Rockwood. Hoard's D 51:337 Mr 17 '16
- Causes of loss in churning. E. E. Rockwood. Hoard's D 54:835 Ja 4 '18
- Cheese and butter making. Ontario Ag Dept B 266:1-56 '18
- Churning cream. W. H. Cooper. Country Gent 82:939 My 26 '17
- Churning difficulties. O. C. Cunningham. Ohio F 139:363 Mr 10 '17
- Churning hints. B. Millar. Nat Stock & F 42: 826 D 14 '18
- Churning temperatures; their regulation and control as weather becomes colder. N Y Prod R 47:42 N 13 '18
- Conditions which affect churning. Rural N Y 77:53 Ja 12 '18
- Controlling composition and color in butter-making. D. J. Davis. N Y Prod R 41:1006 Ap 5 '16
- Difficult churning. O. C. Cunningham. Ohio F 139:42 Ja 13 '17
- Difficult churning. L. G. Rinkle. Jersey B 35: 1992 D 20 '16
- Difficult churning and failure of butter to gather properly. N Y Prod R 43:738 Mr 7 '17
- Difficult churning; usual causes of this trouble—overcoming foam in the churn. N Y Prod R 46:572 Ag 14 '18
- Does your butter break? G. F. E. Story. Country Gent 82:1745 N 10 '17
- Efficiency in buttermaking. J. Sorenson. N Y Prod R 42:868 S 27 '16
- Factors affecting the churnability of cream. H. L. Judkins. Hoard's D 53:7 Ja 26 '17; Same. Wallaces' F 42:159 Ja 26 '17

**Butter making—Continued**

- Farm butter making. Country Gent 81:1076 My 20 '16
- Farm buttermaking. il Hoard's D 52:364 O 6 '16
- Farm butter making. il O Judd Farmer 60:17 Ap 8 '16
- Farm buttermaking. W. H. Cooper. Kimball's D F 14:724 N 15 '16
- Farm butter making. H. B. Layton. Florida State College for Women B 12:1-14 '17
- Farm butter making pointers. Prog F 31:1409 D 9 '16
- Farm manufactured butter; its moisture content, and some factors which influence it. E. E. Ash. J Dept Ag Victoria 14:633-4 O '16
- Getting the most money out of butter. E. E. Rockwood. Hoard's D 55:1051 J1 19 '18
- Gold in butter. Mrs H. G. Easterly. Ill Farmers Inst Household Sci 1917:162-7 '18
- Good butter—how to make it. J. M. W. Kitchen. Jersey B 37:808 My 22 '18
- Good butter in winter. Nat Stock & F 40:1124 Ja 27 '17
- Good farm butter. Weekly N L 5:4 F 13 '18; Same. Hoard's D 55:164 F 15 '18; Same. Prac F 114:83 F 15 '18; Same. Power F 27:44 Mr '18
- Grain of butter. F. W. Bouska. N Y Prod R 45:88+ N 21 '17
- Handling cream and making butter on the farm. E. C. Rowe. il Purdue Ag 11:27-9 D '16
- Handling starter when cream arrives late and must be pasteurized in the afternoon. N Y Prod R 43:570 F 7 '17
- Hard churning cream. Nat Stock & F 40:1354 Mr 10 '17
- \* Hints on buttermaking. L. A. Zufelt. (In Report, Dairymen's assns., 1917, p. 33-5) '18 Ontario ag. dept., Toronto
- Home butter-making. V. E. Scott. diags Nev Ag Ext B 7:1-8 '16
- Hot weather hints; effects on quality during manufacture and shipping. N Y Prod R 44:722 S 5 '17
- How to make good butter. W. H. Howell. il Ga Ag Coll (Ext) B 130:1-11 '17
- How to make the butter come. Rural N Y 76:340 Mr 3 '17
- How to overcome butter difficulties. Mrs A. S. Altig. Prog F 31:516 Ap 8 '16
- How we make no. 1 butter. M. E. Underwood. il Kimball's D F 15:277 Ap 15 '17
- Improvement in butter manufacture. M. A. O'Callaghan. Ag Gaz of New South Wales 27:863-4 D '16
- Improving farm butter. Jersey B 35:1599 O 11 '16
- Improving the farm made butter. J. Underwood. Prac F 114:298 S 1 '18
- Improving the quality of butter. Jersey B 37:1391 Ag 28 '18
- It has been my experience. O Judd Farmer 62:19 My 19; 20 My 26 '17
- Making better butter. A. G. Vestal. il Power F 25:34 F '16
- Making butter and cheese on the farm. C. Larsen and V. R. Jones. il S D Ag Exp B 164:347-74 '16; Same cond. Hoard's D 52:204 S 8 '16
- Making butter on the farm; symposium. Prac F 114:246 J1 15 '18
- Making butter on the farm. C. Larsen. il Kimball's D F 16:4 Ja 1 '18
- Making butter on the farm. W. White. il Farmers' B 876:1-23 '17
- Making butter without ice. E. E. Rockwood. Hoard's D 52:194 S 1 '16
- Making dairy butter. Hoard's D 51:114 F 11 '16
- Making farm butter. G. L. McKay. Farmers' Gaz 70:14 J1 6 '16
- Making for storage. N Y Prod R 46:206 Je 5 '18
- Making good butter. Wallaces' F 43:756 My 3 '18
- Making good butter on the farm. il Hoard's D 53:680-1+ My 11 '17
- Manufacturing creamery butter in the South. Prog F 31:1342 N 18 '16
- Mottle prevention. N Y Prod R 42:722 Ag 30 '16
- Mottled butter. Kimball's D F 14:70 F 1 '16
- Neutralising acidity in cream. L. T. MacInnes and A. A. Ramsay. Ag Gaz of New South Wales 29:42-6 Ja '18
- Neutralization of sour cream in butter making. G. E. Owen. Purdue Ag 11:29-30 Ja '17
- Neutralizers; how should they be used? N Y Prod R 43:382+ Ja 3 '17
- \* Pasteurization of cream for buttermaking. (B. 63) 18p '16 Minn. Dairy and food dept., St Paul
- Preventing mottled butter. Prac F 112:sup7 Mr 1 '16
- Private butter customers. E. E. Rockwood. Hoard's D 51:961 J1 14 '16
- Renovating cream. N Y Prod R 45:374 Ja 16 '18
- Report of committee on the use of alkalies in buttermaking. J. H. Frandsen and others. J Dairy Sci 1:162-73 J1 '17
- Seasonal differences which may cause a variation in the average monthly overrun. N Y Prod R 45:736+ Mr 20 '18
- Starter milk. N Y Prod R 44:10 My 2 '17
- Starters for pasteurised cream. M. A. O'Callaghan. Ag Gaz of New South Wales 28:571-7 Ag '17
- Suggestions for the manufacture and marketing of creamery butter in the South. R. C. Potts and W. White. bibliog U S Ag C 66:1-12 '16
- Tallowy butter. O. F. Hunziker. N Y Prod R 46:94 My 15 '18
- Tempering wash water. N Y Prod R 43:842 Mr 21 '17
- Thermometers and butter. G. H. Campbell. Kimball's D F 15:349 My 15 '17
- To avoid difficult churning fight causes of froth cream foam or partial success. Penn State F 11:272 F '18
- To improve market for Minnesota butter. Hoard's D 56:224 S 13 '18
- To prevent mottles. N Y Prod R 41:546 Ja 26 '16
- Trouble in churning. Rural N Y 76:212 F 10 '17
- Use of bicarbonate of soda for the reduction of acidity in cream. G. M. Valentine. J Ag New Zealand 15:308-13 D '17
- Using starter; reason for the failure to employ a pure culture. N Y Prod R 43:930 Ap 4 '17
- Vermont butter scoring. N Y Prod R 46:62 My 8 '18
- Washing and working. N Y Prod R 46:916+ O 16 '18
- When is butter worked? N Y Prod R 41:694 F 23 '16
- Wide-awake girls learn the care of milk and butter. Mrs W. N. Hutt. Prog F 31:762 Je 10 '16
- Winter buttermaking. E. E. Rockwood. Hoard's D 50:795 Ja 7 '16
- Working butter. N Y Prod R 41:538+; 44:226+ Ja 26 '16, Je 6 '17
- Workmanship of butter. J. Sorenson and M. P. Mortenson. (Exp. Creamery B. 66) 13p '17 Minn. Dairy and food dept., St Paul; Same. N Y Prod R 45:724+ Mr 20 '18
- See also American association of creamery butter manufacturers

**Butter trade**

- American butter for Russia. N Y Prod R 41:458 Ja 12 '16
- Butter a thousand dollars a ton. H. F. Thurston. il Am Coop J 13:327+ Ap '18; Same cond. Ag Digest 2:967 My '18
- Butter boom in France. F. M. Mansfield. Jersey B 35:1134-5 J1 19 '16
- Butter record of 1915. Creamery 1:32 Ja '16; Same. N Y Prod R 41:453 Ja 12 '16
- Chat about butter. See weekly numbers of New York produce review and American creamery
- Cold storage creamery butter 1917-18. Creamery 7:31 Je '18
- Commandeers butter; Food administration asks the reservation of 60 per cent. of holdings. N Y Prod R 46:659 S 4 '18



**Butter trade—Continued**

- Commissioner Osborn's report: large increase in adulterated butter cases brought by internal revenue. W. H. Osborn. N Y Prod R 43:278 D 13 '16
- Deplore use of substitutes. E. R. Eastman. N Y Prod R 46:130 My 22 '18
- Export of butter to the United Kingdom. Ag Gaz of New South Wales 28:866-8 D '17
- Government butter purchases. T. A. Sommerville. N Y Prod R 46:359 O 9 '18
- Marketing creamery butter. R. C. Potts and H. F. Meyer. il U S Ag B 456:1-37 '17
- General facts and information regarding the packing, shipping, and marketing of creamery butter
- Marketing of Kansas butter. T. Macklin. il maps Kan Ag Exp B 216:1-79 '17; Same cond. Hoard's D 53:716-17+ My 18 '17; Summary. N Y Prod R 44:476 Jl 18 '17
- New England conditions. M. R. Tolstrup. N Y Prod R 46:940 O 16 '18
- Opportunity to sell butter and cheese in China. A. H. Kolbe. Hoard's D 53:18 Ja 26 '17
- Quality and quantity of New South Wales butter, 1916-18, shown graphically. Ag Gaz of New South Wales 29:724-5 O '18
- Retail trade; advisability of developing it at the creamery. N Y Prod R 46:604 Ag 21 '18
- Review of the butter export season; with discussion. R. Crowe. J Dept Ag Victoria 16:364-70 Je '18
- Rules for retailers of butter. Creamery 7:46 O '18
- Rules which are to govern butter trading for the coming season. N Y Prod R 46:70 My 8 '18
- Siberian butter and cheese. N Y Prod R 44:550+ Ag 1 '17

**Laws and regulation**

- \* Butter. (In Official statement no. 5, p. 17-19) '18 U.S. Food administration, Washington, D.C.
- Butter (maximum prices) (amendment) order, 1917. J Bd Ag 24:906-9 N '17
- Butter rules criticized; text of letter of New York mercantile exchange to U.S. Food administration. N Y Prod R 46:499 Jl 31 '18
- Changes in margins of profit on butter and cheese; new interpretations and rulings. H. Hoover. Creamery 7:21-2 Ag '18
- Danish butter regulations. N Y Prod R 45:449 Ja 30 '18
- Décret n. 3070 autorisant le président de la République à réglementer la fabrication du beurre, et portant aussi d'autres dispositions: Décret n. 12,025 portant approbation du règlement d'exécution de la loi n. 3,070 de 1915 concernant la fabrication du beurre, son contrôle et les mesures de protection visant le commerce de ce produit au Bresil. Int Yearbook Ag Leg 1916:722-30 '17
- Fresh butter included; limitation of profits in selling storage butter applied to fresh. N Y Prod R 46:467 Jl 24 '18
- Manufacturers' profit limits. E. Rickard. N Y Prod R 47:214 D 18 '18
- Special regulations governing manufacturers, dealers, brokers and commission merchants in butter. Creamery 7:24-24a N '18
- Suggestions for a standard for butter presented on behalf of Swift & co. to the Joint committee on definitions and standards, representing food control officials of the United States and the several states. 75p bibliog '17 Swift & co., Union Stock Yards, Chicago; Same cond. N Y Prod R 45:160+ D 5 '17
- Statistics**
- Butter trade of 1916. N Y Prod R 43:373 Ja 3 '17
- Butter trade of 1917. N Y Prod R 45:289 Ja 2 '18
- Census of manufactures; 1914; butter, cheese and condensed milk. B. L. McNulty. 23p '17 U. S. Bur. of census, Washington, D.C.
- Commercial stocks of butter, Jan. 1. U S Food Surveys 1:1-3 Je 22 '18

- Commercial stocks of butter, July 1. U S Food Surveys 2:1-3 Ag 31 '18
- Exports from and imports into U.S. for years 1910-1915. Wallaces' F 41:290 F 18 '16
- Statistics of farm animals and their products. See United States Department of agriculture Yearbooks
- Volume of butter production to be noted and reported weekly by U. S. Office of markets. C. J. Brand. N Y Prod R 43:938 Ap 4 '17
- Year's butter trade. N Y Prod R 46:37 My 8 '18
- Year's butter trade in New York; with comparative statistics. N Y Prod R 44:1 My 2 '17; Same. Hoard's D 53:775 My 25 '17

**Butter tubs and boxes**

- Butter tubs or boxes. N Y Prod R 45:355 Ja 9 '18
- Cottonwood butter boxes. N Y Prod R 41:509 Ja 19 '16

**Buttercups**

- Weeds of New South Wales; a poison buttercup. J. H. Maiden. il Ag Gaz of New South Wales 27:865-7 D '16
- Buttercups (poultry)**
- Buttercups a desirable breed for the beginner. H. D. Reed. Am P J 47:958 Jl '16
- Buttercups as seen in the show room. W. M. Anderson. Am P J 48:241 F '17
- Buttercups from a breeder's standpoint. H. W. Court. Am P J 48:459 Mr '17
- Buttercups—the coming breed. A. D. Loper. Am P J 48:566 Ap '17
- On the subject of Sicilian buttercups. J. F. R. Scott. Am P J 48:888 Ag '17
- Sicilian buttercup fowls as I know them. I. F. Tillinghast. Prac F 112:154 Ap 1 '16
- Sicilian buttercups. J. A. Eichstedt. Am P Advocate 24:482 Ap '16
- Sicilian buttercups. J. F. R. Scott. Am P Advocate 25:362 Ap '17
- Why I breed buttercups. C. J. Lieber. Am P J 49:481 Ap '18

**Butterfat**

- Butter and butterfat. W. H. Cooper. Country Gent 82:1355 S 1 '17
- Butterfat and other fats. W. T. Creasy. Nat Stock & F 41:1243 Mr 2 '18; Same. Kimball's D F 16:189 Mr 1 '18; Same. Jersey B 37:343 Mr 6 '18; Same. Hoard's D 55:382 Mr 22 '18
- Butter fat as a food. G. L. McKay. Breeder's Gaz 69:915 Ap 27 '16
- Changes in composition of butter fat produced by feeding cottonseed oil. F. H. Smith and others. bibliog Ga Ag Exp B 122:95-111 '16
- Composition of Roquefort-cheese fat. J. N. Currie. bibliog J Ag Research 2:429-34 S '14
- Dairy cows must be conserved. M. D. Munn. il Country Gent 82:1259 Ag 11 '17
- Importance of butter fat in human diet. J Dept Ag Victoria 16:176-80 Mr '18
- Marketing whey butterfat. N Y Prod R 45:716 Mr 13 '18
- Nature and function of butterfat as food. J. H. Rushton. Creamery 5:23 F '17
- Some new facts regarding butter fat for food. J. H. Frandsen. Jersey B 35:1871 N 29 '16
- Tallowy butter—its causes and prevention. O. F. Hunziker and D. F. Hosman. bibliog J Dairy Sci 1:320-46 N '17
- Value of butterfat. G. L. McKay. Hoard's D 51:51 F 4 '16
- See also Cheese—Fat content; Milk—Fat content

**Analysis**

- Detection of tallow and hydrogenated fats in butter fat. K. Arnberger. Scientific Am Sup (233 Broadwav, N.Y. 10c) 83:29 Ja 13 '17
- Determination of fat in certain milk products. C. K. Francis and D. G. Morgan. Okla Ag Exp B 114 4p '17
- Determination of fatty acids in butter fat. E. B. Holland and J. P. Buckley, jr. bibliog J Ag Research 12:719-32 Mr 18 '18
- Determination of stearic acid in butter fat. E. B. Holland and others. bibliog J Ag Research 6:101-13 Ap 17 '16
- \* Method for the detection of foreign fats in butter fat. A. Seidenberg. bibliog J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:617-21 Ag '18

**Butterflies**

Mimicry in butterflies, by R. C. Punnett. Review, *il J Heredity* 7:463-8 O '16  
 Net and the butterfly. R. D. Lander. *Country Life* 31:132 Mr '17

**Buttermakers**

Buttermaker of tomorrow; with discussion. C. E. Lee. *la Ag Bd Yearbook* 1916:372-9  
 Good buttermakers scarce. *N Y Prod R* 46:872 O 9 '18  
 Maker's salary; has it advanced in proportion to the advance in other labor? *N Y Prod R* 45:502 F 13 '18  
 Makers' wages. *N Y Prod R* 43:462-3 Ja 17 '17  
 Paying the buttermaker. *N Y Prod R* 45:434 Ja 30 '18  
 Tomorrow's buttermaker. C. E. Lee. *N Y Prod R* 43:154 N 22 '16  
 Trade unionism in the business of buttermaking. *N Y Prod R* 44:182+ My 30 '17  
 When changing jobs. *N Y Prod R* 43:1050 Ap 25 '17  
 Woman does man's work and wins! M. R. Tolstrup. *il Hoard's D* 55:89 F 8 '18

See also National creamery buttermakers' association

**Buttermilk**

Artificial buttermilk. *Hoard's D* 54:80 Ag 10 '17  
 Artificial buttermilk. O. C. Cunningham. *Ohio F* 137:167 F 5 '16  
 Butterfat in buttermilk. G. L. McKay. *Breeder's Gaz* 69:429 F 24 '16  
 Buttermilk. *N Y Prod R* 46:442 Jl 17 '18  
 Buttermilk a food drink. *Hoard's D* 54:30, 700 Ag 3, D 7 '17  
 Buttermilk and artificial buttermilk. *Hoard's D* 51:342 Mr 17 '16; Same. *N Y Prod R* 41:948 Mr 29 '16; Same. *Wallaces' F* 41:979 Jl 14 '16; Same. *Jersey B* 35:1244 Ag 9 '16  
 Buttermilk and its uses. M. Palmer. *Kimball's D F* 14:714 N 1 '16  
 Buttermilk as a beverage. G. L. McKay. *Breeder's Gaz* 70:91 Jl 20 '16  
 Disposing of by-products in the creamery. *N Y Prod R* 41:462+ Ja 12 '16  
 Fermented milks. L. A. Rogers. *bibliog U S Ag B* 319:9-14 '16  
 Handling buttermilk. *N Y Prod R* 41:986+ Ap 5 '16  
 How to make good buttermilk. W. H. Eaton. *Prog F* 31:520 Ap 8 '16  
 Making buttermilk on the farm. G. L. McKay. *Breeder's Gaz* 70:236 Ag 17 '16  
 Making market buttermilk. O. F. Hunziker. *Country Gent* 82:966 Je 2 '17  
 Manufacture of casein from buttermilk or skim milk. A. I. Dahlberg. *il U S Ag B* 661:1-32 '18; Excerpts. *N Y Prod R* 40:50-1, 86+, 132 My 8-22 '18  
 Manufacture of commercial buttermilk. O. F. Hunziker. *Creamery* 4:15 Ap '16; Same. *N Y Prod R* 42:57 My 3 '16  
 Modern buttermilk. *N Y Prod R* 41:530 Ja 26 '16  
 Profits from buttermilk. A. C. Hall. *Hoard's D* 52:254 S 15 '16  
 Push buttermilk sales. *N Y Prod R* 46:338 Je 26 '18

See also Feeding and feeding stuffs—Milk

**Testing**

Testing buttermilk. *N Y Prod R* 44:1002 O 17 '17

**Button clover.** See Clover, Button

**Buttonholes**

Buttonholes that last. *Power F* 26:30 Ap '17

**Buxus.** See Boxwood

**Buying**

Avoiding time prices; individual and cooperative effort. *Prog F* 33:350 Mr 16 '18  
 Improving shopping facilities. J. A. Martin. *Prog F* 31:527 Ap 8 '16

Our marketing problems; the consumer's part. A. Hobson. *Hoard's D* 54:489 N 2 '17  
 See also Cooperative buying

**By word and deed; story.** *Nat Stock & F* 40:529 Ag 19 '16

**C**

**Cabbage bug.** See Harlequin cabbage bugs

**Cabbage butterflies**

Common cabbage worm. F. H. Chittenden. *il map Farmers' B* 766:1-14 '16  
 Imported cabbage worm in Wisconsin. H. F. Wilson and L. G. Gentner. *il J Econ Entom* 11:79-81 F '18  
 Insects attacking cabbage. W. E. Britton and Q. S. Lowry. *il Conn State Ag Exp B* 190:9-11 '16  
 Why the cabbage butterfly does not increase more rapidly. *il J Heredity* 8:312-13 Jl '17

**Cabbage flies.** See Cabbage maggots

**Cabbage lice**

Control of cabbage-aphis by parasites in Western Canada. E. H. Strickland. (*In* *Pro., Entom. Soc., of British Columbia*, 1916, p. 84-8) *il '16*

False cabbage aphis; description with methods of control. J. J. Davis and A. F. Satterthwait. *il Ind Ag Exp B* 185:915-39 '16

Insects attacking cabbage. W. E. Britton and Q. S. Lowry. *il Conn State Ag Exp B* 190:14-15 '16

Observations on the turnip louse. F. B. Pad-dock. *J Econ Entom* 9:67-71 F '16

Plant lice on cabbage. *Rural N Y* 76:74 Ja 20 '17

Turnip louse—how to fight it. *Prog F* 31:1294 N 4 '16

**Cabbage looper**

Insects attacking cabbage. W. E. Britton and Q. S. Lowry. *il Conn State Ag Exp B* 190:12-13 '16

**Cabbage maggots**

Biology of *pegomya brassicae* Bouché; with discussion. W. J. Schoene. *J Econ Entom* 9:136-9 F '16

Cabbage maggot. *Am Flor* 46:1272 Jl 1 '16

Cabbage maggot. *Gard Chron (Lond)* 62:80 Ag 25 '17

Cabbage maggot; its biology and control. W. J. Schoene. *il N Y State Ag Exp B* 190:99-160 '16

Cabbage root maggot and its control in Canada. A. Gibson and R. C. Treherne. 58p *bibliog il '16 Canada Ag*

Controlling the cabbage maggot. *il Market Growers J* 19:6 Jl 1 '16

Controlling the root-maggots. D. B. Whelan. *Market Growers J* 20:153 F 15 '17

Insects attacking cabbage. W. E. Britton and Q. S. Lowry. *il Conn State Ag Exp B* 190:3-8 '16

Radish maggot. P. J. Parrott and H. Glasgow. *il N Y State Ag Exp B* 442:693-715 '17

Root maggot pest. E. B. Stookey. *Western Wash Ag Exp B v* 5:32-4 Je '17

Tarred felt discs for protecting cabbages and related vegetables from attacks of the root fly. A. D. Imms. *il J Bd Ag* 23:1222-4 Mr '17

Tarred felt discs for protecting cabbages from the cabbage-root fly. A. D. Imms. *J Bd Ag* 25:59-61 Ap '18

**Cabbage plusia.** See Cabbage looper

**Cabbage plutella**

Insects attacking cabbage. W. E. Britton and Q. S. Lowry. *Conn State Ag Exp B* 190:15 '16

Life history of *plutella maculipennis*, the diamond-back moth. H. O. Marsh. *il J Ag Research* 10:1-10 Jl 2 '17

**Cabbage root flies.** See Cabbage maggots

**Cabbage root maggots.** See Cabbage maggots

**Cabbage worm.** See Cabbage butterflies

**Cabbage yellows**

Control of cabbage yellows through disease resistance. L. R. Jones and J. C. Gilman. *Int R Sci & Prac Ag* 7:no 3:444 Mr '16

Controlling cabbage yellows. S. N. Green and J. G. Humbert. *il Ohio Ag Exp B v* 2:37-40 F '17

Routing cabbage sickness. M. Ryder. *il Ohio F* 139:78 Ja 20 '17



**Cabbages**

- Acre of cabbage. A. E. Wilkinson. Country Gent 81:2120 D 9 '16
- By-products of the fermentation of cabbage. V. E. Nelson and A. J. Beck. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 40:1001-5 Je '18
- Cabbage and cauliflower as market-garden and farm crops. H. N. Legate. il Mass Ag Bd B 5:126-37 '18 (3d ed. rev.)
- Cabbage and cauliflower culture. A. L. Dacy. W Va Ag Ext C 196 4p '18
- Cabbage and cauliflower culture. C. B. Sprague. Wash Ag Exp Pop B 110:1-4 '17
- Cabbage: cultivation, diseases and pests. J. C. C. Price and G. V. Stelzenmuller. il Ala Ag Exp B 187:1-20 '16
- Cabbage culture. A. L. Dacy. W Va Ag Ext C 126 3p '17
- Cabbages as a money crop. J. W. Rummels. O Judd Farmer 60:17 Mr 25 '16
- Congress and cabbage plants. Country Gent 81:886 Ap 22 '16
- Cost of late cabbage. Market Growers J 19:14 Jl 1 '16
- Cutting cabbage. A. E. Wilkinson. il Country Gent 81:1687 S 16 '16
- Doubling cabbage profits. M. A. Herold. Prac F 112:40 Ja 15 '16
- Early cabbage. Market Growers J 20:25+ Ja 1 '17
- Early cabbage. J. T. Rosa, jr. il Country Gent 83:42 F 16 '18
- Early cabbage, cauliflower and lettuce. D. C. Mooring. il Okla Ag Exp C 68:1-7 '18
- Early cabbage crop. H. L. Royce. il Purdue Ag 10:36-8 Ja '16
- Early vs. late sowing of cabbage. Ohio F 137: 42 Ja 8 '16
- Experience with late cabbage; symposium. Market Growers J 20:460-1+ Je 15 '17
- Experiences with early cabbage; symposium. Market Growers J 22:62-3+ Ja 15 '18
- Experiment in mulching cabbage. F. E. Daggett. Market Growers J 18:170 Mr 1 '16
- Experiments with cabbage. C. E. Myers. Pa Ag Exp B 137:1-15 '16
- Growing early cabbages. Prac F 112:326 S 1 '16
- How I grow early cabbage plants. R. Tooman. Market Growers J 22:414 Je 15 '18
- How to grow early cabbage. A. M. Latham. Prog F 33:1172 O 26 '18
- How to grow profitable cabbage. H: G. Bell and C. A. Waugh. (Soil improvement com. Pamph. 25) 12p il n.d. Nat. fertilizer assn., Chicago
- Information on cabbage. Wallaces' F 42:648 Ap 13 '17
- Late cabbage. Market Growers J 18:373+ Je 1 '16
- Lessons from experience with cabbage and potatoes. M. L. Rhodes. Prac F 112:186 My 1 '16
- 1918 cabbage bed. Rural N Y 77:645 My 4 '18
- Notes on cabbage growing. Fla Ag Dept Quar B v 27:37-8 Ap '17
- Partial directions for raising, harvesting and storing of onions, squashes, cabbages. Me Ag Dept B v 15:13-19 Je '16
- Planting cabbage by machine. M. A. Turpin. Rural N Y 77:351 Mr 2 '18
- Short-stem Holland cabbage in Wisconsin. W. J. Hansche. Market Growers J 20:145-6 F 15 '17
- Some cabbage recipes. Weekly N L 5:7 O 17 '17
- Spring cabbage. J. A. Paice. Gard Chron (Lond) 62:24 Jl 21 '17
- Successful cabbage field. E. C. Willard. Minn Hort 45:59-61 F '17
- Successful growing of cabbage. P. Work. (In Report, Ontario vegetable growers' assn., 1916, p 74-7) '17 Ontario ag. dept., Toronto, Canada
- When cabbage is worth \$100 a ton. J. W. Henceroth. Market Growers J 20:451 Je 15 '17
- York state cabbage methods. M. G. Feint. Ohio F 139:694 My 19 '17

See also Sauerkraut

**Diseases and pests**

- Black-leg disease of cabbage caused by phoma lingam (Tode) Desmaz. M. P. Henderson. bibliog il Phyt 8:379-431 Ag '18
- Black rot of cabbages. J Ag (Quebec) 20:76 O '16
- Breeding disease resistant cabbages. il Field 11 27:191 Mr '17
- Cabbage diseases. L. L. Harter and L. R. Jones. il Farmers' B 925:1-29 '18
- Cabbage diseases. I. E. Melhus and I. H. Vogel. il Ia Ag Exp C 46:1-4 n.d.
- Cabbage diseases and how to control them. H. R. Fulton. Prog F 31:129 Ja 22 '16
- Cabbage insects. A. Gibson. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 30-8) il '17
- Cabbage worms. E. W. Berger. Fla State Plant Bd Quar B v 3:16 O '18
- Control of cabbage worms. H. D. Brown. Ill Ag Exp C 226:1-4 '18
- Disease-resistant cabbage. il O Judd Farmer 64:9 Mr 9 '18
- Disease-resistant cabbage. Market Growers J 18:378 Je 1 '16
- Disease resistant cabbage in Wisconsin. L. R. Jones. il Rural N Y 75:465 Mr 18 '16
- Diseases of cabbage and their control. R. E. Vaughan. Market Growers J 20:146 F 15 '17
- Enemies of cabbage. W. C. O'Kane. il Country Gent 83:25 Mr 9 '18
- Fighting cabbage diseases. O Judd Farmer 61: 15 O 21 '16
- Insects attacking cabbage and allied crops in Connecticut. W. E. Britton and Q. S. Lowry. bibliog il Conn State Ag Exp B 190: 1-23 '16; Abstract. J Ag (Quebec) 19:254 Je '16
- Overcoming cabbage wilt. Wallaces' F 41:841 Je 9 '16
- Steam sterilization of hotbed soils. H: B. Hahn. Market Growers J 22:169-70 Mr 1 '18
- Studies on clubroot of cruciferous plants. C. Chupp. bibliog il Cornell Ag Exp B 387:421-52 '17; Same. Cornell Ag Exp Rep 1917:421-52 '18
- Tissue invasion by plasmodiophora brassicae. L. O. Kunkel. bibliog il J Ag Research 14: 543-72 S 16 '18
- See also Cabbage butterflies; Cabbage lice; Cabbage looper; Cabbage maggots; Cabbage plutella; Cabbage yellows; Harlequin cabbage bugs

**Statistics**

- Acreage and production of cabbages. Monthly Crop Rep 3:101 O '17
- Cabbage for kraut and peas for canneries. Monthly Crop Rep 4:25 Mr '18
- Commercial acreage and production of cabbages. Monthly Crop Rep 3:89 S '17
- Commercial stocks of cabbage. U S Food Surveys 1:13 Jl 24 '18

**Varieties**

- Early cabbage varieties. R. L. Watts. Country Gent 81:210 Ja 29 '16
- Marked variations in strains. R. L. Watts. il Mass Ag Bd B 5:23-5 '16
- Spring cabbages at Wisley, 1915-16. Royal Hort Soc J 42:pts 2-3:400-11 S '17

**Cabins, Log. See Log cabins****Cables, Submarine**

- Day's work in a cable station. Rural N Y 76: 1450 D 22 '17

**Cacao**

- Cacao in the Dominican Republic. A. McLean. Int R Sci & Prac Ag 9,no 5:568-70 My '18
- \* Chocolate and cocoa. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:232 O 12 '18
- Cultivation of cacao in Costa Rica. il South Am (165 Broadway, N.Y. 25c) 5:12-13 Ag '17
- Effect of alkali treatment on cocoas. E. Bloomberg. U S Ag B 666:1-20 '18
- Future of coffee and cacao. M. B. Romero. Pan-Am Magazine (70 5th av, N.Y. 25c) 26: 165-6 Ja '18
- Manuring of cacao at Peradeniya, Ceylon. Int R Sci & Prac Ag 7,no 1:78 Ja '16

**Cacao** —Continued**Analysis**

Report on cocoa and cocoa products. H. C. Lythgoe. Assn Offic Ag Chem J 1, no 4, pt 1: 550-2 F '16

**Diseases and pests**

- Ant, *dolichoderus bituberculatus*, in the control of pests of the cocoa-tree, in Java. P. Van der Goot. Int R Sci & Prac Ag 8, no 12: 1300-1 D '17
- Insect and vegetable parasites of the cacao-tree in the state of Bahia, Brazil. C. Torrend. Int R Sci & Prac Ag 9, no 4: 523-4 Ap '18
- Insect parasites of the cacao tree and other cultivated plants in São Thome. A. F. de Scabra. Int R Sci & Prac Ag 9, no 5: 642-4 My '18
- Marasmius perniciosus n. sp. cause of witch brooms on the cocoa-tree in Surinam. Int R Sci & Prac Ag 7, no 1: 158-9 Ja '16

**Laws**

- \* Arrêté n. 5083 relatif à l'importation du cacao en Allemagne. Int Yearbook Ag Leg 1916: 173-4 '17

**Statistics**

Cacao in the world's trade, with particular reference to Latin America. Econ World (80 Wall st, N.Y. 25c) n s 15: 620-1 My 4 '18

*Cacaecia conflictana*. See Aspen tortrix

**Cactus**

- Behavior, under cultural conditions, of species of cacti known as opuntia. D. Griffiths. il U S Ag B 31: 1-24 '13
- Cactus lakes. F. Coyne. il Am For 23: 361-2 Je '17
- Cactus solution as an adhesive in arsenical sprays for insects. M. M. High. U S Ag B 160: 1-20 '15
- Cold-resistance in spineless cacti. J. C. T. Uphof. il Ariz Ag Exp B 79: 119-44 '17
- Cultivation of spineless prickly pear. J. H. Maiden. Ag Gaz of New South Wales 28: 740-2 O '17
- Further results in desiccation and respiration of echinocactus. E. R. Long. Bot Gaz 65: 354-8 Ap '18
- Giant cactus. S. F. Wilson. il Am For 23: 427 Jl '17
- Polar bear cacti. O. F. Cook and A. C. Cook. il J Heredity 8: 113-20 Mr '17
- Potash in prickly pear. Scientific Am (233 Broadway, N.Y. 10c) 116: 58 Ja 13 '17
- Prickly pears of interest to Australians. J. H. Maiden. il Ag Gaz of New South Wales 28: 486-8, 650-2 Jl S '17
- Queensland government enquiry into means of controlling prickly-pear. H. T. Johnston and H. Tryon. Int R Sci & Prac Ag 7, no 3: 451-5 Mr '16
- Respiration in succulents. C. A. Shull. Bot Gaz 63: 83-4 Ja '17
- Spraying experiments to destroy prickly pear. G. P. Darnell-Smith and H. Ross. il Ag Gaz of New South Wales 29: 1-12 Ja '18
- Warning against spineless cactus. Am Flor 46: 1022 My 27 '16
- Yields of native prickly pear in southern Texas. D. Griffiths. il U S Ag B 208: 1-11 '15; Abstract. Int R Sci & Prac Ag 7, no 1: 81-2 Ja '16
- See also Feeding and feeding stuffs—Cactus

**Diseases and pests**

- Fungus disease of prickly pear. G. P. Darnell-Smith and H. Ross. Ag Gaz of New South Wales 29: 440-1 Je '18
- Insects and prickly pear. W. W. Froggatt. il Ag Gaz of New South Wales 28: 417-26 Je '17

**Caffein**

- Report on medicinal plants and drugs. W. O. Emery. Assn Offic Ag Chem J 2, no 1, pt 1: 59-75 My '16
- Report on synthetic products. W. O. Emery. Assn Offic Ag Chem J 2, no 1, pt 1: 75-9 My '16

Report on tea and coffee. J. M. Bartlett. Assn Offic Ag Chem J 1, no 4, pt 1: 552-6 F '16

**Cage paralysis**

Osteomalacia or cage paralysis in primates; with discussion. W. R. Blair and H. Brooks. Am Vet M Assn J 51: 330-47 Je '17

**Cake**

- Cake crinkles. O Judd Farmer 62: 20 Ap 28 '17
- Cake-making. M. M. Johnson. il Nev Ag Ext B 14: 1-16 '17
- Christmas cakes. R. M. F. Berry. Rural N Y 75: 1426, 1479 N 11, 25 '16
- Ginger cakes and tea. O Judd Farmer 65: 263 S 28 '18
- Little cakes for the holidays. M. M. Wright. O Judd Farmer 63: 15 D 22 '17
- Making cake. L. E. Eldridge. Green's Fruit Grower 36: 14 S '16
- My favorite cake. O Judd Farmer 62: 16 My 5, 16 My 12; 20 My 19 '17
- Successful cake. E. C. Salisbury. Country Gent 81: 91 Ja 8 '16
- Successful cake baking; symposium. Prac F 113: 393 N 15 '17
- Tested cakes. B. Goggin. Rural N Y 76: 861 Jl 7 '17
- War cakes. Mrs C: Johnston. Rural N Y 77: 1245 N 2 '18
- Warm-weather cakes. M. B. Foulks. il Country Gent 81: 1139 My 27 '16

**Calcareous soils.** See Soils, Calcareous

**Calceolarias**

- Early history of the calceolarias. R. P. Brotherston. il Gard Chron (Lond) 60: 56 Jl 29 '16
- Herbaceous calceolarias. E. Roorbach. il Gard Chron Am 22: 121 Ap '18

**Calcmeters**

- County-agent calcmeter. Country Gent 81: 836 Ap 15 '16

**Calcium**

- Estimation of calcium in ash of forage plants and animal carcasses. S. B. Kuzirian. Ia Ag Exp Research B 32: 99-110 '16
- High calcium content of some cucurbit vines. L. K. Wilkins. bibliog N J Ag Exp B 310: 1-20 '17

**Calcium arsenate**

- Arsenate of calcium effective against chewing insects on fruit trees. Green's Fruit Grower 36: 20 F '16
- Calcium arsenate vs. lead arsenate; high prices require substitute for arsenical spray material. J. R. Stear. Ohio Ag Exp B v 3: 156-8 My '18
- Calcium arsenates. R. H. Robinson. J Ag Research 13: 281-94 Ap 29 '18; Same. Ore Ag Exp B 131: 1-15 '18
- Calcium arsenates and their efficiency as insecticides. A. L. Lovett. bibliog J Econ Entom 11: 57-62 F '18
- Cut spraying costs. Weekly N L 4: 3 Je 6 '17

**Analysis**

- Report on calcium arsenate. R. C. Roark. Assn Offic Ag Chem J 3: 172-3 My '17

**Calcium bicarbonate**

- Reaction of Hawaiian soils with calcium bicarbonate solutions, its relation to the determination of lime requirements of soils, and a rapid approximate method for the determination of lime requirements of soils. M. O. Johnson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa 60c) 10: 31-3 Ja '18

**Calcium carbide**

- Calcium carbide residue for liming. J Bd Ag 22: 1289 Mr '16

**Calcium carbonate**

- Action of calcium carbonate on acid phosphate. E. W. Magruder. Am Fert 45: 30-1 O 14 '16
- Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on soil reaction. D. R. Hoagland and A. W. Christie. bibliog Soil Sci 5: 379-82 My '18
- Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on water-soluble nutrients in soils. A. F. Christie and J. C. Martin. bibliog Soil Sci 5: 383-92 My '18



**Calcium carbonate—Continued**

Does  $\text{CaCO}_3$  or  $\text{CaSO}_4$  treatment affect the solubility of the soil's constituents? C. B. Lipman and W. F. Gericke. *Cal Univ Pub Ag Sci v 3*, no 7 271-82p '18 (10c)

Effects of lime and carbonate of lime on acid phosphate. G. S. Fraps. *Tex Ag Exp B 223*: 1-16 '17

Influence of carbonate of magnesium and calcium on bacteria of certain Wisconsin soils. H. L. Fulmer. *bibliog J Ag Research 12*:463-504 F 25 '18

Influence of the presence of calcium carbonate on the determination of available phosphoric acid in soils by Dyer's method. Jatindra Nath Sen. *Ag J of India 12*:258-65 Ap '17

Nitrification as a measure of the availability of different forms of calcium carbonate when employed as correctors of soil acidity. P. S. Burgess. *Soil Sci 4*:327-36 O '17

**Calcium chloride**

Effects of feeding calcium chloride to domestic animals. O. Loew. *Int R Sci & Prac Ag 9*, no 2:211-13 F '18

**Calcium cyanamide as fertilizer**

Addition of tar to calcium cyanamide to facilitate spreading: experiments made in Germany. *Int R Sci & Prac Ag 8*, no 6:842-4 Je '17

Control of root-knot by calcium cyanamide and other means. J. R. Watson. *Fla Ag Exp B 136*:147-60 '17

Some conditions affecting the value of calcium cyanamide as a manure. T. D. Moss-crop. *J Ag Sci 8*:178-81 Mr '17

**Calcium hypochlorite**

Calcium hypochlorite as a seed sterilizer. J. K. Wilson. *bibliog Am J Bot 2*:420-7 O '15

**Calcium oxalate**

Calcium oxalate in the dasheen. O. F. Black. *Am J Bot 5*:447-51 N '18

**Calcium sulfate**

Does  $\text{CaCO}_3$  or  $\text{CaSO}_4$  treatment affect the solubility of the soil's constituents? C. B. Lipman and W. F. Gericke. *Cal Univ Pub Ag Sci v 3*, no 7 271-82p '18 (10c)

Role of calcium sulphate in phosphate baking powders. H. E. Patten. *Assn Offic Ag Chem J 2*:225-9 F '17

**Calcium sulfate in soils.** See Soils—Calcium sulfate content

**Calf clubs**

Bank calf clubs encourage dairying in Illinois. C. Pratt. *Jersey B 35*:1725 N 1 '16

Bank's calf club showed there was money in raising livestock. T. F. Chamberlain. *il Banker-F 4*:2-3 Mr '17

Banks promote calf clubs. W. A. Martin. *Ohio F 141*:700 My 25 '18

Boys' calf club movement. F. W. Merrill. *Kimball's D F 15*:288 Ap 15 '17

Brighton calf club show. J. P. Eves. *Kimball's D F 16*:8 Ja 1 '18; Same. *Hoard's D 54*:890 Ja 11 '18

Calf club sale in Illinois. *Jersey B 36*:14 Ja 3 '17

Calf club show. *Ohio F 142*:585 D 14 '18

Calf clubs. W. S. Matthews. *Hoard's D 51*: 944 J1 7 '16

**Calf-feeding competition.** *il Ag Gaz of Canada 5*:620-1 Je '18

Columbiana Jersey calf club launched. *Jersey B 37*:1161 J1 24 '18

Dairy calf club movement. C. R. George. *il Hoard's D 56*:615 N 29 '18

Dairy calf clubs. F. W. Merrill. *Kimball's D F 15*:345 My 15 '17

Dairy calf clubs in White county. *il O Judd Farmer 62*:5 Ap 14 '17

Details of the calf club movement. E. J. Trospers. *Jersey B 37*:673-4 My 1 '18; Same cond. *Hoard's D 55*:804- My 31 '18

Does it pay? *il Kimball's D F 16*:391 My 15 '18

Georgia calf clubs. M. P. Jarnagin. *il Ga Ag Coll (Ext) C 51*:1-12 '17

Have you a calf club in your bank? *il Banker-F 4*:12 Ag '17

How eight Illinois banks have formed calf clubs—follow their example. *il Banker-F 4*:6-7 D '16

How to form a calf club. J. M. Crebs. *il Banker-F 5*:9 Ap '18

Indiana starts calf clubs. C. R. George. *Ohio F 142*:96 Ag 3 '18

Instructions for boys' and girls' dairy and beef calf clubs. G. L. Martin. *Mont Ag Ext Pub*:no 24:1-8 '18

Iowa calf club. *Hoard's D 54*:514 N 2 '17

Iowa dairy calf clubs. J. P. Eves. *il Kimball's D F 15*:548 Ag 15 '17; Same cond. *Hoard's D 54*:7 J1 27 '17; Same. *Wallaces' F 42*:1355 O 5 '17

Kentucky bank's calf club. A. H. Eckles. *il Banker-F 5*:10 F '18

Knightstown Indiana calf club. C. R. George. *il Jersey B 37*:344 Mr 6 '18

Live wire Pennsylvania Jersey calf club. *il Jersey B 36*:1325 Ag 29 '17

Louisiana dairy club. R. G. Miller. *Hoard's D 54*:93 Ag 17 '17

Missouri calf club. *Jersey B 35*:1988 D 20 '16

Organization and direction of dairy calf clubs. *Ill Ag Ext C 12*:1-12 '17

Organizing calf clubs. *Ohio F 142*:52 J1 20 '18

Plan of calf clubs in Pettis county, Missouri. *Hoard's D 56*:114 Ag 16 '18

Portage county calf club. J. M. Coyner. *il Hoard's D 56*:530 N 8 '18

Purebred calf club. E. J. Trospers. *il Kimball's D F 15*:45 J1 1 '17

Why not start a calf club for boys and girls? this will help you. *il Banker-F 4*:13 Ja '17

See also Baby beef clubs

**Calf pens**

Calf pens on South African dairy farms. T. Reece. *Hoard's D 51*:4+ Ja 28 '16

**California**

California impressions. *Wallaces' F 41*:531 Mr 31 '16

See also Orland, California; also subhead California under special subjects

**Agriculture, State board of**

Statistical report for the year 1917. *map Cal Ag Bd Rep 1917*:i-lvi,1-557 '18

**Dairy bureau, State**

11th biennial report, 1915-1916. 65p *il plans '16 Cal. State dairy bur., 268 Market st, San Francisco*

**Description and travel**

Gardener in California. E. O. Orpet. *Gard Chron Am 21*:91 Mr '17

Glimpes of California. *Wallaces' F 42*:1501 N 2 '17

Tree of legend and romance; cypress in California. M. Daniels. *il Am For 22*:76-81 F '16

**Education**

Reorganizing a county system of rural schools; schools of San Mateo county, California. J. H. Williams. (B 16) 50p '16 U. S. Bur. of educ., Washington, D. C.

**Forester, State**

6th biennial report, 1915-1916. 56p *il plans '16 Cal. State forester, Sacramento*

Contains: Forest protection by lumber companies; Cooperation with state departments; City tree planting; Eucalyptus investigations; Summer homes on the national forests; Legislation

**Horticulture, State commissioner of**

7th biennial report, 1915-1916. 16p '16 *Cal. State comr. of horticulture, Sacramento*

**Industries and resources**

California—yields and prices of citrus and other fruits, olives olive, oil. *Doc Leaflets 1*, no 4:52-6 O '17

Forest policy for California. D. T. Mason. *J For 15*:424-30 Ap '17

Giving the new settler a lift; an analysis of the proposed state aid to model colonization in California. D. P. Barrows. *Sunset (San Francisco 15c) 38*:20-1 Mr '17

Hand-me-down farms; establishment by the state of a model colony on a tract of ten thousand acres. *Sunset (San Francisco 15c) 38*:16 Mr '17

**California—Industries and resources—Continued**  
 State of great diversity of conditions. G: T. Powell. Rural N Y 76:275 F 24 '17  
 Statistical report of the California State board of agriculture for the year 1916. map Cal Ag Bd Rep 1916:1-460 '17  
 Statistical report of the California State board of agriculture for the year 1917. map Cal Ag Bd Rep 1917:i-lvi,1-557 '18

*See also* Citrus fruits; Forests and forestry—California; Prunes; Raisins

#### Land colonization and rural credits, Commission on

\* Report, 1916. 120p '16 Cal. Comm. on land colonization and rural credits, Sacramento

#### Land settlement board, State

\* Act creating a State land settlement board and defining its powers and duties and making an appropriation in aid of its operations. (Senate Bill no. 584) 8p '17 Cal. State land settlement bd., Berkeley

#### Market director, State

1st annual report of the State market director of California for the year ending Dec. 1, 1916. 110p '16 Cal. State market director, Sacramento

2d annual report to the governor for the year ending December 1, 1917. 52p '18 State market commission of California, 525 Market st, San Francisco

Market director. N Y Prod R 44:141 My 23 '17  
 Scientific distribution of fruit; with discussion. H. Weinstock; J. L. Nagle; A. L. Wisner. Cal State Comm Hort B v 6:159-75 My '17

#### Veterinarian, State

8th biennial report for the two years ending June 30, 1916. 24p '17 Cal. State veterinarian, Sacramento

#### California agricultural experiment station

Report of the college of agriculture and the agricultural experiment station of the University of California from July 1, 1915, to June 30, 1916. 130p il plans '16 Univ. of California, Berkeley

Report of the college of agriculture and the agricultural experiment station of the University of California from July 1, 1916, to June 30, 1917. 95p '17 College of agriculture, Univ. of Cal., Berkeley

#### California almond growers' exchange

Almond growers' exchange. G: W. Pierce. Cal State Comm Hort B v 6:180-3 My '17

#### California associated olive growers

California associated olive growers, inc. (In Report Cal. State market director, 1916, p 36-40) '16 Cal. State market director, Sacramento

#### California associated raisin company

Co-operation a success. R. C. Gano. Fruit-Grower 28:104 F 1 '17; Summary. Ag Digest 1:339 Mr '17

Co-operative production and sale of raisins in California. C. A. Murdoch. Int R Ag Econ 82:16-18 O '17

Making folks eat raisins. J. H. Collins. il Country Gent 81:1356-7 Jl 15 '16

Rise of the raisin; the growers have found that success lies in organization. W. V. Woehlke. il Country Gent 83:6 Ap 20 '18

#### California association of county horticultural commissioners

Convention, Sacramento, Cal., Nov. 19-24, 1917. Cal State Comm Hort B v 7:111-67 Mr '18

#### California association of practical farmers

Plan to increase farm production. A. Lindley. Breeder's Gaz 72:280 Ag 30 '17

#### California berry growers, Central. *See* Central, California berry growers

#### California creamery operators

18th annual convention, Petaluma, Oct. 4-6, 1917. Hoard's D 54:463 O 26 '17

#### California dahlia society

California dahlia society show, San Francisco, Sept. 5. Am Flor 49:491, 649 S 22, O 13 '17

#### California federation of farmers' cooperative marketing associations

Meeting, San Francisco, October, 1917. Int R Ag Econ 84:51-2 D '17

#### California fruit growers' exchange

Biggest marketing exchange; California's citrus organization and its manager. J. H. Collins. il Country Gent 81:95-6, 198-9 Ja 15, 29 '16

Citrus industry. G: T. Powell. Rural N Y 76: 451, 484 Mr 24-31 '17

Interesting achievements. Better Fruit 12:28 Ja '18

National publicity campaign for honey; suggestions of an advertising specialist. R. C. Gano. il Am Bee J 56:79-81 Mr '16

Study the California fruit growers' exchange. R. C. Gano. Prog F 31:925 Jl 29 '16

#### California green lacewing flies. *See* Lacewing flies

#### California hop growers' association

California hop growers' association. (In Report Cal. State market director, 1916, p 54-6) '16 Cal. State market director, Sacramento

#### California land and live stock show

California land show. Breeder's Gaz 72:1038 D 6 '17

#### California peach growers

California peach growers have benefited by cooperation. A. E. Sunderland. Cal State Comm Hort B v 7:57-8 Ja '18

California peach growers, inc. (In Report Cal. State market director, 1916, p 9-14) '16 Cal. State market director, Sacramento

New peach growers organization, and what it means to the peach growers. J. C. Rorden. Cal State Comm Hort B v 6:176-80 My '17  
 What cooperation has meant to the peach growers. J. F. Niswander. Cal State Comm Hort B v 6:42-3 F '17

#### California pear growers' association

Results obtained from the formation of the California pear growers' association. F. T. Swett. Cal State Comm Hort B v 7:55-6 Ja '18

#### California prune and apricot growers

All about prunes and apricots. 28p il map n.d. Cal. prune and apricot growers, inc., San Jose

#### California sheep & wool growers' association

Meeting, Davis, Jan. 3-5. Am Sheep B & W 38:131 F '18

#### California state agricultural society

Acts relating to the management and control of the State agricultural society. Cal Ag Bd Rep 1917:373-89 '18

Acts relating to the management and control of the State agricultural society. Cal Ag Bd Rep 1916:ix-xx '17

#### California state fair

California state fair—vocational department, by E. Franklin; Future possibilities of the state fair grounds, by C. J. Chenu. il Cal Ag Bd Rep 1917:xii-xiv,xx-xxiii '18

Fair at Sacramento, Cal. Breeder's Gaz 72:556 O 4 '17; Kimball's D F 15:746 O 15 '17  
 Great California report. Jersey B 37:1541 S 25 '18

Jerseys at the California state fair; with list of awards. Jersey B 35:1540 O 4 '16

Sheep show at Sacramento. R. Millar. Am Sheep B & W 36:526 S '16

Show at Sacramento, Cal. Breeder's Gaz 70: 600-1 O 5 '16

#### California state fruit growers' association

49th convention, Napa, Cal., Nov. 15-17, 1916. il Cal State Comm Hort B v 6:121-215 My '17

#### California university

New home of forestry at the University of California. il Am For 24:173-6 Mr '18

Publications in agricultural sciences; index, 1912-1917. Cal Univ Pub Ag Sci 589-95p '17

#### College of agriculture

California farmer and the College of agriculture. T: F. Hunt. Cal State Comm Hort B v 6:183-92 My '17



**California univ.—College of agriculture—Cont.**

Report of the college of agriculture and the agricultural experiment station of the University of California from July 1, 1915, to June 30, 1916. 130p il plans '16 Univ. of California, Berkeley

Report of the college of agriculture and the agricultural experiment station of the University of California from July 1, 1916, to June 30, 1917. 95p '17 College of agriculture, Univ. of Cal., Berkeley

**California walnut growers' association**

Annual report of the manager for the 1916 season. C. Thorpe. 9p '17 C. Thorpe, manager, Los Angeles

**Californian thistles**

Californian thistle rust as a check on the spread of Californian thistle. A. H. Cockayne. Int R Sci & Prac Ag 7, no 3:451 Mr '16

Noxious weeds and their control; Californian thistle. A. H. Cockayne. J Ag New Zealand 14:469-72 Je '17

**Calipers**

Arvidsjaur caliper. S: T. Dana. Soc Am For Pro 11:337-8 Jl '16

**Callistephus.** See Asters

**Calochortuses**

Calochortuses. Gard Chron Am 21:398 N '17

**Calorimeters and calorimetry**

Calories. Gard Chron (Lond) 63:173, 184 Ap 27-MY 4 '18

Calories in cans; how much should be put up for a family? Gard M 27:256 Jl '18

Fuel values of foods. C: F. Bolduan. il Safety (New York \$1 per yr) 5:192-6 S '17

Quick method of calculating food values. C. L. Hunt. J Home Econ 10:212-18 My '18

Why the large calories? F: A. Osborn. J Home Econ 9:354-6 Ag '17

**Calosoma beetles**

Calosoma beetle (calosoma sycophanta) in New England. C. W. Collins and A. F. Burgess. U S Ag B 251:1-40 '15

**Caltha**

Genus caltha in the southern hemisphere. A. W. Hill. il Ann Bot 32:421-35 Jl '18

**Calves**

Birth weight of calves. A. C. McCandlish. il Hoard's D 51:58 F 4 '16

Bull calf problem. Ohio F 137:598 Ap 22 '16

Calf farms to be established in Illinois. C. Pratt. Jersey B 35:1806 N 15 '16

Calf—its feed and care. O. E. Reed. Jersey B 35:1922 D 6 '16

Calf-management. H. Munro. J Ag New Zealand 13:269-73 O '16

Calf-raising. L. W. Lighty. Nat Stock & F 41:943 D 29 '17

Calf-saving venture. E. Chamberlain. Country Gent 81:1189 Je 10 '16

Care of dairy calves. Va Ag Dept B 109:119-20 '16

Careful growing of calves a breed necessity. A. L. Tichane. Jersey B 37:1054 Jl 3 '18

Cattle in the far West. G: F: Stratton. il Country Gent 82:1811-12 N 24 '17

Coming crop of calves. Wallaces' F 41:46 Ja 14 '16

Cull the heifers. B. R. Eldredge. Hoard's D 51:115 F 11 '16

Dairy calves—a by-product. J. M. Carroll. Kimball's D F 15:659 S 15 '17

Dairy calves for veal. G. H. True and C. V. Castle. Cal Ag Exp C 196:1-7 '18

Developing the dairy heifer; with discussion. W. H. Clark. Wis Dairymen's Assn Rep 1913-1916:189-94 '17

Development of the dairy herd. J Ag (Quebec) 19:193 Mr '16

Disposal of surplus calves. J: Marsh. Hoard's D 52:690 D 8 '16

Disposing of the bull calf. C. H. Sapp. Ohio F 137:496 Ap 1 '16

Feeding and farm management; calf schedule. M. H. Roberts, jr. il Jersey B 37:1634-5+ O 9 '18

Feeding calves—age of heifers at calving. W. S. Tomlinson. il Ohio F 137:535 Ap 8 '16

Finish the feeders in Canada; keep the heifers at home. J: Bright and H. S. Arkell. 8p '16 Canada Ag

Giving the fall calves a good start. J: Underwood. Prac F 113:309 S 1 '17

Growth of calves. B: W. Hunt. il Jersey B 36:1945 D 12 '17

Happy calves! Ohio F 141:76 Ja 19 '18

Heaton discusses calf raising. E. B. Heaton. O Judd Farmer 60:13 My 6 '16

Heifer that's coming fresh. E. E. Rockwood. Hoard's D 52:494 O 27 '16

How to raise calves successfully. E. A. Cannon. Jersey B 36:423 Mr 21 '17

How we raise our calves. H. H. Kildee. Jersey B 36:20 Ja 3 '17

How we raise our calves. J. W. Ridgway. Jersey B 35:1944 D 13 '16

Importance of proper calf raising. W. J. Fraser. Wallaces' F 41:775 My 19 '16

Increasing the meat supply. C. O. Levine. Hoard's D 51:300 Mr 10 '16

Keep the dairy calves on the farm. H. L. Spooner. il Jersey B 37:1321 Ag 21 '18

Keep the young thing growing. C. H. Sapp. Ohio F 141:430 Mr 23 '18

Little calf and its care. E. E. Rockwood. Hoard's D 51:528 Ap 14 '16

Luck vs. good judgment. W. O. Mills. il Purdue Ag 12:427-9 Ap '18

Management of calves. E. F. Lyman. Hoard's D 50:821 Ja 14 '16

Management of dairy herds; calf raising. E. V. Ellington. Idaho Ag Exp B 102:31-7 '17

Management of the dairy calf. O. F. Hunziker and R. E. Caldwell. il Purdue Ag Ext B 44:1-20 '16

Managing the calves in shorthorn herds. W. S. Robbins. Breeder's Gaz 69:488 Mr 2 '16

Method of rearing calves at the Kentucky experiment station. J. J. Hooper and J. W. Nutter. Jersey B 36:90 Ja 17 '17

Milk cow of the future. R. Wylie. Ohio F 141:141 F 2 '18

New method for raising calves. H. Sage. il Country Life 31:138 Ap '17

Purebred calves at weaning time. W. S. Robbins. Breeder's Gaz 69:234 F 3 '16

Preventing calf scours. I. J. Mathews. Ohio F 141:262 F 23 '18

Raise more calves. Vt Ag Ext Production and conservation ser 9 1p '17 (Mim)

Raise the heifer calf. Field il 27:870 N '17

Raising better dairy calves. G. C. Humphrey and W. E. Markey. il Wis Ag Ext C 59:1-12 '16

Raising calves by wholesale. il O Judd Farmer 64:1 Ap 6 '18

Raising calves successfully. W. E. Rinehart. Jersey B 36:124 Ja 24 '17

Raising calves without pasture. H. E. Skott. Ohio F 137:765 Je 3 '16

Raising dairy calves. W. S. Cunningham. Ariz Ag Exp Timely Hints 127:1-8 '17

Raising heifer calves. il Purdue Ag 11:29-30 My '17

Raising heifer calves. R. E. Caldwell. il Jersey B 36:1905-6 D 5 '17

Raising the dairy calf. W: M. Rider. il Field il 28:325+ My '18

Raising the dairy calf. W: Rider. Hoard's D 52:319 S 29 '16

Raising the dairy calf; our experience pool. Prac F 114:193 My 15 '18

Raising the dairy heifer. J. E. Dodge. Jersey B 35:267 F 23 '16

Raising the heifer calf. E. L. Quaife. Rural N Y 76:994 Ag 18 '17

Raising the heifers for the dairy herd. T. Butler. Prog F 33:860 Ag 3 '18

Rearing calves. Gard Chron (Lond) 61:238 Je 9 '17

Rearing dairy calves. L. S. Gillette and others. il Ia Ag Exp C 50:1-16 '18

Rearing of calves in the summer and autumn of 1918. J Bd Ag 25:261-9 Je '18

Rearing of the calf and heifer. N. Sangster. J Ag (Quebec) 19:240 My '16

Rules for dairy calves. Nat Stock & F 41:1137 F 9 '18

Shall milk producers raise calves? O Judd Farmer 60:10 Ap 22 '16

**Calves**—*Continued*

- Shall slaughter of calves be forbidden? Hoard's D 53:822 Je 8 '17
- Shall we bite off our noses? Kimball's D F 16:339+ My 1 '18
- Shall we conserve female breeding stock by legislative enactment? Prog F 32:1119 N 17 '17
- Shall we kill the calf? J. O. Armour. Hoard's D 55:100 F 8 '18
- Should all heifers be raised? W. J. Fraser. Jersey B 36:1327, 1363, 1399 Ag 29-S 12 '17; Same, N Y Prod R 44:688, 726, 798 Ag 29-S 5, 19 '17; Same. Hoard's D 54:301, 322, 371 S 28-O 12 '17; Same. Creamery 6:65-7 O '17; Same. Wallaces' F 42:1435, 1535, 1593 O 19, N 9, 23 '17; Same cond. O Judd Farmer 63:3 S 15 '17; Excerpt. Ag Digest 2:659 O '17; Excerpt. J Ag (Quebec) 21:122 F '18
- Slaughter of calves. N Y Prod R 44:1064 O 24 '17
- Slaughter of calves. H. R. Smith. Country Gent 82:1064 Je 23 '17
- Spring calf. I. J. Mathews. Ohio F 137:384 Mr 11 '16
- Start the calf right. il Va Ag Dept B 126:56-62 '18
- Start the calf right. Wallaces' F 41:633 Ap 21 '16
- Thrifty calves. H. Barton. J Ag (Quebec) 20: 153 Ja '17
- Valuable calf. N. Newkirk. Jersey B 35:1848 N 22 '16
- Veal calves increase on Chicago market. J. M. Carroll. Hoard's D 55:61 F 1 '18
- Veal or beef the dairy calf? C. C. Hayden. Ohio F 140:452 N 17 '17
- Why some calves do not thrive. E. E. Rockwood. Hoard's D 55:1021 Jl 12 '18
- Wisconsin saves heifer calves. G. C. Humphrey. Kimball's D F 15:800 N 1 '17

**Costs**

- Cost of raising a calf. J. L. Tormey. Hoard's D 54:847 Ja 4 '18
- Cost of raising dairy heifers. Hoard's D 50: 790 Ja 7 '16
- Cost of raising dairy heifers. J. Marsh. il Ohio F 141:350 Mr 9 '18
- Raising dairy heifers. Ohio Ag Exp B v 2: 291-8 S '17
- Wintering dairy heifers. R. E. Hunt. il Va Ag Exp B 219:1-20 '18; Same cond. Jersey B 37:1857-8 N 6 '18

**Diseases and pests**

- Bacillus enteritidis as the cause of infectious diarrhea in calves. K. F. Meyer and others. Am Vet M Assn J 49:17-35 Ap '16
- Calf scours. F. B. Hadley. Hoard's D 54:881 Ja 11 '18
- Common ailment of calves. A. S. Alexander. Breeder's Gaz 72:494 S 27 '17
- Indigestion in calves. O Judd Farmer 61:1 S 23 '16
- Scouring in calves. J. G. Clayton. J Ag New Zealand 14:393-4 My '17; Same. Jersey B 36: 1174 Ag 1 '17
- Scours in calves. O Judd Farmer 62:9 Ja 27 '17
- Tabulated recommendation for methods of control of white scours. A. T. Kinsley. Am Vet M Assn J 50:372-3 D '16
- Vaccination prevents blackleg in calves. Prog F 31:766 Je 10 '16
- Veterinary problems; calf with scours. Prog F 33:683 Je 8 '18
- White scours of sucklings. H. Marshall. Am Vet M Assn J 48:731-8 Mr '16

**Feeding**

- Baby beef and calf feeding. H. K. Gayle. il Miss Ag Exp B 183:1-35 '17
- Calf feeding. Hoard's D 56:672 D 6 '18
- Calf-feeding. W. Dietrich. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 95-6) '17
- Calf feeding. M. S. Libbert. il Purdue Ag 10:33-4 Ap '16
- Calf feeding cost of first six months. P. H. Sprengle. il Penn State F 11:131+ Ap '18
- Calf feeding experiments. J Dept Ag Ireland 17, no 2:257-9 '17
- Calf feeding experiments. O. F. Hunziker. Ind Ag Exp Rep 1917:27-9 '18
- Calf meals. Hoard's D 55:777 My 24 '18
- Calf raising experience. E. S. Robbins. O Judd Farmer 60:6 My 13 '16
- Calf ration that gives results. R. L. Buchanan. Country Gent 81:1158 Je 3 '16
- Calf rearing. J Bd Ag 24:963-78 D '17
- Calves without milk. B. J. Ruetenik. Country Gent 81:838 Ap 15 '16
- Developing the dairy heifer. W. H. Clark. Hoard's D 53:282 Mr 9 '17
- Digestion of starch by the young calf. R. H. Shaw and others. il J Ag Research 12:575-8 Mr 4 '18
- Efficiency of certain milk substitutes in calf feeding. R. H. Carr and others. Int R Sci & Prac Ag 8, no 5:768-70 My '17
- Feed and care of the dairy calf. R. S. Hulce and W. B. Nevens. il Ill Ag Exp C 202:1-12 '17; Same. Jersey B 36:1209-10+ Ag 8 '17; Same. Hoard's D 54:323+ O 5 '17; Same. N Y Prod R 44:966+ O 10 '17
- Feeding a young calf. O Judd Farmer 64:7 F 23 '18
- Feeding and care of dairy calves. J. R. Dice. Hoard's D 53:606 Ap 27 '17
- Feeding and management of dairy calves and young dairy stock. W. K. Brainerd and H. P. Davis. il Farmers' B 777:1-19 '17; Partial summary. Jersey B 36:286 F 21 '17
- Feeding calves. Ohio F 141:307 Mr 2 '18
- Feeding dairy calves in California. F. W. Woll and E. C. Voorhies. il Cal Ag Exp B 271:1-44 '16; Excerpts. Jersey B 36:503+ Ap 4 '17
- Feeding dairy cows and calves. R. L. Pou. Tex Ag Ext B C-7:1-8 '18
- Feeding the calves. Ohio F 140:120 Ag 18 '17
- Feeding the dairy calf. E. W. Gage. Ohio F 141:108 Ja 26 '18
- Feeding the dairy calf. A. B. Nystrom. Western Wash Ag Exp B v 6:5-8 Ap '18
- Feeding the Jersey calf. W. F. McSparran. Jersey B 36:54 Ja 10 '17
- Feeds for dairy calves. G. L. Reed. il Purdue Ag 11:35-7 F '17
- Five years' calf-feeding work in Alabama and Mississippi. W. F. Ward and S. S. Jerdan. U S Ag B 631:1-53 '18
- Grain supplements for the calves. I. J. Mathews. Ohio F 141:648 My 11 '18
- Growing calves on home-mixed calf meal. R. E. Caldwell. Ohio F 138:326 O 7 '16
- How dairy heifers are affected by early feeding and date of calving. J. F. Duggar. Prog F 31:48 Ja 8 '16
- How to feed and care for the dairy calf. T. Butler. Prog F 33:838 Jl 27 '18
- How to feed the dairy cow. H. G. Van Pelt. Kimball's D F 15:590, 652, 722 S 1-O 1 '17
- Kansas feeding test. Nat Stock & F 42:257 Je 1 '18
- Milk for the dairy calf. H. F. Lemmermann. il Country Gent 81:262 F 5 '16
- Milk substitutes for rearing dairy calves. J. B. Lindsey. il Kimball's D F 15:783 N 1 '17
- Pasteurization of skim milk and whey as food for calves. V. A. Moore. bibliog N Y Ag Dept B 81:1780-97 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1780-97 '17; Same. Am Vet M Assn J 49:365-80 Je '17
- Potatoes for calves. J. T. McKim. Hoard's D 51:806 Je 9 '16
- Raising a herd header. H. G. Van Pelt. Kimball's D F 14:837 Ja 1 '17
- Raising a motherless calf. T. Butler. Prog F 31:723 Je 3 '16
- Raising beef calves by hand. L. B. Mann. Breeder's Gaz 71:156 Je 7 '17
- Raising calves on skim milk. J. N. Price. Wash Ag Ext Pub Ser 1, no 23 4p '16
- Raising calves without milk. E. L. D. Seymour. il Country Life 29:63 Mr '16
- Raising of dairy calves. C. H. Eckles. il Hoard's D 53:52 F 2 '17
- Raising the dairy calf; feeds and grazing crops that are good. F. Williams. Prog F 33: 246 F 23 '18
- Raising the skim-milk calf. Wallaces' F 43: 244 F 8 '18
- Rearing of calves on substitutes for milk-fat and milk. B. N. Wale. J Dept Ag Victoria 15:617-24 O '17
- Several dairying inquiries answered. Prog F 32:839 Ag 4 '17



**Calves—Feeding—Continued**

- Skim milk and calf rearing. T. L. Haecker. Hoard's D 50:830 Ja 14 '16; Same. J Ag (Quebec) 21:xv Je '18  
Skim milk and milk substitutes for calf feeding. O. F. Hunziker and R. E. Caldwell. il Ind Ag Exp B 193:1-104 '16; Excerpts with conclusions. Am Soc Animal Production Pro 1915-1916:21-32 '17; Summary. Hoard's D 53:10 Ja 26 '17  
Skim-milk calf. Wallaces' F 41:278 F 18 '16  
Skim milk or calf meal? R. G. Dukes. il Country Gent 81:946 Ap 29 '16  
Starting calves. W. Nevens. Country Gent 81:789 Ap 8 '16  
Starting the young calf. Ohio F 139:789 Je 16 '17  
**Summer management of the grade herd of beef cattle.** R. S. Stephenson. Purdue Ag 12:561-2 Je '18  
Transmission of bacterium abortus (Bang) to new born calves through the ingestion of milk. I. F. Huddelson. Mich Ag Exp Tech B 32:1-22 '16; Same. Mich Ag Bd Rep 1917:607-24  
When Glen cared for the calves. R. H. Birlingmair. Hoard's D 52:48 Ag 4 '16  
Wintering dairy heifers. R. E. Hunt. il Va Ag Exp B 219:1-20 '18; Same cond. Jersey B 37:1857-8 N 6 '18  
Wisconsin way of raising calves. Wallaces' F 41:852 Je 9 '16

**Cambium**

- Further notes on intrafascicular cambium in monocotyledons. A. Arber. il Ann Bot 32:87-9 Ja '18  
Gliding growth and the bars of Sanio. J. G. Grossenbacher. bibliog il Am J Bot 1:522-30 D '14  
On the occurrence of intrafascicular cambium in monocotyledons. A. Arber. bibliog Ann Bot 31:41-5 Ja '17

**Cambium miners**

- Cambium miner in river birch. C. T. Greene. il J Ag Research 1:471-4 Mr '14  
Two new cambium miners (diptera). C. T. Greene. il J Ag Research 10:313-18 Ag 6 '17

**Camouflage**

- Nature's camouflage and man's. A. Embury. il Country Life 34:27-40 Je '18

**Camp fires**

- How to build a camp fire. il Am For 22:298-9 My '16  
Your camp fire. W. Mason. Country Life 31:102 Mr '17

**Campanulas**

- Campanula kolenatiana. il Gard Chron (Lond) 64:67 Ag 17 '18  
Campanulas at Wisley. J. K. Ramsbottom. il Gard Chron (Lond) 60:119 S 9 '16  
Platycodon grandiflorum. il Gard Chron (Lond) 64:7 J1 6 '18

See also Canterbury bells

**Campbell, J. T., 1872-1918**

- Autobiography of a farmer. por il Ohio F 141:643+, 667+ My 11-18 '18

**Camphor**

- Camphor and camphor oil from Malaya. Int R Sci & Prac Ag 7,no 1:73 Ja '16  
Spirits of camphor. A. Retlas. Ohio F 138:337 O 7 '16

**Campines (poultry)**

- Beautiful campine is a most excellent egg producer. F. L. Sewell. il Reliable P J 24:263-4 My '17  
Campine. W. H. Card. il Country Gent 81:649 Mr 18 '16  
Campines, the leghorns of Belgium. il Reliable P J 25:33-4 Mr '18  
Silver campines as layers. E. VanWhy. Am P Advocate 26:208 F '18

**Camping**

- Camping out in comfort. W. H. Miller. il Country Life 34:53-6 Ag '18  
Private property no camping. S. Riley. il Am For 23:358-60 Je '17  
Use of the New York state forests for public recreation. G. D. Pratt. Soc Am For Pro 11:281-5 J1 '16

- What the Poseyville gang did. H. R. O'Brien. il Rural N Y 76:409 Mr 17 '17  
Woman in the party. E. C. White. il Country Life 30:23-6 S '16

See also Camp fires

**Camping outfits**

- First aid in camp. C. H. Lerrigo. Country Life 29:98 Ap '16

**Camps**

- Camp for commuters. J Home Econ 8:378-80 J1 '16  
Glimpses of California. Wallaces' F 42:1501 N 2 '17  
Tepee camp. E. I. Farrington. il Country Life 32:63 S '17

**Camps, Agricultural**

- Agricultural camp housing. L. Magnusson. Monthly R (U.S. Bur. of labor statistics, Washington, D.C.) 6:1325-35 My '18  
Boy patriotism in farm labor. A. A. Heald. il Rural Manhood 8:434-6 D '17  
Farm boys' camps of one state. Rural Manhood 9:8-11 Ja '18  
Other side of boy labor. I. B. Squire. il Rural N Y 77:761 Je 8 '18  
Report of the Committee on mobilization of high school boys for farm service. 60p '17  
Mass. Com. on pub. safety, Boston  
Training town boys for farm work. il Wallaces' F 43:1103 Ag 2 '18

See also Farm cadet camps

**Camps, Military. See Military training camps**

**Canada**

See also subhead Canada under special subjects

**Agriculture, Department of**

- Publications available for distribution by the Publications branch, Department of agriculture, Ottawa. 10p '16 Canada Ag  
Report for the year ending March 31, 1918. (9 George V Sessional paper no. 15) 96p 5c '18 Canada Ag  
Report of the Minister of agriculture for the Dominion of Canada, for the year ended March 31, 1916. 118p '16 Canada Ag

**Entomological branch**

- Outline of work projected for 1916. C. G. Hewitt. Ag Gaz of Canada 3:400-2 My '16

**Conservation, Commission of**

- Report of the 8th annual meeting held at Ottawa, Jan. 16-17, 1917. 344p il maps The Commission, Ottawa

**Description and travel**

- Trip to the British Columbia coast. R. Brodie. J Ag (Quebec) 19:165-6 F '16

**Food board**

- Canada food board. Ag Gaz of Canada 5:223-4 Mr '18  
Canada food board; a review of the work of the current year. S. H. Howard. Ag Gaz of Canada 5:938-44 O '18  
Demonstrations in food conservation. S. Roy. Ag Gaz of Canada 5:1038-9 N '18

**Forestry, Department of**

- \* Report of the Director of forestry, 1917. 81p il '18 Canada Dept. of interior, Ottawa

**Veterinary director general**

- Report for the year ending March 31, 1917. (8 George V Sessional paper no. 15b) 19p '18 Canada Ag  
Report of the Veterinary director general for the year ending March 31, 1916. 36p '17 Canada Ag

**Canada food board. See Canada—Food board**

**Canada thistles**

- Canada thistle. O. W. Newman. il Cal State Comm Hort B v 6:48-51 F '17  
Development of the root system of cirsium arvense and medicago sativa with reference to their vegetative reproduction, observations carried out in Russia. J. Paczoskij; F. Berg. Int R Sci & Prac Ag 8, no 4:563-5 Ap '17

**Canada thistle—Continued**

- Eradication of the Canadian thistle. *Breeder's Gaz* 71:64 J1 12 '17  
 Round with Canada thistle. O. Hough. *Nat Stock & F* 41:532 S 1 '17  
 Sudan grass and Canada thistles. *il Rural N Y* 76:543 Ap 14 '17  
 To eradicate Canada thistle. T. Shaw. *Nat Stock & F* 41:605 S 22 '17

**Canadian agricultural extension act.** See Agricultural instruction act

**Canadian Ayrshire breeders' association**

- Condensed report of the secretary, W. F. Stephen. *J Ag (Quebec)* 19:194 Mr '16  
 45th annual meeting, Toronto, Ont., Feb. 3, 1916. W. F. Stephen. *Hoard's D* 51:278 Mr 10 '16  
 46th annual meeting, Montreal, Feb. 14, 1917. *Kimball's D F* 15:210 Mr 15 '17; *J Ag (Quebec)* 20:208 Ap '17

**Canadian cooperative wool growers**

- Canadian wool growers organize. Toronto, Feb. 5. *Am Sheep B & W* 38:114-16 F '18; *Ag Gaz of Canada* 5:303 Mr '18  
 Conference of wool growers at Toronto. A. A. Macmillan. *J Ag (Quebec)* 21:136 Mr '18

**Canadian fertilizer association**

- Meeting of representatives, Atlantic City, N.J., July 19. *Am Fert* 49:138w-138x Ag 3 '18  
 Soil and crop improvement bureau of the Canadian fertilizer association. *Am Fert* 48:29 Mr 2 '18

**Canadian handicrafts guild**

- Quebec industries and their encouragement. *J Ag (Quebec)* 19:225 Ap '16

**Canadian horticultural association**

- Annual convention, Ottawa, Ont., Aug. 13-16. H. J. Eddy. *Am Flor* 51:190 Ag 17 '18  
 Annual meeting, August 7-9, 1917. *Am Flor* 49:208 Ag 18 '17

**Canadian Jersey cattle club**

- Annual meeting at Toronto, Feb. 1, 1916. *Jersey B* 35:230 F 16 '16

**Canadian lumbermen's association**

- 10th annual meeting, Montreal, Que., Feb. 5. *Am Lumberman* 431 S. Dearborn st, Chicago 15c) 2230:49-50 F 9 '18

**Canadian seed growers' association**

- Catalogue of registered and improved seed produced in 1916 and offered for sale. 8p L. H. Newman, sec., Canadian bldg., Ottawa  
 13th annual meeting, Ottawa, July 31-August 1, 1917. *Ag Gaz of Canada* 4:815-17 S '17  
 13th annual report, 1917. 39p n.d. The assn., Canadian bldg., Ottawa

**Canadian sheep breeders' association**

- Annual meeting, Toronto, Feb. 5, 1918. (*In Report*, 1917. Live stock branch, p. 39-46) '18  
 Ontario ag. dept., Toronto  
 Annual meeting, Toronto, Feb. 6, 1917. (*In Report*, Live stock branch, 1916, p. 111-21) '17  
 Ontario ag. dept., Toronto, Canada

**Canadian swine breeders' association**

- Annual meeting, Toronto, Feb. 5, 1917. (*In Report*, Live stock branch, 1916, p. 95-105) '17  
 Ontario ag. dept., Toronto, Canada  
 Annual meeting, Toronto, Feb. 4, 1918. (*In Report*, 1917. Live stock branch, p. 19-32) *il '18*  
 Ontario ag. dept., Toronto

**Canadian yew.** See Yew

**Canals**

See also Irrigation canals

**Canaries**

- Canaries; their care and management. A. Wetmore. *il Farmers' B* 770:1-20 '16  
 Care of the canary. R. Potter. *Country Gent* 81:1780 S 30 '16

**Canby, Minnesota**

- Read about the Canby idea—then bring it to your community. B. Ostrolenk. *il Banker-F* 3:7 Mr '16

**Cancer**

- Cancer; the dread disease of women. L. F. Rainsford. *Rural N Y* 75:1013 J1 22 '16

Further evidence that crown gall of plants is cancer. E. F. Smith. (*In Pan American scientific congress Pro.*, 1915, v. 10, p. 472-89) '17

Path to cancer through the plant. *il Current Opinion* (63 W. 36th st, N.Y. 25c) 64:193-4 Mr '18

See also Galls (botany)

**Candles**

- Decorated candle. *il Country Life* 31:45 D '16

**Candy.** See Confectionery

**Canker, Blister.** See Apple canker

**Canker worms**

- Canker worms. *Ohio F* 137:715 My 20 '16  
 Canker worms; life history and control of this orchard and shade-tree pest. W. H. Goodwin. *il Ohio Ag Exp B v* 3:89-92 Mr '18  
 Municipal control of the spring canker worm; with discussion. S. J. Hunter. *J Econ Entom* 11:164-7 Ap '18

**Cannas**

- Cannas for the home grounds. *Prog F* 31:411 Mr 18 '16  
 Culture of the gladiolus and the canna. W. Hughes. *J Ag (Quebec)* 20:204 Ap '17  
 How to treat cannas in winter. W. N. Roper. *Prog F* 31:125 Ja 22 '16  
 Something about cannas and their varieties. A. C. Millard. *il Gard Chron Am* 22:86-7 Mr '18

**Canned beans****Analysis**

- Canned beans. *Conn State Ag Exp B* 200:102-13 '17

**Canned food**

- Canned foods are safe. F. J. Haskin. *Ill Farmers Inst Household Sci* 1917:207-10 '18  
 Canned foods; modern processes of canning in the United States, general system of grading, and description of products available for export. (Misc. ser. no. 54) 79p *il 20c '17* U. S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Chemist in the canned food industry. W. D. Bigelow. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:137-9 F '17  
 Comparison of commercially prepared and home prepared luncheons. *J Home Econ* 9:85-6 F '17  
 Food investigation; report of the Federal trade commission on canned foods; general report and canned vegetables and fruits. 97p '18 U.S. Federal trade comm., Washington, D.C.  
 Grades for canned corn, peas and other foods; with discussion. W. Frear. *Assn Am Dairy Food & Drug Offic Pro* 1917:19-27  
 Meat and canned foods act; the inspection of preserved fruits, vegetables, and milk. *Ag Gaz of Canada* 5:755-6 Ag '18  
 Relative value of different weights of tin coating on canned food containers; report of an investigation by a technical committee representing the National canners association, the American sheet and tin plate company, and the American can company. 666p '17 Nat. canners assn., Washington, D.C.

Report of the committee on swells and springers in canned goods; with discussion. L. M. Tolman. *Assn Am Dairy Food & Drug Offic Pro* 1917:44-63

Supply of canned salmon in the United States. *U S Ag C* 98:1-13 '18

See also Canning industry

**Analysis**

Adsorption of tin by proteins and its relation to the solution of tin by canned foods. B. C. Goss. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:144-8 F '17

Canned vegetables. *Assn Offic Ag Chem J* 2, no 2, pt 2:185-6 Ag '16

Maine packed blueberries, corn and sardines. C. D. Woods. *Maine Ag Exp Offic Inspec* 83:37-52 '17; Same. *Maine Ag Exp Rep* 1917:37-52



**Canned food—Analysis—Continued**

Official food analyses, 1917; canned goods. Fla Ag Dept Quar B v 28:160-8 Ja '18  
 Official food analyses, 1917; canned tomatoes. Fla Ag Dept Quar B v 27:111-14 Ap '17  
 Report on canned vegetables. W. D. Bigelow. Assn Offic Ag Chem J 3:1-21 My '17  
 Report on vegetables. E. W. Magruder. Assn Offic Ag Chem J 1, no 4, pt 1:545-50 F '16  
*See also* Canned beans—Analysis; Tomato products—Analysis

**Canned food, Home**

Calories in cans; how much should be put up for a family? Gard M 27:256 JI '18  
 Canned food safe. Weekly N L 5:6 N 21 '17  
 Danger of poisoning from vegetables canned by the cold-pack method. E. C. Dickson. (J. Am. Medical Assn. 69, no 12:966-8 '17) Exp Station Rec 37:669-70 N '17  
 Poisoning from home-canned foods. Wallaces' F 42:1532 N 9 '17

**Marketing**

Building up a canning business. M. Birdseye. il Country Gent 82:1713 N 3 '17  
 Marketing home canned tomatoes. L. C. Seal. Market Growers J 22:126-7 F '15 '18  
 Marketing of canning club products. L: B. Flohr. (Doc. Markets—5) 8p '17 U S Ag  
 Marketing the canning club products. J. S. McKimmon. il Country Gent 81:1171+ Je 3 '16; Same cond. Int R Ag Econ 71:10-12 N '16  
 Marketing the home canned products; symposium. Prac F 113:338 O 1 '17  
 Selling home-canned stuff. J. H. Collins. il Country Gent 81:2035 N 25 '16  
 Selling my canned products. B. S. Johnson. Country Gent 83:37 S 21 '18

**Standards**

New Jersey market standards for home canned fruits and vegetables. A. L. Clark. N J Ag Dept B 14:599-612 '18

**Canneries**

Acreages contracted for by canners. Monthly Crop Rep 3:76 Ag '17  
 Alaska, the land of plenty. R: E. Delaney. il Overland (259 Minna st, San Francisco 10c) n s 71:375-90 My '18  
 Canned foods; modern processes of canning in the United States, general system of grading, and description of products available for export. (Misc. ser. no. 54) 79p il 20c '17 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Canned fruits industry in California. Int R Sci & Prac Ag 7, no 2:289-91 F '16  
 Canning apples and pineapples; commercial. C. O. Warford. Rural N Y 77:482 Mr 30 '18  
 Crops for the cannery. A. E. Wilkinson. il Nat Stock & F 40:1398 Mr '17  
 Peas a mile above sea level. G: F: Stratton. il Country Gent 83:8 D 21 '18  
 Relation of the canner to the farmer. S: Fraser. Nat Stock & F 40:1159 F 3 '17  
 Sanitary control of tomato-canning factories. B. J. Howard and C: H. Stephenson. il U S Ag B 569:1-29 '17  
 Sugar corn for canning. il Country Gent 83: 38 Mr 9 '18  
 Sweet corn a staple Indiana crop. il O Judd Farmer 60:3 Ag 8 '16  
 Vegetables for canning. A. E. Wilkinson. Nat Stock & F 40:1024 Ja 6 '17  
 Work conducted by the commercial canners of the country. W. D. Bigelow. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:157-63 N '17

**By-products**

Pacific coast fish scrap. Am Fert 44:40+ Ap 1 '16

**Equipment**

Washing fruits and vegetables. A. W. Bitting. (B. 12) 25p il plans '17 Research laboratory, Nat. canners assn., Washington, D. C.

**Canneries, Cooperative**

Business essentials for cooperative fruit and vegetable canneries. W. H. Kerr. U S Ag Yearbook 1916:237-49; Same. Separate 705

Canning a way to market. R. Howard. il Country Gent 83:12 Ja 5 '18  
 Cooperative canning. Weekly N L 4:2 Mr 14 '17  
 Co-operative fruit and vegetable canneries in the United States. Ag Gaz of Canada 5: 424-6 Ap '18  
 Essentials for the success of cooperative canneries on reclamation projects. W. H. Kerr. Reclamation Record (Washington, D. C. 50c per yr.) 8:235-7 My '17

**Canning, Community. See Community canning**

**Canning and preserving**

Acute canning conditions. O Judd Farmer 62: 13 Ap 14 '17  
 All kinds of canners. H. Mason. il Ohio F 139: 752 Je 2 '17  
 All kinds of pickles. Ohio F 140:202 S 8 '17  
 Appetizing spring pickle. V. C. Lee. O Judd Farmer 60:30 Ap 1 '16  
 Automatic canning of corn and pumpkin. C. O. Warford. Rural N Y 75:831 Je 3 '16  
 Bacteriology of preserving. J. Vanderleek. J Ag (Quebec) 20:42 Ag '16  
 Bottling fruit pulp without sugar or water. Country Life 33:102 N '17  
 Boys' and girls' canning clubs; the Food administration, the board of education and the gas company worked hand in hand in Missouri. L: Resnick. il Am Gas Eng J (42 Pine st, N.Y. 10c) 109:248-50 S 14 '18  
 Can and cannon; drier and dreadnought. N. C. McCloud. il Am For 23:389-95 JI '17  
 Can and preserve your strawberries for the winter months. Prog F 31:627; 32:511 My 6 '16, Ap 21 '17  
 Can carefully. Weekly N L 4:6 Ag 1 '17  
 Can food at home. Weekly N L 4:6 Je 6 '17  
 Can while you can. il Country Life 32:66 S '17  
 Canned foods. W. H. Brooks. Machinery (140 Lafayette st., N.Y. 20c) 24:58 S '17  
 Canned vegetables. S. E. Wilcox. Nat Stock & F 40:702 O 7 '16  
 Canning and drying corn. M. S. Ellis. Kimball's D F 15:596 S 1 '17  
 Canning and drying of vegetables. B. R. Murphy. (Home Econ. B. 7) 2p '17 Woman's dept., Bur. of farm development, Chamber of commerce, Memphis, Tenn.  
 Canning and drying queries. Ohio F 140:86 Ag 4 '17  
 Canning and jelly-making. E. L. Ragsdale. Fruit-Grower 27:416 S 1 '16  
 Canning and preserving. J Home Econ 9:338 JI '17  
 Canning and preserving. Mrs E. M. Barrett. Tex Ag Dept B n s 21:1-21 n.d.  
 Canning and preserving of fruits; jelly making. B. R. Murphy. (Home Econ. B. 8) 2p '17 Woman's dept., Bur. farm development, Chamber of commerce, Memphis, Tenn.  
 Canning and preserving of vegetables and fruits. H. S. Elliot. Fla Ag Dept Quar B v 26:53-67 JI '16  
 Canning and preserving tomatoes. Mrs F. W. Stillman. Rural N Y 77:1028 Ag 31 '18  
 Canning and preserving with 4-H recipes. J. S. McKimmon. il N C Ag Ext C 11:1-38 '16  
 Canning apples and pineapples; commercial. C. O. Warford. Rural N Y 77:482, 548 Mr 30, Ap 13 '18  
 Canning asparagus. Kimball's D F 14:442 JI 1 '16  
 Canning by the cold pack method. il Ia Ag Ext Emergency Leaflet 41:1-7 '18  
 Canning by the cold pack method. il Manitoba Ag Dept Farmers' Lib (Ext) B 12:1-31 Mr '17 (2d ed)  
 Canning by the cold pack method. E. C. Bishop. Ia Ag Ext Emergency Leaflet 17:1-4 '17  
 Canning by the one-period cold pack method. A. D. Root. il Mo Ag Ext C 52:1-14 '18  
 Canning conveniences for canny housekeepers. E. M. Robinson. il Gard M 27:262-3 JI '18  
 Canning food for war times. A. M. Johnson. il Country Gent 82:851 My 5 '17; Same. Banker-F' 4:12-13 Je '17  
 Canning for home use and to sell; symposium. Prac F 114:211 Je 1 '18

**Canning and preserving—Continued**

- Canning for pleasure and profit. E. B. Kelley. il Wis Ag Ext C 68:1-16 '17
- Canning fruit and vegetables.** T. M. Jeffords. (In Suggestions for food conservation, p 68-72) '17 Women's central committee on food conservation, St Louis
- Canning fruit with less sugar. V. Inman. il Ohio F 141:546 Ap 13 '18
- Canning fruits and vegetables. Wis Ag Ext C 88 4p '17
- Canning fruits and vegetables. S. R. Guseman. il W Va Ag Ext C 157:1-8 '18 (Reprint C. 79)
- Canning fruits and vegetables. R. S. Mackintosh. Minn Hort 45:258-62 Je '17
- Canning fruits and vegetables. J. C. C. Price. il Ala Ag Ext C 12:26-39 '17
- Canning fruits by the cold-pack method. G. V. Gray. il Country Gent 83:36 My 11 '18
- Canning in glass by the cold pack method. B. Bell and A. D. Root. il Mo Ag Ext C 9:1-12 '16
- Canning industry. S. R. Winters. Field II 28: 426 Je '18
- Canning industry—some accomplishments and opportunities along technical lines. H. A. Baker. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10: 69-71 Ja '18
- Canning instructions. Kan Ag Ext B 12:1-16 '17; Same. (C. 3) '17 Kan. State council of defense, Topeka
- Canning meats and vegetables in steam pressure canner. S. W. Partridge. il Florida state college for women B 13:1-18 '17
- Canning new peas. S. E. Wilcox. Nat Stock & F 41:447 Ag 4 '17
- Canning of fruit and vegetables. J Bd Ag 24:539-47 Ag '17
- Canning of fruit and vegetables. Mass Ag Ext C 68 4p '18
- Canning of fruits and vegetables as an aid in food conservation. N. M. Wilson. il Penn State F 10:136+ O '17
- Canning of fruits and vegetables by 4-H recipes. J. S. McKimmon. il N C Ag Ext C 76:1-32 '18
- Canning of peas. R. Christen. Rural N Y 77: 774 Je 8 '18
- Canning on the farm. J. S. Underwood. Green's Fruit Grower 37:4 Je '17
- Canning outlook. J. R. McMahon. il Country Gent 83:3-4 Mr 23 '18
- Canning peaches on the farm. H. P. Gould and W. F. Fletcher. il Farmers' B 426:1-24 '17 (rev.)
- Canning, pickling and drying for winter. Country Gent 82:1204 Jl 28 '17
- Canning, preserving, pickling. (B. 36) p 1-17 '17 Warehouse and marketing dept., Austin, Texas; Same (recipes not same). Tex Ag Ext B B-26:1-16 '16
- Canning problems again. Nat Stock & F 42: 374 Jl 13 '18
- Canning—the cold pack method. J. Vanderleek. J Ag (Quebec) 22:48 S '18
- Canning time table. Rural N Y 76:881 Jl 14 '17
- Canning to conserve. il Wallaces' F 42:939 Je 22 '17
- Canning tomatoes. S. R. Guseman. il W Va Ag Ext C 203:1-8 '18 (Reprint C. 80)
- Canning tomatoes for sale. Ohio F 138:74 Jl 22 '16
- Canning tomatoes in California. A. L. Dahl. il Scientific Am (233 Broadway, N.Y. 10c) 117:133 Ag 25 '17
- Canning vegetables. Nat Stock & F 40:478 Ag 5 '16
- Canning with honey. A. L. Andrea. il Country Gent 83:33 Jl 20 '18
- Canning without sugar. J. S. Caldwell. Wash Ag Exp Pop B 103:1-4 '16; Same. Better Fruit 11:23+ S '16
- Care and use of fruit in the home. R. E. Jones. Purdue Ag 11:40-2 O '16
- Chart for canning. J Home Econ 9:426-7 S '17
- Chart for Wisconsin canning. Wis Ag Ext C 1p n.d.
- Cold pack canning. Fruit-Grower 28:295 Je 15 '17
- Cold pack canning. Prac F 113:234, 249 Je 15-16 '17
- Cold pack method. O Judd Farmer 63:12 Jl 28 '17
- Cold pack method of canning fruits and vegetables. Mrs F. W. Stillman. Rural N Y 77: 681 My 11 '18
- Cold packing canned tomatoes. C. O. Warford. Rural N Y 75:1091 Ag 19 '16
- Commercial canning of pork and beans. C. O. Warford. Rural N Y 77:36 Ja 19 '18
- Community cannery establishes its claim as national defense kitchen. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2261:43 S 14 '18
- Comparison between canning and drying. E. Allen and J. Short. J Home Econ 10:223-5 My '18
- Consideration of the canning problem. E. F. Genung. J Home Econ 10:323-33 Jl '18
- Country Gentleman chart for canning vegetables. Country Gent 83:38 My 25 '18
- Cucumber relishes. Rural N Y 75:1078 Ag 12 '16
- Difficulties in cold pack canning. Wallaces' F 43:960 Je 21 '18
- Does canning always pay? A. M. Johnson. Country Gent 81:2211 D 23 '16
- Doing up the surplus from the garden. E. E. Trumbull. il Gard M 25:289 Je '17
- Don't be afraid of tin cans. M. R. Warren. il Country Gent 83:30 Je 8 '18
- Don'ts and some short cuts for the beginner. il Country Gent 81:1492 Ag 5 '16
- Easy sun preserves. Nat Stock & F 40:238 My 27 '16
- Easy ways to can. Fruit-Grower 28:277 Je 1 '17
- Economics in manufacturing in the canning industry. J. H. Shrader. Am Soc Mechanical Eng J (29 W. 39th st, N.Y. 35c) 40:686-9 Ag '18
- Extension circulars. Mass Ag Ext C 32, 38, 46 '17
- Titles are: Canning of fruits and vegetables; Fruit products; Evaporating and drying
- Factors in successful canning.** J. S. Knox. Prog F 33:672 Je 1 '18
- Facts about canning. Prog F 33:694 Je 8 '18
- Favorite pickle recipes. H. A. Syman. Country Gent 81:1602 Ag 26 '16
- Favorite pickles, preserves and spices; symposium. Prac F 114:261 Ag 1 '18
- Food conservation; home canning and drying; how to organize groups for the work. il Touchstone (118 E. 30th st, N.Y. 35c) 3:358-61 Jl '18
- 43 ways to save the wild plum crop. G. W. Carver. Tuskegee Exp B 34:1-12 '17
- Fruit and vegetables canned in honey. Gleanings 45:443 Je '17
- Fruit and vegetables for every day in the year. il Country Gent 81:1350 Jl 8 '16
- Fruit-preserving in the home. T. E. Rodda. J Ag New Zealand 13:356-9 N '16
- Fruit preserving without sugar. H. Goodrich. Gard Chron (Lond) 64:11 Jl 13 '18; Same. Gard Chron Am 22:216 Ag '18
- Girl who must earn her own living: home canning. Prog F 31:598 Ap 29 '16
- Good things for the pickle shelf. C. B. Williams. Nat Stock & F 40:607 S 9 '16
- Good things for winter. C. B. Williams. Nat Stock & F 40:703 O 7 '16
- Growing of vegetables for canning. M. H. Hegerle. il Minn Hort 44:203-6 My '16
- Helping a community to conserve. F. E. Brookins. J Home Econ 9:322-3 Jl '17
- Helps on gardening and canning. H. J. Reed and L. R. Gaddis. il Purdue Ag Ext B 54:1-8 '17
- Home and farm canning. W. V. Cruess. il Cal Ag Exp C 158:1-31 '16
- Home canning. Conn Ag Coll Ext Home Canning B 4:1-8 '17
- Home canning. il Vt Ag Ext C 6:1-16 '17
- Home canning. Mrs L. M. Glenzka. Minn Hort 45:308-11 Ag '17
- Home canning. A. M. Johnson. See weekly numbers of Country gentleman, beginning May 12, 1917



**Canning and preserving—Continued**

- Home canning. T. J. Newbill. Western Wash Ag Exp B v 5:42-4 Je '17
- Home canning. A. M. Turley. il Ore Ag Ext B 204:1-16 '17
- Home canning; symposium. Prac F 113:218 Je 1 '17
- Home canning; a commercial outfit. il Country Gent 81:1246 Je 17 '16
- Home canning and drying of vegetables and fruits. Okla Ag Ext C 77:1-8 '18
- Home canning and drying of vegetables and fruits with directions for making jellies and fruit butters and for fermentation, salting and pickling. 31p il '18 National war garden comm., Maryland bldg., Washington, D.C.
- Home canning army likely to set a record this year. Weekly N L 6:1 S 11 '18
- Home canning by the cold pack method. 60p il '17 Agricultural extension dept., Int. harvester co., Harvester bldg., Chicago
- Home-canning by the cold-pack method. N. O. Newburn. il Ill Ag Ext C 10:1-15 '17
- Home canning by the cold pack process. R. McNeill. il Purdue Ag Ext B 55:1-8 '17
- Home canning by the one-period cold-pack method. O. H. Benson. il Farmers' B 839:1-39 '17
- Home canning facts. Country Gent 81:1599 Ag 26 '16
- Home canning fruits and vegetables in the provinces. il Ag Gaz of Canada 4:768-79 S '17
- Home canning; how to make a canner. il Country Gent 81:1211 Je 10 '16
- Home canning of fruit and vegetables. M. E. Creswell. il Ga Ag Coll (Ext) B 107:1-39 '17 (rev. ed)
- Home canning of fruits and vegetables. il Va Ag Dept B 109:129-43 '16
- Home canning of fruits and vegetables. M. E. Creswell and O. Powell. il Farmers' B 853:1-41 '17
- Home canning of fruits and vegetables. E. L. Davies. il Ontario Ag Dept B 236:1-11 '16
- Home canning of vegetables. Nat Stock & F 42:352 Jl 6 '18
- Home canning of vegetables. G. Dietz. il Fruit-Grower 28:265 My 15 '17
- Home canning of vegetables and fruits. Green's Am Fruit Grower 38:10 Je '18
- Home canning; one period, cold pack method. R. McNeill. S D Ag Ext C 4:1-8 '18
- Home canning outfit pays profits. E. W. Gage. Green's Fruit Grower 36:4 Je '16
- Home canning; tin versus glass. il Country Gent 81:1278 Je 24 '16
- Home uses for muscadine grapes. C. Dearing. il Farmers' B 859:1-22 '17
- Household engineering of great interest to women on the farm. G. V. Gray. il Farm Eng 3:277; 4:14-15 Je-Jl '16
- Housewife's manual for canning, drying and salting of fruits and vegetables. M. E. Sweeney. Ky Univ B v 9,no 8:1-16 '17
- How I use my canner in midwinter. M. G. Feint. il Rural N Y 77:243 F 16 '18
- How to can fruits, vegetables and meats. 23p il 15c '16 Ladies' home journal, Independence sq., Philadelphia
- How to can in South. Weekly N L 4:6-7 My 30 '17
- Importance of blanching your products. il Country Gent 81:1385 Jl 15 '16
- Imprisoned sunshine. A. Ovington. Country Life 32:102 O '17
- Improvements in methods of pickling olives. F. T. Bioletti and W. V. Cruess. Cal Ag Exp B 289:195-200 '17
- Influence of cold shock in the sterilization of canned foods. L. D. Bushnell. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:432-6 Je '18
- Instructions for canning and preserving. il Maine Ag Ext B 112:1-24 '18 (rev.)
- It's canning time again. A. G. Vestal. il Power F 25:32 Je '16
- Jelly making, preserving, and pickling. G. Erickson, comp. S D Ag Ext 12p mim n.d.
- Juices and sirups. Weekly N L 5:6 Ag 15 '17
- Keep a good fire under your canner. il Country Gent 81:1423 Jl 22 '16
- Keep canning, sugar or no sugar. Weekly N L 5:2 Jl 24 '18
- Late summer canning. Mrs F. W. Stillman. Rural N Y 77:1051 S 7 '18
- Learned by experience. G. I. Gibson. il Fruit-Grower 28:306 Jl 1 '17
- Learned in last year's preserving. Ohio F 141:508-9 Ap 6 '18
- Lecture notes for canning charts. G. M. Smith. 52p il '16 Int. harvester co., Chicago
- Living from preserves. M. H. Talbott. il Country Gent 81:1420 Jl 22 '16
- Marmalades, jams and jellies to carry you through till summer. M. H. Talbott. il Country Gent 81:86 Ja 8 '16
- Massachusetts canning school. L. Comstock. J Home Econ 9:27 Ja '17
- Methods followed in the commercial canning of foods. U S Ag B 196:1-21 '15
- Midsummer canning. Mrs F. W. Stillman. Rural N Y 77:985 Ag 17 '18
- Mobilizing crops for winter. E. M. Robinson. il Gard M 25:317-19 Jl '17
- Muscadine grape sirup. C. Dearing. il Farmers' B 758:1-11 '16
- My experiments in home canning. H. C. Bennett. Country Gent 82:789 Ap 21 '17
- New breakfast food. Weekly N L 5:8 S 26 '17
- New Jersey market standards for home canned fruits and vegetables. A. L. Clark. N J Ag Dept B 14:599-612 '18
- New Jersey ways with beans. Nat Stock & F 41:446 Ag 4 '17
- New way to preserve; vegetables preserved by fermentation method. Weekly N L 4:6 Je 27 '17
- Not a jar spoiled. G. V. Gray. il Country Gent 83:46 Ap 6 '18
- Old methods and new conditions. J. H. Hurd. J Home Econ 9:282-5 Je '17
- One-period cold-pack canning with home utensils. Better Fruit 11:5 Je '17
- Pickles. Wallaces' F 43:126 S 6 '18
- Pickles. V. M. Kellar. Md Ag Ext Letter no 33 6p n.d.
- Pickles. M. E. Sutherland. Western Wash Ag Exp B v 5:90-2 S '17
- Pickles and ketchup. B. R. Murphy. (Home Econ. B. 9) 2p '17 Woman's dept., Bur. farm development, Chamber of commerce, Memphis, Tenn.
- Pickles and pickling. Purdue Ag 13:33-4 O '18
- Pickles and relishes. C. L. Pancoast. Mo Ag Ext C 35:1-4 '17
- Pickling cucumbers. C. E. Brehm. Country Gent 82:1240 Ag 4 '17
- Planning for canning this season. Green's Am Fruit Grower 38:4 My '18
- Planning for winter supplies. il Country Gent 81:1270 Je 24 '16
- Preparation and the preservation of vegetables. H. W. Calvin and C. A. Lyford. (B. 1917,47) 24p U.S. Bur. of educ., Washington, D.C.
- Present status of the preservation of food by canning and possibilities of increase. H: Burden. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:195-6 Mr '18
- Preservation of food; canning, preserving, drying; and preserving of eggs. 16p n.d. Council of national defense, Ohio branch, State house, Columbus
- Preservation of food; home canning. E. M. Chapman. il Ontario Ag Dept B 252:1-29 '17
- Preserves, relishes, and pickles. S. R. Guseman. il W Va Ext C 202:1-8 '18 (Reprint C. 73)
- Preserving cucumber pickles. J. G. Boyle. il Country Gent 81:1495 Ag 5 '16
- Preserving fruit by carbon dioxide and oxygen. Review of Reviews (30 Irving place, N.Y. 25c) 55:325 Mr '17
- Preserving; fruits saved by this process as well as by canning. Weekly N L 5:1 Ag 8 '17
- Preserving of fruits and vegetables. B. T. P. Barker. Gard Chron (Lond) 60:97-8 Ag 26 '16
- President Wilson urges saving of perishables. Weekly N L 4:1-2 Ag 1 '17
- Preventing food spoilage by warring on the guilty micro-organisms. Scientific Am (233 Broadway, N.Y. 10c) 116:99 Ja 27 '17

**Canning and preserving—Continued**

- Principles of canning. J. Vanderleek. J Ag (Quebec) 20:245 Je '17
- Problems of canning operations. W. D. Bigelow. Am Pub Health J (126 Massachusetts av. Boston, Mass. 50c) 8:212-16 Mr '18
- Process of canning vegetables. Gard Chron Am 21:197-8 My '17
- Pulping fruit. Better Fruit 13:19 S '18
- Quince recipes. Rural N Y 75:1243 S 23 '16
- Ready to can. G. V. Gray. il Country Gent 83:48+ Ap 13 '18
- Recipes for 4-H brand pickles. Mrs J. McKimmon. Prog F 31:863 Jl 8 '16
- Research in the canning industry. F. E. Gorrrell. Iron Age (239 W. 39th st, N.Y. 20c) 102:143 Jl 18 '18
- Revival of brining. M. R. Warren. il Country Gent 83:32 Ag 17 '18
- Rules for canning vegetables. M. G. Feint. O Judd Farmer 61:34 Jl 29 '16
- Sauerkraut and chow-chows. Mrs L. York. Rural N Y 75:1107 Ag 19 '16
- Save vegetables and fruits for winter. N J Ag Dept Leaflet 2 4p n.d.
- Saving the soul of food. E. Ellis. il Country Gent 83:8 S 14 '18
- Scientific research in the canning industry. W. D. Bigelow. J Franklin Inst. (Franklin Institute, Philadelphia. 50c) 186:1-14 Jl '18
- Secret in canning. Wallaces' F 41:904 Je 23 '16
- Shall I start a canning business? A. M. Johnson. il Country Gent 81:1095 My 20 '16
- Shapes and the tops for your glass jars. il Country Gent 81:1313 Jl 1 '16
- Simplified up-to-date canning methods. 7p n.d. Kentucky bd. of trade, Louisville
- Small fruits from the canner's standpoint. Green's Fruit Grower 36:5 Mr '16
- Small helps to canning efficiency. M. G. Phillips. Am Bee J 58:269 Ag '18
- Solving the food problem by canning. G. V. Gray. il Farm Eng 5:12 Je; 12 Jl '17
- Some makeshifts in canning. Prog F 32:636 My 26 '17
- Some pickle recipes. Prog F 32:867 Ag 11 '17
- Sour cherry recipes. Rural N Y 76:776 Je 9 '17
- Starting from nothing; how a Maryland woman has succeeded with canning. M. R. Warren. il Country Gent 83:6-7+ My 18 '18
- Strawberries. Nat Stock & F 40:286 Je 10 '16
- Strawberry preserves. Weekly N L 4:11 My 16 '17; Same. Better Fruit 11:8 Je '17; Same. Ohio F 139:772 Je 9 '17
- Substitutes for sugar. G. V. Gray. il Country Gent 83:32 Jl 6 '18
- Substitutes for tin cans. 4p '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Sugarless preserves. E. S. Romero-Todesco. Gard Chron (Lond) 59:295 Je 3 '16
- Summer canning for winter serving. E. M. Robinson. il Gard M 27:236-8 Je '18
- Syrups for canning and preserving. J. B. McNair. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:151-3 F '17
- Tested rules for pickles and preserves. H. A. Lynan. Rural N Y 76:947 Ag 4 '17
- Three year-round vegetables. I. M. Angell. Country Life 32:124 My '17
- Tin can. H. S. Stabler. il Everybody's (Spring and Macdougall sts, N.Y. 15c) 38:108-12 Ja '18
- To can without sugar. Weekly N L 4:8 Je 27 '17
- Tomato ketchup. Prog F 32:846 Ag 4 '17
- Vegetable canners' problems. Ohio F 140:106 Ag 11 '17
- Vegetables and greens; how to cold-pack can them. G. V. Gray. il Country Gent 83:39 My 25 '18
- War of the packs. M. R. Warren. il Country Gent 83:38-9 Mr 30 '18
- What about artificial preservatives? il Country Gent 81:1529 Ag '16
- What canning recipe do you follow? Prog F 32:866 Ag 11 '17
- What to do with green tomatoes. Ohio F 138:340 O 7 '16
- Wherewithals for canning and drying. A. G. Vestal. il Power F 27:30 Jl '18

- Why we can foods. G. Erickson. il Md Ag Ext B 13:1-23 '18
- Why your canned things spoil. Country Gent 81:1057 My 13 '16
- Wide-awake girls learn about canning. Mrs W. N. Hutt. Prog F 31:736 Je 3 '16
- Wide-awake girls learn how to make jams and pickles. Mrs W. N. Hutt. Prog F 31:786 Je 17 '16
- Year-round diary for the man with a small place. il Country Gent 81:1626 S 2 '16
- See also Canned food; Canneries; Canning clubs; Canning industry; Chow-chow; Community canning; Fish canning; Fruit butter; Fruit paste; Jam; Jelly; Marmalade; Meat canning; Soup—Canning

**Bibliography**

- Foods and cooking; canning and cold storage; publications relating to the above subjects for sale by the superintendent of documents. (Price list 11—8th ed) 16p '17 Supt. of doc., Washington, D.C.

**Equipment**

- Canning methods and supplies. H. Mason. Ohio F 141:509 Ap 6 '18

**Canning clubs**

- Alabama short course. il Country Gent 81:1741 S 23 '16
- Along the march of canning. il Country Gent 82:1018 Je 16 '17
- Can all you can. H. S. Stabler. il Country Gent 82:1019-20 Je 16 '17
- Girls' state fair vegetable canning contest. H. Mason. il Ohio F 138:264 S 16 '16
- Kansas cans. Weekly N L 5:4 Ag 8 '17
- Marketing the canning club products. J. S. McKimmon. il Country Gent 81:1171+ Je 3 '16; Same cond. Int R Ag Econ 71:10-12 N '16
- Minnesota boys' and girls' garden and canning club work. il Minn Hort 46:321-9 S '18
- Mother-daughter canning. Country Gent 81:188 Ja 22 '16
- Mother-daughter home canning club. O. H. Benson. J Home Econ 9:251-6 Je '17
- Out of one patch. M. R. Warren. il Country Gent 83:30 Je 1 '18
- Putting the can in Kansas. C. Dillon. il Country Gent 82:1129 Jl 7 '17
- She lifted sixty-six counties. M. R. Warren. il Country Gent 83:8-9 Je 29 '18
- We form a mother-daughter canning club. M. C. Hessler. Country Gent 82:885 My 12 '17

See also Community canning

**Programs**

- Programs for girls' canning clubs. M. B. Reeves. Miss Ag Ext Home Econ B 7 12p '18

**Canning factories. See Canneries****Canning industry**

- Call to the canner of foods. C: H. Bentley. il Country Gent 82:1505 S 29 '17
- Can all you can. H. S. Stabler. il Country Gent 82:1019-20 Je 16 '17
- Cannery pea culture. E. F. White. Prac F 113:78 F 15 '17
- Canning crop situation. A. E. Wilkinson. Nat Stock & F 42:200 My 18 '18
- Canning industry—some accomplishments and opportunities along technical lines. H. A. Baker. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:69-71 Ja '18
- Cherry and other W.N.Y. crops. il Rural N Y 77:937 Ag 3 '18
- Closer relation of horticulture to the cannery. A. Rupert. Better Fruit 13:13 Jl '18
- Cooperation between canner and grower. C: G. Summers, jr. il Md Ag Soc Rep 1916, v 1:183-7 '17
- Corn for the canners. il Wallaces' F 42:523 Mr 23 '17
- Food investigation; report of the Federal trade commission on canned foods; general report and canned vegetables and fruits. 97p '18 U.S. Federal trade comm., Washington, D.C.



**Canning industry—Continued**

- Four billion cans of food. B. M. Fernald. Country Gent 82:1167 Jl 21 '17  
Great American canning industry. W: P. Doyle. il Ohio F 141:557 Ap 20 '18  
Growing of canning peas. Prac F 113:125 Mr 15 '17  
Growing vegetables for the cannery and evaporator. A. G. B. Bouquet. Better Fruit 12: 5-7 Mr '18  
Increase in commercial canning. il map O Judd Farmer 64:20 Mr 9 '18  
Methods followed in the commercial canning of foods. U S Ag B 196:1-21 '15  
Origin of the canning industry. A. W. Bitting and K. G. Bitting. J Franklin Institute (Franklin Institute, Philadelphia 50c) 183: 257-8 F '17  
Outlook in Ontario canning industry. F. S. S. Johnson. (Commerce Reports no. 184) p 500 (Ag 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Overtime in the fruit and vegetable canning and packing industry of Oregon. Int R Ag Econ 74:125 F '17  
Raising peas for canning. E. L. Kirkpatrick. il Ohio F 139:366 Mr 10 '17  
Report on the regulation of wages, hours and working conditions of women and minors in the fruit and vegetable canning industry of California. (B. 1) 176p il '17 Cal. Industrial welfare comm., 525 Market st, San Francisco  
Tomato as a farm crop for the canning factory. C. G. Woodbury and H. J. Reed. il Ind Ag Exp C 59:1-28 '17  
Your local cannery is up against it because of war conditions. W: H. Dean. Country Gent 82:914 My 19 '17  
See also Canneries

**Regulation**

- \* Canning regulations. (In Official statement no. 5, p. 19-20) '18 U.S. Food administration, Washington, D.C.

**Statistics**

- Census of manufactures 1914; canning and preserving. J: M. Brady. 31p '17 U. S. Bur. of census, Washington, D.C.  
Commercial stocks of canned goods, including meats, soup, salmon, sardines, tomatoes, corn, peas, baked beans, miscellaneous canned vegetables, fruits and berries, and preserves, marmalades, jellies, crushed fruits and fruit sirups. U S Food Surveys 1:1-32 Jl 16 '18  
Commercial stocks of canned goods on July 1, 1918. U S Food Surveys 2:1-28 S 23 '18

**Cans.** See Tin cans

**Cantaloupes**

- Cantaloupe culture in Delaware. G. F. Smith. Market Growers J 21:46 Jl 15 '17  
Cantaloupe culture in Indiana. R. F. Sproat. il Purdue Ag 11:22-6 Mr '17  
Cantaloupes a profitable truck crop. J. W. Griffin. il Prac F 114:156 Ap 15 '18  
Cantaloupes for local market. I. R. Waggoner. Market Growers J 18:151 F 15 '16  
Commercial cantaloupe growing in Georgia. J. W. Firor. il Ga Ag Coll (Ext) C 35 8p '16  
Commercial grading, packing and shipping of cantaloupes. C. T. More and G. V. Branch. il Farmers' B 707:1-25 '13 (rev)  
Experience with cantaloupes; symposium. Market Growers J 20:411+ My 15 '17  
Growing cantaloupes. Fruit-Grower 27:135 F 15 '16  
Growing cantaloupes. C. O. Ormsbee. Market Growers J 21:164 O 15 '17  
Melon production in southern Indiana. T. W. Harvey. il Purdue Ag 13:115-16 D '18  
Melons under glass. il Am Flor 47:214 Ag 12 '16  
More care is needed in handling western cantaloupes. G: L. Fischer and A. E. Nelson. (Markets Doc. 9) 11p il '18 U S Ag  
Nitrate of soda on cantaloupes. W. F. Allen. Market Growers J 18:335 My 15 '16  
Of canteloups. H. E. Durham. il Gard Chron (Lond) 59:181-2 Ap 1 '16  
See also Honey dew melons

**Diseases and pests**

- Melon troubles. Wallaces' F 41:844 Je 9 '16  
Spraying for melon rust. C. E. Durst. Market Growers J 19:44 Jl 15 '16

**Marketing**

- Cantaloupe association in Madison county. Ky. Ky Ag Dept Rep 1916-1917:355-7 '18  
Cantaloupe marketing in the larger cities, with carlot supply, 1914. W. A. Sherman and others. il U S Ag B 315:1-20 '15; Abstract. Int R Sci & Prac Ag 7,no 2:295-7 F '16  
Commercial grading, packing, and shipping of cantaloupes. C. T. More and G. V. Branch. il Farmers' B 707:1-23 '16; Same cond. Market Growers J 18:293 Ap 15 '16; Same cond. Am Flor 46:254 F 19 '16; Same cond. Country Gent 81:1269 Je 24 '16  
Grading and packing cantaloupes for market. Prog F 31:915 Jl 22 '16  
Marketing cantaloupes under the standardization act. F. W. Waite. Cal State Comm Hort B v 6:344-5 Ag '17  
Melon growing in Imperial valley. Market Growers J 19:43 Jl 15 '16  
Turning cantaloupe losses into gains. M. L. Williams. il Country Gent 81:1748-9 S 30 '16

**Seed**

- Home-grown cantaloupe seed. M. L. Williams. il Country Gent 82:1391 S 8 '17

**Statistics**

- Commercial acreage and production of cantaloupes. Monthly Crop Rep 3:65 Jl '17

**Transportation**

- Loading and transporting western cantaloupes. A. W. McKay. il (Doc.—Markets 10) 16p '18 U S Ag

**Canterbury bells**

- Pot culture of canterbury bells. J: S. Doig. il Gard Chron Am 20:428 O '16

See also Campanulas

**Canterbury seed-growers' association**

- First three years' work. F. W. Hilgendorf. J Ag New Zealand 17:80-3 Ag '18

**Cantua buxifolia**

- Cantua buxifolia. R. I. Lynch. il Gard Chron (Lond) 62:18 Jl 14 '17

**Canvas**

- Canvas-attacking fungus. J. Ramsbottom. Ag J of India 12:671-2 O '17

**Cape Cod**

- Sand dunes on old Cape Cod; photographs. R. H. Cahoon. il Country Life 31:54-5 F '17

**Cape primroses**

- Garden varieties of streptocarpus. Gard Chron (Lond) 64:14 Jl 13 '18  
Streptocarpus denticulata. R. I. Lynch. il Gard Chron (Lond) 59:271 My 20 '16

**Capital**

- Capitalism. Wallaces' F 41:1187 S 8 '16  
More capital and farm profits. W. L. Cavert. (In Minnesota farmers' institute annual, 1916, p 29-31) '16 Extension division, University Farm, St Paul  
Proportionate investment of capital on the farm. F. W. Peck. (In Minnesota farmers' institute annual, 1916, p 54-65) il '16 Extension division, University Farm, St Paul  
That elusive capital. S: Fraser. Country Gent 81:321 F 12 '16

See also Investments

**Capons and caponizing**

- About caponizing. Wallaces' F 42:1110 Ag 10 '17  
Capon. V: G. Aubry. N J Ag Exp Hints to Poultrymen v 5 4p My '17  
Capon production. Ag Digest 1:76 Je '16  
Caponizing; its benefits and how to learn. S. K. Burdin. il Am P J 48:746-7 Je '17  
Caponizing the surplus cockerels. J. L. Schmidt. Am P J 47:1324 D '16  
Capons aid many on the road to success with poultry. Mrs J: Miller. il Reliable P J 24: 360+ Je '17

**Capons and caponizing—Continued**

- Capons and caponizing. R. R. Slocum. *il Farmers' B* 849:1-15 '17 (B. 452 rev.)
- Capons and caponizing. H. D. Smith. *il Mass Ag Bd B* 1:149-53 '17
- Capons as foster mothers. S. K. Burdin. *il Am P Advocate* 24:634 JI '16; Same. *Am P J* 47: 919 JI '16; Same. *Reliable P J* 23:575 JI '16
- Capons for a side line. C. C. Collier. *Am P Advocate* 24:594 Je '16
- Capons for Kansas. W. A. Lippincott. *il Kansas Ag Exp C* 27:1-8 '16 (rev)
- Capons make big profits on high feed. G. Beuoy. *Am P J* 49:522 My '18
- Clears \$1000.00 a year on capons. T. E. Quisenberry. *Am P Advocate* 25:532 JI '17; Same cond. *Fruit-Grower* 28:311 JI '17
- Experiments in caponizing fowls. D. F. Laurie. *J Dept Ag S Australia* 22:40-3 Ag '18; Same. *Am Vet M Assn J* 54:144-9 N '18
- Feeding capons and roasters. S. K. Burdin. *Am P Advocate* 26:410 My '18
- Feminization of male birds. H. D. Goodale (J. Am. Assn. Instr. and Invest. Poultry Husb., 3, no. 9 68-70p. '17). *Exp Sta Record* 38, no 3:275 '18
- How to caponize. G. Beuoy. *Am P Advocate* 26:448 Je '18; Same. *Reliable P J* 25:416+ Je '18
- How to produce capons, and advantages. H. D. Smith. *il Am P J* 49:527-9 My '18
- Practical way of caponizing. O Judd Farmer 62:16 Je 9 '17
- Prime capons. J. Hillis. *Country Gent* 83: 31 My 11 '18
- Profit in surplus cockerels—the way to do it. G. Beuoy. *Am P J* 49:639 Je '18
- Profitable poultry branch neglected. F. V. L. Turner. *Prac F* 113:183 My 1 '17
- Reasons for caponizing surplus cockerels. R. F. Clark. *il Reliable P J* 25:463-4 JI '18
- Regarding caponizing tools. E. L. Rinehart. *Ohio F* 137:795 Je 10 '16
- Turn your surplus cockerels into prime profit-paying capons. C. E. Farris. *il Reliable P J* 23:644+ Ag '16
- What a woman can do if she will. Mrs C. Simmons. *Am P J* 49:668-9 JI '18

**Caprification.** See Fig wasps**Capsicum**

- Studies on the hybrids of capsicum annum; pt. 2. On some variegated races. S. Ikeno. *Int R Sci & Prac Ag* 8,no 7:991-2 JI '17

**Capsid bugs**

- Capsid bugs. J. C. F. Fryer. *il J Bd Ag* 22: 950-8 Ja '16
- Control of the apple capsid bug by spraying. F. R. Petherbridge. *il J Bd Ag* 24:1401-10 Mr '18
- Further observations on the capsids which attack apples. F. R. Petherbridge and M. A. Husain. *il J Bd Ag* 25:54-8 Ap '18
- Report on further investigations on the capsids which attack apples. J. C. F. Fryer and F. R. Petherbridge. *il J Bd Ag* 24:33-44 Ap '17

**Car shortage.** See Freight car service**Caramel**

- Suggestion in regard to the preparation and use of caramel. G. P. Plaisance and H. Monsch. *J Home Econ* 9:167-71 Ap '17

**Carbide lighting**

- Carbide lighting and cooking plant. *Prog F* 32:1078 O 13 '17

**Carbohydrates**

- Assimilation of carbon compounds; the work of the green leaf. *Gard Chron (Lond)* 59: 172 Mr 25 '16
- Estimation of carbohydrates; the supposed precipitation of reducing sugars by basic lead acetate. W. A. Davis. *J Ag Sci* 8:7-15 S '16
- Influence of milk and carbohydrate feeding on the character of the intestinal flora. T. G. Hull and L. Rettger. *bibliog J Bact* 2:47-71 Ja '17

- Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the leaf and leaf stalks of the potato. W. A. Davis and G. C. Sawyer. *bibliog J Ag Sci* 7:352-84 F '16

- Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the mangold leaf. W. A. Davis and others. *bibliog J Ag Sci* 7:255-326 F '16
- Studies of the formation and translocation of carbohydrates in plants; the dextrose-lae-vulose ratio in the mangold. W. A. Davis. *J Ag Sci* 7:327-51 F '16
- Study of five members (or so-called species) of the septicemia hemorrhagica (pasteurella) group of organisms with special reference to their action on the various carbohydrates. A. M. Besemer. *bibliog J Bact* 2:177-84 Mr '17

See also Pentoses; Plants, Effect of carbohydrates on; Starch; Sugars

**Carbohydrates as fertilizer**

- Influence of plant residues on nitrogen fixation and on losses of nitrate in the soil. H. B. Hutchinson. *bibliog J Ag Sci* 9:92-111 Ag '18

**Carbolic acid**

- Organic plant poisons; phenols. W. E. Brencchley. *Ann Bot* 32:259-78 Ap '18
- Phenolic insecticides and fungicides. G. P. Gray. *il Cal Ag Exp B* 269:329-81 '16

**Carbolineum**

- Treatment of gummosis with carbolineum. C. C. Miller. *il Cal State Comm Hort B v* 7:488-93 Ag '18

**Carbon**

- Carbon assimilation. *Bot Gaz* 64:516-521 D '17
- Direct assimilation of organic carbon by ceratodon purpureus. W. J. Robbins. *bibliog il Bot Gaz* 65:543-51 Je '18
- Vegetable decolorizing carbons and their use in the cane sugar industry. F. W. Zerban. *bibliog La Ag Exp B* 161:1-39 '18

**Carbon bisulphide.** See Carbon disulfid**Carbon dioxide**

- Carbon dioxide production in soils and carbon and nitrogen changes in soils variously treated. R. S. Potter and R. S. Snyder. *bibliog Ia Ag Exp Research B* 39:253-309 '16
- Controlling influence of carbon dioxide on the production of secondary dormancy in seeds of brassica alba. F. Kidd and C. West. *bibliog il Ann Bot* 31:457-87 JI '17
- Limestone tester; weight of carbon dioxide in milligrams per cubic centimeter; table. C. G. Hopkins. *Ill Ag Exp C* 185:8-9 '16
- Production of carbon dioxide by molds inoculated into sterile soil. R. S. Potter and R. S. Snyder. *il Soil Sci* 5:359-77 My '18
- Relation of carbon dioxide to soil reaction as measured by the hydrogen electrode. D. R. Hoagland and L. T. Sharp. *bibliog J Ag Research* 12:139-48 Ja 21 '18
- Root variations induced by carbon dioxide gas additions to soil. H. A. Noyes and others. *il Bot Gaz* 66:364-73 O '18
- Some effects of oxygen and carbon dioxide on nitrification and ammonification in soils. J. K. Plummer. *bibliog Cornell Ag Exp B* 384:305-30 '16; Same. *Cornell Ag Exp Rep* 1917:305-30 '18
- Studies of the correlation between the production of carbon dioxide and the accumulation of ammonia by soil organisms. J. R. Neller. *bibliog il Soil Sci* 5:225-41 Mr '18

See also Soils—Carbon dioxide content

**Carbon disulfid**

- Carbon bisulphid and its use for grain fumigation. W. H. Goodwin. *il Ohio Ag Exp B v* 1:86-90 Mr '16
- Carbon disulphid as an insecticide. W. E. Hinds. *Farmers' B* 799:1-21 '17
- Horse owners warned; carbon bisulphid sold fraudulently as remedy for bots and worms. *Weekly N L* 4:5 JI 4 '17
- Notes in regard to bots. M. C. Hall. *Am Vet M Assn J* 52:177-84 N '17



**Carbon disulfid—Continued**

Relation of carbon bisulphid to soil organisms and plant growth. E. B. Fred. bibliog il J Ag Research 6:1-20 Ap 3 '16

**Carbon black.** See Lampblack

**Carbon in soils.** See Soils—Carbon content

**Carbonic acid gas**

Carbonic acid gas in relation to soil acidity changes. H. S. Noyes and L. Yoder. bibliog il Soil Sci 5:151-61 F '18

**Carbureters**

Carburetor trouble. I. W. Dickerson. Wallaces' F 43:1086 J1 26 '18

Carburetors. P. T. Hines. Country Gent 82:1123 J1 7 '17

Farm automobile: how to use and care for it; carburetors and their troubles. P. T. Hines. il Prog F 33:66 Ja 19 '18

Heart of the car. C. H. Claudy. Country Life 29:72 Ja '16

Talk on carburetors. G. P. Pearce. Country Gent 82:1196 J1 28 '17

Utilizing kerosene as engine fuel. G. W. Iversen. O Judd Farmer 62:2 Ja 13 '17

**Carcinoma.** See Cancer

**Card indexes**

Simple method of cataloguing agricultural literature suitable for the school library. il Ag Gaz of Canada 3:466-8 My '16

**Carding machinery**

Kapok carding machine. Int R Sci & Prac Ag 7,no 1:116-17 Ja '16

**Carduaceae**

Carduaceous species of puccinia; species occurring on the tribe vernoniae. H. S. Jackson. Bot Gaz 65:289-312 Ap '18

**Carduus arvensis.** See Canada thistles

**Carex.** See Sedges

**Caribou national forest**

Value of grazing management on the Caribou national forest. C. H. Shattuck. il Am For 23:536-8 S '17

**Carludovica palmata.** See Panama-hat palm

**Carnations**

American carnation society exhibition. C. W. Johnson. Am Flor 45:1357-8; 46:116 Ja 15, F 5 '16

American carnation society meeting; with list of awards. Am Flor 46:53-9 Ja 29 '16

Benching the plants. C. W. Johnson. Am Flor 47:341; 49:198 S 2 '16, Ag 18 '17

Bread-winning carnations. Am Flor 50:1154 Je 29 '18

Breeding at Arlington farms. il Am Flor 48:795 Ap 28 '17

Bringing in field plants. C. W. Johnson. Am Flor 51:254 Ag 24 '18

Care after benching. C. W. Johnson. Am Flor 49:386 S 8 '17

Care of field plants. C. W. Johnson. Am Flor 49:103 Ag 4 '17

Care of the cuttings. C. W. Johnson. Am Flor 50:626 Ap 13 '18

Care of the field plants. Am Flor 47:5 J1 22 '16

Care of the plants. C. W. Johnson. Am Flor 46:1133 Je 17 '16

Care of the plants after Christmas. C. W. Johnson. Am Flor 45:1312 Ja 8 '16

Care of the young stock. C. W. Johnson. Am Flor 46:724 Ap 22 '16

Carnation arrangements at National flower show. il Am Flor 46:579-80 Ap 8 '16

Carnation culture. W. R. Fowkes. Gard Chron Am 20:474 N '16

Carnation growing. Rural N Y 76:312 Mr 3 '17

Combination crops for the carnation house. W. C. McCollom. il Gard M 24:14-15 Ag '16

Comments on new carnations. J. T. Scott. Gard M 25:182 Ap '17

Effects of large applications of commercial fertilizers on carnations. G. D. Beal and F. W. Muncie. bibliog Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 38:2784-804 D '16

Encouraging growth of young plants. C. W. Johnson. Am Flor 47:491 S 23 '16

F. G. Strout's carnations at Biddeford, Me. il Am Flor 47:154 Ag 12 '16

Factors causing the splitting of carnation calyxes. N J Ag Exp Rep 1916:83-98 '17

General care. C. W. Johnson. Am Flor 49:984 N 24 '17

General winter routine for carnation plants. C. W. Johnson. Am Flor 47:1150 D,16 '16

Marketing carnations. W. A. Clarke. Am Flor 48:174 F 10 '17

Mid-winter care. C. W. Johnson. Am Flor 49:1359 Ja 12 '18

Mulching and general care. C. W. Johnson. Am Flor 48:508 Mr 24 '17

Mulching and propagating. C. W. Johnson. Am Flor 46:272 F 26 '16

Mulching the beds. C. W. Johnson. Am Flor 50:103 F 2 '18

Night firing and fall care. C. W. Johnson. Am Flor 47:808 N 4 '16

Overfeeding; results of heavy fertilization. Am Flor 46:724-5 Ap 22 '16

Planting in permanent quarters. C. W. Johnson. Am Flor 51:436 S 21 '18

Planting in the field. C. W. Johnson. Am Flor 50:720 Ap 27 '18

Planting out preparations. C. W. Johnson. Am Flor 48:794 Ap 28 '17

Propagating carnations. C. W. Johnson. il Am Flor 47:1336 Ja 6 '17

Rose and carnation production. F. W. Muncie. Am Flor 48:382 Mr 10 '17

Seasonable treatment. C. W. Johnson. Am Flor 49:754 O 27 '17

Summer work. C. W. Johnson. Am Flor 51:92 Ag 3 '18

See also American carnation society

**Diseases and pests**

Carnation diseases. G: L. Peltier. Am Flor 46:725-6 Ap 22 '16

Carnation yellows. E. M. R. Lamkey. Am Flor 48:508-10 Mr 24 '17

Carnation yellows. G: L. Peltier. Am Flor 46:60-1 Ja 29 '16

Floricultural pathology at Univ. of Illinois. E. M. R. Lamkey. Am Flor 48:796 Ap 28 '17

**Carob**

Algaroba, carob, or locust trees (ceratonia siliqua). T. W. Kirk. J Ag New Zealand 16:196-7 Ap '18

Algaroba tree. A. J. Ewart. J Dept Ag Victoria 15:749-50 D '17

Carob. C. W. Beers. Cal State Comm Hort B v 5:282-6 Ag '16

Carob-tree. W. J. Poynton. J Ag New Zealand 14:220 Mr '17

Carob tree in southern Italy. R. Honey. (Commerce Reports no. 202) p 792-3 (Ag 28) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Hawaiian algaroba. L. Burr. il Gleanings 45:23-6 Ja '17

**Carotin**

How silage affects color of butter. Wallaces' F 41:279 F 18 '16

Occurrence of carotin in oils and vegetables. A. H. Gill. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:612-14 Ag '18

**Carp**

Carp: a valuable food resource. (Econ. C. 31) 7p il '17 U.S. Bur. of fisheries, Washington, D.C.

Carp-breeding in transplanted rice fields: experiments at Vercelli, Italy. B. Marcarelli. Int R Sci & Prac Ag 9,no 1:91 Ja '18

Game laws and carp. T. H. Bean. Rural N Y 76:5 Ja 6 '17

**Carpenter's square.** See Square (instrument)

**Carpentry**

Christmas gifts the boys can make. Prog F 31:1379 N 25 '16

Hundred handy helps for the farmer his farm and his home. 31p il plans n.d. Southern pine assn., New Orleans, La.

**Carpet beetles**

Household and camp insects. E. P. Felt. il N Y State Museum (Albany) B 194:52-5 F '17

**Carpets**

Rag carpets. I. Stolt. il O Judd Farmer 64:28  
Ja 12 '18

See also Linoleum

**Carriages**

Carriage museum. G. E. Wentworth. Breeder's  
Gaz 72:736 O 25 '17

**Carrier pigeons.** See Pigeons**Carriers.** See Railroads; Shipping**Carrot beetles**

Studies on the life-history of ligyrus gib-  
bosus Deg. (coleoptera). W. P. Hayes. bib-  
liog il J Econ Entom 10:253-61 Ap '17

**Carrot rust flies**

Rust fly, pest of carrots and celery. J. P.  
Griffiths. Market Growers J 23:205 D 1 '18

**Carrots**

Carrots a successful field crop. E. G. Mc-  
Closkey. il Prac F 114:159 Ap 15 '18  
Carrots in England. Am Flor 46:756 Ap 22 '16  
Carrots, salsify, parsnips. Country Gent 82:  
772 Ap 21 '17

Culture of carrots. W. S. Thornber. Wash Ag  
Ext Pub Ser 1, no 12:1-4 '16

Experience with carrots; symposium. Market  
Growers J 21:209-11 N 1 '17

Experiments with carrots. Market Growers J  
19:218-19 N 1 '16

How three gardeners grow carrots. Market  
Growers J 23:110 S 15 '18

Radishes and carrots that will make you  
proud. il Country Gent 83:48 Mr 9 '18

**Diseases and pests**

Rust fly, pest of carrots and celery. J. P.  
Griffiths. Market Growers J 23:205 D 1 '18

**Seed**

Growing carrot seed. C. E. Brehm. Country  
Gent 81:1269 Je 24 '16

**Statistics**

Commercial stocks of carrots. U S Food Sur-  
veys 1:14-15 Jl 24 '18

\* Potatoes and carrots in Ontario. (In Report,  
Bur. of industries, 1917, p. 33) '18 Ontario  
ag. dept., Toronto

**Cars, Feed.** See Feed cars**Carteria laccæ.** See Lac insects**Carterville (Ill.) Jersey breeders' association**

1st co-operative bull association in Illinois.  
E. M. Clark. il Hoard's D 56:156 Ag 30 '18

**Carts**

See also Hand carts

**Carya.** See Hickory**Casa de ganaderos de Zaragoza**

New mutual live-stock insurance society. Int  
R Ag Econ 62:70-2 F '16

**Casa Grande national park**

Mesa Verde and Casa Grande national parks.  
M. Daniels. il Am For 22:139-45 Mr '16

**Case-bearers, Pecan leaf.** See Pecan leaf case-  
bearers**Casein**

Casein. W. H. Cooper. Kimball's D F 15:434  
Je 15 '17

Casein and milk sugar. N Y Prod R 41:946+  
Mr 29 '16

Casein or skims? N Y Prod R 42:1104 O 18 '16

Effect of time of digestion on the hydrolysis  
of casein in the presence of starch. J. S.  
McHargue. J Ag Research 12:1-7 Ja 7 '18

Manufacture of casein from buttermilk or  
skim milk. A. O. Dahlberg. il U S Ag B  
66:1-32 '18; Excerpts. N Y Prod R 46:50-1,  
86+, 132, 222 My 8-22, Je 5 '18

New high prices for casein. O. F. Hunziker.  
Country Gent 81:1964 N 11 '16

**Casimiroa edulis.** See Sapote, White**Cassava**

Growing cassava in Florida—its uses. Fla Ag  
Dept Quar B v 27:16-26 O '17

**Diseases and pests**

Leucopholis rorida in manioc plantations. Int  
R Sci & Prac Ag 7,no 2:315-16 F '16

**Castela**

Notes on the forms of castela galapageia. A.  
Stewart. il Am J Bot 2:279-88 Je '15

**Castleman, John Breckinridge, 1841-1918**

Life and work. por Breeder's Gaz 73:1146c My  
30 '18

**Castor bean.** See Castor-oil plant**Castor oil**

Castor oil for airplanes. E. B. Reid. il Coun-  
try Gent 83:6+ Mr 23 '18

**Castor-oil plant**

Breeding new castor beans. O. E. White. il J  
Heredity 9:195-200 My '18

Brown rot of solanaceae on ricinus. E. F.  
Smith and G. H. Godfrey. Science (Science  
Press, Garrison, N.Y. 15c) n s 48:42-3 Jl 12  
'18

Castor beans. P. H. Rolfs. Fla Ag Ext C 2:1-4  
'17

Castor-oil plant. Sci Am Sup (233 Broadway,  
N.Y. 10c) 86:47 Jl 20 '18

Castor-oil plant and its cultivation. J Dept  
Ag S Australia 22:37-9 Ag '18; Same. J Dept  
Ag Victoria 16:505-7 Ag '18

Castor-oil plant in Egypt. V. Mosseri. Int R  
Sci & Prac Ag 8,no 9:1252-3 S '17

Liberty-oil plant. R. S. Walker. il Am For  
24:612-13 O '18

Raising castor beans. Prog F 33:291 Mr 2 '18

**Diseases and pests**

Rust (uredo ricini) of the castor-oil plant in  
Morocco. G. Arnaud. Int R Sci & Prac Ag  
8,no 12:1291-2 D '17

**Castor oil plant, False.** See Jimson weed**Castration**

Castration and docking. (In Appendix to re-  
port, Live stock branch, 1917, p. 30-3) '17  
Ontario ag. dept., Toronto

Dehorning and castrating cattle. F. W. Far-  
ley. il plans Farmers' B 949:1-13 '18

Some surgical suggestions. A. S. Alexander.  
Am Sheep B & W 38:274 Ap '18

Suppurating and schirrous cord. C. A. Cary.  
Am Vet M Assn J 51:767-71 S '17

**Cat.** See Cats**Cat-tail millet.** See Pearl millet**Cat-tails.** See Typha**Catabolism.** See Metabolism**Catalase**

Catalase activity of American wheat flours.  
C. H. Bailey. Int R Sci & Prac Ag 9,no 4:  
502-3 Ap '18

Catalase and oxidase content of seeds in rela-  
tion to their dormancy, age, vitality, and  
respiration. W. Crocker and G. T. Harring-  
ton. bibliog J Ag Research 15:137-74 O 21 '18

Relation between oxidase and catalase in  
plant tissues. G. B. Reed. Bot Gaz 62:409-12  
N '16

Relation of catalase and oxidases to respi-  
ration in plants (B. 191). C. O. Appleman.  
bibliog Md Ag Exp Rep 1915-1916:1-16 '16;

Same cond. Am J Bot 3:223-33 My '16

Respiration and catalase activity in sweet  
corn. C. O. Appleman. Am J Bot 5:207-9  
Ap '18

Role of catalase in acidosis. W. E. Burge.  
Science (Science Press, Garrison, N.Y. 15c)  
n s 47:347-8 Ap 5 '18

Separation of oxidase reactions from the cata-  
lase reaction. G. B. Reed. Bot Gaz 62:303-10  
O '16

See also Enzymes

**Cataloes**

Cattalo herd established. Ag Gaz of Canada  
3:208-9 Mr '16

**Catalogs, Seed and plant**

Annual catalogue of plant immigrants; many  
additions to our food plants. D: Fairchild. il  
J Heredity 8:500-8 N '17

Eighteenth-century Durham catalogue. W.  
Roberts. Gard Chron (Lond) 62:135 O 6 '17

Improvement in seed catalogues. C. E. Myers.  
Market Growers J 18:170 Mr 1 '16

Some old seed and plant catalogues. W. Rob-  
erts. Gard Chron (Lond) 60:299, 309 D 23-30  
'16



**Catalogs, Trade**

- Catalogs that increase farm mail-order business. M. F. Delano; P. H. Hofius. *il System on the Farm* 1:105-7 My '17  
My most successful sale catalog. J. L. Barber. *il System on the Farm* 2:175-6 My '18  
Sale catalogs that have broken records. *il System on the Farm* 3:180 N '18

**Catalows. See Cataloes**

**Catalpa**

- Catalpa in London. *Gard Chron (Lond)* 64:3 J1 6 '18  
Catalpa in London. A. D. Webster. *il Gard Chron (Lond)* 60:162 S 30 '16  
Catalpa speciosa. O. A. Vent. *il Nat Stock & F* 41:79 Ap 14 '17  
Catalpas. *Am Flor* 49:1198 D 15 '17

**Diseases and pests**

*See also Catalpa sphinx*

**Catalpa sphinx**

- Catalpa sphinx. L. O. Howard and F. H. Chittenden. *il map Farmers' B* 705:1-9 '16

**Catbirds**

- Catbird. E. S. Jones. *il Ohio F* 139:178 F 3 '17

**Catch-as-catch**

- cannery; story. F. Tilden. *il Country Gent* 82:1868-9+ D 1 '17

**Catch crops**

- Catch crops. H. A. Bereman. *Country Gent* 81:1227 Je 17 '16  
Catch hay crops. F. E. Robbins. *il Purdue Ag* 10:19-20 Je '16  
Chemical fertilizers and intensive cropping. *il Country Gent* 81:1162 Je 3 '16  
Field and garden catch crops; our experience pool. *Prac F* 114:209 Je 1 '18  
Intercropping. *Country Gent* 81:1198 Je 10 '16  
Intercropping and catch cropping in Belgium. *J Bd Ag* 24:646-9 S '17  
New England companion crops. E. I. Farrington. *il Country Gent* 81:1030 My 13 '16  
Quick money for tiding over. A. W. Brayton. *Fruit-Grower* 27:102 F 1 '16

**Caterpillars**

- False tussock caterpillars on shade trees. J. M. Swaine. *Ag Gaz of Canada* 4:1043-7 D '17

- Frozen caterpillars that thaw out. *Scientific Am* (233 Broadway, N.Y. 10c) 116:48 Ja 6 '17

- Sign language of the caterpillar. E. M. Patch. *il Country Life* 33:92 Ja '18

- Some important tree caterpillars. W. A. Radspinner. *Purdue Ag* 12:566 Je '18

- See also Alfalfa caterpillars; Antler moths; Army worms; Aspen tortrix; Brown-tail moths; Codling moths; Eight-spotted foresters (insects); Gipsy moths; New Mexico range caterpillars; Spiny elm caterpillars; Tent caterpillars; Velvet bean caterpillars; Walnut datana; White-marked tussock moths; Yellow-necked apple caterpillars; Zebra caterpillars*

**Catharinea**

- Four-lobed spore mother cells in catharinea. C. E. Allen. *il Am J Bot* 3:456-60 O '16

**Catholic agricultural confederation of old Castile and Leon**

- Foundation of the Catholic agricultural confederation of old Castile and Leon. *Int R Ag Econ* 62:43-4 F '16

**Catholic social federation of Navarre**

- Work of the Catholic social federation of Navarre in 1914-15. *Int R Ag Econ* 62:45-7 F '16

**Cato, Marcus Porcius**

- Upon Cato and the Latin agronomes. *Rural Manhood* 8:340-1 O '17

**Cats**

- Ancestry of the cat. *il J Heredity* 8:397-9 S '17

- Cat raising for farm women. *Rural N Y* 76:708 My 19 '17

- Cats and dogs. E. O. Kaserman. *Breeder's Gaz* 72:1290 D 27 '17

- Color inheritance in mammals. S. Wright. *J Heredity* 9:130-44 Mr '18

- Domestic cat, bird killer, mouser, and destroyer of wild life; means of utilizing and controlling it. E. H. Forbush. *il Mass Ag Bd Econ Biol Bul* 2:1-112 '16  
When pussy has a fit. *Country Life* 33:118 Ap '18

**Cats-tails. See Cattails**

**Cattails. See Typha**

**Cataloes. See Cataloes**

**Cattle**

- Agricultural somersault. H. S. Stabler. *il Country Gent* 82:1550-1+ O 13 '17

- Bad for cattle feeders. J. R. Brown. *O Judd Farmer* 64:19 Mr 2 '18

- Bank's agricultural agent campaigns against scrub cattle. E. B. Keeley. *Banker-F* 3:7 J1 '16

- Beef credit makes good. *Ag Digest* 2:913 Ap '18

- Beef, dairy or dual purpose cattle—which? H. Barton. *J Ag (Quebec)* 21:137 Mr '18

- Bible and cattle; milk and butter. G. B. Harper. *Jersey B* 37:113 Ja 23 '18

- Bull-dog cattle; niata breed. *il J Heredity* 7:263-5 Je '16

- Care and management of the dairy herd. R. S. Hulce and W. B. Nevens. *il Ill Ag Exp C* 204:1-29 '17

- Care of dairy cattle. C. H. Staples. *Jersey B* 37:1157-8 J1 24 '18

- Cattle and dairying. (*In Geography of the world's agriculture*, p. 117-29) maps '17 U S Ag

- Cattle situation. C. H. Herr. *Ohio F* 140:166 S 1 '17

- Cows for milk and beef. Wallaces' *F* 42:115 Ja 25 '18

- Credit conditions in the cattle loan business, by F. T. Ramson. *Nat Assn Credit Men B* (103 Main st., Cooperstown, N.Y.) 17:953-6, 963-7 O '17

- Culling out the herd. *J Ag (Quebec)* 20:115 N '16

- Dairy cattle. H. H. Kildee. *Ia Ag Coll Offic Pub v* 14,no 36:48+55 '16

- Dairy cattle. A. Leitch and others. *il plans Ontario Ag Dept B* 253:1-71 '17

- Dairy cattle. C. A. Norcross. *il Nev Ag Ext B* 1:1-20 '16

- Dairy herd. H. H. Wing. *il Cornell Reading Course* 116:26-44 '16

- Dual-purpose and beef cattle. C. A. Norcross. *il Nev Ag Ext B* 3:1-19 '16

- Efficiency in meat production of beef and dairy cattle. *il Hoard's D* 54:209+ S 14 '17

- Europe will ask us for dairy cattle. E. W. Simons. *Jersey B* 37:1160 J1 24 '18

- Facts a young breeder should know. G. Campbell. *Jersey B* 36:1289 Ag 22 '17

- Financing the cow keeper. *Country Gent* 82:805 Ap 28 '17

- First steps with purebreds. L. L. Rummell. *Ohio F* 142:375 O 19 '18

- Good grade cattle for market. J. A. Rickart. *Country Gent* 81:810 Ap 8 '16

- How bankers have cooperated to loan farmers money to buy cattle. *Banker-F* 4:10-11 My '17

- How eleven banks cooperate to bring better cows and bigger milk checks. H. I. Wood. *il Banker-F* 4:6-7 Ja '17; Same cond. *Ag Digest* 1:295-6 F '17

- How to borrow money to buy cattle. *Ag Digest* 1:214-15 D '16

- How to debauch cattle. G. S. Templeton. *il Prog F* 31:74 Ja 15 '16

- How to succeed with hogs and cattle. *Prog F* 33:512, 536, 558, 592, 618, 640, 667, 688, 712, 732, 752, 770, 791, 816, 838-9, 860, 886, 910, 932, 956, 980, 1006, 1030, 1054, 1078, 1131, 1166, 1222, 1258, 1286, 1310, 1348, 1372 Ap 20-O 5, 19-D 14 '18

- How Wisconsin bankers loan money to farmers to buy cattle. R. Baker. *Banker-F* 3:10 N '16; Same. *Kimball's D F* 15:186 Mr 15 '17

- Naming pure-bred cattle. R. Wylie. *Hoard's D* 53:239 Mr 2 '17

- Naming the pure-bred. E. A. Grombacher. *Jersey B* 36:1473-4 S 26 '17

- Open-air system of herd management. F. Pabst. *Breeder's Gaz* 69:488 Mr 2 '16

**Cattle—Continued**

Origin of domesticated cattle. Hoard's D 54: 692 D 7 '17

Passing of the longhorn. *il* Literary Digest (354 4th av., N.Y. 10c) 54:702 Mr 17 '17

Pure-bred or just cows? Mrs C. C. Boyd. *Prac F* 113:118 Mr 15 '17

Relation between the external body measurements, the live weight and the net weight on the one hand, and the weight of the heart and the lungs on the other hand, in cattle of the Schwytz and Parmesan breeds. D. Brentana. *Int R Sci & Prac Ag* 8,no 7: 1014-16 Jl '17

Starting a dairy herd. V. L. Stuewe. Hoard's D 51:283 Mr 10 '16

Uncle Sam furnished the creamery—but a banker produced the cows. *il* Banker-F 4: 12 Ja '17

*See also* Buffaloes; Bulls; Calves; Cattle; Cows; Dairying; Horns; Insurance; Live stock; Live stock; Oxen; Zebus; also headings beginning Cattle

**Branding**

Dehorning and branding chute. W. C. Barnes. *il* Breeder's Gaz 71:63 Ja 11 '17

Identification of dairy cattle. Wallaces' F 42: 1355 O 5 '17

Popular cattle brands. *Country Gent* 81:111 Ja 15 '16

**Breeds**

Adaptability of breeds. E. N. Wentworth. *il* Field 11 26:501-3+ Je '16

Adaptability of cattle breeds. J. H. McKenney. *Ohio F* 140:370 O 27 '17

Ayrshires and shorthorns as dual-purpose cattle. *Ohio F* 137:256 F 19 '16

Breed rivalries years ago. W. C. McGavock. *Breeder's Gaz* 73:652 Mr 28 '18

Breeds of dairy cattle. Wallaces' F 42:1467 O 26 '17

Breeds of dairy cattle. H. P. Davis. *il* Farmers' B 893:1-34 '17

Breeds of dairy cattle. F. A. Pearson. *J Ag* (Quebec) 20:v Ja '17; Same. (*In* De Laval dairy hand book, p. 59-62) *il* '16 De Laval separator co., New York

Choice of a breed. Hoard's D 50:822 Ja 14 '16

Choice of breeds. G. L. Ogle. *Fruit-Grower* 27: 24 Ja 1 '16

Comparison of beef breeds. M. B. Kroft. *Purdue Ag* 12:23 O '17

Comparison of dairy breeds. L. J. Belknap. *Kimball's D F* 14:126 F 15 '16

Dairy breed comparisons. H. McAlister. *Kimball's D F* 13:814; 14:17-18 Ja 1-15 '16

Dairy breed statistics in the United States. *Int R Sci & Prac Ag* 7,no 2:251 F '16

Dexter and Kerry cattle. C. S. Plumb. *il* Hoard's D 53:884 Je 22 '17

Dual-purpose breeds of cattle. Wallaces' F 42:1499 N 2 '17

Dual-purpose cattle. Wallaces' F 43:1649 N 8 '18

Dual-purpose cows again. A. L. Madsen. Hoard's D 51:666 My 12 '16

Dual-purpose dairy situation. H. S. Kelley. *Ohio F* 137:534 Ap 8 '16

Fitting breeds to environment. B. F. Vanmeter. *Breeder's Gaz* 72:492 S 27 '17

Further details of the Ohio test. R. I. Grady. *Jersey B* 37:7 Ja 2 '18

Highest testing breed pays best. *Jersey B* 35: 428 Mr 22 '16

Holstein enthusiast compares breeds. E. G. Johnson. Hoard's D 53:684 My 11 '17

Holsteins and Jerseys. H. McAlister. *Breeder's Gaz* 69:960 My 4 '16

Jersey camp returns the fire. H. F. Probert. *Breeder's Gaz* 69:176 Ja 27 '16

Kerry and Dexter cattle. A. H. Kolbe. Hoard's D 53:263 Mr 2 '17

More comparisons. H. McAlister. *Kimball's D F* 14:235 Ap 1 '16

Native homes of dairy breeds. J. Marsh. *Ohio F* 138:304 S 30 '16

Origin of the beef breeds. Wallaces' F 42: 1568 N 16 '17

Progress of the dairy breeds; advances made in 1916 by the four leading American breeds of dairy cows. W. H. Caldwell and others. *Field* 11 26:835-6 O '16; Same cond. *Int R Sci & Prac Ag* 8,no 1:109-11 Ja '17

Question of breeds. W. S. Tomlinson. *Ohio F* 137:299 F 26 '16

Relative efficiency of the breeds. C. H. Eckles. Hoard's D 52:573 N 17 '16

Selection of a breed. *Purdue Ag* 11:32-3 My '17

Some of the characteristics of the beef breeds. T. Butler. *Prog F* 33:910 Ag 17 '18

Some of the characteristics of the different breeds of dairy cattle. T. Butler. *Prog F* 33: 536 Ap 27 '18

Statistics of Jerseys, Holsteins, and Guernseys. H. McAlister. Hoard's D 53:771 My 25 '17

Swiss cattle. C. S. Plumb. *il* *Country Gent* 81:686 Mr 25 '16

Ten highest record cows. J. F. Hudson. *Ohio F* 137:383 Mr 11 '16

Trademarks of breed. J. H. McKenney. *Prac F* 113:187 My 1 '17

What breed of cows? L. W. Lighty. *Nat Stock & F* 41:112 Ap 21 '17

Where our cattle originated. *map* *Field* 11 27: 102 F '17

Which cattle for milk and beef? W. A. Martin. *Ohio F* 140:531 D 8 '17

*See also* names of breeds, e.g. Aberdeen Angus cattle; Ayrshires; Brown Swiss cattle; Galloway cattle; Guernseys; Herefords; Holstein-Friesian cattle; Jerseys; Polled Durhams; Red polled cattle; Shorthorns

**Diseases and pests**

Advantages of sanitary precautions in cattle practice. J. F. De Vine. *Am Vet M Assn J* 50:23-8 O '16

Anaphylaxis in cattle and sheep, produced by the larvae of hypodermis bovis, h. lineatum and oestrus ovis; with discussion. S. Hadwen and E. A. Bruce. *il* *Am Vet M Assn J* 51:15-44 Ap '17

Black-leg. W. H. Dalrymple. *Kimball's D F* 14:279 Ap 15 '16

Bloat or hoven. Hoard's D 53:898 Je 22 '17

Bovine hematuria. S. Hadwen. *Am Vet M Assn J* 51:822-30 S '17

Bracken poisoning in cattle. *Ag Gaz of New South Wales* 29:665-6 S '18

Brisket disease. G. H. Clover and I. E. Newson. *Colo Ag Exp B* 229:1-8 '17

Cattle lice and how to eradicate them. M. Innes. *il* *Farmers' B* 909:1-26 '18

Cattle mange. J. C. Hargrave. *Ag Gaz of Canada* 4:860-2 O '17

Clover bloat. *Kimball's D F* 14:436 Jl 1 '16

Common ailments and diseases. *Ontario Ag Dept B* 253:51-8 '17

Common contagious cattle diseases and methods of dealing with them. R. Branford. *Ag J of India* 13:639-52 O '18

Common diseases of the digestive organs of horses and cattle. J. H. Reed. *Ontario Ag Dept B* 264:1-38 '18

Control and prevention of infectious diseases of cattle. E. C. Schroeder. *Int Assn Dairy & Milk Inspep Rep* 1916:167-80

Digestive diseases of the ox; choking. J. K. Reed. *Prac F* 112:4+ Ja 1 '16

Digestive diseases of the ox; colic. *Prac F* 112:31 Ja 15 '16

Digestive diseases of the ox; diarrhoea. *Prac F* 112:57 F 1 '16

Digestive diseases of the ox; dysentery. *Prac F* 112:sup6 F 15 '16

Digestive diseases of the ox; enteritis. *Prac F* 112:sup4 Mr 1 '16

Diseases in cattle in the Philippine islands similar to anaplasma marginale. Theiler. W. H. Boynton. *il* *Philippine Ag R* 10,no 2: 119-27 '17

Diseases of cattle. *N H Ag Dept Rep v* 34:111-15 '16

Few veterinary medical suggestions. M. Jacob. *Jersey B* 36:1253 Ag 15 '17

First aid in the dairy cow stable. I. E. Boye. *Prac F* 112:430 N 15 '16

Fly protection for the herd. W. E. Wiecking. *il* *Country Life* 30:46 Jl '16



**Cattle—Diseases and pests—Continued**

- Health of the herd. D: Roberts. Kimball's D F 14:156 Mr 1 '16
- Hemorrhagic septicaemia. A. T. Kinsley; D. F. Luckey. Mo Ag Bd Yearbook 1916:462-5
- Hemorrhagic septicaemia of cattle. A. E. Moore. Ag Gaz of Canada 4:764-6 S '17
- Infectious keratitis and conjunctivitis in cattle. C. A. Cary. Jersey B 36:1497 S 26 '17
- Intestinal coccidiosis. W. J. Lentz. Am Vet M Assn J 54:155-6 N '18
- Intestinal intussusception in cattle. J. K. Bosshart. Am Vet M Assn J 51:704-6 Ag '17
- Keeping the beef herd healthy. T. Butler. Prog F 33:1348 D 7 '18
- Keratitis infectiosa in cattle (keratitis pyobacillosa). J. Poels. Am Vet M Assn J 51:526-31 J1 '17
- Lumpy jaw or actinomycosis. Wallaces' F 41:26 Ja 7 '16
- Mortality of dairy cows in the Hamilton district, Victoria, by E. W. Murphy; Osteomalacia, or creeps, in cattle, by V. T. Atkinson. (B. 70) p 2-6 '17 Tasmania ag. and stock dept., Tasmania, Australia
- Mysterious losses among cattle in the Pacific Northwest. C. H. Schultz. Am Vet M Assn J 53:711-32 S '18
- Notes on a fatal parasitic infestation in a herd of cattle and goats in the province of Ambos Camarines. W: H. Boynton and L. D. Wharton. Il Philippine Ag R 9,no 4:348-53 '16
- Occurrence of coccidioid granuloma (oidiomycosis) in cattle. L. T. Giltner. bibliog il J Ag Research 14:533-41 S 16 '18
- Pink-eye in cattle. Prog F 33:927 Ag 24 '18
- Preliminary notes on the use of repellents for horn flies and stable flies on cattle. A. W. Baker. (In Report, Entomological soc. of Ontario, 1916, p. 52-6) '17 Ontario ag. dept., Toronto
- Protection of dairy cattle from flies. E. N. Cory. J Econ Entom 10:111-13 F '17
- Rains cause clover bloat. D. F. Luckey. O Judd Farmer 61:8 J1 8 '16
- Range sanitation. G. W. Barnes. Il Ariz Ag Ext C 6:1-11 '16
- Red water or bloody urine in cattle. J. W. Kalkus. Western Wash Ag Exp B v 5:127-9 D '17
- Report of committee on bovine diseases—their relation to the milk supply and to the public health. H. Young and others. Int Assn Dairy & Milk Inspec Rep 1915:40-3
- Scabies cattle act. C. L. Rein. Neb Ag Bd B 245:335-7 '18
- Some common diseases of dairy cattle. Purdue Ag 11:33-4 My '17
- Studies of an obscure cattle disease in western Nevada; with discussion. W. B. Mack and E. Records. Am Vet M Assn J 52:143-55 N '17
- Studies to diagnose a fatal disease of cattle in the mountainous regions of California; with discussion. K. F. Meyer. Am Vet M Assn J 48:552-65 F '16
- Tutu poisoning in cattle. A. R. Young. J Ag New Zealand 15:307-8 D '17
- Vaccinations against hemorrhagic septicaemia. J. B. Hardenbergh and F: Boerner, jr. Am Vet M Assn J 49:55-9; 50:868-76 Ap '16, Mr '17
- Vesicular stomatitis of horses and cattle. J: R. Mohler. Il U S Ag B 662:1-10 '18; Same. Am Vet M Assn J 52:410-22 Ja '18
- Why diseases spread. E. G. Hastings. Country Gent 82:376 F 24 '17
- Worm nodules in cattle. (B. 2) 31p '17 Advisory council of science and industry, Melbourne, Australia
- See also Abortion, Infectious; Cattle ticks; Foot-and-mouth disease; Rinderpest; Texas fever; Tuberculin test; Tuberculosis in cattle; Warble flies

**Feeding**

- Accuracy and economy in feeding. C. M. Gallup. Il Country Life 33:80b D '17
- Acorns and beechnuts as food for cattle. Int R Sci & Prac Ag 9,no 1:77-8 Ja '18
- Another steer feeding story. Rural N Y 77:1231 N 2 '18

- Arkansas experiment. C. O. Carpenter. Prog F 31:1063 S 2 '16
- Associative digestibility of corn silage and cottonseed meal in steer rations; pt 2. P. V. Ewing and others. Il Ga Ag Exp B 125:151-64 '17
- Basal katabolism of cattle and other species. H: P. Armsby and others. bibliog J Ag Research 13:43-57 Ap 1 '18; Abstract. Int R Sci & Prac Ag 9,no 5:584-7 My '18
- Beef from silage. Country Gent 82:1256 Ag 11 '17
- Beef from waste. H. L. Cole. Country Gent 81:633 Mr 18 '16
- Cattle feeders' day. Nat Stock & F 40:119 Ap 22 '16
- Cattle feeding. Wallaces' F 43:1569 O 25 '18
- Cattle feeding. J. Weil. Il Ky Ag Dept Rep 1916-1917:344-6 '18
- Cattle feeding experience. A. L. Ames. Wallaces' F 43:400 Mr 1 '18
- Cattle feeding in the corn belt. Il Purdue Ag 11:22-3 F '17
- Cattle feeding in the corn belt. J: G. Imboden. Il Breeder's Gaz 69:301-2 F 10 '16
- Cattle feeding in the Lancaster district. Breeder's Gaz 73:156 Ja 24 '18
- Cattle feeding; oat and pea silage for beef cows; oat and pea silage for growing cattle. A. D. Faville. Wyo Ag Exp B 117:55-64 '17
- Cattle feeding suggestions. G: L. Hyslop. Ohio F 140:478 N 24 '17
- Cattle feeding; winter steer feeding, 1916-1917. J. H. Skinner and F. G. King. Il Ind Ag Exp B 206:1-27 '17
- Cattle feeds wasted. Am Coop J 11:1240 Ag '16
- Cheap beef out of roughage. Il Wallaces' F 42:563 Mr 30 '17
- Chief factors in profitable cattle feeding. J: G. Imboden. Breeder's Gaz 69:865 Ap 20 '16
- Corn silage and velvet beans found to be good feed for fattening cattle. Weekly N L 6:6 S 11 '18
- Corn silage for beef production. G. Gusler. Il Field 11 27:930-1 D '17
- Corn silage in rations for fattening steers. H. O. Allison. Il Mo Ag Exp B 150:1-24 '17
- Cottonseed meal compared with velvet beans for fattening steers. G. S. Templeton and E. Gibbens. Il Ala Ag Exp B 192:135-41 '16
- Dairy cattle feeding. J. A. Waldron. Mich Ag Ext Course Notes no 10:1-16 '16
- Dairy feeds for winter. Jersey B 36:1915 D 5 '17
- Department of agriculture advises against heavy feeding of beef cattle. Weekly N L 5:4 J1 10 '18; Same. Nat Wool Grower 8:54 J1 '18
- Digestibility of corn silage, velvet-bean meal, and alfalfa hay when fed singly and in combinations. P. V. Ewing and F. H. Smith. J Ag Research 13:611-18 Je 17 '18
- Dry roughage and its relation to beef production. A. L. French. Prog F 33:1194 N 2 '18
- Dry roughage for dairy cattle. T. Butler. Prog F 33:752 Je 29 '18
- Economical feeding. Kimball's D F 15:554 Ag 15 '17
- Economical winter feeding of beef cows in the corn belt. J. S. Cotton and E. H. Thompson. U S Ag B 615:1-16 '17; Same. Neb Ag Bd B 245:358-70 '18
- Emergency cow feeds. H. K. Gayle. Miss Ag Exp B 181:1-6 '17
- Energy values of hominy feed and maize meal for cattle. H: P. Armsby and J. A. Fries. bibliog J Ag Research 10:599-613 S 17 '17
- Failure in feeding. S: Sosland. Country Gent 81:687 Mr 25 '16
- Fattening cattle in Alabama. D. T. Gray and W. F. Ward. map U S Ag B 110:1-41 '14
- Fattening two-year-olds. C: F. Salt. Country Gent 82:1040 Je 16 '17
- Fattening young beef. Il Va Ag Dept B 109:59-63 '16
- Feed for 1,000-pound steers. T. Butler. Prog F 33:1047 S 28 '18
- Feed range cattle; heavy losses in breeding cows unless feeding is begun at once. Weekly N L 4:1 F 28 '17
- Feeder of champion beeves. W. L. Nelson. Il Country Gent 82:993 Je 9 '17

**Cattle—Feeding—Continued**

Feeding a balanced ration. See weekly numbers of Rural New-Yorker

Feeding and housing beef cattle. G: L. Hyslop, il Hoard's D 51:194 F 25 '16

Feeding and line breeding for the future. L. S. Gillette, il Jersey B 37:805 My 22 '18

Feeding baby beeves. J. C. Burns, il Tex Ag Exp B 198:1-21 '16

Feeding beef calves for growth. A. M. Soule, Breeder's Gaz 69:428 F 24 '16

Feeding beef cattle for market. I. W. Carpenter, il Miss Ag Ext C 9:1-11 '16

Feeding calves or making baby beef. I. W. Carpenter, Prog F 32:736 Je 30 '17

Feeding cattle and lambs in Colorado. Breeder's Gaz 73:107 Ja 17 '18

Feeding coconut cake on grass. K. J. J. Mackenzie and E. H. Powell, J Bd Ag 23:117-23 My '16

Feeding dairy cattle. C. A. Willson, Jersey B 36:1143 Jl 25 '17

Feeding dollars to fat cattle. M. R. Myers, Am Coop J 12:223-4 N '16

Feeding for beef in Alberta. G. H. Hutton and W. H. Fairfield, 38p il '16 Canada Ag

Feeding market-topping cattle. il O Judd Farmer 62:1+ F 24 '17

Feeding range steers. L. Foster and H. H. Simpson, il N M Ag Exp B 101:1-24 '16

Feeding steers as a means of increasing crop production. A. B. Puterbaugh, il System on the Farm 1:219-22 Ag '17

Feeding value of bhusa and straw. O. T. Faulkner, Ag J of India 12:308-10 Ap '17

Feeding velvet beans to cattle. L. A. Niven, Hoard's D 56:418 O 18 '18

Feeds influence milk. W. H. Underwood, Jersey B 37:1558 S 25 '18

Field investigations of forage poisoning in cattle and horses. H. P. Rusk and H. S. Grindley, il Ill Ag Exp B 210:163-76 '18

Grains or concentrates and their place in beef production. A. L. French, Prog F 33:1222 N 9 '18

Has undue emphasis been laid upon protein. N Y Ag Dept B 86:2336-44 Ag '16

Hay-fed steer. E. L. Potter, Breeder's Gaz 71:328 F 15 '17

Heavy silage and ground corn rations are most profitable. il Field 11 27:471 Je '17

Heavy silage feeding in fattening cattle. H. O. Allison, Breeder's Gaz 69:1068 My 18 '16

High priced feeds causing tuberculosis? J. M. W. Kitchen, Jersey B 36:1907 D 5 '17

Hogs vs. steers. J. J. Imboden, Breeder's Gaz 72:670 O 18 '17

How are you going to feed? J. M. Carroll, O Judd Farmer 65:275 O 5 '18

How Hall wins championships. O Judd Farmer 63:4 D 22 '17

How the champions were fed; inside history of winners at International. O Judd Farmer 61:3 D 30 '16

How to feed fattening beef cattle in the South. A. L. French, Prog F 33:1286 N 23 '18

Indiana cattle feeders' meeting. Ohio F 141:590 Ap 27 '18

Influence of environment and breeding. il Ohio F 138:173 Ag 26 '16

Influence of phosphates on the feeding of cattle. M. Piccinini, Int R Sci & Prac Ag 7, no 10:1470-1 O '16

Influence of the degree of fatness of cattle upon their utilization of feed. H: P. Armsby and J. A. Fries, il J Ag Research 11:451-72 D 3 '17

Instinctive choice of food and water by stock. E. W. Murphy, J Dept Ag Victoria 16:55-6 Ja '18

Keeping records on 23 steers. C. A. Bruer, O Judd Farmer 61:5 Ag 19 '16

Latest steer feeding experiment shows interesting results. Pa Ag Ext B v 3 4p Je '16

Maintenance of a beef breeding herd. il Pa Ag Exp B 147:10-13 '17

Maize silage and alfalfa hay for beef production. R. K. Bliss and C. B. Lee, Int R Sci & Prac Ag 7, no 5:706-10 My '16

Make beef on minimum of corn. O Judd Farmer 62:5 Ap 7 '17

Making beef from less grain. Country Gent 83:28 Ap 13 '18

Making sure of a sufficient margin of profit. W: R. Butler, System on the Farm 3:45-6 Ag '18

Management of dairy herds; feeding dairy cattle. E. V. Ellington, Idaho Ag Exp B 102:17-26 '17

Market-topping grass-fat steers. J. L. Torrey, Country Gent 82:1797 N 17 '17

Methods and results in a cornbelt feed lot. J. G. Imboden, Breeder's Gaz 70:1019-20 N 30 '16

Mineral matter and abortion. A. T. Peters, Kimball's D F 16:389 My 15 '18

Missouri cattle feeder's methods and results. W. L. Nelson, il Breeder's Gaz 69:1323 Je 29 '16

Missouri cattle feeding tests. Ohio F 137:839 Je 24 '16

Modern cattle feeding methods. J: J. Lawler, il Breeder's Gaz 70:1197 D 21 '16

More beef from South. Weekly N L 4:2 Jl 18 '17

Net energy values for ruminants. H: P. Armsby and J. A. Fries, Pa Ag Exp B 142:1-20 '16

Net energy values of feeding stuffs for cattle. H: P. Armsby and J. A. Fries, bibliog J Ag Research 3:435-91 Mr '15

Nutrition. Ontario Ag Dept B 253:12-34 '17

Our method of cattle feeding. S. B. Stowe, Ohio F 140:287 O 6 '17

Penn'a state college cattle. Nat Stock & F 42:101 Ap 20 '18

Pennsylvania cattle feeding. Ohio F 137:626 Ap 29 '16

Pennsylvania cattle feeding test. W. H. Tomhave, Prac F 112:203 My 1 '16

Pennsylvania steer feeding experiments. Wallaces' F 43:790 My 10 '18

Pennsylvania steer feeding experiments. P. Gerlaugh, Breeder's Gaz 70:88 Jl 20 '16

Preliminary report on steer feeding experiments, 1914-1915 and 1916-1917. G. E. Martin and T. E. Leiper, Colo Ag Exp Information B 8p '18

Preparation of corn for fattening steers. H. O. Allison, il Mo Ag Exp B 149:1-35 '17

Profit from cheap feeds. A. Boss, Breeder's Gaz 71:824 Ap 19 '17; Same cond. Ag Digest 2:2491 Je '17; Same cond. Ag Digest 2:569-70 Ag '17

Profits in steer-feeding. D. D. Casement, Breeder's Gaz 72:142 Ag 2 '17

Purchase of feed for dairy cattle. E. S. Savage, Cornell Countryman 15:19-21 O '17

Report of Sioux City stock yards cattle and hog feeding demonstration. Coop Manager & F 7:88-9 D '17

Results of steer feeding with silage. W. H. Tomhave, Prac F 114:182 My 1 '18

Selecting a feed for beef cattle. E. Butler, Prog F 32:1352 D 29 '17

Seven plans for keeping up with the rising cost of cattle feeding. F. H. Higgins, chart map System on the Farm 1:74-6 Ap '17

Shall the farmer buy feed or sell his cows? M. Michels, Jersey B 37:639 Ap 24 '18

Sheep on cattle range. Nat Wool Grower 8:51 My '18

Short feed on yearling steers. D. Casement, Breeder's Gaz 71:672 Mr 29 '17

Silage and alfalfa make master feeders. L. Ogilvy, Breeder's Gaz 74:116 Jl 25 '18

Silage as a factor in beef production. W. H. Tomhave, Am Soc Animal Production Pro 1915-1916:158-64 '17; Same cond. Prac F 113:61 F 1 '17

Silage for beef cattle. A. L. French, Prog F 33:1166 O 26 '18

Silage for beef-makers. C. G. Starr, Breeder's Gaz 72:374 S 13 '17

Silage for dairy cattle. S. P. Wild, Breeder's Gaz 71:1158 Je 7 '17

Silage for fattening cattle. B. E. Carmichael, Ohio Ag Exp B v 2:225-6 Jl '17

Silage in beef production. W. H. Tomhave, Nat Stock & F 42:222 My 25 '18

Silages for fattening steers. H. K. Gayle and E. R. Lloyd, Miss Ag Exp B 182:1-15 '17



**Cattle—Feeding—Continued**

Some experimental results in wintering beef cattle; with suggestions for the utilization of cheap roughages. E. W. Sheets. W Va Ag Dept B 30:23-8 '17

Some steer-feeding inquiries. Prog F 33:63 Ja 19 '18

Soy-bean-meal beef. G. H. Day. Country Gent 81:1131 My 27 '16

Steer feeding. P. Gerlaugh. Penn State F 9: 314-15 F '16

Steer feeding experiments. W. H. Tomhave and others. Pa Ag Exp B 145:1-20 '17; Summary. Breeder's Gaz 71:919 My 3 '17; Summary. Ohio F 139:639 My 5 '17

Steer feeding for amateur and expert. W. H. Tomhave. Prac F 113:277 Ag 1 '17

Steer-feeding problems. Wallaces' F 43:1792 D 6 '18

Steers with less grain make more gain. L. G. Hood. Breeder's Gaz 71:722 Ap 5 '17

Stockyards sales prove silage best. Prac F 113:187 My 1 '17

Straw as feed. F. G. King. il Country Gent 82:371 My 12 '17

Studies on the residual effect of the winter feeding of corn silage on the ability of steers to gain on pasture. E. S. Good. Am Soc Animal Production Pro 1915-1916:193-6 '17

Study of steer fattening. Ag Digest 1:341 Mr '17

Study of the physical changes in feed residues which take place in cattle during digestion. P. V. Ewing and L. H. Wright. J Ag Research 13:639-46 Je 17 '18

Study of the rate and economy of gains of fattening steers. H. W. Mumford and others. Ill Ag Exp B 197:567-604 '17

Suggestions to steer feeders. I. W. Carpenter. Prog F 32:1246 N 24 '17

Summer handling of the breeding herd. W. E. Wiecking. Hoard's D 51:943 Jl 7 '16

Table of relative values of some concentrated cattle foods. O. T. Faulkner. Ag J of India 12:126-31 Ja '17

Texas method feeding cattle. G. O. Creswell. O Judd Farmer 60:8 Mr 11 '16

Treatment of pastures; prevention of rickets, cripples, and paralysis. E. W. Murphy. il J Dept Ag Victoria 15:449-56 Ag '17

Turning grass and forage into beef. N. S. Schein. O Judd Farmer 60:5 F 12 '16

Two cattle-feeding tests. Breeder's Gaz 71: 1014 My 17 '17

Utilization of feed by range steers of different ages; alfalfa hay and milo maize meal. F. W. Christensen and others. il N M Ag Exp B 103:1-117 '16

Utilization of grain sorghums in meat production. W. A. Cochel. Am Soc Animal Production Pro 1915-1916:9-14 '17

Value of permanent pastures. D. T. Gray. Prog F 33:1130 O 19 '18

Value of silage for cattle. R. L. Case. il Purdue Ag 10:23-4 F '16

Velvet bean for feeding. Rural N Y 76:980 Ag 18 '17

War rations for beef cattle. W. H. Tomhave. il Field II 28:728-9 O '18

War rations for beef steers. R. Beresford. Breeder's Gaz 72:276 Ag 30 '17

Wartime beef. M. F. Grimes. Penn State F 10:204-5 D '17

Watch out for bloat. Kimball's D F 16:468 Je 1 '18

Will it pay to feed cattle? O Judd Farmer 62:9 Ja 6 '17

Winter pasturing in the Southeast. F. H. Jeter. Breeder's Gaz 74:80 Jl 18 '18

Winter steer feeding, 1915-1916. J. H. Skinner and F. G. King. Ind Ag Exp B 191:1-35 '16; Summarized. B 191 Popular ed 8p

Wintering and fattening beef cattle in North Carolina. W. F. Ward and others. il map U S Ag B 628:1-53 '18; Same. N C Ag Dept B v 39:1-53 Ja '18

Wintering beef cattle. W. F. Ward. il Va Ag Dept B 115:37-41 '17

Wintering beef cattle at the Iredell test farm. Prog F 31:858 Jl 8 '16

Wintering of store cattle. J Bd Ag 23:774-9 N '16

Wintering two-year old steers preparatory to finishing on grass the following summer. R. E. Hunt. il Va Ag Exp B 215:1-15 '17; Same cond. Nat Stock & F 42:800 D 7 '18

See also Calves—Feeding; Cows—Feeding; Feeding and feeding stuffs; Grazing; Pastures and meadows; Ranges

*Iowa college experiment*

Cattle feeding day at Ames, Ia. Breeder's Gaz 71:733 Ap 5 '17

Iowa cattle feeding day at Ames. Wallaces' F 42:603 Ap 6 '17

Iowa experiment station cattle feeding tests. il C: F. Salt. Ohio F 139:511 Ap 7 '17

Review of feeding experiments at Ames. Breeder's Gaz 73:709 Ap 4 '18; Wallaces' F 43:608 Ap 5 '18

**Fitting for show**

Conditioning for the show ring. E. A. Cannon. Jersey B 36:955 Je 20 '17

Developing shorthorns for the showyard. P. G. Ross. il Breeder's Gaz 70:1202-3 D 21 '16

Fitting and showing cattle. R. H. Whitten. Jersey B 37:1323-4 Ag 21 '18

Fitting and showing milking shorthorns. L. D. May. il Field II 26:1029 D '16

Fitting cattle for the fall show ring. J. W. Schwab. il Ohio F 137:757 Je 3 '16

Fitting cattle for the ring. J. Livingstone. il Field II 26:593 Jl '16

Fitting cattle for the show ring—a la Pat. Robinson. J. A. McLean. Kimball's D F 14: 285 Ap 15 '16; Same. Jersey B 35:600 Ap 19 '16

Fitting dairy cattle for show and sale. J. R. Dice. Hoard's D 54:1 Jl 27 '17

Fitting dairy show animals. L. E. Ortiz. il Field II 28:716-17 O '18

Fitting purebred beef calves. K. C. Ikeler. Breeder's Gaz 71:386 F 22 '17

Fitting purebred beef cattle for showing. O. V. Battles. Breeder's Gaz 74:221 Ag 15 '18

Fitting young stock for show. B. O. Cowan. il Field II 26:1020 D '16

Students learn to fit show cattle. A. B. Nystrom. il Hoard's D 51:992 Jl 21 '16

**Judging**

Discussion on show ring practices. C. W. Hall. Hoard's D 51:384 Mr 24 '16

Facts about the show ring. M. D. Munn. il Kimball's D F 14:310 My 1 '16

History and results of scale of points of the Jersey breed of cattle. W. N. Clark. Jersey B 35:23, 59, 92, 132, 167 Ja 5-F 2 '16

History of the Guernsey breed; the island scale of points. C. L. Hill. il Kimball's D F 14:302-3 My 1 '16

How the show ring benefits the cattle industry. Kimball's D F 14:378 Je 1 '16

How to judge a dairy cow. C. L. Hill. il Hoard's D 56:69+ Ag 9 '18

Incorrect decision in judging. il Jersey B 36: 1752 N 7 '17

Judging dairy cattle. il Hoard's D 52:850 Ja 5 '17

Judging dairy cattle. J. A. McLean. il Field II 28:568-9 Ag '18

Judging dairy cattle—bulls. J. A. McLean. il Field II 28:319 My '18

Judging dual-purpose beef. L. Ogilvy. Breeder's Gaz 70:1066 D 7 '16

Judging Jerseys. H. G. Van Pelt. Jersey B 37:1653-4+ O 9 '18

Judging the age of cattle by teeth. J Ag (Quebec) 21:vii S '17

Junior stock judging in Massachusetts. W. F. Turner. Hoard's D 54:556 N 9 '17

More about judges. W. L. Hunter. Jersey B 36:1943 D 12 '17

National dairy show—judging Jerseys. C. I. Hudson. Jersey B 36:1871 N 28 '17

Production in the show ring. R. R. Graves. Hoard's D 53:44 F 2 '17

Qualifications a judge should have. M. D. Munn. il Kimball's D F 15:632 S 15 '17

Scale of points adopted by the American Jersey cattle club. Int R Sci & Prac Ag 7, no 8:1143-5 Ag '16

**Cattle—Judging—Continued**

- Scale points. R. M. Gow. Jersey B 36:1330-1 Ag 29 '17
- Score for Holstein-Friesian bulls and cows adopted by the Holstein-Friesian association of America. E. G. Bennet. Int R Sci & Prac Ag 7, no 11:1634-7 N '16
- Shall we show our dairy cattle. G. T. Slade. il Kimball's D F 14:351 My 15 '16
- Show ring an important factor. C. W. Hall. il Kimball's D F 14:311+ My 1 '16
- Show ring, its value and limitations. Hoard's D 51:379 Mr 24 '16
- Show rings—object lessons. C. H. Staples. Kimball's D F 14:458 Jl 15 '16
- Show yard conformation. A. Hansen. il Kimball's D F 14:350 My 15 '16
- Some showing views. R. C. Forbes. Breeder's Gaz 73:15 Ja 3 '18
- Teaching dairy cattle judging. E. G. Woodward. J Dairy Sci 1:177-80 Jl '17
- Value of the dairy showing. G. Gusler. il Field II 27:748-9+ O '17
- Value of the show yard. W. E. Skinner. Kimball's D F 14:455 Jl 15 '16
- What a judge looks for in placing the dairy winners; photographs. Country Gent 82:1600-1 O 20 '17
- What is dairy temperament? C. Larsen. J Dairy Sci 1:174-6 Jl '17
- Would give breeding a place in judging. R. N. Bell. Jersey B 36:161 Ja 31 '17
- See also Students' national contest in judging dairy cattle*

**Marketing**

- Auction sales of stock. J. R. Long. Breeder's Gaz 69:722 Mr 30 '16
- Cattle-zone plan. Country Gent 83:29 Ja 5 '18
- Selling of purebred cattle. F. D. Tomson. Breeder's Gaz 69:722 Mr 30 '16
- Selling plans that raised my average cattle prices. W. T. McCray. il System on the Farm 1:55-60 Ap '17
- When to buy and sell cattle. J. H. McKenney. Ohio F 139:111 Ja 27 '17

**Auction method**

- Attraction of the sale ring. T. Dempsey. Jersey B 37:1651 O 9 '18
- How to conduct an auction sale. D. L. Perry. Jersey B 37:1644-5 O 9 '18

**Photographs and photography**

- How to photograph Jerseys. A. L. Tichane. Jersey B 37:122 Ja 23 '18

**Prices**

- Breeder's questions and answers. H. C. Lookabaugh. Breeder's Gaz 73:970 My 9 '18
- Cattle receipts and prices. Breeder's Gaz 73:163 Ja 24 '18
- High prices for purebreds. W. C. Jeffries. il Ohio F 137:533 Ap 8 '16
- Price at which to inventory cows. Hoard's D 53:724 My 18 '17
- Well bought is half sold. O Judd Farmer 64:10 Ap 13 '18

**Renting**

- Contract for cows on shares. H. C. Taylor. Hoard's D 52:278 S 22 '16
- Dairy cattle on shares. W. C. Jeffries. Ohio F 137:260 F 19 '16
- Live stock share plan. H. G. Van Pelt. Kimball's D F 14:473 Jl 15 '16

**Sires futurity tests**

- Bull futurity test. Kimball's D F 13:827 Ja 1 '16
- Report of Jersey sires' futurity test. R. Pearl. Maine Ag Exp B 247:37-52 '16
- Rules governing the Maine Jersey sires' futurity test. Mrs A. J. S. Tarbell. Jersey B 35:1208 Ag 2 '16
- Sires' futurity test. Wallaces' F 41:878 Je 16 '16

**Transportation**

- No express embargo on Jerseys. E. M. Williams. Jersey B 37:591 Ap 17 '18

**Argentina**

- Argentina's growing number of pedigree cattle. W. Dawson, jr. (Commerce Reports no. 79) p 56 (Ap 5) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Cattle breeding in the Argentine Republic at the present day. G. Martinoli. Int R Sci & Prac Ag 8, no 8:1073-84 Ag '17

**Austria-Hungary**

- Mountain milk boys of Hungary. F. J. Koch. il Hoard's D 53:928 Je 29 '17

**Brazil**

- Improvement of Caracu cattle in the state of Sao-Paulo Brazil. Int R Sci & Prac Ag 8, no 11:1114-16 N '17

**Canada**

- \* Horses and cattle in Ontario. (In Report, Bur. of industries, 1917, p. 40-1) '18 Ontario ag. dept., Toronto
- Loans on live stock in Canada. H. Vanderhoof. Jersey B 36:795 My 23 '17
- Report of division of animal husbandry; dairy cattle. (In Experimental farms, 1916. v. 1, p. 423-505) il 45c '17 Canada Ag

**Colorado**

- Shorthorns in Colorado. F. D. Tomson. Breeder's Gaz 74:150 Ag 1 '18

**Denmark**

- Denmark sells her poor cows. N. Porse. Hoard's D 52:510 N 3 '16

**Europe**

- Principle dairy breeds and dairy farming in Europe. H. M. Landon. il Hoard's D 51:43 F 4 '16

**Florida**

- Improving Florida cattle stocks. F. S. Hastings. Breeder's Gaz 73:654 Mr 28 '18
- New cattle range country. F. S. Hastings. Breeder's Gaz 73:602 Mr 21 '18

**India**

- Awankari cattle at Peshawar. W. Robertson Brown. il Ag J of India 12:588-92 O '17
- Situation as regards the milk supply in India. Ag J of India 13:744-6 O '18
- Survey and census of cattle in Bengal: a review. J. R. Blackwood. Ag J of India 12:593-8 O '17

**Korea**

- Arrêté n. 55 du gouvernement de la Corée portant règlement de la protection des bêtes bovines. Int Yearbook Ag Leg 1916:677-8 '17

**Louisiana**

- Forestry and cattle raising on the cut-over pine lands of the southern states. J. G. Lee. (In Cut-over land conf. of the South, 1917, p. 217-25) \$2.50 '17 Southern pine assn., New Orleans, La.
- Organizing and conducting state-wide tick eradication in Louisiana. E. I. Smith. il Am Vet M Assn J 53:639-45 Ag '18

**Peru**

- Stock raising in Peru. H. Magill. Hoard's D 55:1022 Jl 12 '18

**Southern states**

- Cattle and alfalfa in the South. F. D. Tomson. Breeder's Gaz 73:1086 My 23 '18
- Future of the cattle industry in the South. J. Daniels. il Field II 27:929+ D '17
- Place of dual purpose cattle on southern farms. A. L. French. Prog F 33:1310 N 30 '18
- South as the coming stock land of America. J. E. Pickett. il Country Gent 83:9-10 O 26 '18

**United States**

- Cattle loans in the United States. Int R Ag Econ 72:83-5 D '16



**Cattle—Continued**

**Wisconsin**

Bankers' opportunity to help eradicate tuberculosis. H. L. Russell. maps Hoard's D 52: 619 N 24 '16

**Cattle, Beef**

Alfalfa-fed baby beeves. J. W. Frazier. il Breeder's Gaz 73:316 F 14 '18

Assessing feeder cattle. Ohio F 137:762 Je 3 '16

Baby beef and calf feeding. H. K. Gayle. il Miss Ag Exp B 183:1-35 '17

Baby beef experience. Wallaces' F 41:170 F 4 '16

Baby beef on grass and silage. il Wallaces' F 43:1031 JI 12 '18

Baby beef—or blue beef? G: L. Hyslop. il Ohio F 142:214 S 7 '18

Baby beef problems. Wallaces' F 41:950 JI 7 '16

Baby beef production. T. Butler. Prog F 33: 1054 S 28 '18

Baby beef production. W. L. Houser. Breeder's Gaz 69:720 Mr 30 '16

Baby beef proposition. J. H. McKenney. Prac F 113:237 Je 15 '17

Beef and beefmaking. F. Reeves. Breeder's Gaz 73:861 Ap 25 '18

Beef and the banker. F. N. Shepherd. il Nation's Business (Riggs bldg., Washington, D.C. 25c) 6:11-12 Ap '18

Beef cattle profits; a few things that affect the net returns from the farm. C. A. Willson. il Tenn Ag Ext Pub 15 (General ser. no. 7):1-11 '16

Beef-cattle prospects. J. A. Rickart. Country Gent 81:59 Ja 8 '16

Beef cattle yield profit on \$200 land. il O Judd Farmer 60:5 Ap 8 '16

Beef feeder's experiences. H. N. Ensign. Ohio F 138:542 D 2 '16

Beef from waste. H. L. Cole. Country Gent 81:633 Mr 18 '16

Beef in the war. C: Gray. Wallaces' F 43:539 Mr 22 '18

Beef is king at American Royal. R. V. Hoffman. il Field II 26:330-1+ N '16

Beef may still be produced. O Judd Farmer 64:463 Ap 27 '18

Beef on cheap land. H. B. Cobb. Country Gent 82:50 Ja 13 '17

Beef on the small farm. B. F. Nichols. il Field II 28:232-3 Ap '18

Beef production. K. J. J. Mackenzie and F. H. A. Marshall. J Bd Ag 25:623-40 S '18

Beef production under war conditions. R. E. Prothero. J Bd Ag 24:567-9 Ag '17

Beef raisers' problems. Prac F 113:378 N 1 '17

Beef shortage not yet developed. Am Coop J 12:688 Je '17

Breed your own baby beeves. H. R. O'Brien. il Country Gent 83:13 Mr 9 '18

Breeding and feeding shorthorns for beef. R. A. Norrish. il Breeder's Gaz 71:1013-14 My 17 '17

Breeding beef cattle. P. P. Pope. Ohio F 138: 250 S 16 '16

Breeding beef on rough land. O Judd Farmer 61:10 S 2 '16

Breeding heifer. F. A. Cochel. Wallaces' F 43:458+ Mr 8 '18

Briley's ranch on Crooked creek. O Judd Farmer 62:3 Ap 14 '17

Buying foundation beef cows. Breeder's Gaz 69:364 F 17 '16

Carloads in the yard pens; fat cattle at the International. Breeder's Gaz 70:1122-3 D 14 '16

Cattle feeders' revival meeting. C. T. Conklin. il Ohio F 142:577-8 D 14 '18

Cattle feeding. Wallaces' F 43:1569 O 25 '18

Cattle feeding on high-priced land. C. W. Hunt. il Breeder's Gaz 71:161 Ja 25 '17

Changes in beefmaking methods. W. S. Tasker. Breeder's Gaz 71:772 Ap 12 '17

Chief factors in profitable cattle feeding. J: G. Imboden. Breeder's Gaz 69:865 Ap 20 '16

Chinese beef enters America. L. L. De Bra. Breeder's Gaz 73:202 Ja 31 '18

Concentrated baby beef production. M. E. Beisel. Breeder's Gaz 71:162 Ja 25 '17

Corn silage and velvet beans found to be good feed for fattening cattle. Weekly N L 6:6 S 11 '18

Corn silage for beef production. G. Gusler. il Field II 27:930-1 D '17

Country buying of fat stock. H. J. Sconce. O Judd Farmer 61:10 N 4 '16

Cows instead of plows. W. L. Nelson. il Breeder's Gaz 72:313 S 6 '17

Crossing beef breeds. W. C. McGavock. Breeder's Gaz 71:1238 Je 21 '17

Dairy steers for beef. E. G. Woodward. il Hoard's D 52:424 O 20 '16

Department of agriculture advises against heavy feeding of beef cattle. Weekly N L 5:4 JI 10 '18; Same. Nat Wool Grower 8:54 JI '18

Dual purpose beef cattle. A. L. French. il Breeder's Gaz 69:125-6 Ja 20 '16

Early contests of the beef breeds. L. Ogilvy. Breeder's Gaz 74:152 Ag 1 '18

Economic factors in beef production; with discussion. W. H. Tomhave. Pa Ag Dept B 283:144-51 '16

Efficiency in meat production of beef and dairy cattle. il Hoard's D 54:209+ S 14 '17

Evolving better strains of range cattle. A. O. Huntley. Breeder's Gaz 71:448 Mr 1 '17

Factors in economical beef raising. B. O. Severson. il Breeder's Gaz 70:772 O 26 '16

Fattening young beef. il Va Ag Dept B 109: 59-63 '16

Feeding and housing beef cattle. G: L. Hyslop. il Hoard's D 51:194 F 25 '16

Feeding beef calves for growth. A. M. Soule. Breeder's Gaz 69:428 F 24 '16

Feeding beef cattle this year. Prac F 114:283 Ag 15 '18

Feeding cattle for profits and patriotism. J: G. Imboden. Breeder's Gaz 72:77 JI 19 '17

Feeding dollars to fat cattle. M. R. Myers. Am Coop J 12:223-4 N '16

Feeding range steers. L. Foster and H. H. Simpson. il N M Ag Exp B 101:1-24 '16

Future market for beef; there is at least one reason why cattle raisers should rejoice. J: E. Pickett. il Country Gent 83:12-13+ Ap 20 '18

Guessing on the beef-cattle market. C. E. Jones. il Country Gent 83:10 Je 29 '18

Handling a Hereford herd. F. C. Giltner. Breeder's Gaz 73:1333 Je 27 '18

Heavy beef for the navy. S: O. Rice. il Country Gent 83:9 N 2 '18

Heavy silage feeding in fattening cattle. H. O. Allison. Breeder's Gaz 69:1068 My 18 '16

How are you going to feed? J. M. Carroll. O Judd Farmer 65:275 O 5 '18

How shall beef production be increased? F. S. Hastings. il Breeder's Gaz 72:1132-3 D 20 '17

How the champions were fed; inside history of winners at International. O Judd Farmer 61:3 D 30 '16

How to increase the cattleman's profits. F. B. Mumford. Tex Ag Dept B 52:131-5 '16

Improving purebred beef cattle. W. T. McGee. Breeder's Gaz 72:138 Ag 2 '17

Increasing the supply of stockers. H. R. Smith. Breeder's Gaz 69:1290 Je 22 '16

Inheritance of beef type. J. L. Lush. Breeder's Gaz 72:1074 D 13 '17

Investigational work. D. T. Gray. N C Ag Exp Rep 1917:43-55

Investigations with growing steers. T. L. Haecker. Am Soc Animal Production Pro 1915-1916:169-73 '17

Keeping records on 23 steers. C. A. Bruer. O Judd Farmer 61:5 Ag 19 '16

Kings and queens of beefdom. il Field II 27: 932-3 D '17

Living on borrowed money. J: E. Pickett. il Country Gent 82:1876-7 D 1 '17

Longhorns and buffaloes. W. C. Barnes. il Breeder's Gaz 70:1020 N 30 '16

Maize silage and alfalfa hay for beef production. R. K. Bliss and C. B. Lee. Int R Sci & Prac Ag 7,no 5:706-10 My '16

Making cattle pay. Wallaces' F 42:1519 N 9 '17

**Cattle, Beef—Continued**

- Making money with beef cattle. A. L. French. Prog F 32:306, 504 Mr 3, Ap 21 '17
- Making prime beef at a profit. il Breeder's Gaz 71:113-14 Ja 18 '17
- Making sure of a sufficient margin of profit. W: R. Butler. System on the Farm 3:45-6 Ag '18
- Meat situation. Country Gent 81:1684 S 16 '16
- Methods of beef production. il Ohio F 141:347 Mr 9 '18
- Modern cattle feeding methods. J: J. Lawler. il Breeder's Gaz 70:1197 D 21 '16
- More beef for a hungry world. F. B. Nichols. il Field 11 27:856-7 N '17
- More calves for ranges. G. W. Barnes. il Country Gent 82:214 F 3 '17
- Multiplying a grand champion. B. W. Currie. il Country Gent 82:6-7 Ja 6 '17
- Natural flesh in cattle demonstrated. il Breeder's Gaz 69:912 Ap 27 '16
- New fashions in beef making. F. Crissey. il Country Gent 83:9-10 Je 1 '18
- New method of beef making. J: J. Lawler. il Field 11 28:22-3 Ja '18
- Notable steer carcass. M. D. Helser. Breeder's Gaz 73:485 Mr 7 '18
- Plan for baby beef production. A. Boss. Breeder's Gaz 69:580 Mr 9 '16
- Polled Herefords for beef-making. N. M. Leonard. Breeder's Gaz 73:154 Ja 24 '18
- Producing yearling beef at a profit in the cornbelt. N. E. Franklin. il Breeder's Gaz 71:625-6 Mr 22 '17
- Production of baby beef. S. H. Ray. il Farmers' B 811:1-22 '17
- Production of beef. W. A. Cochel. il Breeder's Gaz 74:43 Jl 11 '18
- Profits from beef production. G. A. Branan. il Purdue Ag 12:283-5 F '18
- Prospects for successful feeding of cattle in the near future. F. G. King. il Purdue Ag 10:20-1 Ja '16
- Raising baby beef profitably. N. E. Franklin. il Breeder's Gaz 69:612 Mr 16 '16
- Raising beef cattle. B. O. Severson. il Pa Ag Exp B 150:1-19 '18
- Royal blood for the block. Country Gent 83:38 Ja 19 '18
- Sale of the International steers. J. G. Imboden. Breeder's Gaz 73:59 Ja 10 '18
- Selection, care and management of the beef herd. I. W. Carpenter. il Miss Ag Ext C 7 7p '16
- Selection of feeders. il Purdue Ag 11:23-4 D '16
- Selection of feeders. W. H. Tomhave. Prac F 112:389 O 15 '16
- Sheltering beef cattle and the cost of making gains. H: J. Hasbrouck. Prog F 31:118 Ja 22 '16
- Showman at seventeen. E. W. Graber. il Country Gent 81:2226 D 30 '16
- Silage and alfalfa make master feeders. L. Ogilvy. Breeder's Gaz 74:116 Jl 25 '18
- Silage for beef cattle. A. L. French. Prog F 33:1166 O 26 '18
- Silage in beef production. W. H. Tomhave. Nat Stock & F 42:222 My 25 '18
- Silages for fattening steers. H. K. Gayle and E. R. Lloyd. Miss Ag Exp B 182:1-15 '17
- \$61,650 worth of beef bulls. il Country Gent 83:2 S 14 '18
- Some experimental results in wintering beef cattle; with suggestions for the utilization of cheap roughages. E. W. Sheets. W Va Ag Dept B 30:23-8 '17
- Southern cattle and army horses at the Denver yards. W. C. Barnes. il Breeder's Gaz 69:75-6 Ja 13 '16
- Soy-bean-meal beef. G. H. Day. Country Gent 81:1131 My 27 '16
- Steer feeding. P. Gerlaugh. Penn State F 9:314-15 F '16
- Steer that made good. A. M. Soule. il Breeder's Gaz 70:592 O 5 '16
- Steers, corn and blue grass. W. L. Nelson. il Country Gent 81:51 Ja 8 '16
- Studies in inheritance of certain characters of crosses between dairy and beef breeds of cattle. J: W. Gowen. bibliog il J Ag Research 15:1-58 O 7 '18
- Studies on maintaining beef cattle. H. P. Rusk. O Judd Farmer 64:503 My 11 '18
- Suggestions for beef cattlemen. I. W. Carpenter. Prog F 32:502 Ap 21 '17
- Suggestions to beef cattle men. I. W. Carpenter. Prog F 32:1126 O 27 '17
- Summer management of the grade herd of beef cattle. R. S. Stephenson. Purdue Ag 12:561-2 Je '18
- Theory of correlation as applied to farm-survey data on fattening baby beef. H. R. Tolley. U S Ag B 504:1-14 '17
- Turning food and forage into beef. N. S. Schein. O Judd Farmer 60:5 F 12 '16
- Unprecedented stocker prospect. Breeder's Gaz 73:58-9 Ja 10 '18
- Use of capital in cattle feeding. A. Haedecke. (In Minnesota farmers' institute annual, 1916, p 32-6) il '16 Extension division, University Farm, St Paul
- Value of permanent pastures. D. T. Gray. Prog F 33:1130 O 19 '18
- War rations for beef cattle. W. H. Tomhave. il Field 11 28:728-9 O '18
- War-time beef making. J. L. Justice; F. Sherer. Ohio F 142:350 O 12 '18
- We're growing beef to feed a hungry world. F. B. Nichols. il Country Gent 82:1724-5 N 10 '17
- Why not produce more beef? J. A. Herr. il Prac F 113:297 S 1 '17
- Will the cattle feeders make money? J. M. Carroll. O Judd Farmer 65:228 S 21 '18
- Wintering of store cattle. J Bd Ag 23:774-9 N '16
- Young beef on high-priced land. C. M. McConnell. il Breeder's Gaz 72:837 N 8 '17

**See also Baby beef clubs****Costs**

- Another steer feeding story. Rural N Y 77:1231 N 2 '18
- Cattle feeders in big powwow. O Judd Farmer 60:13 My 20 '16
- Cheap beef in Alabama. il Country Gent 81:2056 N 25 '16
- Cheap silage steer ration. Wallaces' F 41:793 My 26 '16
- Cheap steer ration. Wallaces' F 41:746 My 12 '16
- Cost of feeding steers. C. R. Moulton. O Judd Farmer 60:10 Je 10 '16
- Cost of making beef. D. Casement. Breeder's Gaz 69:670 Mr 23 '16
- Fattening two-year-olds. C: F. Salt. Country Gent 82:1040 Je 16 '17
- Feed cost of keeping beef cattle. C. R. Moulton. Wallaces' F 41:640 Ap 21 '16; Same. Prog F 31:594 Ap 29 '16
- How I buy to make more profit from steers. O. Kruse. System on the Farm 3:181 N '18
- How one cattle company figures its cost. A. E. de Ricqlès. Breeder's Gaz 69:866 Ap 20 '16
- Investigation in animal nutrition. T. L. Haacker. Minn Ag Exp B 155:1-31 '16
- Maintaining the beef breeding herd. W. H. Tomhave. il Ohio F 139:33 Ja 13 '17
- Maintenance costs for beef cattle. Ohio F 138:88 Jl 29 '16
- Meat situation in the United States. pt. 2. Live stock production in the eleven far western range states. W. C. Barnes and J. T. Jardine. il maps U S Ag Report 110:26-43 '16
- Meat situation in the United States. pt. 3. Methods and cost of growing beef cattle in the corn belt states. J. S. Cotton and others. il U S Ag Rep 111:1-64 '16; Abstract. Int R Sci & Prac Ag 8, no 6:927-31 Je '17
- Optimum age for fattening off Irish bullocks. J. Wilson. J Dept Ag Ireland 18, no 1:3-6 '48; Same cond. Int R Sci & Prac Ag 9, no 5:590-2 My '18
- Profitable silage feeding in Iowa. Breeder's Gaz 69:1290 Je 22 '16
- Purdue cattle feeding. Ohio F 137:683 My 13 '16
- Raising and fattening beef calves in Alabama. D. T. Gray and W. F. Ward. il U S Ag B 73:1-11 '14
- Raising and fattening beef cattle. W. H. Tomhave. il Field 11 26:115-16+ F '16



**Cattle, Beef—Costs—Continued**

- Raising beef cattle. B. O. Severson. il Pa Ag Exp B 138:1-20 '16; Same cond. Wallaces' F 41:1114 Ag 25 '16  
Report blanks that helped lower cattle feeding costs. C. C. Fisher. System on the Farm 3:16-17 Jl '18  
Short-fed steers at the International. J. G. Imboden. Breeder's Gaz 71:60 Ja 11 '17  
See also Cattle, Beef—Prices

**Diseases**

See Cattle—Diseases and pests

**Feeding**

See Cattle—Feeding

**Grading**

- Way the buyers grade your cattle. J. M. Carroll. il O Judd Farmer 65:373 O 26 '18  
Your beef at the market. J. M. Carroll. il O Judd Farmer 65:477 N 23 '18

**Judging**

- Judging feeder steers. Wallaces' F 43:401 Mr 1 '18  
Judging of beef cattle. J. W. Wuichet. il Ohio Ag Ext B v 13,no 7 11p '17-'18  
Statistical study of body weights, gains, and measurements of steers during the fattening period. B. O. Severson and P. Gerlaugh. il J Ag Research 11:383-94 N 19 '17

**Marketing**

- Marketing beef cattle. D. T. Hill. Penn State F 10:206 D '17  
Marketing methods differ throughout United States. Ag Digest 1:223-4 D '16

**Prices**

- Cattle are coming to town. Am Coop J 13:68 O '17  
Cattle market. Wallaces' F 42:24 Ja 5 '17  
Monthly steer profits and losses of past ten years; chart. Appears in Wallaces' farmer each month, usually the first issue  
Upward trend of beef prices. J. E. Poole. Field II 28:420+ Je '18  
What is the future for beef cattle? J. M. Carroll. O Judd Farmer 65:169 S 7 '18

**Study and teaching**

- Beef production; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 81) 11p '18 U.S. States relations service, Washington, D.C.

**Transportation**

- Shrinkage in weight of beef cattle in transit. U S Ag B 25:1-78 '13

**Weights and measurements**

- Statistical study of body weights, gains, and measurements of steers during the fattening period. B. O. Severson and P. Gerlaugh. il J Ag Research 11:383/94 N 19 '17

**Argentina**

- American pedigree cattle in Argentina. W. H. Robertson. Wallaces' F 41:1439 N 3 '16

**California**

- Bullock champions from California. G. H. True. il Breeder's Gaz 71:11 Ja 4 '17  
California's conquest at the International in the grand champion and reserve champion steers. R. P. Royce. Field II 27:101 F '17

**Canada**

- Beef cattle trade in Canada. H. S. Arkell. (In Report, Live stock branch, 1916, p. 62-6) '17 Ontario ag. dept., Toronto, Canada.  
Breed more cattle. J Ag (Quebec) 20:9 Jl '16  
Canada's prospects in the world's beef market. H. S. Arkell. il J Ag (Quebec) 19: 263 Je '16  
Feeding for beef in Alberta. G. H. Hutton and W. H. Fairfield. 38p il '16 Canada Ag  
Finish the feeders in Canada; keep the heifers at home. J. Bright and H. S. Arkell. 8p '16 Canada Ag  
Raising beef in Canada. J. H. McKenney. Ohio F 138:355 O 14 '16

- Report of division of animal husbandry; beef cattle. (In Experimental farms, 1916. v. 1, p. 388-422) il 45c '17 Canada Ag

**Central America**

- Central America—cattle countries. H. O. Sandberg. il Pan Am Union B (17th and B sts., N. W., Washington, D.C. 25c) 44:449-64 Ap '17

**Colombia**

- Cattle ranch problem in Colombia. G. M. Rommel. Breeder's Gaz 70:52 Jl 13 '16

**Corn belt**

- Cattle feeding in the corn belt. J. G. Imboden. il Breeder's Gaz 69:301-2 F 10 '16  
Economical winter feeding of beef cows in the corn belt. J. S. Cotton and E. H. Thompson. il U S Ag B 615:1-16 '17; Same. Neb Ag Bd B 245:358-70 '18  
Meat situation in the United States. pt 3, Methods and cost of growing beef cattle in the corn belt states. J. S. Cotton and others. il U S Ag Rep 111:1-64 '16; Abstract. Int R Sci & Prac Ag 8,no 6:927-31 Je '17  
Methods and results in a cornbelt feed lot. J. G. Imboden. Breeder's Gaz 70:1019-20 N 30 '16

**Eastern states**

- Beef cattle in the East. W. H. Tomhave. Prac F 112:222 My 15 '16  
Beef cattle on eastern farms. Rural N Y 75: 107 Ja 22 '16  
Beef making on eastern farms. il Rural N Y 77:271 F 23 '18  
East calls for beef. H. L. Garrigus. il Field II 27:928+ D '17  
Says the East should feed more cattle. C. O. Robinson. Breeder's Gaz 72:492 S 27 '17

**Florida**

- Florida, an ideal cattle state. 39p '18 Florida State live stock assn., P. O. Box 1181, Jacksonville  
Florida's cattle ranges. A. A. Coult. Breeder's Gaz 72:427 S 20 '17

**Great Britain**

- Experiment in war-time beef production. J Bd Ag 25:856-8 O '18  
Experiment in war time beef production. T. B. Wood. J Bd Ag 25:549-60 Ag '18  
In the land of white-faces; old Herefordshire, England, has hung out the sign: business as usual. W. H. Dean. il Country Gent 83: 10. Jl 27 '18

**Hawaiian Islands**

- Cattle-raising in Hawaii. W. H. Carter. Breeder's Gaz 69:74 Ja 13 '16

**Illinois**

- Full feed lots in Illinois. J. M. Carroll. O Judd Farmer 63:3 D 8 '17

**Indiana**

- Cattle feeding; winter steer feeding, 1916-1917. J. H. Skinner and F. G. King. il Ind Ag Exp B 206:1-27 '17  
Fattening steers at Purdue. Purdue Ag 12: 503-4 My '18

**Iowa**

- Cattle feeder's dilemma. H. R. O'Brien. il Country Gent 83:3-4 My 11 '18  
Iowa cattle farm. il Wallaces' F 41:895 Je 23 '16  
Iowa farm credit plan. J. A. Rickart. Country Gent 81:1612 S 2 '16  
Review of feeding experiments at Ames. Breeder's Gaz 73:709 Ap 4 '18; Wallaces' F 43:608 Ap 5 '18

**Ireland**

- Optimum age for fattening off Irish bullocks. J. Wilson. J Dept Ag Ireland 18,no 1:3-6 '18; Same cond. Int R Sci & Prac Ag 9,no 5: 590-2 My '18

**Kentucky**

- Cattle feeding. J. Weil. il Ky Ag Dept Rep 1916-1917:344-6 '18

**Cattle, Beef—Continued****Louisiana**

Louisiana beef cattle. W. C. Stubbs. 16p il  
'17 Louisiana co., New Orleans.

**Michigan**

Producing beef in Michigan. G. B. Smith.  
Breeder's Gaz 74:114 Jl 25 '18

**Missouri**

Cattle situation from the viewpoint of the  
feeder. S. P. Houston. Mo Ag Bd Yearbook  
1916:520-3

Missouri cattle feeder's methods and results.

W. L. Nelson. il Breeder's Gaz 69:1323 Je

29 '16

Missouri cattle feeding tests. Ohio F 137:839  
Je 24 '16

Missouri experimental cattle. H. O. Allison.  
Breeder's Gaz 73:972 My 9 '18

**Nebraska**

Beef raising in Nebraska. C. G. Haskins. O  
Judd Farmer 61:20 N 4 '16

**New England**

Beef making in New England. Rural N Y 76:  
1274 N 3 '17

Beef making in New England; Hereford cat-  
tle and cheap grass. J. Walker. il Rural  
N Y 76:1356, 1384 N 24-D 1 '17

Beef raising in New England. H. L. Garrigus.  
Rural N Y 77:51 Ja 12 '18

Beef renaissance in New England. J. C.  
Bartlett. Breeder's Gaz 72:40 Jl 12 '17

Steers in New England. H. L. Garrigus.  
Breeder's Gaz 73:1336 Je 27 '18

**New York**

Beef cattle on abandoned New York farms.  
K. J. Seulke. Cornell Countryman 15:513-16  
Je '18

Beef cattle versus sheep in New York. Rural  
N Y 76:124 Ja 27 '17

**North Carolina**

Wintering and fattening beef cattle in North  
Carolina. W. F. Ward and others. il map  
U S Ag B 628:1-53 '18; Same. N C Ag Dept  
B v 39:1-53 Ja '18

Wintering beef cattle at the Iredell test farm.  
Prog F 31:858 Jl 8 '16

**Ohio**

Baby beef production for Ohio farms. C. M.  
Baker. il Ohio F 140:497 D 1 '17

Beef makers of the Darby Plains. C. T. Conk-  
lin. il Ohio F 141:671 My 18 '18

Building beef on an Ohio farm. G. H. Kirk-  
patrick. il Ohio F 141:253 F 23 '18

Early Ohio cattle industry. C. M. Baker. Ohio  
F 139:766 Je 9 '17

**Pennsylvania**

Pennsylvania cattle feeding. Ohio F 137:626  
Ap 29 '16

Pennsylvania steer feeding experiments. P.  
Gerlaugh. Breeder's Gaz 70:88 Jl 20 '16

**Rhodesia**

Ranching in Rhodesia. Breeder's Gaz 69:925  
Ap 27 '16

**Southern states**

Beef cattle and hogs. G. M. Rommel. (*In* Cut-  
over land conf. of the South, 1917, p. 112-  
25) \$2.50 '17 Southern pine assn., New Or-  
leans, La.

Beef cattle breeding in the South. F. C. Gilt-  
ner. il Breeder's Gaz 71:1269 Je 28 '17

Beef cattle outlook. E. R. Lloyd, jr. Prog F  
33:817 Jl 20 '18

Five years' calf-feeding work in Alabama and  
Mississippi. W. F. Ward and S. S. Jerdan.  
U S Ag B 631:1-53 '18

Growth of the beef-cattle industry in the  
South. F. W. Farley. il U S Ag Yearbook  
1917:327-40

How to succeed with hogs and cattle. Prog F  
33:886, 910, 932, 956, 980, 1006, 1030, 1078,  
1194, 1222, 1258, 1286, 1411 Ag 10-S 21, O 5,  
N 2-23, D 9 '18

More beef cattle in the South. C: A. Whittle.  
Breeder's Gaz 72:241 Ag 23 '17

Place of beef production in southern farming.  
A. L. French. Prog F 33:886 Ag 10 '18

South as the coming stock land of America.  
J: E. Pickett. il Country Gent 83:6-7 O 19

'18

South's opportunity for bettering its beef in-  
dustry. C: A. Whittle. Prog F 32:71 Ag 11

'17

**Spain**

Cattle in Asturias, Spain. M. Naredo and F.  
Baio. Int R Sci & Prac Ag 8,no 2:266-9 F '17

**Texas**

Texas method feeding cattle. G. O. Creswell.  
O Judd Farmer 60:8 Mr 11 '16

**United States**

Beef breeding classes at Denver. il Field Il  
28:158-9 Mr '18

Beef-making in the Southeast. R. S. Curtis.  
il Breeder's Gaz 69:21-2 Ja 6 '16

Increased cattle production on southwestern  
ranges. J. T. Jardine and L. C. Hurtt. il  
U S Ag B 588:1-31 '17

Production of beef cattle in the East; views  
of Governor Stuart of Virginia. M. Fergu-  
son. Review of Reviews (30 Irving Place,  
N.Y. 25c) 55:298-9 Mr '17

Winter pasturing in the Southeast. F. H.  
Jeter. Breeder's Gaz 74:80 Jl 18 '18

**Virginia**

Beef and blue grass in Virginia. H: C. Stuart.  
il Va Ag Dept B 115:66-74 '17

Cooperation in livestock improvement. W. G.  
Wysor. Nat Stock & F 40:348 Jl 1 '16

Wintering two-year old steers preparatory to  
finishing on grass the following summer.  
R. E. Hunt. il Va Ag Exp B 215:1-15 '17;

Same cond. Nat Stock & F 42:800 D 7 '18

**Western states**

Cattle in the far West. G: F: Stratton. il  
Country Gent 82:1811-12 N 24 '17

In western cattle pastures. A. E. de Ricqlès.  
Breeder's Gaz 69:1324 Je 29 '16

Western stock and land conditions. A. E.  
de Ricqlès. Breeder's Gaz 70:770 O 26 '16

**Cattle, Wild**

Capturing wild cattle in the Central Prov-  
inces. D. Clouston. il Ag J of India 12:274-9  
Ap '17

Trap corrals in Arizona. J. H. Sizer. il  
Breeder's Gaz 72:9 Jl 5 '17

**Cattle branding. See Cattle—Branding****Cattle breeders' societies**

Administration of affairs of a record associ-  
ation. M. D. Munn. il Breeder's Gaz 72:239  
Ag 23 '17

Beef-growing associations among farmers.  
G. B. Smith. Rural N Y 76:430 Mr 17 '17

Big drive on for local Jersey clubs. Jersey B  
36:1262 Ag 15 '17

Bull association. S. W. F. Raven. Ohio F 139:  
717 My 26 '17

Bull associations. Jersey B 35:1843 N 22 '16;  
Same. Hoard's D 52:632 N 24 '16; Same.

Wallaces' F 41:1575 D 1 '16

Bull associations described. Hoard's D 51:992  
Jl 21 '16

Bull associations produce better bred cows at  
less cost to the dairyman. Weekly N L 4:6  
My 16 '17

Bulls are bulls no longer. L. L. Rummell. il  
Ohio F 142:497+ N 23 '18

Buy bulls co-operatively. L. A. Higgins. Kim-  
ball's D F 16:305 Ap 15 '18

By-laws for a bull association; Minnesota  
county breeders' association. T. A. Erick-  
son. Hoard's D 51:428 Mr 31 '16

Community breeding. C. H. Eckles. il Purdue  
Ag 12:269-71 F '18

Community breeding contract. Wallaces' F  
43:1572 O 25 '18

Community breeding experience. Wallaces' F  
42:841 My 25 '17

Community bull—benefit or detriment. A. L.  
Tichane. Jersey B 36:1218 Ag 8 '17

Community enterprise in dairying. G: C. Hum-  
phrey. il Kimball's D F 15:622-3 S 15 '17



**Cattle breeders' societies—Continued**

- Community organization for livestock improvement. G. C. Humphrey. Hoard's D 51:137+ F 18 '16; Same cond. Ohio F 137:294-5 F 26 '16; Same cond. Country Gent 81:346 F 12 '16
- Co-operation by state clubs. A. C. Ragsdale. Jersey B 37:1048 JI 3 '18
- Co-operation for herd improvement. Ag Digest 2:879-80 Mr '18
- Co-operative bull association of Roland, Iowa. Wallaces' F 42:1127 Ag 17 '17
- Co-operative bull associations. J Ag (Quebec) 22:xiv S '18
- Co-operative bull associations. R. H. Byrd. Wallaces' F 43:627 Ap 5 '18
- Cooperative bull associations. L. G. Hood. Breeder's Gaz 71:626 Mr 22 '17
- Cooperative bull associations. J. G. Winkjer. il Farmers' B 993:1-35 '18
- Cooperative bull associations. J. G. Winkjer. il U S Ag Yearbook 1916:311-19; Same, Separate 718; Summary. Prog F 32:388 Mr 24 '17
- Co-operative cattle-rearing societies in Switzerland. J. Frey. Int R Ag Econ 61:47-55 Ja '16
- Dairy cattle improvement associations. F. W. Merrill. (*In* De Laval dairy hand book, p 37-40) '16 De Laval separator co., New York Function of a state Jersey club. A. L. Tichane. Jersey B 37:158 Ja 30 '18
- Henry county bull association. C. R. George. Purdue Ag 12:505 My '18; Same. Jersey B 37:809 My 22 '18
- Holsteins came; city and country cooperated to bring them to a Missouri county. C. M. Long. il Banker-F 5:16 My '18
- Improve dairy cattle; cooperative bull associations increase milk production. Weekly N L 5:2 Mr 13 '18
- Jersey cattle associations. R. M. Gow. Jersey B 35:465 Mr 29 '16
- Local dairy team work. I. J. Mathews. Hoard's D 54:89+ Ag 17 '17
- Organizing a local breed association. R. C. Forbes. Breeder's Gaz 69:1326 Je 29 '16
- Organizing bull associations. Prog F 31:1448 D 16 '16
- Real community breeding; Pettis county (Mo.) Holstein Friesian breeders' association. il Wallaces' F 43:1555 O 25 '18
- Team work in breeding; Southwestern New York Holstein breeders' association. E. W. Gage. Prac F 112:158 Ap 1 '16
- See also* Dairymen's associations; also names of societies, e.g. Alvarado Jersey cattle club, American Guernsey cattle club, American Jersey cattle club, etc.
- Cattle breeding**
- Advanced registry records desirable. I. M. Avery. Hoard's D 51:143 F 18 '16
- Advanced registry requirements. Hoard's D 51:145 F 18 '16
- Advice to cattle breeders. H. H. Wing. Hoard's D 56:27 JI 26 '18
- Age at first calving. G. C. White. il J Dairy Sci 1:139-47 JI '17; Same cond. Wallaces' F 42:879 Je 1 '17
- Angus families and herd management. W. C. McGavock. Breeder's Gaz 69:770 Ap 6 '16
- Angus shoulders and flesh. L. Ogilvy. Breeder's Gaz 72:241 Ag 23 '17
- Are high prices for pure-breds justified? Hoard's D 51:9 Ja 28 '16
- Ayrshire breeders' association 41st annual meeting at Philadelphia. Field II 26:118-19 F '16
- Ayrshires at Grafton experiment farm. A. H. Haywood. il Ag Gaz of New South Wales 27:209-11 Mr '16
- Barn full of Jersey history; Hood farm. J. E. Dodge. il Jersey B 36:1287-8 Ag 22 '17
- Bates shorthorns as dual purpose cattle. il Field II 26:227-8 Mr '16
- Beef breeding in the future. W. Stemmons. il Country Gent 82:1905 D 8 '17
- Beginnings of the dual-purpose shorthorn type. W. Graham. il Breeder's Gaz 71:1235-6 Je 21 '17
- Big costs, big returns. E. Hopson. Country Gent 81:686 Mr 25 '16
- Big oaks from little acorns grow. F. R. Edwards. Breeder's Gaz 73:14 Ja 3 '18
- Boys get a bull; story. Hoard's D 54:776-7 D 21 '17
- Breed Jerseys for milk production. H. F. Probert. Jersey B 37:385-6 Mr 13 '18
- Breed statistics and their interpretation. J. R. Bent. Breeder's Gaz 69:556 Mr 9 '16
- Breeders' catechism; definitions of terms. Hoard's D 51:141 F 18 '16
- Breeders daughter-dam test; a cooperative project to enable the breeder to test the transmitting qualities of his herd bulls. Maine Ag Exp Doc 532:1-4 '17
- Breeders' luck. R. Wylie. Country Gent 83:23 Ag 31 '18
- Breeder's questions and answers. H. C. Lookabaugh. Breeder's Gaz 73:970 My 9 '18
- Breeding and developing Holsteins. I. M. Avery. il Hoard's D 52:4 JI 28 '16
- Breeding and feeding for dairy purposes. J. Underwood. il Prac F 112:339 S 15 '16
- Breeding and feeding of cows. H. P. Miller. Ohio F 138:356 O 14 '16
- Breeding crate. il Hoard's D 55:44 F 1 '18
- Breeding for business. Wallaces' F 43:807 My 17 '18
- Breeding for milk production. Ohio F 142:120 Ag 10 '18
- Breeding for production and type. C. F. Reid. il Kimball's D F 14:430 JI 1 '16
- Breeding for production or type. il Hoard's D 54:119 Ag 24 '17
- Breeding for sex. G. C. Iles. Hoard's D 51:950 JI 7 '16
- Breeding for the dairy. R. R. Kerr. J Dept Ag Victoria 15:373 Je '17; Same. Jersey B 37:192 F 6 '18
- Breeding polled Herefords. O. Lloyd-Jones. Breeder's Gaz 69:1014 My 11 '16
- Breeding principles at Rockwood. H. Jenkins. Jersey B 35:524 Ap 5 '16
- Breeding terms defined. E. Davenport. Breeder's Gaz 69:668 Mr 23 '16
- Breeding up Holstein cattle. J. G. Morse. il Rural N Y 75:1600 D 30 '16
- Brookmead farm's substantial start. Field II 26:135 F '16
- Building of a good herd. J. Kyle. J Dept Ag Victoria 14:741-2 D '16
- Building the dairy herd. H. H. Dean. Prac F 112:187 My 1 '16
- Building up a dairy herd thru purebred sires. C. Larson. Wallaces' F 43:364 F 22 '18
- Building up the breeding herd. C. H. Eckles. Ag Digest 2:571 Ag '17
- Building up the dairy herd. E. L. Vincent. Hoard's D 51:657 My 12 '16
- Building up the dairy herd. T. F. West. Hoard's D 52:877 Ja 12 '17
- Business side of a dairy herd. C. H. Eckles. il Country Gent 83:9+ S 14 '18
- Cattle breeding in the Argentine Republic at the present day. G. Martinoli. Int R Sci & Prac Ag 8,no 8:1073-84 Ag '17
- Cattle breeding with special reference to the milch cow. E. W. Oliver. Ag J of India 11:168-73 Ap '16
- Cause of barrenness in dairy cattle. J Ag (Quebec) 19:242 My '16
- Choosing a sire. H. H. Kildee. Jersey B 36:1233 Ag 8 '17
- Color inheritance in mammals. S. Wright. J Heredity 8:521-7 N '17
- Complete, simple herd record system. E. R. Shoemaker. il Kimball's D F 14:5-6, 45-6, 85 Ja 15-F 15 '16
- County breeding work. Wallaces' F 42:1434 O 19 '17
- Cow that fails to breed. C. C. Palmer. Kimball's D F 15:114 F 15 '17
- Creator of the Langwath May Roses. F. L. Ames. Field II 26:415 My '16
- Crossing grade dairy herds. Ohio F 137:685 My 13 '16
- Crossing of breeds not constructive breeding. J Ag (Quebec) 20:xi My '17
- Dairy industry and the Holstein. M. H. Gardner. Hoard's D 51:870 Je 23 '16
- Day of line and inbreeding. D. O. Bull. Jersey B 37:1982 N 27 '18

**Cattle breeding—Continued**

- Developing a purebred herd. O. Erf. Kimball's D F 15:137 Mr 1 '17; Same. Jersey B 36:1285-6 Ag 22 '17
- Discrimination in shorthorn pedigrees. R. C. Forbes. Breeder's Gaz 69:957 My 4 '16
- Does like beget like? J. E. Dodge. Jersey B 37:2067 D 11 '18
- Early shorthorn breeders and beginnings. B. F. Vanmeter. Breeder's Gaz 72:276 Ag 30 '17
- Easy points on line breeding for beginners. H. F. Probert. Jersey B 36:1607 O 17 '17
- Effect of varying conditions on type. J. M. W. Kitchen. Jersey B 36:504 Ap 4 '17
- Essay on line breeding. H. G. Van Pelt. Jersey B 37:389 Mr 13 '18
- Essential points in breeding for production. C. C. Dickson. Jersey B 36:542 Ap 11 '17
- Evolving better strains of range cattle. A. O. Huntley. Breeder's Gaz 71:448 Mr 1 '17
- Facts as I see them. J. A. Driscoll. Jersey B 35:130 Ja 26 '16
- Fame, fortune, or whatever you want. W. Macmonnies. Jersey B 36:1602 O 17 '17
- Feed and good bulls work wonders. A. C. McCandlish. il Kimball's D F 16:107 F 15 '18
- Feeding and line breeding for the future. L. S. Gillette. il Jersey B 37:805 My 22 '18
- Fetich of family. E. L. Brewer. Jersey B 36:1745 N 7 '17
- Finding the prepotent sire. J. M. Hover. J Heredity 7:173-8 Ap '16
- For a clearing house for blooded dairy stock. Creamery 5:15-16 Je '17
- Founding a herd of purebred cattle. J. M. Robinson. Breeder's Gaz 69:74 Ja 13 '16
- Free-martin. L. J. Cole. Breeder's Gaz 72:204 Ag 16 '17
- Ganeshkhind dairy herd. Willingdon. il Ag J of India 13:1-9 Ja '18
- Gestation table, calculated at the average period of 282 days, for every day in the year. Jersey B 37:19 Ja 2 '18
- Good breeding North and South. R. H. Wooten. Breeder's Gaz 70:1284 D 28 '16
- Good bulls in Texas. Country Gent 81:263 F 5 '16
- Good bull's influence upon three generations. J. J. Dunne. Hoard's D 53:518 Ap 13 '17
- Government as a cattle breeder. R. M. Cleveland. il Country Life 35:52-3 N '18
- Grade cow herdbook. W. C. Jeffries. Ohio F 138:71 Jl 22 '16
- Great old Scotch cow. G. McMillan. il Field II 26:589-91 Jl '16
- He had a great mother; does high production pass on from mother to daughter or through the male line? H. G. Gulliver. il Field II 28:405-9+ Je '18
- Herd building through the sire. G. H. Campbell. Hoard's D 52:724 D 15 '16
- Herd improvement. Country Gent 81:324 F 12 '16
- Herd improvement and analysis. Hoard's D 51:431 Mr 31 '16
- Herd improvement: breeding for butter fat. B. A. Barr. J Dept Ag Victoria 14:89-93 F '16
- Heredity laws applied to cattle breeding. C. B. Davenport. Jersey B 36:1832-3 N 21 '17
- Hereford herd management in the Middle West. Breeder's Gaz 69:667-8 Mr 23 '16
- Higher yields thru good sires. A. L. Beam. Ohio F 141:760 Je 8 '18
- Hints on breeding dairy cattle. Hoard's D 51:906 Je 30 '16
- History of the Guernsey breed; the Island scale of points. C. L. Hill. il Kimball's D F 14:333-4+ My 15 '16
- How a beginner expects to make good with dairy cattle. I. J. Mathews. Ohio F 138:204 S 2 '16
- How I saved fifteen years in starting a herd. W. W. Washburn. System on the Farm 1:73 Ap '17
- How one bank helped. E. B. Harshaw. il Banker-F 5:15 My '18
- How to build up a dairy herd. F. Williams. Prog F 33:618 My 18 '18
- Importance of careful selection of the herd sire. F. H. Scribner. Kimball's D F 14:445 Jl 1 '16
- Improve dairy cattle. Kimball's D F 16:453 Je 1 '18
- Improving Florida cattle stocks. F. S. Hastings. Breeder's Gaz 73:654 Mr 28 '18
- Improving the dairy herd. Country Gent 81:1026 My 13 '16
- Improving the herd. R. G. Reiff. il Purdue Ag 13:11 O '18
- Improving type and ability at the pail. W. Macmonnies. il Field II 27:355 My '17
- In defense of English-bred Herefords. W. G. C. Britten. Breeder's Gaz 69:554 Mr 9 '16
- Inbreeding and linebreeding. T. Smith. il Purdue Ag 11:38-40 Ap '17
- Indiana committee food and conservation dairy division to the farmers of Indiana. Purdue Ag 12:89-91 N '17
- Individuality in western purebreds. W. Hislop. Breeder's Gaz 69:489 Mr 2 '16
- Influence of a sire; results of Maine college experiments. Wallaces' F 42:1626 N 30 '17
- Influence of sires on production. C. C. Hayden. il Ohio Ag Exp B v 1:211-15 Jl '16
- Influence of the sire on the herd. J. H. Wilson. Vt Ag Exp B 202:39-44 '17
- Inheritance of beef type. J. L. Lush. Breeder's Gaz 72:1074 D 13 '17
- Inheritance of color and horns in blue gray cattle. O. Lloyd-Jones and J. M. Evvard. bibliog il Ia Ag Exp Research B 30:67a-106a '16
- Interesting tale of two dairy bulls. C. M. Baker. il Ohio F 138:317+ O 7 '16
- Is the ability to produce milk fat transmitted by the dam or by the sire? T. E. Woodward. Hoard's D 51:146 F 18 '16
- Jersey blood a national asset. D. F. Lee. Jersey B 36:1396 S 12 '17
- Join hands once more—for 1918. A. L. Tichane. Jersey B 36:2017-19+ D 26 '17
- Judging dairy cattle; factors in the selection of a bull. J. A. McLean. il Field II 28:496-7 Jl '18
- Like does not always produce like. C. D. Kirkpatrick. Hoard's D 52:205 S 8 '16
- Line breeding and inbreeding. H. F. Probert. Jersey B 35:343 Mr 8 '16
- Line-breeding at Jean Du Luth farms. il Hoard's D 55:3 Ja 25 '18
- Linebreeding in relation to cattle. W. S. Robbins. Breeder's Gaz 69:668 Mr 23 '16
- Live stock improvement. H. Barton. il J Ag (Quebec) 21:10 Jl '17
- Management of the breeding herd. W. S. Robbins. Breeder's Gaz 69:16 Ja 6 '16
- Masterpieces in black and white. il Field II 26:531-3 Je '16
- Milk power and transmission. Rural N Y 75:206 F 5 '16
- More about that best calf. E. L. D. Seymour. il Country Life 30:68 My '16
- More latitude in selecting sires. B. O. Cowan. Breeder's Gaz 73:546 Mr 14 '18
- More McLean corn data. O Judd Farmer 63:1 N 17 '17
- New lines of dairy work in Ohio. C. C. Hayden. Breeder's Gaz 72:209 Ag 16 '17
- Obtaining a good dairy cow. C. Larsen. il Kimball's D F 16:232-3 Mr 15 '18
- Off-colors in shorthorns. R. C. Forbes. Breeder's Gaz 71:918 My 3 '17
- Opportunities for breeding pure bred cattle. C. H. Eckles. Jersey B 37:1365 Ag 28 '18
- Opportunities in purebred cattle. R. C. Forbes. Breeder's Gaz 71:1116 My 31 '17
- Outcrossing for high production. O. Erf. Jersey B 37:505-6 Ap 3 '18
- Perpetuating blood lines. il Kimball's D F 16:493 S 15 '18
- Pioneer shorthorn breeders. S. F. Lockridge. Breeder's Gaz 72:666 O 18 '17
- Plea for Bates blood. H. G. Regnart. Field II 26:616 Jl '16
- Polled Guernseys. E. N. Wentworth. Breeder's Gaz 71:1016 My 17 '17
- Post graduate work. D. H. Jenkins. Jersey B 36:1746 N 7 '17
- Prepotency of dairy sires. B. H. Rawl. il Hoard's D 55:221 Mr 1 '18



**Cattle breeding—Continued**

Prices of cows for founding a herd. R. C. Forbes. Breeder's Gaz 69:176 Ja 27 '16

Principles in breeding pure-breeds. L. M. Merryman. il Hoard's D 56:583+ N 22 '18

Principles in dairy development. E. E. Lyman. Breeder's Gaz 69:490 Mr 2 '16

Production—prepotency—longevity. il Hoard's D 53:131 F '16 '17

Profit from pure breeds. Country Gent 81:1506 Ag 12 '16

Profit in purebreds. L. L. Rummell. il Ohio F 142:397+ O 26 '18

Prolificacy and the dairy cow. J. R. Dice. Hoard's D 51:154 F '16

Proofs of breeding-on-power. F. B. Keeney. Jersey B 35:1986 D 20 '16

Pure bred dairy stock on the farm. H. C. Mills. il Purdue Ag 12:486-7 My '18

Pure breeds for scrubs. il Ag Digest 1:385 Ap 17

Pure breeds replacing southern scrubs. J. C. Clair. Ag Digest 1:303 F '17

Question of sex prepotency. H. E. Sharp. Jersey B 36:543-4 Ap 11 '17

Raising beef cattle. B. O. Severson. il Pa Ag Exp B 138:1-20 '16

Recollections of the Aberdeen-Angus cattle trade. W. C. McGavock. Breeder's Gaz 69:553-4 Mr 9 '16

Redeeming Scheemet farm. J. A. McLean. il Kimball's D F 15:192 Mr 15 '17

Regarding the dairy merit of a sire. F. B. Keeney. Jersey B 35:480 Mr 29 '16

Relative value of conformation and breeding. L. J. Mathews. Hoard's D 51:2 Ja 28 '16

Report of progress on animal husbandry investigations in 1916. R. Pearl. Maine Ag Exp B 261:121-44 '17; Same. Maine Ag Exp Rep 1917:121-44

Reward of \$60,000 for line breeding. H. G. Van Pelt. Jersey B 37:1494-5+ S 18 '18; Same. Kimball's D F 16:490-1+ S 15 '18

Selecting a dairy herd. C. H. Eckles. il Country Gent 83:8-9 N 16 '18

Selecting dairy bulls by performance. W. E. Carroll. Utah Ag Exp B 153:1-19 '17

Selecting the dairy sire. Ohio F 137:764 Je 3 '16

Selecting the herd sire. M. O. Maughan. Jersey B 36:1785 N 14 '17

Selection of a herd sire. W. R. Proctor. Jersey B 36:1596 O 17 '17

Selection of the dairy sire. C. H. Eckles. Wis Dairymen's Assn Rep 1913-1916:119-30 '17; Same. Hoard's D 51:229+ Mr 3 '16

Selection of the dairy sire. L. L. Rummell. il Breeder's Gaz 72:665-6 O 18 '17

Selection of the Jersey sire. M. A. Wortman. Jersey B 36:622 Ap 25 '17

Selling plans that raised my average cattle prices. W. T. McCray. il System on the Farm 1:55-60 Ap '17

Should the renter purchase a purebred bull? D. Stratton. Ohio F 139:190 F 10 '17

Sires at Sni-A-Bar. il Wallaces' F 43:1511 O 18 '18

Some good suggestions on breeding. C. H. Eckles. Jersey B 35:1808 N 15 '16

Some mistakes made by breeders. il Kimball's D F 16:394 My 15 '18

Sound reasons for pure breeds. B. O. Severson. il Field II 26:670-2 Ag '16

South's greatest breeding establishment to be discontinued. T. Butler. Prog F 32:1059 O 13 '17

Sterility in cows. H. E. Bemis. Ia Ag Coll Offic Pub v 14, no 36:218-26 '16

Story of six dairy sires. Wallaces' F 43:1426 O 4 '18

Story of three cows. W. W. Swett. il Hoard's D 55:551+ Ap 19 '18

Studies in inheritance of certain characters of crosses between dairy and beef breeds of cattle. J. W. Gowen. bibliog il J Ag Research 15:1-58 O 7 '18

Study in breeding. W. M. Singleton. J Ag New Zealand 12:190-2 Mr '16

Successful breeders' many problems. W. M. Kelly. Jersey B 37:2023 D 4 '18

Suggestion on polled beginnings. R. C. Auld. Breeder's Gaz 72:6 Jl 5 '17

Suggests formation of a new breed. B. F. Van Meter. Breeder's Gaz 72:424 S 20 '17

System of cattle breeding in Hawaii. G. P. Cooke. Breeder's Gaz 69:236 F 3 '16

Take care of the pure-breeds. C. O. Carpenter. Prog F 31:1447 D 16 '16

Team work in breeding. E. W. Gage. Prac F 112:158 Ap 1 '16

Testing the herd sire. G. H. Campbell. Hoard's D 53:465 Ap 6 '17

That vexed question of type. H. E. Sharp. Jersey B 36:305 F 28 '17

Through the Hereford country. R. V. Hoffman. il Field II 26:108-10, 208-9, 315-16, 410-11 F-My '16

Triplet calves. il J Heredity 7:135-7 Mr '16

Trouble with dairy business. Ohio F 141:46 Ja 12 '18

Twenty-year breeding experiment at Kansas agricultural experiment station. Field II 26:615 Jl '16

Type, production, or both? E. M. Hastings and F. S. Prescott. il Field II 26:504-5 Je '16

Up-grading. F. E. Robbins. il Purdue Ag 13:106-7 D '18

Value of advanced registry. F. C. Barney. Country Gent 81:508 Mr 4 '16

Value of breeding. D. F. Adams. Jersey B 35:307 Mr 1 '16

Value of pure bred sire. W. J. Frazer. Coop Manager & F 6:98 Ag '17; Same. Coop Manager & F 7:2 O '17

What scrub sires cost the South. Ag Digest 1:262-3 Ja '17

What we pay for scrub sires. L. H. Klaas. Hoard's D 51:660 My 12 '16

Where breeding pays. J. A. McLean. Kimball's D F 14:114 F 15 '16

Which calf is the best? E. L. D. Seymour. il Country Life 30:56-7 My '16

Why buy a mature bull? W. M. Singleton. Jersey B 36:1213 Ag 8 '17

Why keep registered cattle? F. L. Austin. Jersey B 35:435 Mr 22 '16

Why slaughter dairy cows? Kimball's D F 16:561 O 1 '18

See also Bulls; Cattle—Breeds; Cattle—Judging; Cow testing; also subhead Price lists under names of breeds, e.g. Aberdeen Angus cattle—Price lists; also subhead Pedigree records under names of breeds, e.g. Jerseys—Pedigree records

**Iowa college experiment**

Arkansas experiment. C. O. Carpenter. Prog F 31:1063 S 2 '16

Breed-and-feed cross on grade dairy cows. F. W. Beckman. il Breeder's Gaz 69:1203 Je 8 '16

Influence of environment and breeding in increasing dairy production. H. H. Kildee and A. C. McCandlish. il Ia Ag Exp B 165:383-402 '16; Same cond. Kimball's D F 14:365+, 406-7+ Je 1-15 '16; Same cond. Wallaces' F 41:866 Je 16 '16; Same cond. Creamery 4:22 Jl '16; Same cond. Jersey B 35:1120 Jl 19 '16; Same cond. Ohio F 138:173 Ag 26 '16; Same cond. Hoard's D 51:901+ Je 30 '16

Iowa's grading up experiment. il Field II 26:611 Jl '16

When scrub cows go to college. H. R. O'Brien. il Country Life 31:49-50 D '16

**Record books**

Birth report rule annulled. Jersey B 35:1912 D 6 '16

Complete, simple herd record system. E. R. Shoemaker. il Kimball's D F 14:5-6, 45+, 85 Ja 15-F 15 '16

How to write a good pedigree. R. Wylie. Hoard's D 54:620 N 23 '17

Reasons for keeping health herd book. V. A. Moore. Hoard's D 51:45 F 4 '16

Records and breeding of cows. Ohio F 137:495 Ap 1 '16

Value of herdbook names. W. C. Jeffries. Ohio F 137:422 Mr 18 '16

Wisconsin register of production. N. Negley. il Hoard's D 55:655 My 3 '18; Same. Jersey B 37:677 My 1 '18

**Cattle clubs**

See also Baby beef clubs; Calf clubs; also Cheyenne club

**Cattle dip**

Cattle lice and how to eradicate them. M. Imes. *il Farmers' B* 909:1-26 '18  
Field test for lime-sulphur dipping baths. R. M. Chapin. *U S Ag B* 163:1-7 '15  
Laboratory and field assay of arsenical dipping fluids. R. M. Chapin. *U S Ag B* 76:1-17 '14  
Studies on changes in the degree of oxidation of arsenic in arsenical dipping baths. R. M. Chapin. *U S Ag B* 259:1-12 '15

**Cattle industry and trade**

Cattle receipts and prices. *Breeder's Gaz* 73:163 *Ja* 24 '18  
Cattle-zone plan. J. Eby. *Country Gent* 83:29 *Ja* 5 '18  
Conditions of cattle industry. C. Powell. *Ohio F* 137:682-3 *My* 13 '16  
Development and importance of the cattle industry. J. Bright and H. S. Arkell. *Ag Gaz of Canada* 3:791-4 *S* '16  
Evolution of the cattle industry. D. D. Casement. *il Field II* 26:404-5 *My* '16  
Extend the purebred cattle trade. J. E. Painter. *Breeder's Gaz* 69:234 *F* 3 '16  
Foreign trade in meat and stock. L. Ogilvy. *Breeder's Gaz* 74:264 *Ag* 22 '18  
Heavy feeder movement. *il Breeder's Gaz* 73:154 *Ja* 24 '18  
Latest live stock markets. W. W. Foote. *O Judd Farmer* 64:654 *Je* 22 '18  
Meat makers' money. S. O. Stanley. *il Country Gent* 81:146 *Ja* 22 '16  
Meat makers' prospects. J. A. Rickart. *Country Gent* 82:1292 *Ag* 18 '17  
Million-acre pastures go begging. G. F. Stratton. *il Country Gent* 83:8-9+ *Ja* 12 '18  
Recollections of the shorthorn cattle trade. W. D. Flatt. *il Breeder's Gaz* 69:235-6, 302+, 364 *F* 3-17 '16  
Spring and summer cattle prospects. J. A. Rickart. *Nat Stock & F* 40:1264 *F* 24 '17  
Story of Trout Creek farm. W. D. Flatt. *Breeder's Gaz* 69:71-2 *Ja* 13 '16  
Summer cattle trade. J. A. Rickart. *Nat Stock & F* 40:206 *My* 20 '16  
Western view of the cattle situation. *Wallaces' F* 41:1307 *O* 6 '16

See also Meat industry and trade

**Statistics**

Dairy breed statistics in the United States. *Int R Sci & Prac Ag* 7, no 2:251 *F* '16  
Estimated number and value on farms, January 1, 1914-1917, by states. *Monthly Crop Rep* 3:5 *Ja* '17  
• Horses and cattle in Ontario. (*In* Report, Bur. of industries, 1917, p. 40-1) '18 Ontario ag. dept., Toronto  
Other cattle: estimated number and value on farms January 1, 1915-1918, by states. *Monthly Crop Rep* 4:13 *F* '18  
Statistics of farm animals and their products. See United States Department of agriculture Yearbooks  
Statistics of Jerseys, Holsteins, and Guernseys. H. McAlister. *Hoard's D* 53:771 *My* 25 '17  
Table showing number of cattle and silos in Iowa. Greater Iowa (Ag dept., Des Moines) 10:5 *Je* '18

**Cattle insurance.** See Insurance, Live stock

**Cattle judging contests, Students' national.** See Students' national contest in judging dairy cattle

**Cattle loans.** See Loans

**Cattle mange.** See Cattle—Diseases and pests

**Cattle ranches.** See Live stock farms

**Cattle sheds**

Cattle sheds and shelters. W. E. Duckwall. *Breeder's Gaz* 69:965 *My* 4 '16  
Open-shed housing of milk cows. G. S. Bulkley. *il Ohio F* 141:184 *F* 9 '18

**Cattle shows**

Alderney cattle show. C. Kitts. *Hoard's D* 54:182 *S* 7 '17

Breeding classes of cattle at the International, 1916. *Breeder's Gaz* 70:1110-13 *D* 14 '16  
Breeding classes of cattle at International, 1917. *Breeder's Gaz* 72:1089-92 *D* 13 '17  
Canadian national exhibition, Toronto. *Jersey B* 37:1493 *S* 18 '18  
Cattle section at Iowa state fair. *il Breeder's Gaz* 72:322 *S* 6 '17  
Cattle shown at early Wisconsin fairs. G. W. Vergeront. *Hoard's D* 53:603 *Ap* 27 '17  
Dairy cattle at the Michigan state fair. W. A. Freehoff. *Hoard's D* 56:260 *S* 20 '18  
Dairy cattle at western fairs; Illinois, Iowa and Ohio state fairs. *il Field II* 28:726-7 *O* '18  
Dairy cattle show at Illinois state fair. *O Judd Farmer* 61:3 *O* 7 '16  
Fitting cattle for the show ring—a la Pat Robinson. J. A. McLean. *Kimball's D F* 14:285 *Ap* 15 '16; Same. *Jersey B* 35:600 *Ap* 19 '16  
Good Jersey turnout at Oklahoma fair. *il Jersey B* 36:1614 *O* 17 '17  
Great California report. *Jersey B* 37:1541 *S* 25 '18  
Great herds at western fairs; Iowa, Ohio and Illinois state fairs. *il Field II* 28:724-5+ *O* '18  
Great show at Kansas City. *il Jersey B* 37:1537-8+ *S* 25 '18  
Illinois state fair, 1918. *Breeder's Gaz* 74:306-7 *Ag* 29 '18; *Wallaces' F* 43:1220 *Ag* 30 '18  
Impressions of the recent live stock show of the Rural society of Argentina at Buenos Aires. C. F. Curtiss. *il Breeder's Gaz* 70:589-90 *O* 5 '16  
Indiana state fair. C. R. George. *il Hoard's D* 56:319+ *O* 4 '18  
Iowa state fair, 1918. *Wallaces' F* 43:1226, 1258-9 *Ag* 30-3 *S* 6 '18  
Island spring show. P. L. Mourant. *Jersey B* 36:961 *Je* 20 '17  
Jersey and its cattle. C. S. Plumb. *il Field II* 27:349-51 *My* '17  
Jerseys at Indianapolis. *Jersey B* 36:1397 *S* 12 '17  
Jerseys at the Tennessee state fair. *Jersey B* 37:1541 *S* 25 '18  
Jerseys at Vancouver fair. *il Jersey B* 37:1540 *S* 25 '18  
Jerseys dominate Syracuse show. A. L. Tichane. *il Jersey B* 37:1539 *S* 25 '18  
Jerseys prominent at three state fairs. *il Jersey B* 37:1496+ *S* 18 '18  
Live stock awards of 1916 Iowa state fair. *il Ia Ag Bd Yearbook* 1916:177-203  
Mississippi glories in Jerseys. J. R. Moore. *il Jersey B* 37:1819 *O* 30 '18  
Missouri state fair, 1918. *il Wallaces' F* 43:1195 *Ag* 23 '18  
Nebraska state fair, 1918. *il Wallaces' F* 43:1295-6 *S* 13 '18  
Old-time shows and forcing calves. T. Andrews. *Breeder's Gaz* 73:202 *Ja* 31 '18  
Prizes on the Island of Jersey, 1917. *Jersey B* 37:1240+ *Ag* 7 '18  
Royal British show in war time. T. Reece. *il Hoard's D* 52:133+ *Ag* 25 '16  
Show at Forth Worth, Texas. *Breeder's Gaz* 73:609-10 *Mr* 21 '18  
Show ring an educator. H. T. Morgan. *Kimball's D F* 14:276 *Ap* 15 '16  
Showing as a business-builder. O. V. Battles. *il Breeder's Gaz* 73:699-700 *Ap* 4 '18  
Show season approaches. A. L. Tichane. *Jersey B* 37:1090 *Jl* 10 '18  
Showyard as a proving place; with illustrations from Hereford history. E. H. Taylor, jr. *Breeder's Gaz* 73:1029 *My* 16 '18  
Single bullocks in the arena at the International. *Breeder's Gaz* 70:1116-17 *D* 14 '16  
Spring cattle show on the Island. P. Le S. Mourant. *Jersey B* 37:977 *Je* 19 '18  
State fairs and dairy shows, and sales. *Jersey B* 36:2021-2 *D* 26 '17  
Symposium on the value of the show ring. *Jersey B* 35:1545-6 *O* 4 '16  
Tillyfour Angus victory in Paris. R. C. Auld. *Breeder's Gaz* 70:832, 1102 *N* 2, *D* 14 '16  
Value of show ring to breeder, public and breed. *Ag Digest* 1:185 *N* '16  
Value of the dairy showing. G. Gusler. *il Field II* 27:748-9+ *O* '17



**Cattle shows—Continued**

- Value of the Island shows. Jersey B 36:431 Mr 21 '17  
Virginia state fair cattle awards. R. E. Hunt. Hoard's D 54:544 N 9 '17  
We greet the show season. W. Macmonnies. Jersey B 36:1137-8 Jl 25 '17  
What the show ring can and cannot do. C. L. Hill. Kimball's D F 14:277 Ap 15 '16  
See also Cow testing exhibits; Dairy shows; also American royal live stock show; Dairy cattle congress; International live stock exposition; National breeders' and feeders' show; National dairy show; National shorthorn congress show and sale; Southwestern Jersey cattle show

**Cattle, swine and sheep feeders' association**  
5th annual meeting, Columbia, Jan. 13-15, 1916. Mo Ag Bd Yearbook 1916:517-26

**Cattle ticks**

- All records broken; 65,520 square miles to be freed of federal quarantine. Weekly N L 5: 1-2 N 21 '17; Same. Prog F 32:1238 N 24 '17  
Are you feeding ticks? C. O. Carpenter. Prog F 32:498 Ap 21 '17  
Cattle tick and milk yield. C. A. Whittle. Hoard's D 51:245 Mr 3 '16  
Cattle tick eradication again to break records. Weekly N L 5:8 Jl 10 '18; Same. Hoard's D 56:102 Ag 16 '18  
Cattle tick in Australia. (B. 1) 30p bibliog maps '17 Advisory council of science and industry, Melbourne, Australia  
Cattle tick: life history and methods of destroying. T. Butler. Prog F 31:1281 N 4 '16  
Cattle tick on the run in 22 Oklahoma counties—Council of defense indorses. Weekly N L 6:10 S 4 '18  
Children tell how to banish cattle fever tick. Hoard's D 56:196 S 6 '18  
Compulsory tick eradication in four states. Prog F 32:516 Ap 21 '17  
Congratulations on lifting of cattle fever tick quarantine. D. F. Houston. Weekly N L 5:5 D 12 '17  
Considering the cattle tick—some sentimental as well as practical phases of the subject. W. A. McRae. il Fla Ag Dept Quar B v 26:45-52 Ap '16  
Cow has but one hide; how science is saving it from the tick. C. M. Morrison. il map Illustrated World (Drexel av. and 58th st., Chicago 15c) 26:204-5 O '16  
Demonstration work in tick eradication. Prog F 31:258 F 19 '16  
Effect of the cattle tick upon the milk production of dairy cows. T. E. Woodward and others. il U S Ag B 147:1-22 '15  
Eradicating cattle ticks in Florida. E. M. Nighbert. il Breeder's Gaz 70:1104 D 14 '16; Same. Breeder's Gaz 71:62 Ja 11 '17  
Georgia's anti-tick drive. F. H. Abbott. Banker-F 5:13 S '18  
History of tick fight. Weekly N L 5:3-5 N 28 '17  
How long will it take to get rid of the cattle tick? J. A. Kiernan. Tex Ag Dept B 52:51-6 '16  
How to obtain outside cooperation in advancing tick eradication. J. B. Reidy. Am Vet M Assn J 52:850-3 Mr '18  
Life history study of the Australian cattle tick. R. H. Van Zwaluwenburg. Porto Rico Ag Exp Rep 1917:31-3 '18  
Livestock progress in Arkansas. C. O. Carpenter. Prog F 32:297 Mr 3 '17  
Making tickless cattle in Texas. W. D. Hornaday. Hoard's D 53:849 Je 15 '17  
Milk flow increased; dipping does not reduce yield. Weekly N L 4:4 Jl 11 '17; Same. Prog F 32:736 Je 30 '17; Same. Jersey B 36:1144 Jl 25 '17  
New records set in cattle tick campaign of this year. map Weekly N L 6:12-13 D 4 '18; Same. Prog F 33:1308 N 30 '18  
New restrictions on ticky cattle. Prog F 31: 834 Jl 1 '16  
Notes regarding ticks found on farm animals in New Zealand. C. J. Reakes. J Ag New Zealand 16:83-6 F '18

- Organizing and conducting state-wide tick eradication in Louisiana. E. I. Smith. il Am Vet M Assn J 53:639-45 Ag '18  
Problems of tick eradication; personal influence of the inspector. W. H. Dalrymple. Am Vet M Assn J 53:230-4 My '18  
Progress of tick eradication work. Prog F 31: 1119 S 23 '16  
Progress of tick eradication work in Arkansas. C. O. Carpenter. Prog F 31:1109 S 16 '16  
\* Résumé of proceedings at conference called to draw up a scheme for repression of the cattle-tick by cooperation between the commonwealth and state governments. (In Executive com. Report, 1918, p. 20-1) '18  
Australia Advisory council of science and industry, Melbourne  
South as the coming stock land of America. J. E. Pickett. il Country Gent 83:6-7 O 19 '18  
South tick-free by 1921. R. G. Miller. il Kimball's D F 15:45-6 F 1 '17  
State-wide tick eradication; Mississippi law. Prog F 31:652 My 13 '16  
Story of the cattle fever tick; what every southern child should know about cattle ticks. 31p il map '17 U S Ag  
Studies on changes in the degree of oxidation of arsenic in arsenical dipping baths. R. M. Chapin. U S Ag B 259:1-12 '15  
Tick and its eradication in Louisiana. J. M. Cadwallader. Hoard's D 51:238 Mr 10 '16  
Tick eradication. E. I. Smith. (In Cut-over land conf. of the South, 1917, p. 182-7) \$2.50  
'17 Southern pine assn., New Orleans, La.; Abstract. Am Vet M Assn J 51:779-86 S '17  
Tick eradication in Arkansas. C. O. Carpenter. Prog F 31:1428 D 9 '16  
Tick eradication in Georgia. J. I. Davis. Breeder's Gaz 69:128 Ja 20 '16  
Tick eradication in Texas. A. K. Short. Breeder's Gaz 72:838 N 8 '17  
Tick eradication laws and regulations of the state of Arkansas. Ark Ag Exp B 132 7p '17  
Tick eradication; progress of tick eradication work in the state of Florida for the month of September, 1918. Fla Ag Dept Quar B v 28:38-40 O '18  
Tick eradication progressing in Arkansas. C. O. Carpenter. Prog F 32:753 Jl 7 '17  
\* Tick eradication quarantine law. (In 5th biennial report, p. 60-7) '18 La. State live stock sanitary bd., Baton Rouge  
Tick quarantine raised in new territory. Prog F 31:442 Mr 25 '16  
Tick-resistance of cattle. T. H. Johnston and M. J. Bancroft. Ag Gaz of New South Wales 29:319-20 My '18  
To admit ticky cattle. Weekly N L 5:2 D 5 '17  
To divide tick army. Weekly N L 4:3 F 21 '17  
To get the tick early. Prog F 32:254 F 24 '17  
Why Florida is behind. W. A. McRae. Fla Ag Dept Quar B v 27:39-42 Ap '17  
See also Texas fever

**Cattlemen**

- Cheyenne club; recollections of an organization famous in connection with the development of the western cattle trade. J. Clay. il Breeder's Gaz 70:1182-3 D 21 '16  
More stories of the early-day shorthorns. M. E. Jones. Breeder's Gaz 73:809 Ap 18 '18 (to be cont)  
Revolution of the eighties. Breeder's Gaz 73: 651-2 Mr 28 '18  
Saddle and sirloin club and gallery; famous shorthorn breeders. L. L. Heller. pors il Field Il 27:923-6 D '17

**Cattlefly flies. See Orchid flies**

**Cauliflower**

- Broccoli industry in Oregon. C. H. Bailey. (In 8th annual report, 1916, p. 53-7) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.  
Broccoli industry of southern Oregon. F. Butner. il Market Growers J 22:389 Je 1 '18  
Cabbage and cauliflower as market-garden and farm crops. H. N. Legate. il Mass Ag Bd B 5:126-37 '18 (3d ed. rev.)

**Cauliflower—Continued**

- Cabbage and cauliflower culture. A. L. Dacy. W Va Ag Ext C 196 4p '18
- Cabbage and cauliflower culture. C. B. Sprague. Wash Ag Exp Pop B 110:1-4 '17
- Cauliflower. Am Flor 46:972 My 20 '16
- Cauliflower as a winter crop. C. W. Waid. il Market Growers J 18:398 Je 15 '16
- Cauliflower for resort trade. J. H. Forell. Market Growers J 18:147 F 15 '16
- Cauliflower-growing in Canterbury. il J Ag New Zealand 13:138-40 Ag '16
- December cauliflower. J. W. Wilkinson. il Country Gent 81:1325 Jl 8 '16
- Experience with cauliflower; symposium. Market Growers J 21:176-7 O 15 '17
- Growing cauliflower in a young orchard. S. M. Shaw. Gard M 23:220 My '16
- Learning how to grow fancy cauliflower. J. Wilson. Market Growers J 21:53 Ag 1 '17
- Long Island cauliflower hints. W. B. Tuthill. O Judd Farmer 60:17 Mr 11 '16
- Preparing cauliflower. E. I. Locke. Kimball's D F 15:535 Ag 1 '17
- To make cauliflower head. Fruit-Grower 27:315 Je 1 '16
- Wintering seedling cauliflowers. E. Beckett. il Gard Chron (Lond) 63:128 Mr 23 '18

**Causes of the revolution in 1941.** H. A. McDonald. Wallaces' F 42:1722 D 21 '17

**Cavies.** See Guinea pigs

**Ceanothus**

Garden varieties of ceanothus. Gard Chron (Lond) 64:194 N 16 '18

**Cecropia moths**

Our cecropia moth. il Am For 24:352-5 Je '18

**Cedar**

- Ancient cedars of Lebanon. G. E. Mitchell. il Am For 22:738-9 D '16
- Cause of the durability of cedar and some suggested uses of cedar. Engineering and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:197-8 F 28 '17
- Cedar of Lebanon. il Gard Chron Am 21:204 My '17
- Commercial uses of western red cedar. H. P. Wyckoff. il Am For 22:134-7 Mr '16
- 1st annual red cedar shingle congress, Seattle, Wash., Jan. 16-17. Am Lumberman (431 S. Dearborn st., Chicago 15c) 2228:43-6 Ja 26 '18
- Incense cedar. J. A. Mitchell. il map U S Ag B 604:1-40 '18
- Miscellaneous conifers of the Rocky Mountain region; generic characteristics of incense cedars. G. B. Sudworth. il U S Ag B 680:27-39 '18
- Notes on conifers; cupressus thyoides. A. B. Jackson. il Gard Chron (Lond) 60:85 Ag 19 '16
- Trees of Vermont; cedar. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:50-3 '16
- Weight of Spanish cedar. C. D. Mell. Sci Am Sup (233 Broadway, N.Y. 10c) 85:325 My 25 '18
- Western red cedar. S. B. Detwiler. il Am For 22:131-4 Mr '16

See also Deodar

**Diseases and pests**

- Keithia thujina, the cause of a serious leaf disease of the western red cedar. J. R. Weir. il Phyt 6:360-3 Ag '16
- Nursery blight of cedars. G. G. Hahn and others. il J Ag Research 10:533-40 S 3 '17
- Origin and development of the galls produced by two cedar rust fungi. J. L. Weimer. bibliog il Am J Bot 4:241-51 Ap '17
- See also Apple rust; Cedar borers

**Cedar borers**

Western cedar borer. R. N. Chrystal. il Ag Gaz of Canada 4:946-9 N '17

**Cedar rust.** See Apple rust

**Cedar waxwing.** See Waxwings

**Cedrats.** See Etrogs

**Ceilings**

Lid of the box; a study in ceilings. A. M. Githens. il Country Life 30:28-9 O '16

**Celeriac**

Celeriac. G. W. Kerr. Country Gent 81:692 Mr 25 '16

**Celery**

- Asparagus culture; celery culture; onion culture. W. T. Macoun. 8p n.d. Canada Ag
- Bed method of growing celery. Prac F 113:268 Ag 1 '17
- Blanching celery. J. S. Gardner. Fruit-Grower 27:459 O 15 '16
- Blanching celery. C. O. Ormsbee. Market Growers J 19:158 O 1 '16
- Blanching celery with paper. il Nat Stock & F 40:355 Jl 1 '16
- Blanching, harvesting and marketing of celery. J. L. Stahl. il Western Wash Ag Exp B v 5:47-9 Jl '17
- Celery. E. Beckett. Gard Chron (Lond) 64:4 Jl 6 '18
- Celery and other summer salad crops. il Country Gent 81:1122 My 27 '16
- Celery banking and storage. Market Growers J 19:210 N 1 '16
- Celery—bolting and pithiness. Country Gent 81:891 Ap 22 '16
- Celery costs. Country Gent 81:2080 D 23 '16
- Celery crop. Prac F 112:278 Jl 15 '16
- Celery culture. F. W. Allen. Wash Ag Exp Pop B 109:1-4 '17
- Celery culture. E. R. Janes. Gard Chron (Lond) 59:78 F 5 '16
- Celery culture in the arid West. F. W. Beckwith. Market Growers J 18:364 Je 1 '16
- Celery culture in western Washington. J. L. Stahl. il Western Wash Ag Exp B v 4:7-13 F '17
- Celery for a local market. E. L. McGregor. Market Growers J 18:140 F 15 '16
- Celery growing and marketing. G. E. Hollowell. (In 8th annual report, 1916, p. 57-61) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.
- Celery growing in Massachusetts. H. T. Thompson. Market Growers J 23:183-5 N 15 '18
- Celery growing, storing and marketing. H. M. Howard. il Mass Ag Bd B 5:107-15 '18 (3d ed. rev.)
- Celery in pits. E. I. Farrington. il Country Gent 81:2163 D 16 '16
- Celery sprayers warned. Am Flor 46:756 Ap 22 '16; Same. Market Growers J 18:339 My 15 '16
- Celery varieties and methods of blanching. C. W. Waid. Market Growers J 18:248 Ap 1 '16
- Concerning quality in celery. J. B. Norton. Vt Ag Exp B 203:10-12 Mr '17
- Device for applying celery paper. il Market Growers J 19:209 N 1 '16
- Experiences with early celery; symposium. Market Growers J 20:218-19+ Mr 1 '17
- Experiences with late celery; symposium. Market Growers J 23:14-15 Jl 1 '18
- Girls' success with celery. H. Creighton. Nat Stock & F 42:55 Ap 6 '18
- Growing celery. Prog F 33:788 Jl 13 '18
- Growing celery in the upper South. Prog F 32:380 Mr 24 '17
- Growing celery plants for early crop. R. H. Garrahan. Market Growers J 18:127 F 15 '16
- Growing celery plants for main crop. Market Growers J 18:309 My 1 '16
- Harvesting early celery. A. E. Wilkinson. il Country Gent 81:1303 Jl 1 '16
- Home garden; celery—to follow peas or early beans. il Country Gent 83:30 Ap 27 '18
- Less ground; more celery. R. E. Allen. Gard M 25:298 Je '17
- Michigan celery methods. C. E. Beckwith. O Judd Farmer 60:10 My 27 '16
- Pennsylvania market gardening methods. R. H. Garrahan. Market Growers J 22:45-6 Ja 15 '18
- Potatoes and celery—two late crops. W. F. Massey. Prac F 114:244 Jl 15 '18
- Quality celery for local markets. F. F. Rockwell. il Gard M 23:171-2 Ap '16
- Raise celery at a profit. B. E. Heitzman. O Judd Farmer 61:9 Ag 12 '16
- Some muck land problems. A. E. Wilkinson. Market Growers J 22:210 Mr 15 '18



**Celery**—*Continued*

Success with celery. M. Heckman. Market Growers J 18:145 F 15 '16  
Utilizing swampy areas for celery. W. C. Covey. il O Judd Farmer 60:5 Mr 25 '16

**Diseases and pests**

Celery blight starts in seed bed. R. W. De Baun. Rural N Y 75:917 Je 24 '16  
Celery blights and spraying. A. E. Wilkinson. Country Gent 81:1233 Je 17 '16  
Celery leaf blight. E. F. Stoddard. Market Growers J 22:350 My 1 '18  
Leaf spot of celery. il J Bd Ag 24:68-70 Ap '17  
Report on diseases of celery. W. S. Krout. N J Ag Exp Rep 1916:584-603 '17  
Rust fly, pest of carrots and celery. J. P. Griffiths. Market Growers J 23:205 D 1 '18  
Septoria injurious to celery in the neighbourhood of Petrograd. G. Dorogin. Int R Sci & Prac Ag 7,no 7:1041-2 Jl '16  
Septoria leaf spot disease of celery. G. H. Coons and E. Levin. il Mich Ag Exp Spec B 77:1-8 '16; Same. Mich Ag Bd Rep 1916:372-8; Same cond. Am Flor 46:1218 Je 24 '16; Same cond. Market Growers J 19:207 N 1 '16

See also Celery rot

**Seed**

Growing celery seed in New Jersey. R. W. DeBaun. il Market Growers J 20:342 Ap 15 '17

**Storage**

Boston way of storing celery. E. I. Farrington. il Rural N Y 77:1211 O 26 '18  
Celery in cold storage. Am Flor 49:892 N 10 '17  
Celery storage experiments. H. C. Thompson. il U S Ag B 579:1-26 '17  
Keeping celery over winter. Rural N Y 76:1260 N 3 '17  
Storing celery. J Ag (Quebec) 22:72 N '18  
Storing celery. C. E. Brehm. il Country Gent 81:1755 S 30 '16  
Storing celery in the Philadelphia section. C. E. Brehm. Market Growers J 19:60 Ag 1 '16

**Transportation**

Handling and precooling of Florida lettuce and celery. H. J. Ramsey and E. L. Markell. il U S Ag B 601:1-28 '17

**Celery blight.** See Celery—Diseases and pests

**Celery cabbage.** See Chinese cabbage

**Celery rot**

Celery-rot bacillus. H. Wormald. bibliog il J Ag Sci 8:216-45 Mr '17

**Cell-permeability.** See Permeability

**Cellars**

Cellar at its best. A. G. Vestal. Power F 25:30 O '16  
Damp proofing a cellar. C: A. King. Country Life 33:102 Mr '18  
Way to a good cellar. N. K. Jones. Country Gent 81:1003 My 6 '16

**Cells**

Collocation of plasmas within the cell. L. Le-grand. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:60-4, 76-7 Ja 26-F 2 '18  
Experimental modification of germ cells. R. Pearl. Maine Ag Exp B 268:297-303 '17; Same. Maine Ag Exp Rep 1917:297-303  
Heredit and mutation as cell phenomena. R. R. Gates. Am J Bot 2:519-28 D '15  
See also Chromosomes; Embryology; Karyokinesis; Plant cells and tissues; Protoplasm

**Cellulose**

Studies on the decomposition of cellulose in soils. I. G. McBeth. bibliog Soil Sci 1:437-87 My '16

**Celtis.** See Nettle trees

**Cement**

Effect of alkali upon Portland cement. K. Steik. il Wyo Ag Exp B 113:71-122 '17

**By-products**

Another cement potash installation. Am Fert 48:36 My 11 '18

Recovery of potash as a by-product in the manufacture of cement. J. J. Porter. Am Fert 46:52 Ap 23 '17  
Recovery of potash as a by-product in the cement industry. W: H. Ross and others. U S Ag B 572:1-22 '17; Same cond. Am Fert 48:35-6+ Ja 13 '18  
Recovery of water-soluble potash as a by-product in the cement industry. W: H. Ross and A. R. Merz. Am Fert 47:26-8 S 29 '17

**Cemeteries**

Improvement and care of rural cemeteries. W. S. Wilson. 13p '17 Historical commission, Legislative reference dept., Raleigh, N.C.  
Rural cemetery a social possibility. T: Jones. il Nat Stock & F 40:572 S 2 '16

See also Cemetery associations; also Association of American cemetery superintendents

**Cemetery associations**

Articles of incorporation for cemetery association. Wallaces' F 43:1041 Jl 12 '18  
Cemetery association. Wallaces' F 42:373 F 23 '17

**Census**

**Bibliography**

Agriculture; Cotton and cottonseed; Tobacco; 1912-1916; Forest products. (In Circular of information concerning census publications, 1790-1916, p 37-42, 73-80) '17 U.S. Census bureau, Washington, D.C.

**Laws**

Loi ordonnant le recensement de la population en Egypte. Int Yearbook Ag Leg 1916:30 '17

**Centaureas**

Centaureas for market. J. H. Sperry. il Country Gent 82:736 Ap 14 '17

**Centenarians.** See Longevity

**Centipedes**

Centipedes and whip-tailed scorpions. R. W. Shufeldt. il Am For 24:607-9 O '18

**Central America**

See also Botany—Central America; Cattle—Central America

**Industries and resources**

Side lights on the coffee industry; facts and scenes from Central America. H. M. Wright. il Sci Am Sup (233 Broadway, N. Y. 10c) 86:168-9 S 14 '18

**Central bank**

Agricultural co-operation in Silesia. Int R Ag Econ 62:6-11 F '16  
Central and provincial banks. Int R Ag Econ 61:36-46 Ja '16  
True sphere of central co-operative banks. R. B. Ewbank. Ag J of India 13:381-8 Jl '18  
Working of central and provincial banks in India. Int R Ag Econ 63:9-24 Mr '16

**Central bureau of social intelligence, Netherlands**

Establishment, organization and finances of the bureau. Int R Ag Econ 64:10-17 Ap '16

**Central California berry growers**

What the Central California berry growers have accomplished. M. Grimes. Cal State Comm Hort B v 7:58-9 Ja '18

**Central chamber of agriculture, Great Britain**

Fifty years of agricultural politics, being the history of the Central chamber of agriculture, 1865-1915. Int R Ag Econ 63:49 Mr '16

**Central Europe.** See Agriculture—Central Europe; Food supply—Central Europe

**Central institute of sericultural trade associations.** See Sericultural trade associations, Central institute of

**Central park, New York city**

Park vandals in Central park. Am Flor 46:225 F 19 '16

**Centralization of schools.** See Rural schools—Consolidation

**Century plants.** See Agaves

- Cephalotus.** See Pitcher plants
- Cephus occidentalis.** See Western wheat-stem sawflies
- Ceramica picta.** See Zebra caterpillars
- Ceratodon purpureus.** See Mosses
- Ceratonla siliqua.** See Carob
- Ceratopogon.** See Punkies
- Cercospora**  
Field studies of cercospora beticola. M. B. McKay and V. W. Pool. *il Phyt* 8:119-36 Mr '18  
Studies in Porto Rican parasitic fungi. E. Young. *Mycol* 8:42-6 Ja '16  
See also Sugar-beet leafspot
- Cereal driers.** See Grain drying machines
- Cereal foods**  
\* Amended coarse grain rules. (*In* Official statement no. 4, p. 7-8) '18 U.S. Food administration, Washington, D.C.  
Breakfast foods and their relative value. S D Ag Exp B 168:448-61 '16  
Cereal breakfast foods. J. P. Street. *Conn State Ag Exp B* 197:19-43 '17  
Cereals in the diet. M. F. Henry. *bibliog il Cornell Reading Course Farm Home* 117:27-52 '18  
Cereals surprise us by being so interesting. *Country Gent* 82:574 Mr 17 '17  
\* Dietary deficiency of cereal foods with reference to their content in "antineuritic vitamin," by C. Voegtlin and others; Growth-promoting properties of foods derived from corn and wheat, by C. Voegtlin and C. N. Myers; Phosphorus as an indicator of the "vitamine" content of corn and wheat products, by C. Voegtlin and C. N. Myers. 54p '18 U.S. Public health service, Washington, D.C.  
Grain and grain products. P. MacDonald. *Pa Ag Ext C* 68:1-12 '17  
Home preparation of breakfast foods and flour from whole grain. G. A. Olson. *il Wash Ag Exp Pop B* 112:1-15 '17  
How to select foods. C. L. Hunt and H. W. Atwater. *il Farmers' B* 817:1-22 '17  
Reduce food costs. *Weekly N L* 4:6 Jl 4 '17  
Sealed paper carton to protect cereals from insect attack. W. B. Parker. *il U S Ag B* 15:1-8 '13  
See also Cookery—Cereals
- Analysis**
- Cereal foods. *Assn Offic Ag Chem J* 2,no 2, pt 2:187-91 Ag '16
- Cereal pathologists, Conference of.** See Conference of cereal pathologists
- Cereals.** See Grain
- Cerotoma trifurcata.** See Bean leaf beetles
- Certified milk.** See Milk, Certified
- Certified milk producers' association**  
New York certified milk producers meet. H. H. Lyon. *Hoard's D* 52:430 O 20 '16  
New York certified producers meet. *Jersey B* 35:389 Mr 15 '16  
9th annual convention, Long Beach, L.I., June 1-2, 1916. *Breeder's Gaz* 69:1258 Je 15 '16; *il Field H* 26:612 Jl '16  
9th annual convention, Long Island, New York, June 1-2, 1916. H. G. Gulliver. *Hoard's D* 51:899 Je 30 '16; *Same, Jersey B* 35:976 Je 21 '16; *Same, Kimball's D F* 14:426 Jl 1 '16
- Cesspools**  
Cheap and efficient cess pool for the country home. E. F. Cauthen. *Prog F* 31:1201 O 14 '16
- Ceutorhynchus marginatus.** See Weevils
- Ceylon.** See subhead Ceylon under Agricultural cooperative credit associations; Agriculture; Botany
- Chaff cutters**  
Chaff-cutter for litter, provided with pneumatic delivery and press. *il Int R Sci & Prac Ag* 7,no 5:719-22 My '16  
Chaff-cutter with curved blade and plate for packing the straw. *Int R Sci & Prac Ag* 7, no 4:563-5 Ap '16
- Chaff-mites**  
Chaff-mite; methods of control. A. H. Cockayne and R. Waters. *il J Ag New Zealand* 12:372-9 My '16
- Chains**  
Repairing a broken chain; how to shape and weld a new link. P. S. Rose. *il Country Gent* 83:26 My 25 '18
- Chair seats**  
How to cane chair seats. E. S. Knapp. *il Rural N Y* 76:708 My 19 '17
- Chairs**  
American Windsor chairs. J. B. Kerfoot. *il Country Life* 32:65-70 O '17  
Cottage chairs. W. A. Dyer. *il Country Life* 31:58 N '16  
Grandmother's fancy chairs. W. A. Dyer. *il Country Life* 32:82 My '17  
Old French chairs. W. A. Dyer. *il Country Life* 33:74+ F '18  
Roundabout chair. *il Country Life* 30:56 S '16  
See also Stools
- Chalcid flies**  
Life history of habrocytus medicaginis, a recently described parasite of the chalcis fly in alfalfa seed. T. D. Urbahns. *il J Ag Research* 7:147-54 O 23 '16  
Oviposition of megastigmus spermatrophus in the seed of Douglas fir. J. M. Miller. *il J Ag Research* 6:65-8 Ap 10 '16  
Tetrastichus bruchophagi, a recently described parasite of bruchophagus funebris. T. D. Urbahns. *il J Ag Research* 8:277-82 F 12 '17  
See also Apple-seed chalcid flies
- Chalets.** See Architecture, Domestic—Switzerland
- Chalk**  
Chalking: a useful improvement for clays overlying the chalk. E. J. Russell. *il J Bd Ag* 23:625-32 O '16
- Chambers of commerce.** See Boards of trade
- Chance**  
Law of chance. *Wallaces' F* 42:1063 Jl 27 '17
- Changas**  
Changa or West Indian mole cricket. R. H. Van Zwaluwenburg. *bibliog il Porto Rico Ag Exp B* 23:1-39 '18
- Channel Islands.** See Guernsey, Island of; Jersey, Island of
- Chapais, Jean Charles, 1850-**  
Sketch. *bibliog pors J Ag (Quebec)* 21:139 Mr '18
- Chaplains, Army**  
Uncle Henry's own story. *Wallaces' F* 43:440 Mr 8 '18
- Chapman, John.** See Appleseed, Johnny
- Charæas graminis.** See Antler moths
- Charbon.** See Anthrax
- Charcoal**  
Farm use of charcoal. *Rural N Y* 75:1093 Ag 19 '16  
Making charcoal. *Wallaces' F* 42:1082 Ag 3 '17
- Charge to keep; story.** B. A. Williams. *il See weekly numbers of Country gentleman, Jan. 26-Feb. 23, 1918*
- Chariots of peace; story.** B. Burch. *Ohio F* 141:358, 398 Mr 9-16 '18
- Charlock.** See Mustard, Wild
- Chats, Yellow-breasted.** See Yellow-breasted chats
- Chaulmoogra oil**  
Use and chemical composition of the seeds of hydnocarpus venenata, h. alcalae, and pangium edule. C. H. Brill. *Int R Sci & Prac Ag* 8,no 12:1230-3 D '17
- Chauveau, Auguste, 1827-1917**  
Sketch. *por Am Vet M Assn J* 51:6-7 Ap '17
- Chayotes**  
Chayote, a wonderful new vegetable to help us out on the high cost of living. *il Gleanings* 45:641-2 Ag '17
- Cheddar cheese.** See Cheese
- Cheerful liar; story.** I. M. Evans. *il Country Gent* 83:16-18+ Mr 23 '18



**Cheese**

Big cheese at New York state fair. H. H. Lyon. *il* Hoard's D 52:242 S 15 '16  
 Branding cheese. N Y Prod R 44:1100; 45:174 O 24, D 5 '17  
 Buttermilk cheese. N Y Prod R 46:300+ Je 19 '18  
 Casein or skims? N Y Prod R 42:1104 O 18 '16  
 Cheddar cheese dept. N Y Prod R 44:266 Je 13 '17  
 Cheddar cheese standard. N Y Prod R 42:328 Je 14 '16  
 Cheese and its value as a food. C. D. Francis. Hoard's D 52:772 D 22 '16  
 Cheese consumption. N Y Prod R 45:246 D 19 '17  
 Cheese defect; where the trouble may lie when cheese will not bore a full trier. N Y Prod R 43:716 F 28 '17  
 Cheese for the Indian market. M. Wallace. *Ag Gaz* of New South Wales 29:205-6 Mr '18  
 Cheese history. R. Robinson. Hoard's D 52:14 J1 28 '16  
 Cheese in war time. J. L. Sammis. *Jersey B* 37:763 My 15 '18  
 Cheese is king. *il* Hoard's D 52:514 N 3 '16  
 Cheese milk quality. N Y Prod R 42:408 Je 28 '16  
 Cheese outlook. N Y Prod R 45:480 F 6 '18  
 Cheese paraffining. N Y Prod R 42:162 My 17 '16  
 Cheese quality improvement. N Y Prod R 44:1036 O 17 '17  
 Cheese—the dairy stabilizer. S. R. Winters. *il* Field 11 28:316-17+ My '18  
 Cheese values; economic factors which affect the price of cheese. N Y Prod R 45:14+ N 7 '17  
 Cheese vs. butter. N Y Prod R 44:82 My 16 '17  
 Cheese versus butter. I: Motes. *Jersey B* 35:1318 Ag 23 '16  
 Comparison of the imported and domestic Swiss cheese. N Y Prod R 43:980 Ap 11 '17  
 Compressed cheese. N Y Prod R 45:592 F 27 '18  
 Cream cheeses. W. R. Gilbert. *Jersey B* 35:58 Ja 12 '16  
 Crumbly cheese. N Y Prod R 44:1138 O 31 '17  
 Does silage affect Swiss cheese. H. E. Paulson. Hoard's D 51:326 Mr 17 '16  
 Domestic consumption; what can the factory-man do to promote larger use of cheese. N Y Prod R 46:306 Je 19 '18  
 Eat more cheese. Hoard's D 55:397 Mr 22 '18  
 Edam cheese. W. H. Cooper. *Country Gent* 81:1114 My 27 '16  
 Effect of silage on Swiss cheese. C. F. Doane. Hoard's D 51:203 F 25 '16  
 Encouragement of cheese production. *J Bd Ag* 23:767-71 N '16  
 Facts about cheese. M. Ryder. Kimball's D F 16:87 F 1 '18  
 Food value of American cheese. *Creamery* 6:69 O '17  
 Food value of cheese. Kimball's D F 15:520 Ag 1 '17  
 Friesland (Holland) skimmed cheese. N Y Prod R 41:466 Ja 12 '16  
 From press to shipment. N Y Prod R 44:404 J1 4 '17  
 General data on cheeses manufactured at the Lodi royal experimental station (Italy) during the year 1915-1916. C. Besana. *Int R Sci & Prac Ag* 8,no 4:649-50 Ap '17  
 Good cheese. O Judd Farmer 63:22 O 20 '17  
 Government purchase of cheese. *J Ag New Zealand* 14:160-2 F '17  
 Greater uniformity. N Y Prod R 42:1160 O 25 '16  
 Home-made cheese. Wallaces' F 43:1341 S 20 '18  
 Home trade shapes best adapted to retail trade. N Y Prod R 44:810 S 19 '17  
 Indole and scatole in cheese. V. E. Nelson. *Int R Sci & Prac Ag* 9,no 5:623 My '18  
 Leading cheese defects. J. B. McCready. N Y Prod R 43:26 N 1 '16  
 Limburger. W. H. Cooper. *Country Gent* 81:2227 D 30 '16  
 Make more cheese. *Creamery* 5:26 J1 '17; *Excerpt*. *Weekly N L* 4:4 J1 4 '17

Manufacture and composition of Bulgarian cheese. A. S. Zlataroff. *Int R Sci & Prac Ag* 7,no 9:1364-7 S '16  
 Monterey or Jack cheese. H. A. Crafts. Kimball's D F 15:654 S 15 '17  
 New Zealand cheese. N Y Prod R 44:768 S 12 '17  
 9th annual meeting of Western New York butter and cheese makers' association, Cuba, Jan. 14. N Y Prod R 45:402 Ja 23 '18  
 Now is the time to eat cheese. *Ag Digest* 2:747 D '17  
 On the formation of eyes in Emmental cheese. W: M. Clark. *bibliog J Dairy Sci* 1:91-113 J1 '17  
 Paraffining cheese. N Y Prod R 44:444 J1 11 '17  
 Part skim cheese. N Y Prod R 44:1058+ O 24 '17  
 Pressing the cheese. N Y Prod R 44:364 Je 27 '17  
 Profitable utilisation of surplus milk. *J Bd Ag* 24:322-6 Je '17  
 Proper names for cheese. *Creamery* 5:52 Je '17  
 Public health studies concerning cheese. E. C. Schroeder and G. W. Brett. *Int Assn Dairy & Milk Inspec Rep* 1917:190-204; *Same*. *Am Vet M Assn J* 52:674-85 F '18  
 Quality and consumption. F. C. Charles. Hoard's D 53:553 Ap 20 '17  
 Quality improvement. N Y Prod R 42:628 Ag 9 '16  
 Relation of composition to quality of cheese. J. N. Currie. *Assn Am Dairy Food & Drug Offic Pro* 1916:218-20  
 Siberian butter and cheese. N Y Prod R 44:550+ Ag 1 '17  
 Silage and Swiss cheese. H. E. Paulson. N Y Prod R 41:1043 Ag 12 '16  
 Silage and Swiss cheese. J. L. Sammis. Hoard's D 53:529 Ap 13 '17  
 Skim cheese. N Y Prod R 41:734 Mr 1 '16  
 Sour cheese. N Y Prod R 42:736 Ag 30 '16  
 South-African cheese. N Y Prod R 44:948 O 10 '17  
 Spiced Leyden cheese. N Y Prod R 41:625 F 9 '16  
 Square prints; experience in manufacture—possibilities of an Eastern outlet. N Y Prod R 47:226 D 18 '18  
 Swiss cheese from silage milk. J. L. Sammis. N Y Prod R 45:135 N 28 '17  
 Swiss or Switzer cheese. O. C. Cunningham. *Ohio F* 139:612 Ap 28 '17  
 Varieties of cheese: descriptions and analyses. C. F. Doane and H. W. Lawson. *bibliog U S Ag B* 608:1-80 '18; *Excerpts*. N Y Prod R 46:226, 649 Je 5, Ag 28 '18  
 Weighing and boxing. N Y Prod R 46:616 Ag 21 '18  
 Whey cheese. N Y Prod R 46:998 O 23 '18  
 White or colored. N Y Prod R 42:244 My 31 '16  
 Wisconsin-made cheese. N Y Prod R 41:798-9 Mr 8 '16  
 Wisconsin skim cheese law. J. L. Sammls. N Y Prod R 45:514 F 13 '18  
 Yield of cheese from milk. W. H. Cooper. *Country Gent* 82:1646 O 27 '17  
*See also* Cheese factories; Cheese industry and trade; Cheese making; Cookery—Cheese; Cottage cheese; Dairy products; Whey

**Analysis**

Report on separation of nitrogenous substances (milk and cheese). L. S. Palmer. *Assn Offic Ag Chem J* 2,no 1,pt 1:1-3 My '16

**Bacteriology**

Bacteria concerned in the production of the characteristic flavor in cheese of the Cheddar type. A. C. Evans and others. *bibliog J Ag Research* 2:167-92 Je '14  
 Bacterial flora of Roquefort cheese. A. C. Evans. *bibliog J Ag Research* 13:225-33 Ap 22 '18  
 Chromogenic micro-organisms of cheese and their presence in the Italian robiola. T. G. Dalla. *Int R Sci & Prac Ag* 7,no 4:600 Ap '16  
 Relation of the action of certain bacteria to the ripening of cheese of the Cheddar type. E. B. Hart and others. *bibliog J Ag Research* 2:193-216 Je '14

**Cheese—Bacteriology—Continued**

Study of the streptococci concerned in cheese ripening. A. C. Evans. bibliog J Ag Research 13:235-52 Ap 22 '18

**Composition**

Composition of Roquefort-cheese fat. J. N. Currie. bibliog J Ag Research 2:429-34 S '14

Flavor of Roquefort cheese. J. N. Currie. bibliog J Ag Research 2:1-14 Ap '14

**Costs**

Cheesemaking costs. T. A. Ubbelohde. N Y Prod R 45:444 Ja 30 '18

Cost of making. N Y Prod R 45:314-15 Ja 2 '18

Cost of manufacture. N Y Prod R 44:520; 46:1030 Jl 25 '17, O 30 '18

Costs of making cheese. N Y Prod R 45:379 Ja 16 '18

Price for making; figures showing this year's rates from various sections of the country. N Y Prod R 43:866 Mr 21 '17

Prices for making. N Y Prod R 43:360 D 27 '16

See also Cheese—Prices

**Exhibits**

See also Southeastern states butter and cheese show

**Fat content**

Butter-fat in cheese. R. T. Archer. J Dept Ag Victoria 14:120-1 F '16

**Grading**

Cheese grades. N Y Prod R 44:906 O 3 '17

Examining cheese at the factory—how should quality be checked up before shipment? N Y Prod R 46:712 S 11 '18

Grading problems. F. Herns. (In Reports, Dairymen's assn., 1916, p. 127-30) '17 Ontario ag. dept., Toronto

**Judging**

Cheese scoring in North Carolina. A. J. Reed. N Y Prod R 44:624 Ag 15 '17

**Marketing**

Cheese auctions as a means of marketing the product. N Y Prod R 43:440 Ja 10 '17

Federated cooperative cheese manufacturing and marketing association. H. Macpherson and W. H. Kerr. U S Ag Yearbook 1916: 145-57; Same. Separate 699; Same. N Y Prod R 44:522, 562, 598 Jl 25-Ag 8 '17

Improved system of selling cheese. S. L. Sammis. Hoard's D 52:511 N 3 '16

Marketing butter and cheese by parcel post. L. B. Flohr and R. C. Potts. il Farmers' B 930:1-12 '18; Same. Hoard's D 56:4-5 Jl 26 '18; Same cond. N Y Prod R 46:294-5 Je 19 '18; Same cond. Jersey B 37:1045-6 Jl 3 '18

Marketing of grain and cheese. (In Nat conf. on marketing and farm credits, 1916, p. 307-53) \$2 '17 C. W. Holman, sec., Madison, Wis.

Includes: Marketing problems of the northwestern grain growers, by L. J. Frazier; Necessary cost of handling grain at country station, by F. W. Stout; Boards of trade and the national welfare, by J. R. Mauff; Costs in exporting grain, by J. H. Barnes; Coöperation in cheese sales, by H. Krumrey

Our call boards. N Y Prod R 43:84 N 8 '16

Selling cheese. N Y Prod R 42:28 Ap 26 '16

Selling cheese in Quebec. J. L. Sammis. N Y Prod R 42:1158 O 25 '16

Undergrade cheese; some general suggestions on disposing of faulty stock. N Y Prod R 45:278 D 26 '17

See also Sheboygan county cheese producers' federation

**Moisture content**

Cheese moisture law. N Y Prod R 44:534 Ag 1 '17

Cheese moisture law. N Y Prod R 45:376 Ja 16 '18

Cheese moisture limits. J. Kirkpatrick. N Y Prod R 42:701 Ag 23 '16

Cheese moisture test. H. C. Troy. il N Y Prod R 44:158 My 23 '17; Same. Hoard's D 54:4 Jl 27 '17

Cheese water limits. N Y Prod R 42:700 Ag 23 '16

Controlling moisture. N Y Prod R 43:212 N 29 '16

Controlling water content in the manufacture of American Cheddar cheese. N Y Prod R 46:24 My 1 '18

Moisture limit effects. N Y Prod R 42:772 S 6 '16

Moisture test in the cheese factory. J. L. Sammis. il Wis Ag Ext C 81:1-20 '17; Same. N Y Prod R 44:634, 666, 702-3 Ag 15-29 '17; Summary. N Y Prod R 44:24 My 2 '17; Summary. Hoard's D 53:762 My 25 '17

N. Y. state cheese law. N Y Prod R 44:405 Jl 4 '17

Observing moisture laws. N Y Prod R 44:664 Ag 22 '17

Percentage of moisture in cheese and the cheese moisture test; with discussion. H. C. Troy. il N Y Farms & Markets Dept Ag B 104:30-49 F '18

That moisture bill. C. E. Griffin. N Y Prod R 44:588 Ag 8 '17

Those moisture laws. N Y Prod R 44:204 My 30 '17

Water in cheese. N Y Prod R 42:1100 O 18 '16

**Packing**

Export of cheese to the United Kingdom. Ag Gaz of New South Wales 28:820-2 N '17

Scale-boards in cheese-packing. D. Cuddie. il J Ag New Zealand 13:204-7 S '16

**Prices**

\* Cheese. (In Official statement no. 5, p. 17) '18 U.S. Food administration, Washington, D.C.

Cheese (maximum prices) order, 1917. J Bd Ag 24:677-8 S '17

Cheese prices in Canada. N Y Prod R 45:564 F 20 '18

English trade restrictions. N Y Prod R 43:978 Ap 11 '17

Value of cheese factory milk at present prices. J. L. Sammis. Hoard's D 54:200 S 7 '17; Same. N Y Prod R 44:808 S 19 '17

Want higher cheese price. N Y Prod R 45:440 Ja 30 '18

Whey cream profits and their relation to the price charged for making cheese. N Y Prod R 43:946 Ap 4 '17

**Standards**

Food officials adopt standards. Creamery 6:32-3 S '17

For Wisconsin state brand; text of bill. N Y Prod R 46:606 Ag 21 '18

Improving New York cheese. N Y Prod R 41:898 Mr 22 '16

State and national brands for butter and cheese. M. Mortensen. J Dairy Sci 1:383-99 Ja '18; Same cond. Creamery 6:21-2 D '17; 7:33-4 Ja '18

State quality brand for Cheddar cheese. N Y Prod R 42:808 S 13 '16

**State brands**

See Cheese—Standards

**Storage**

Cheese mites. N. B. Eales. il J Bd Ag 24:1087-96 Ja '18

Mould in cheese. N Y Prod R 46:340 Je 26 '18

**Transportation**

Fastening cheese box covers. N Y Prod R 41:898 Mr 22 '16

Fastening covers. N Y Prod R 44:846 S 26 '17

Fastening covers on cheese boxes. N Y Prod R 42:368 Je 21 '16

Reasonable regulations. N Y Prod R 42:664 Ag 16 '16

Shipping cheese. N Y Prod R 41:1056 Ap 12 '16

Time of shipping in relation to age of the cheese during warm weather. N Y Prod R 46:382 Jl 3 '18

Winter made cheese. N Y Prod R 45:346 Ja 9 '18



**Cheese—Continued**

**Weights**

Cheese scales. N Y Prod R 43:120 N 15 '16  
Fractional weights; should they be marked on the cheese?—prevailing trade practices. N Y Prod R 46:488 JI 24 '18  
Marking cheese weights. N Y Prod R 43:207 N 29 '16  
Marking weights; even vs. fractional pounds. N Y Prod R 43:1030 Ap 18 '17  
Marking weights on butter and cheese packages. N Y Prod R 46:336 Je 26 '18  
Testing cheese on half pounds. G: A. Cochran. N Y Prod R 43:790 Mr 14 '17  
Uniform weights. N Y Prod R 44:30 My 2 '17

**Cheese boxes**

As to boxes; getting a supply and assuring a reserve on hand when needed. N Y Prod R 46:648 Ag 28 '18  
Boxes; wood vs. paper. N Y Prod R 45:788 Mr 27 '18  
Cheese boxes. N Y Prod R 44:978 O 10 '17  
Fastening cheese box covers. N Y Prod R 41:898 Mr 22 '16  
Fastening covers. N Y Prod R 44:846 S 26 '17  
Fastening covers on cheese boxes. N Y Prod R 42:368 Je 21 '16

**Cheese contests**

California educational contest. L. M. Davis. N Y Prod R 42:270 Je 7 '16  
California educational scorings. H. S. Baird. N Y Prod R 45:120 N 28 '17

**Cheese factories**

Advantages of cheese factory vs. creamery. J. L. Sammis. Hoard's D 54:493 N 2 '17  
Big New York cheese factory. N Y Prod R 41:952 Mr 29 '16  
Centralization; its economic limitations. N Y Prod R 43:476 Ja 17 '17  
Cheese factory and butter-fat test; discussion. N Y Ag Dept B 80:1494-1500 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1494-1500 '17  
Cheese-factory extension work. B. H. Rawl. Country Gent 81:886 Ap 22 '16  
Cheese factory helpers. N Y Prod R 44:118 My 16 '17  
Construction and equipment of butter and cheese factories in the province of Quebec. (In Report, Quebec Dairymen's assn., 1916, p. 302-8) '17  
Creamery and cheese factory building. E. H. Farrington. il plans Hoard's D 53:944-5 JI 6 '17  
Curing room construction. N Y Prod R 45:210-11 D 12 '17  
Dairyman's profit; money in producing cheese milk? N Y Prod R 43:288 D 13 '16  
Factories registered under the dairy industry act. Ag Gaz of New South Wales 28:655-9 S '17  
Factory construction; material and general plan. N Y Prod R 43:988 Ap 11 '17  
Grading cheese milk. N Y Prod R 43:324 D 20 '16  
High grade product in cold weather. N Y Prod R 41:672 F 16 '16  
Improving milk quality. N Y Prod R 41:552 Ja 26 '16  
List of butter and cheese factories, milk stations and condensing plants in New York state. N Y Ag Dept B 88:1-72 O '16  
Making a land fulfill its destiny. F. L. Clark. il Hoard's D 55:605 Ap 26 '18  
Miss Heffner, cheesemaker. Mission cheese factory. A. J. Reed. il Hoard's D 54:576 N 16 '17  
New York cheese industry. W. W. Fisk. N Y Prod R 41:542-3 Ja 26 '16  
Plans of a cheese factory. plans Ag Gaz of New South Wales 27:127-30 F '16  
Swiss cheese factories in Tuscarawas county, Ohio. C. T. Conklin. Ohio F 139:9 Ja 6 '17  
Tillamook cheese. N Y Prod R 43:898 Mr 28 '17

See also Cheese-making machinery

**Cost of operation**

Charge for making cheese. N Y Prod R 41:628-9 F 9 '16

Cost of making cheese. Hoard's D 53:133 F 16 '17  
Cost of making cheese. F. S. Oakes. N Y Prod R 43:466+ Ja 17 '17  
Why they deserve more; a Wisconsin cheesemaker explains justice of a higher charge for making cheese. O. A. Kielsmeier. N Y Prod R 43:700 F 28 '17

**Equipment**

Apparatus for the cheese curing room. il Int R Sci & Prac Ag 7, no 4:565-7 Ap '16  
Capacities and specifications for making vats for cheese factories and dairies. G. C. Sawyers. plan J Dept Ag Victoria 15:755-9 D '17  
Curd knives; wire vs. steel. N Y Prod R 41:924 Mr 22 '16  
Metal or wood followers. N Y Prod R 41:480 Ja 12 '16  
Office conveniences recommended for the cheese factory. N Y Prod R 41:1096 Ap 19 '16  
Press, hoops and followers. N Y Prod R 42:284 Je 7 '16  
Tool kit. N Y Prod R 44:774 S 12 '17

See also Cheese boxes; Cheese vats

**Heating**

Heating the factory. N Y Prod R 45:412 Ja 23 '18

**Management**

Cheese factory milk prices. N Y Prod R 42:948 O 4 '16  
Cheese milk payments. N Y Prod R 41:576 F 2 '16  
Condensing competition; how should prices paid by condensery and cheese factory be compared? N Y Prod R 44:700 Ag 29 '17  
Correct payment for cheese factory milk by the Babcock test. J. L. Sammis. Wis Ag Exp B 276:1-42 '17; Summary. Creamery 5:28-30 F '17; Summary (pt 1). Hoard's D 53:513 Ap 13 '17  
Female labor in our cheese factories—can it be more extensively used? N Y Prod R 46:456 JI 17 '18  
Meeting competition from manufacturers of other dairy products. N Y Prod R 45:752 Mr 20 '18  
Paying for butterfat; frequency of payments in our Cheddar cheese factories. N Y Prod R 43:512 Ja 24 '17  
Paying for milk. N Y Prod R 41:516 Ja 19 '16  
Paying for milk at cheese factories and creameries. F. E. Ellis. Hoard's D 51:620+ My 5 '16  
Paying for milk at cheese factory. Hoard's D 51:157 F 18 '16  
Paying for milk in cheesemaking. H. C. Troy. Hoard's D 53:647 My 4 '17  
Payment for cheese milk according to the yield of cheese. J. L. Sammis. N Y Prod R 41:468+ Ja 12 '16  
Prices for making. N Y Prod R 43:360 D 27 '16  
Running every other day. N Y Prod R 42:1024 O 11 '16  
Skimming whey at Vermont cheese factories. H. B. Ellenberger and M. R. Tolstrup. Vt Ag Dept B 26:1-10 JI '17  
Skimming whey in Vermont cheese factories. N Y Prod R 45:616 F 27 '18  
Time for making; how long from receipt of milk to pressing under normal conditions? N Y Prod R 45:832 Ap 3 '18  
Variety of makes; should a Cheddar factory take up other varieties? N Y Prod R 45:912 Ap 17 '18  
Winter operation. N Y Prod R 43:28 N 1 '16

**Sanitation**

Sanitary suggestions. G: J. Weigle. N Y Prod R 41:916-17, 950, 996+ Mr 22-Ap 5 '16

**Statistics**

Butter factories and cheese factories operated in 1916; dairy statistics for 1915 as reported by the operators of butter and cheese factories. 81p '17 Dairy and food commissioner, Madison, Wis.

**Cheese factories, Cooperative**

Cheese factory as a market for milk. R. Robinson. Hoard's D 52:660 D 1 '16

**Cheese factories, Cooperative—Continued**

- Cheesemaking a new industry for the South. A. Kolbe. Hoard's D 55:49 F 1 '18
- Cheesemaking brings prosperity to farmers of southern mountains. C. F. Doane. il map U S Ag Yearbook 1917:147-52
- Cheesemaking in Tennessee. G. N. Tobey. il Hoard's D 55:378 Mr 22 '18
- Cheese-making in the South. J. P. Lucas. Country Gent 81:743 Ap 1 '16
- Cheesemaking in the southern mountains. N Y Prod R 41:740 Mr 1 '16; Same. Hoard's D 51:389 Mr 24 '16
- Cooperative cheese factories. B. H. Hibbard and A. Hobson. il maps Wis Ag Exp B 282:10-16 '17
- Co-operative cheese factories. G. N. Tobey. il Tenn Ag Ext Pub 64 4p '18
- Co-operative cheese factory. K. Perkins. Ohio F 142:216 S 7 '18
- Co-operative cheesemaking in Oregon. R. Robinson. il Kimball's D F 15:223 Ap 1 '17
- Cooperative creameries and cheese factories in Minnesota, 1914. E. D. Durand and F. Robotka. maps Minn Ag Exp B 166:1-53 '17
- Correct payments for milk. J. L. Sammis. il Kimball's D F 15:638 S 15 '17
- Federated cooperative cheese manufacturing and marketing association. H. Macpherson and W. H. Kerr. U S Ag Yearbook 1916:145-57; Same. Separate 699; Same. N Y Prod R 44:522, 562, 598 Jl 25-Ag 8 '17
- First co-operative cheese factory in Spain. Int R Ag Econ 78:1-5 Je '17
- Management of cheese factory. Rural N Y 75:210 F 5 '16
- Manufacture of cheese in co-operative dairies. J Bd Ag 24:170-4 My '17
- Organization of a co-operative creamery or cheese factory; with forms of agreement, etc. Hoard's D 51:541+ Ap 21 '16
- See also Sheboygan county cheese producers' federation
- Cheese factory inspection**
- Cheese factory and creamery inspection in Quebec. E. Bourbeau. J Ag (Quebec) 20:130 D '16
- Cheese factory and creamery instruction and inspection in the provinces. il Ag Gaz of Canada 3:964-85 N '16
- Inspections in western New York. N Y Prod R 44:732 S 5 '17
- Cheese industry and trade**
- Alkmaar's unequalled cheese fairs. C. S. Ellis. Ohio F 137:634 Ap 29 '16
- Altered conditions that now confront the industry. G. A. Cochran. N Y Prod R 44:432 Jl 11 '17
- British cheese control. N Y Prod R 44:446 Jl 11 '17
- Canada cheese situation. J. H. McKenney. Hoard's D 55:137 F 15 '18
- Canadian cheese commission. J. A. Ruddick. N Y Prod R 44:190 My 30 '17
- Cheese commission. J. A. Ruddick. Ag Gaz of Canada 5:242-4 Mr '18
- Cheese industry as it affects the Victorian farmer. R. T. Archer. J Dept Ag Victoria 15:435-42 Jl '17
- Cheese industry in Portugal. B. A. Ramires. Int R Sci & Prac Ag 7,no 7:1026-7 Jl '16
- Cheese industry in the West. G. L. Martin. Hoard's D 55:725 My 17 '18
- Cheese making in western irrigated land. Creamery 4:17 Ap '16
- Cheese-making more profitable than butter-making. J Bd Ag 23:668-71 O '16
- Cheese making possibilities in Rocky Mountain states. Jersey B 35:1214 Ag 2 '16
- Consider cheese rules. N Y Prod R 46:237 Je 12 '18
- Control of cheese. Creamery 7:36 O '18
- Extension of cheese-making in Ireland. A. P. Wilson. J Dept Ag Ireland 17,no 3:467-85 '17
- Foreign trade in cheese. N Y Prod R 45:134 N 28 '17
- Home trade vs. export; which type of cheese should the factory plan to make this season? N Y Prod R 45:872 Ap 10 '18
- New York cheese industry. W. W. Fisk. N Y Prod R 41:542-3 Ja 26 '16
- New Zealand cheese outlook. N Y Prod R 42:665 Ag 16 '16

- New Zealand cheese situation. N Y Prod R 42:799 S 13 '16
- Opportunity to sell butter and cheese in China. A. H. Kolbe. Hoard's D 53:18 Ja 26 '17
- Production outlook; prices must go higher to ensure a heavy fall and winter cheese make. N Y Prod R 46:776 S 25 '18
- War and Danish cheese exports. J. J. Dunne. Hoard's D 50:870 Ja 21 '16
- War increases demand for cheese. E. C. Edwards. O Judd Farmer 65:451 N 16 '18
- Wisconsin cheese industry. H. L. Russell. Creamery 7:30 Jl '18
- Word to cheesemakers. Kimball's D F 15:768 O 15 '17
- \* Work of the cheese commission, by J. A. Ruddick; Cheese commission, by J. Alexander. (In Report, Dairymen's assns., 1917. p. 36-43, 43-51) '18 Ontario ag. dept., Toronto

**Regulation**

- Arrêté n. 5091 concernant l'importation du fromage en vertu du 6 alinéa 2 de l'ordonnance n. 5020 du Conseil fédéral relatif au fromage, du 13 janvier 1916 en Allemagne. Int Yearbook Ag Leg 1916:268-70 '17
- British cheese order, 1917. J Bd Ag 24:910-13 N '17
- Changes in margins of profit on butter and cheese; new interpretation and rulings. H. Hoover. Creamery 7:21-2 Ag '18
- Cheese intended for export. Ag Gaz of New South Wales 29:12 Ja '18
- Cheese profits rule. E. Rickard. N Y Prod R 47:224 D 18 '18
- Cheese rules revised; original rules amplified and extended to cover certain foreign types. N Y Prod R 46:563+ Ag 14 '18; Same. Creamery 7:23-5 S '18; Hoard's D 56:223 S 13 '18
- Cheese situation clearing; definite date for unloading storage reserve fixed. N Y Prod R 45:540 F 20 '18
- New ruling on cheese. N Y Prod R 45:494 F 13 '18
- Special regulations governing manufacturers, dealers, brokers and commission merchants in cheese. H. Hoover. Creamery 7:22-3 Je '18; Same. N Y Prod R 46:279 Je 19 '18
- Various cheese decisions. N Y Prod R 46:470 Jl 24 '18

**Statistics**

- Census of manufactures; 1914; butter, cheese and condensed milk. B. L. McNulty. 23p '17 U.S. Bur. of census, Washington, D.C.
- Cheese stocks Jan. 1. N Y Prod R 43:413 Ja 10 '17
- Commercial stocks of cheese, Jan. 1. U S Food Surveys 1:5-8 Je 22 '18
- Commercial stocks of cheese, July 1. U S Food Surveys 2:4-6 Ag 31 '18
- International trade. See United States Department of agriculture Yearbooks
- Cheese making**
- Acid texture; precautions necessary to prevent shortgrained and acidity cheese. N Y Prod R 46:184 My 29 '18
- \* Address at the meeting of the Dairymen's association of eastern Ontario. H. H. Dean. (In Report, Dairymen's assns., 1917. p. 55-62) '18 Ontario ag. dept., Toronto
- Agitating curd before dipping; power driven agitators vs. the rake. N Y Prod R 46:100 My 15 '18
- Amount of color; how regulated to keep cheese of uniform tint. N Y Prod R 46:224 Je 5 '18
- Amount of rennet to use in making cheese. N Y Prod R 41:1012 Ap 5 '16
- Brick cheese. W. H. Cooper. Country Gent 82:13 Ja 6 '17
- Buttermilk cheese. J Bd Ag 25:325-6 Je '18
- Cambridge cheese. Country Gent 81:1648 S 9 '16
- Care and treatment of starters for cheese-making. M. Wallace. Ag Gaz of New South Wales 28:863-5 D '17
- Carrying starter. N Y Prod R 47:190 D 11 '18
- Cheese and butter making. Ontario Ag Dept B 266:1-56 '18



**Cheese making—Continued**

- Cheese from skim-milk. Rural N Y 76:1330, 1358 N 17-24 '17
- Cheesemakers' biggest problem. C. S. Phelps. Hoard's D 51:866 Je 23 '16
- Cheesemaking at home. R. C. Scott. il Country Gent 82:571 Mr 17 '17
- Cheese making in the home. H. B. Ellenberger. il Vt Ag Ext C 14:1-8 '18
- Cheesemaking in the West. C. F. Doane. Hoard's D 52:168 S 1 '16
- Cheese making in Vermont. N Y Prod R 45:406 Ja 23 '18
- Cheesemaking in Vermont. H. B. Ellenberger. il plan Vt Ag Dept B 25:1-31 '16
- Cheese making on the farm. H. H. Dean. Frac F 113:397 N 15 '17
- Cheesemaking possibilities. N Y Prod R 42:484 JI 12 '16
- Close and open cheese. N Y Prod 47:154 D 4 '18
- Cracked rinds; precautions necessary to prevent the appearance of this defect. N Y Prod R 46:552 Ag 7 '18
- Curd racks; their usefulness in Cheddar cheese making considered. N Y Prod R 43:624 F 14 '17
- Curd temperatures. N Y Prod R 45:134 N 28 '17
- Cutting curd. N Y Prod R 44:244 Je 6 '17
- Early recollections of cheese making in western Ontario. A. T. Bell. (In Reports, Dairy-men's assns., 1916, p. 117-22) '17 Ontario ag. dept., Toronto
- Factors to be considered in the manufacture of skim milk cheese after the Cheddar process. W. W. Fisk. N Y Prod R 43:818-19 Mr 14 '17
- Failure to curdle. N Y Prod R 44:560 Ag 1 '17
- Fancy cheesemaking. D. W. Hodges. N Y Prod R 41:614 F 9 '16
- Farm cheese-making. J. H. Frandsen and T. Thorson. il Neb Ag Ext B 47:1-16 '17
- Farm cheesemaking. L. G. Rinkle. Mo Ag Ext C 30:1-4 '17; Same cond. Country Gent 83:28 F 16 '18
- Farm woman's cheese. M. R. Warren. il Country Gent 83:34 Ap 27 '18
- Fat in skims; how much should be incorporated and how much water? N Y Prod R 46:680 S 4 '18
- From dipping to pressing. N Y Prod R 44:324 Je 20 '17
- Handling a fast curd when not well firmed at time of dipping. N Y Prod R 46:144 My 22 '18
- Handling whey after drawing from the vat—profits in separating. N Y Prod R 46:584 Ag 14 '18
- Heating curd. N Y Prod R 44:284 Je 13 '17
- Home cheese making. Rural N Y 75:1221 S 16 '16
- Home cheese-making. Rural N Y 77:392 Mr 9 '18
- Home cheese making. H. F. Judkins and P. A. Downs. il Conn Ag Coll Ext B 9:1-16 '17
- Home cheese making. G. L. Martin. il Mont Ag Ext Pub no 26:1-12 '18
- Home cheese-making. V. E. Scott. il Nev Ag Ext B 15:1-8 '17
- Home cheese making; Cheddar. Rural N Y 76:926 JI 28 '17
- Home cheese making; Cheddar and cottage cheese. Rural N Y 76:842 Je 30 '17
- Homemade cheese. Rural N Y 76:903 JI 21 '17
- Home-made cheese. R. B. Stoltz. Ohio F 141:352 Mr 9 '18
- Home making of cottage and buttermilk cheese. W. H. Eaton. il N C Ag Ext C 62:1-8 '18
- Homogenized cream used in cheese making. (In Report, 1917, p. 83-9) '17 Quebec ag. dept., Quebec
- How Swiss cheese is made. Country Gent 81:262 F 5 '16
- How to make home-made cheese. G. C. Sawers. J Dept Ag Victoria 16:310-12 My '18
- Huffed cheese. N Y Prod R 44:738 S 5 '17
- Improving cheese quality. N Y Prod R 41:768-9 Mr 1 '16
- Kingston cheese—a cheese for small-holders and others (J Bd Ag, v. 18, no. 3, p. 193-203, 1911). A. Todd and W. Sadler. J Dairy Sci 1:372-3 N '17
- Kitchen cheese making. R. B. Stoltz. il Ohio F 142:334, 364, 388 O 5-19 '18
- Loss of fat in the whey when using pepsin. G. H. Barr. Ag Gaz of Canada 4:660-2 Ag '17
- Make cheese on the farm. R. Robinson. il Kimball's D F 16:206 Mr 15 '18
- Make soft cheese at home. Kimball's D F 16:604 O 15 '18
- Making brick cheese. F. Schuler. N Y Prod R 43:706 F 28 '17
- Making butter and cheese on the farm. C. Larsen and V. R. Jones. il S D Ag Exp B 164:347-74 '16
- Making cheese at home. Wallaces' F 42:973 Je 29 '17
- Making cheese at home. R. S. Miller. Hoard's D 56:219 S 13 '18
- Making cheese at home. M. E. Underwood. Kimball's D F 15:435 Je 15 '17
- Making cheese on the farm. C. Larsen. Kimball's D F 16:35 Ja 15 '18
- Making fancy cheese. H. E. Cook. N Y Prod R 43:118 N 15 '16
- Making fancy cream cheese. R. B. Stoltz. Ohio F 140:87 Ag 4 '17
- Making jack cheese. N Y Prod R 45:378 Ja 16 '18
- Making soft cheeses on the farm. W. S. Cunningham. il Ariz Ag Exp Timely Hints 123:1-7 '17
- Manufacture of Neufchâtel and cream cheese in the factory. K. J. Matheson and F. R. Cammack. il U S Ag B 669:1-28 '18
- Manufacture of small cheese with improvised apparatus. J Bd Ag 25:269-77 Je '18
- Matting curd in making a Cheddar cheese—as to high piling. N Y Prod R 47:52 N 13 '18
- Neufchâtel and cream cheese; farm manufacture and use. K. J. Matheson and F. R. Cammack. il Farmers' B 960:1-35 '18; Summary. N Y Prod R 46:603 Ag 21 '17; Summary. Jersey B 37:1392 Ag 28 '18; Summary. O Judd Farmer 65:555 D 14 '18
- New possibilities in dairying; manufacture of small hard-pressed cheese. W. Sadler. J Ag (Quebec) 19:221 Ap '16; Same cond. N Y Prod R 42:950 O 4 '16
- Notes on Cheddar cheese-making. G. C. Sawers. il J Dept Ag Victoria 15:470-4 Ag '17
- Off flavored milk. N Y Prod R 44:632 Ag 15 '17
- Overcooked curd; undercooked curd. N Y Prod R 41:440 Ja 5 '16
- Overripe or fast milk. N Y Prod R 44:596 Ag 8 '17
- Pasteurization of milk for cheesemaking. C. Stevenson and W. Grant. il J Ag New Zealand 12:440-5 Je '16
- Pasteurized milk for cheesemaking. J. J. Dunne. Hoard's D 55:466 Ap 5 '18
- Pasty cheese. N Y Prod R 42:880 S 27 '16
- Perfect rind. N Y Prod R 42:592 Ag 2 '16
- Perfect texture; how to handle curd to assure it. N Y Prod R 47:116 N 27 '18
- Preventing mottle in American Cheddar cheese. N Y Prod R 45:566 F 20 '18
- Sage cheese. N Y Prod R 42:844 S 20 '16
- Sage cheese; usual method of manufacture and of imparting the flavor and color. N Y Prod R 46:744 S 18 '18
- Salting curd. N Y Prod R 41:708; 47:84 F 23 '16, N 20 '18
- Sampling whey and testing for fat to keep track of butterfat losses. N Y Prod R 46:520 JI 31 '18
- Simple directions for cheesemaking. C. F. Doane. Hoard's D 50:831 Ja 14 '16
- Simplifying cheesemaking. N Y Prod R 45:62 N 14 '17
- Size of hoops. N Y Prod R 45:26 N 7 '17
- Skim-milk cheese. J Bd Ag 24:175-9 My '17
- Skim-milk cheese. N Y Prod R 43:818 Mr 14 '17
- Soft cheese-making. R. W. Brown and M. Mortensen. Ia Ag Exp C 38 4p '17
- Spring cheese; methods of manufacture. N Y Prod R 41:880 Mr 15 '16

**Cheese making—Continued**

Starter in hot weather; regulation of amount to be used and its proper acidity. N Y Prod R 46:420 J1 10 '18

Starter precautions. N Y Prod R 42:556 J1 26 '16

- \* Story of cheese. J. D. Frederiksen. 33p il 25c '18 Mohawk bk. co., Little Falls, N.Y.

Successful cheesemaking of Maine dairymen. L. G. Brown. Hoard's D 51:960 J1 14 '16

Time for making; how long from receipt of milk to pressing under normal conditions? N Y Prod R 45:832 Ap 3 '18

Uneven surfaces; how to prevent them and keep cheese true in shape. N Y Prod R 45:948 Ap 24 '18

Use of bacillus bulgaricus in starters for making Swiss or Emmentaler cheese. C. F. Doane and E. E. Eldredge. il U S Ag B 148:1-16 '15

Use of surplus milk in a small dairy: cheesemaking. R. G. Allan and J. V. Takle. Ag J of India 13:628-38 O '18

Using starter in spring cheese making. N Y Prod R 42:116 My 10 '16

Value of fat in cheese-making. Rural N Y 76:90 Ja 20 '17

Varieties of cheese: descriptions and analyses. C. F. Doane and H. W. Lawson. bibliog U S Ag B 608:1-80 '18; Excerpts. N Y Prod R 46:146, 226, 649, 942 My 22, Je 5, Ag 28, O 16 '18

Washed curd cheese; approved methods of making this type of American Cheddar. N Y Prod R 46:60 My 8 '18

When to set. N Y Prod R 44:162 My 23 '17

Whole milk cheese. Rural N Y 76:51 Ja 13 '17

Winter starter. N Y Prod R 45:98 N 21 '17

Wisconsin curd test in cheese factory work. N Y Prod R 41:588-9 F 2 '16

See also Pepsin; Rennet

**Study and teaching**

Wisconsin winter dairy course lessons. Kimball's D F 15:184 Mr 15 '17

**Cheese mites**

Cheese mites. N. B. Eales. il J Bd Ag 24:1087-96 Ja '18

Cheese mites history. M. Wallace. N Y Prod R 46:840 O 2 '18

**Cheese schools, Cooperative**

Services of the co-operative cheese schools in the formation of milk depots. J Bd Ag 25:322-4 Je '18

**Cheese trade. See Cheese industry and trade****Cheese vats**

Cheese vats; copper, copper lined and wood vats in American cheese making. N Y Prod R 45:664 Mr 6 '18

**Cheesemakers**

Cheesemakers' union; advisability of such an organization, its objects and purposes. N Y Prod R 46:264 Je 12 '18

Hours of labor; how many does the average cheesemaker put in each day? N Y Prod R 47:20 N 6 '18

Maker's pay; should it be advanced when working on salary or commission? N Y Prod R 45:514 F 13 '18

When changing factories. N Y Prod R 43:1070 Ap 25 '17

Woman cheesemaker. F. H. Jeter. il Country Gent 83:36 Ja 12 '18

**Cheesemakers associations**

See also Quebec cheesemakers cooperative agricultural society

**Cheiranthus cheiri. See Wallflowers****Chemical alliance**

Chemical alliance. Am Fert 48:33-4 Mr 16 '18

Committee on fertilizers of the chemical alliance. Am Fert 49:29-30 D 7 '18

Meeting of fertilizer and chemical manufacturers to be held in New York, Feb. 6. Am Fert 48:21-7 Ja 19 '18

Officers, directors, committees and members of the different sections. Am Fert 48:25-8 Ap 27 '18

Organization meeting; with list of officers and committees. Am Fert 48:21-2 F 16 '18

**Chemical extraction**

See also Oil extracting apparatus

**Chemical industries**

Chemical industry's war work. C. H. MacDowell. Am Fert 49:29-32 O 12 '18

Cotton seed products and the chemical industries. E. W. Thompson. Sci Am Sup (233 Broadway, N.Y. 10c) 86:153 S 7 '18

Early chemical manufacturing in Philadelphia. S. P. Sadtler. Am Fert 45:44+ D 9 '16

Fertilizer situation. Am Fert 47:21-3 D 22 '17

German chemical industry in 1917. Am Fert 49:76 Ag 31 '18

See also Fertilizer industry; Nitrate industry

**Exhibitions**

Chemical exposition. il Am Fert 49:32-7 O 26 '18

Exposition of chemical industries. il Am Fert 45:37-40 O 14 '16

4th national exposition of chemical industries to be held in New York city, September 23-28. Am Fert 49:68 S 14 '18

National exposition of chemical industries. Am Fert 45:41 S 2 '16

**Chemical reaction**

Influence of temperature on chemical reaction in general. F. Barry. bibliog Am J Bot 1:203-25 My '14

**Chemical reagents**

Report on testing chemical reagents. J. B. Rather. Assn Office Ag Chem J 2, no 1, pt 1:38-41 My '16

See also Litmus paper

**Chemical research**

Chemical research as a directing aid in the efficient utilization of pine forests. C. H. Herty. (In Pan American scientific congress Pro., 1915, v. 8, p. 385-7) '17

Chemical society, American. See American chemical society

**Chemistry**

Chemistry. Wallaces' F 43:1167 Ag 16 '18

Chemistry in industry. G. T. Morgan. J Dept Ag Ireland 17, no 4:639-47 '17

- \* Physical chemistry of bread making. E. J. Cohn and L. J. Henderson. Science (Science Press, Garrison, N.Y. 15c) n s 48:501-5 N 22 '18

See also Agricultural chemistry; Biological chemistry; Fertilizers, Commercial—Analysis; Food chemistry; Milk—Bacteriology; Osmosis; Physiological chemistry; Soil bacteriology; Water—Bacteriology; also United States—Chemistry, Bureau of

**Experiments**

Reduction of arsenic acid to arsenious acid by thiosulphuric acid. R. M. Chapin. J Ag Research 1:515-17 Mr '14

**Study and teaching**

Report on correlation of chemistry and home economics in high schools. M. E. Moore and others. J Home Econ 9:114-17 Mr '17

What should general chemistry contribute to the home economics course? N. E. Goldthwaite. J Home Econ 8:173-8 Ap '16

**Chemistry, Household**

Household chemical tests for textile fabrics. J. G. Mackinnon. J Home Econ 8:36-7 Ja '16

**Chemistry, Organic**

Volatility of organic compounds as an index of the toxicity of their vapors to insects. W. Moore. J Ag Research 10:365-71 Ag 13 '17

Chemistry, Textile. See Textile industry and fabrics

Chemistry of food. See Food chemistry

**Chemists**

Deferred classification for chemists. Am Fert 48:34-5 Mr 2 '18

**Chemotropism**

Chemotropism in rhizopus nigricans. A. H. Graves. bibliog il Bot Gaz 62:337-69 N '16

Chenopodium quinoa. See Quinoa

Chermes. See Kermes



# Cherries

- Bargain day cherries. E. H. Brown. *il Fruit-Grower* 27:231 Ap 1 '16
- Bringing up the cherries. R. H. Elsworth. *il Fruit-Grower* 27:229-30 Ap 1 '16
- Cherries for the millions. F. A. Waugh. *il Country Gent* 83:6-7 Je 15 '18
- Cherry culture in Wisconsin; with discussion. F.; Craneheld. *ill State Hort Soc Trans* 1917: 275-82 '18
- Cherry growing in Door county. M. B. Goff. *Wis Hort Soc Rep* 48:146-56 '18
- Cultural methods in growing the cherry. W. L. McKay. *il N Y Ag Dept B* 79,pt 2:1135-42 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3: 1135-42 '17
- Different cherry recipes. H. A. Lyman. *O Judd Farmer* 61:16 Jl 8 '16
- Growing cherries east of the Rocky mountains. H. P. Gould. *il Farmers'* B 776:1-36 '16
- Growing sweet cherries. L. Powell. *il Fruit-Grower* 27:230-1 Ap 1 '16
- In the land of the cherry. G. T. Stutsman. *il Fruit-Grower* 28:271 My 15 '17
- Investigations and experimental work carried on in cherry orchards in Kent during the months of April and May, 1915-1916. G. P. Berry. *J Bd Ag* 24:288-98 Je '17
- Japanese cherries and Asiatic crabapples. E. H. Wilson. *il Gard M* 23:75-8 Mr '16
- Made good with cherries. E. L. Ragsdale. *il Fruit-Grower* 27:454 O 15 '16
- New York cherries. *il Rural N Y* 75:841 Je 3 '16
- Peninsula favors cherry growing. *O Judd Farmer* 60:3 Ap 1 '16
- Pickers for cherry harvest. R. H. Elsworth. *Country Gent* 81:1160 Je 3 '16
- Picking and marketing the cherry crop; how Wisconsin provides pickers. B: Jelinek. *Rural N Y* 77:139, 184 F 2-9 '18
- Plums and cherries. J. Oskamp. *il Ind Ag Exp B* 212:1-12 '18
- Promising cherry orchard. *il Fruit-Grower* 28: 134 F 15 '17
- Pruning the sweet cherry. O. B. Whipple. *il Better Fruit* 13:5-6 D '18
- Prunus pseudo-cerasus*. Lindl. R. I. Lynch. *il Gard Chron (Lond)* 62:47 Ag 4 '17
- Ripening cherries. M. Allen. *O Judd Farmer* 61:34 Jl 29 '16
- Self-sterility of sweet cherries; the value of bees as pollinators. *Fruit-Grower* 27:233 Ap 1 '16; Same. *Gleanings* 44:384 My 15 '16
- Sour-cherry culture. *il Country Life* 30:64 Ag '16
- Sour cherry recipes. *Rural N Y* 76:776 Je 9 '17
- Summary of cherry culture and production. E. Bowles. *Better Fruit* 12:11 Ag '17
- Sweet cherries. G. A. Robertson. (*In Report, Fruitgrowers' assn.*, 1916, p. 75-81) Ontario ag. dept., Toronto
- Tickling the thrift streak; how a Kansas orchardist gets his cherries picked. S: O. Rice. *il Country Gent* 83:18 Ag 3 '18
- What to do with cherries. *il Ohio F* 138:34 Jl 8 '16

See also Surinam cherries

## By-products

- Cherry pits to make valuable products. *Green's Fruit Grower* 36:5 My '16
- Cherry pits worth money. *Fruit-Grower* 27: 233 Ap 1 '16
- \* Oil in cherry pits. H. L. Maxwell. *School Sci and Math* (2059 E. 72d Place, Chicago 30c) 18:401-4 My '18
- Utilization of cherry by-products. F. Rabak. *U S Ag B* 350:1-24 '16

## Diseases and pests

- Bacterial disease of the Wragg cherry. W. G. Sackett. *J Bact* 2:79-80 Ja '17
- Bacterial gummosis of stone fruits; with discussion. H. P. Barss. *il Cal State Comm Hort B v* 7:121-36 Mr '18
- Brown-rot in cherries controlled. G. H. Cunningham. *J Ag New Zealand* 16:38 Ja '18
- Brown-rot of prunes and cherries in the Pacific northwest. C: Brooks and D. F. Fisher. *il U S Ag B* 368:1-10 '16

- Cherry and hawthorn sawfly leaf-miner (B. 411). P. J. Parrott and B. B. Fulton. *il N Y State Ag Exp Rep* 1915:403-32 '16; Same cond. *J Ag Research* 5:519-28 D 20 '15
- Cherry gummosis. R. Muller. *Better Fruit* 11: 14 Je '17
- Cherry insects. C. R. Crosby. *il N Y Ag Dept B* 79,pt 2:1143-9 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1143-9 '17
- Common diseases of the peach, plum and cherry. M. T. Cook. *il N J Ag Exp C* 81:1-19 '17
- Control of cherry leaf spot in Wisconsin. G. W. Keitt. *il Wis Ag Exp B* 286:1-11 '18
- Inoculation experiments with species of coccymyces from stone fruits. G. W. Keitt. *il J Ag Research* 13:539-70 Je 10 '18
- Leaf-spot or shot-hole defoliation of cherry and plum. A. D. Selby. *Ohio Ag Exp B v* 1: 206-8 Jl '16
- New leaf-spot disease of cherries. B. A. Rudolph. *il Phyt* 7:188-97 Je '17
- Spray calendar for sweet cherry. *N J Ag Exp C* 77 2p '17
- Witch's broom on Japanese cherries. C. W. H. Douglass. *il Am For* 23:346-8 Je '17
- See also Black cherry aphid; Cherry black-knot; Cherry fruit flies; Cherry leaf beetles; Cherry tree tortrix; Pear tree slugs; Plum black knot

## Marketing

- Better cherry packs. R. H. Elsworth. *Country Gent* 81:694-5 Mr 25 '16
- Handling and shipping fresh cherries and prunes from the Willamette valley. H. J. Ramsey. *U S Ag B* 331:1-23 '16; Same cond. *Country Gent* 81:506 Mr 4 '16; Same cond. *Better Fruit* 11:11 Jl '16
- Marketing berries and cherries by parcel post. C. C. Hawbaker and C: A. Burmeister. *il U S Ag B* 688:1-17 '18
- Marketing cherries. G. K. Soon. *il N Y Ag Dept B* 79,pt 2:1152-5 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1152-5 '17
- Marketing Michigan's cherry crop. R. H. Elsworth. *il Fruit-Grower* 27:437 O 1 '16

## Packing

- Sweet cherry packs. H. L. Lantz. *il Fruit-Grower* 28:294 Je 15 '17

## Statistics

- Table showing number of trees and production in bushels of cherries in New York state, by counties. *N Y Ag Dept B* 79,pt 2:1156-7 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1156-7 '17

## Varieties

- Cherry varieties and methods. *O Judd Farmer* 64:13 Ja 19 '18
- Varieties of cherries. U. P. Hedrick. *il N Y Ag Dept B* 79,pt 2:1123-34 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1123-34 '17
- Cherry aphid, Black. See Black cherry aphid
- Cherry black-knot
- Black knot of plum and cherry. R. C. Walton. *il Ohio Ag Exp B v* 3:36-8 F '18

## Cherry fruit flies

- Increasing menace of the apple and cherry maggots and methods of control; with discussion. G. W. Herrick. *N Y State Fruit Growers' Assn Pro* 1918:218-26
- Native food plant of rhafoletis fausta O. S. H: H. P. Severin. *bibliog J Econ Entom* 11: 325-7 Je '18

## Cherry leaf beetles

- Cherry leaf-beetle. F. Z. Hartzell. *bibliog il maps N Y State Ag Exp B* 444:747-820 '17
- Cherry leaf-beetle, a periodically important enemy of cherries. R. A. Cushman and D. Isely. *bibliog il U S Ag B* 352:1-26 '16
- Observations on the life history of the cherry leaf beetle. G. W. Herrick and R. Matheson. *bibliog il J Ag Research* 5:943-50 F 14 '16

Cherry orange, African. See Citropsis

Cherry pits. See Cherries—By-products

**Cherry tree tortrix**

Some notes on the natural control of the cherry-tree ugly nest tortricid, archips cerasivorana Fitch. A. B. Baird. *il Ag Gaz of Canada* 5:766-71 Ag '18

**Cherry trees**

Trees of Vermont; the plums and cherries. G. P. Burns and C. H. Otis. *il Vt Ag Exp B* 194:148-55 '16

**Chester White swine**

Chester White, a good hog that has not had the best chance. H. T. Morgan. *il Country Gent* 82:767 Ap 21 '17

Chester White at the National. *il Swine World* 5:9 N '17

Chester White swine breeder's story. E. D. Funk. *il Breeder's Gaz* 72:1157 D 20 '17

History and improvement of Chester White swine. F. H. Moore. *il Breeder's Gaz* 71:323 Ap 19 '17

Showing and feeding Chester Whites. J. J. Newlin. *il Breeder's Gaz* 72:784 N 1 '17

**Chestnut**

Chestnut growing in Illinois: three good new nuts. E. A. Riehl. *Rural N Y* 75:1473 N 25 '16

Chestnuts in Butte county. E. Mills. *il Cal State Comm Hort B v* 6:419-20 N '17

Fumigating chestnuts. *Am Flor* 47:1374 Ja 6 '17

Hybrids and other new chestnuts for blight districts. W. Van Fleet (North. Nut Growers Assoc. Pro., 754-8p. '16). *Exp Sta Record* 38:152 F '18

Profitable chestnut growing. E. A. Riehl. *il Rural N Y* 77:1307 N 23 '18

Recovery of a chestnut tree from lightning stroke. N. E. Stevens. *Phyt* 6:204-6 Ap '16

Use of chestnuts in breadmaking. *Int R Sci & Prac Ag* 8,no 12:1282-3 D '17

What to do with blighted chestnut. G. Day. *Country Gent* 82:1655 O 27 '17

**Diseases and pests**

Death of chestnuts and oaks due to armillaria mellea. W. H. Long. *il U S Ag B* 89:1-9 '14

Disease-resistant chestnuts. *Gard Chron Am* 21:62 F '17

New observations on the ink disease of the chestnut tree in Italy. L. Petri. *Int R Sci & Prac Ag* 8,no 4:661-3 Ap '17

Phoma endogena a spheropsid parasite of the chestnut in Piedmont, Italy. P. Voglino and V. Bongini. *Int R Sci & Prac Ag* 8,no 7:1062-3 Ji '17

Studies on the ink disease of the chestnut tree in Italy. L. Petri. *Int R Sci & Prac Ag* 8,no 10:1435-6 O '17

*See also* Chestnut blight; Chestnut borers, Two-lined

**Chestnut blight**

Air and wind dissemination of ascospores of the chestnut-blight fungus. F. D. Heald and others. *bibliog il J Ag Research* 3:493-526 Mr '15

Birds as carriers of the chestnut-blight fungus. F. D. Heald and R. A. Studhalter. *bibliog il J Ag Research* 2:405-22 S '14

Breeding chestnuts for disease control. *Am Flor* 46:708 Ap 15 '16

Endothia parasitica and related species. C. L. Shear and others. *bibliog il maps U S Ag B* 380:1-82 '17

Expulsion of ascospores from the perithecia of the chestnut blight fungus, endothia parasitica (Murr) And. F. D. Heald and R. C. Walton. *bibliog il Am J Bot* 1:499-521 D '14

Immune chestnuts. *Am Flor* 47:372 S 2 '16

Influence of certain climatic factors on the development of endothia parasitica. N. E. Stevens. *bibliog Am J Bot* 4:1-32 Ja '17

Influence of temperature on the growth of endothia parasitica. N. E. Stevens. *Am J Bot* 4:112-18 F '17

Influence of the tannin content of the host plant on endothia parasitica and related species. M. T. Cook and G. W. Wilson. *N J Ag Exp B* 291:1-47 '16

Longevity of pycnospores of the chestnut-blight fungus in soil. F. D. Heald and M. W. Gardner. *bibliog J Ag Research* 2:67-75 Ap '14

Notes on effect of dyes on endothia parasitica. C. Rumbold. *Bot Gaz* 64:250-2 S '17

Persistence of viable pycnospores of the chestnut blight fungus on normal bark below lesions. R. A. Studhalter and F. D. Heald. *bibliog Am J Bot* 2:162-8 Ap '15

Seasonal duration of ascospore expulsion of endothia parasitica. F. D. Heald and R. A. Studhalter. *bibliog il Am J Bot* 2:429-48 N '15

Utilization and reforesting of chestnut-blighted lands. L. C. Barnes. *J For* 15:854-8 N '17

What to do with blighted chestnut. G. Day. *Country Gent* 82:1655 O 27 '17

White pine blister rust and the chestnut bark disease. E. P. Meinecke. *il Cal State Comm Hort B v* 6:277-9 Ji '17

**Chestnut borers, Two-lined**

Observations on the life history of agrilus bilineatus. R. N. Chapman. *il J Ag Research* 3:283-94 Ja '15

**Chestnut oak. See Oak****Cheyenne club**

Cheyenne club; recollections of an organization famous in connection with the development of the western cattle trade. J. Clay. *il Breeder's Gaz* 70:1182-3 D 21 '16

**Chicago**

*See also* Chicago milk investigation; Chicago milk producers' association; Chicago stockyards; Food control—Chicago; Milk supply—Chicago

**Chicago board of trade**

Address at the annual meeting, Jan. 14, 1918. A. S. White. *Coop Manager & F* 7:60-1 F '18

Board of trade and the war. H. M. Sager. *Coop Manager & F* 7:51-2 Ji '18

Boards of trade and the national welfare. J. R. Mauff. (*In* Nat. conf. on marketing and farm credits, 1916, p. 326-38) \$2 '17

C. W. Holman, sec., Madison, Wis.

By a twist of the fist grain is bought and sold on the Chicago board of trade. T. J. DeLoherly. *il Country Gent* 81:2111 D 9 '16

Chicago the nerve center of the world's grain trade. R. H. Moulton. *Ag Digest* 2:503 Je '17

Denies fixing price on futures. J. P. Griffin. *Am Coop J* 12:763 Ag '17

Description of work. Wallaces' *F* 43:1606 N 1 '18

New regulations in future trading by Chicago board of trade. *Coop Manager & F* 7:36 My '18

Uphold call rule, by decision of the Supreme court. *Coop Manager & F* 7:28 Ap '18

**Chicago florists' club**

Meeting, Aug. 8. *Am Flor* 51:173-6 Ag 17 '18

Regular meeting, Jan. 10. *Am Flor* 50:16 Ja 19 '18

**Chicago milk investigation**

Chicago milk commission. *Breeder's Gaz* 72:986 N 29 '17

Chicago milk commission errs. E. Davenport. *Kimball's D F* 16:160+ Mr 1 '18; Same.

Hoard's *D* 55:234-5 Mr 1 '18; Excerpts. O Judd Farmer 64:14 Mr 9 '18

Chicago milk hearings. O Judd Farmer 64:5 Ja 26 '18

Chicago milk inquiry. C. S. Duncan. *J Political Econ (Univ. of Chicago Press 35c)* 26:321-46 Ap '18

Chicago milk price for March settled. J. M. Carroll. *Hoard's D* 55:337 Mr 15 '18

Chicago milk prices too low. H. S. Stone. *Kimball's D F* 16:122 F 15 '18

Chicago milk situation. J. M. Carroll. *Hoard's D* 55:148, 287 F 15, Mr 8 '18

Commission to fix Chicago milk prices. J. M. Carroll. *Hoard's D* 54:695 D 7 '17

Dairymen before commission show cause why price of milk should be higher. O Judd Farmer 63:3 D 22 '17

Dairymen tell whys and wherefores. *il O Judd Farmer* 63:1 D 29 '17

Effect of Chicago prices. H. S. Stone. *Kimball's D F* 16:173 Mr 1 '18



**Chicago milk investigation—Continued**

- Facts and bunk on milk supply. O Judd Farmer 64:3+ Ja 19 '18  
 Final argument on milk price. O Judd Farmer 64:12 F 2 '18  
 Final briefs in Chicago milk hearing. J. M. Carroll. Hoard's D 55:118 F 8 '18  
 Hearings before commission, Dec. 3-13. Milk News (29 S. La Salle st., Chicago 50c per yr) 23:1-2 D '17  
 Illinois milk investigation. Hoard's D 54:766 D 21 '17  
 Illinois milk investigations. J. M. Carroll. Hoard's D 54:731 D 14 '17  
 Increase of the price for March from \$2.83 to \$3.10. Creamery 7:13-14 Mr '18  
 Last act of the Chicago milk farce. O Judd Farmer 64:22 F 16 '18  
 Milk hearings almost completed. O Judd Farmer 64:9 Ja 12 '18  
 Milk investigation drags along. O Judd Farmer 64:3 Ja 5 '18  
 Milk investigation in Illinois. S. J. Craig. Kimball's D F 16:2 Ja 1 '18  
 Milk price commission named. O Judd Farmer 63:7 D 8 '17  
 Milk price investigation on. O Judd Farmer 63:6 D 15 '17  
 Milk prices fixed again. O Judd Farmer 64:5 Ap 6 '18  
 Playing square with the farmer. Wallaces' F 43:342 F 22 '18  
 Regulation of milk prices. B. H. Hibbard. Kimball's D F 16:172 Mr 1 '18; Same. Jersey B 37:391+ Mr 13 '18  
 Report of Chicago milk commission. Creamery 7:17-22 Mr '18  
 Resume of the Chicago testimony. J. M. Carroll. Hoard's D 54:802-3 D 28 '17  
 Still hunting Chicago milk trust. O Judd Farmer 63:1 O 20 '17  
 What is a fair price for milk? J. E. Pickett. il Country Gent 83:3-4 Ap 13 '18
- Chicago milk producers' association**  
 Activities in the Chicago milk strike. il O Judd Farmer 60:3+ Ap 15 '16  
 Annual meeting. Chicago, Feb. 1, 1916. T. J. Delohery. Hoard's D 51:204 F 25 '16  
 Chicago dairymen called trust. O Judd Farmer 63:1 O 13 '17  
 Chicago milk inquiry. C. S. Duncan. J Political Econ (Univ. of Chicago press, Chicago 35c) 26:321-46 Ap '18  
 Chicago milk marketing controversy. F. M. Chase. Hoard's D 52:212+ S 8 '16  
 Chicago milk prices. T. J. Delohery. Hoard's D 51:469 Ap 7 '16  
 Chicago milk producers' association shows its power. A. C. Page. map O Judd Farmer 60:1 Ap 8 '16  
 Chicago producers will ask for three-dollar milk. J. M. Carroll. Hoard's D 54:217 S 14 '17  
 Farmers resent Swift's expulsion. O Judd Farmer 61:10 Ag 26 '16  
 Federal authorities and the Chicago milk price. J. M. Carroll. Hoard's D 54:504 N 2 '17  
 Fight for twenty-two cents. C. E. Gapen. il Country Gent 81:1063-4 My 20 '16  
 Final Chicago milk prices. J. M. Carroll. Hoard's D 53:524 Ap 13 '17  
 Great Chicago milk war. R. B. Swift. Rural N Y 75:853 Je 10 '16  
 Last act of the Chicago milk farce. O Judd Farmer 64:22 F 16 '18  
 Law and the milk producer. W. Drew. Hoard's D 54:912+ Ja 18 '18  
 Milk marketing corporation. O Judd Farmer 61:6 Ji 22 '16  
 Milk marketing firm formed. O Judd Farmer 65:483 N 23 '18  
 Milk producers and Chicago dealers. Hoard's D 51:468 Ap 7 '16  
 Milk producers' strike. H. T. Morgan. Kimball's D F 14:301 My 1 '16  
 Milk situation in northern Illinois. Hoard's D 52:288 S 22 '16  
 Milk situation in section tributary to Chicago. Hoard's D 52:284 S 22 '16  
 Patriotism and milk production. C. E. Gapen. Country Gent 82:1870-1 D 1 '17

- Real cause of the fight. R. B. Swift. O Judd Farmer 61:10 Ag 12 '16  
 Straight talk by Swift. R. B. Swift. O Judd Farmer 61:5 Ag 19 '16  
 Suggests job for producers. W. D. Dunning. O Judd Farmer 62:11 Je 16 '17  
 Swift condemns market plan. R. B. Swift. O Judd Farmer 61:9 Ji 8 '16  
 Swift warns milk producers. O Judd Farmer 61:9 Ji 15 '16  
 Will Chicago milk price stand. J. M. Carroll. Hoard's D 54:416 O 19 '17  
 Wrecking Chicago milk producers? O Judd Farmer 61:3 Ag 5 '16  
 Year book and directory, 1916. 87p '16 Milk producers' assn., 29 S. La Salle st., Chicago
- Chicago milk strike.** See Chicago milk producers' association
- Chicago-Northwestern bee-keepers' association**  
 \* 20th annual convention, Chicago, Nov. 30-Dec. 1, 1917. (In Report, 1917, p. 72-115) '18  
 Ill. State beekeepers' assn., Springfield
- Chicago stockyards**  
 Biggest butcher shop. T. J. Delohery. il Country Gent 81:557 Mr 11 '16  
 Countryman in Chicago. il Cornell Countryman 14:302-5 Ja '17  
 Selling a load of cattle. J. M. Carroll. il O Judd Farmer 61:3 O 14 '16
- Chicago university**  
 Pledge of women students. J Home Econ 9: 220-1 My '17
- Chick peas**  
 Gram cultivation in India. A. Howard and others. Int R Sci & Prac Ag 7,no 5:676-7 My '16  
 Leblebil, a food made from the chick pea (cicer arietinum), in the eastern Balkans. A. Zlataroff. Int R Sci & Prac Ag 8,no 6:932-4 Je '17  
 Some enzymes of germinating red gram (cajanus indicus). B. Viswanath. Ag J of India Sci Congress No 1917:109-16
- Chickadees**  
 Nuthatches and the chickadees. A. A. Allen. il Am For 23:663-7 N '17
- Chicken hawks.** See Hawks
- Chickens.** See Poultry
- Chickens and a child.** S. M. Weed. Country Life 34:102 My '18
- Chicory**  
 Chicory: its nature and eradication. G. T. French. Va Ag Dept B 126:64-6 '18  
 Culture and forcing of Witloof chicory. F. H. Hall. Am Flor 47:40 Ji 22 '16; Same. Market Growers J 19:59 Ag 1 '16  
 Culture and forcing of Witloof chicory. J. W. Wellington. il N Y State Ag Exp B 418:89-98 '16  
 Culture of chicory. il Rural N Y 77:34 Ja 12 '18  
 Endive, or chicory of salads. S. W. Garekol. Gard M 28:32 Ag '18  
 Fertility in cichorium intybus: the sporadic occurrence of self-fertile plants among the progeny of self-sterile plants. A. B. Stout. bibliog il Am J Bot 4:375-95 Ji '17  
 Forcing Brussels chicory. H. W. Schneek. Market Growers J 22:189 Mr 1 '18  
 Forcing Witloof chicory or French endive. E. F. Stoddard. il Market Growers J 22:335-6 My 1 '18  
 Grow chicory (endive) salad in your cellar. F. K. Porter. il Gard M 23:186 Ap '16  
 Growing French endive in the backyard. S. L. de Fabry. il Gard M 23:184 Ap '16  
 On increased food production. W. L. Laven-der. Gard Chron (Lond) 64:67 Ag 17 '18  
 Plant now and grow salad in your cellar all winter. A. M. Burke. il Gard M 25:288 Je '17  
 Varieties of chicory in the province of Lecce, Italy. A. Mannarini. Int R Sci & Prac Ag 8,no 1:86-7 Ja '17  
 Witloof chicory. A. E. Wilkinson. il Country Gent 82:1843 N 24 '17  
 Witloof or Brussels chicory. G. Cooper. Mar- ket Growers J 22:220 Mr 15 '18  
 See also Endive

## Chicory —Continued

## Laws

Arrêté n. 5135 concernant les racines de chicorée, pris en vertu des ordonnances n. 4951 et 5122 du 11 novembre 1915 et du 4 avril 1916 en Allemagne. *Int Yearbook Ag Leg* 1916:178-9 '17

Chiggers. See Chigoes

## Chigoes

Chigger-mites affecting man and domestic animals. H. E. Ewing and A. Hartzell. *il J Econ Entom* 11:256-64 Ap '18

Chiggers or jiggers. R. D. Whitmarsh. *il Ohio Ag Exp B v* 1:221-3 Jl '16

Harvest mites. L. Patterson. *Purdue Ag* 11:53 My '17

Chigres. See Chigoes

## Chihuahuas dogs

Dogs of Mexico. *il Country Life* 30:49 Jl '16

## Child labor

Causes of absence from rural schools in Oklahoma. E. N. Clopper. *il map Child Labor B* (105 E. 22d st. N.Y. 50c) 6:90-113 Ag '17

Child labor in the sugar-beet fields of Colorado. E. N. Clopper and L. W. Hine. (Pamph. 259) 25c 34p *il '16 Nat. child labor comm.*, 105 East 22d st., N.Y.

\* Child labor on English farms during the war. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:31-2 Jl '17

Child laborers in the shade grown tobacco industry in Connecticut. M. C. Welles. (Pamph. no. 11) 6p n. d. Consumers' league of Conn., 36 Pearl st., Hartford

Children in agriculture. R. McIntire. (Pamph. 284) 14p *il '18 Nat. child labor comm.*, 105 E. 22d st. N.Y.

Effect of agricultural employment upon school attendance. R. McIntire. *Elementary School J* (Univ. of Chicago Press 20c) 18:533-42 Mr '18

Farmwork and schools in Kentucky. E. N. Clopper. *il Child Labor B* (National Child Labor Com., 105 E. 22d st., N.Y. 50c) 5:178-206 F '17

Rural child labor problem; with discussion. A. C. Monahan. *Child Labor B* (105 E. 22d st., N.Y. 50c) 6:50-6 My '17

## Child study

Home study for mothers. E. Morris. *Country Gent* 81:1055 My 13 '16

## Children

Marketing the American farm boy. O. J. Kern. *Breeder's Gaz* 71:970 My 10 '17

Mobilizing the nation's children for Red cross. E. Evans. *J Home Econ* 9:559-61 D '17

More of the children; their play and their pets. *il Rural N Y* 76:1326 N 17 '17

Relation of children and parents. E. Flory. *Am Coop J* 14:78 N '18

See also Adoption; School children

## Care and hygiene

Bad breath in children. *Prog F* 31:786 Je 17 '16

Care of young children. *J Home Econ* 9:275-6 Je '17

Child and its care. N. S. Knowles and others. *il Ia Ag Ext Home Econ B* 2:1-32 '16

Child feeding. *N H Ag Ext C* 37 4p '18

Child of four. *Nat Stock & F* 41:201 My 12 '17

Child—suggestive outline for club study. *Ia Ag Ext Home Econ C* 2:1-6 '16-'17

Children need farm conditions. O. F. Cook. *Am Flor* 46:1241 Jl 1 '16

Conservation of children. F. M. Hollingshead. *Ohio F* 140:410, 516, 594 N 3, D 1, 22 '17

Conserving children. A. C. Wortman. *Hoard's D* 56:675 D 6 '18

Constipation. L. A. DeVilbis. *Country Gent* 82:407 F 24 '17

Daily questions that mothers should ask. *J Home Econ* 8:261-2 My '16

Diet for school children. G. Hadley. *Purdue Ag Ext Leaflet* 103:1-5 '18

Diet of children from babyhood to ten years old. Mrs W. N. Hutt. *Prog F* 31:232 F 12 '16

Feeding a child from nine months to two years. *Ia Ag Ext Home Econ C* 9:1-2 '17-'18

Feeding a child from two to three years old. *Ia Ag Ext Home Econ C* 10:1-2 '17-'18

Feeding children from two to seven years old; for the use of visiting nurses, social service workers and teachers. 8p '17 Bur. of pub. health educ., Dept. of health, 139 Centre st., N.Y.

Feeding children two to three years old. F. Hollingshead. *Ohio F* 140:465 N 17 '17

Feeding the child of six. *Ia Ag Ext Home Econ C* 11:1-2 '17-'18

Feeding the child of three. *Ohio F* 139:654 My 5 '17

Feeding the school child. *Country Gent* 81:2241 D 30 '16

Feeding the school child. L. G. Chace. *R I State Bd Health B* (Providence) 3:42-6 Jl '17

Fever. L. A. De Vilbis. *Country Gent* 82:407 F 24 '17

First-aid preparedness for mothers. M. P. Connolly. *Country Gent* 81:1459 Jl 29 '16

Food for children. *J Ag* (Quebec) 19:248 My '16

Food for children from one to six years old. (Ser. 3, no. 4) 8p '18 Winthrop Normal and industrial college, Rock Hill, S.C.

\* Food for children from two to six years old. 15p '18 Mass. State dept of health, Boston

Food for infants and growing children. A. E. Richardson and J. P. Rich. *Texas Univ* (Austin) B 1804:1-30 Ja 15 '18

Food for young children. C. L. Hunt. *il Farmers' B* 717:1-20 '16

Food requirements of children. L. H. Gillett. *J Home Econ* 9:324-7 Jl '17

Getting ready for school. G. V. Gray. *il Farm Eng* 4:52+ S '16

Good work of the new year. *Wallaces' F* 41:56 Ja 14 '16

Health of country children. *School and Society* (Science Press, Garrison, N.Y. 10c) 4:926-7 D 16 '16

Health of rural school children. W. S. Kellogg. *Public Health* (Mich. State bd. of health, Lansing) n s 5:106-9 Mr '17

How shall I make him eat? M. P. Connolly. *il Country Gent* 81:1777 S 30 '16

How you can help children's year. *Banker-F* 5:9 Je '18

Is he fit for school? *Country Gent* 81:2059 N 25 '16

Little children deprived of milk. *Hoard's D* 55:561 Ap 19 '18

Make the child thankful. *Country Gent* 81:2059 N 25 '16

Milk for children. L. L. DeBra. *Hoard's D* 54:564 N 9 '17

Needs of young children. A. Ravenhill. *Utah Ag Ext C* 14:1-4 '18

Planning children's clothes for school. Mrs King. *Purdue Ag* 13:76 N '18

Preventing children's colds. *Country Gent* 81:2241 D 30 '16

Schedule for sleep and work is a mother's greatest saving. N. K. Jones. *Country Gent* 82:1805 N 17 '17

Sick child. M. P. Connolly. *Country Gent* 81:1673 S 9 '16

Start the toothbrush drill. M. H. Talbott. *Country Gent* 81:1349 Jl 8 '16

Stupid child. *Prog F* 33:1234 N 9 '18

Suggestion for mothers. M. Merritt. *O Judd Farmer* 61:20 S 30 '16

Suggestions for the health of children. H. Knowlton. *il Cornell Reading Courses* 5,no 103:67-76 '16; Same. *Cornell Ag Exp Rep* 1916, v 2:1033-41 '17

Well-cared for child. M. L. Westcott. *il Fruit-Grower* 27:65 Ja 15 '16

What does he eat? M. P. Connolly. *Country Gent* 81:817 Ap 8 '16

What shall children eat? M. Rice. *Rural N Y* 77:528 Ap 6 '18

What to feed the children. D. R. Mendenhall and A. L. Daniels. *il Wis Ag Ext C* 69:1-8 '17 (rev. '18)

When is a child healthy? Mrs M. West. *O Judd Farmer* 65:441 N 9 '18



**Children—Care and hygiene—Continued**

Whiner. E. G. Wallace. Country Gent 81:1988 N 11 '16

See also Infants—Care and hygiene; School lunches

**Charities, protection, etc.**

Saving the babies in war time. Prog F 33:1233 N 9 '18

Saving the children. Am Assn Farmers' Inst Workers Pro 1917:82-7 '18

**Diseases**

Ailments of children; cause, treatment and prevention. Mrs W. N. Hutt. Prog F 31:228+ F 12 '16

Whooping cough. Prog F 31:336 Mr 4 '16

See also Children—Care and hygiene

**Education**

See Education of children

**Food**

See Children—Care and hygiene

**Growth and development**

- \* Mental and physical development of rural children. W. H. Pyle and P. E. Collings. School and Soc (Science Press, Garrison, N.Y. 10c) 8:534-9 N 2 '18

**Health**

See Children—Care and hygiene

**Management and training**

Afraid of things. E. G. Wallace. Country Gent 81:367 F 12 '16

Family government. Ohio F 138:450, 504 N 4, 18 '16

Gaining obedience. E. G. Wallace. Country Gent 82:87 Ja 13 '17

Getting ready for winter. Mrs J. Seymour. Rural N Y 75:1211 S 16 '16

Giving the little child her own possessions. Prog F 31:813 Je 24 '16

Heart of a child. Nat Stock & F 41:1182 F 16 '18

Home study courses for mothers. Nat Stock & F 40:750 O 21 '16

Keep your promise to the child. Prog F 31:1497 D 30 '16

Love in homeopathic doses. il Rural N Y 75: 1105 Ag 19 '16

Making a capitalist of your boy. il Country Gent 81:365 F 12 '16

One who is misunderstood. E. G. Wallace. Country Gent 81:139 Ja 15 '16

Personal bad habits. M. A. Bartlett. O Judd Farmer 65:325 O 12 '18

Small children on the farm. Rural N Y 75: 892 Je 17 '16

Starting the right way. N. K. Jones. il Country Gent 83:58 Ja 12 '18

Thoughtful child. E. G. Wallace. O Judd Farmer 63:19 S 29 '17

Training little children; articles written by mothers who were formerly kindergarten teachers. U.S. Bur. of educ., Washington, D.C.

A series of 55 articles which are intended to run at weekly intervals for a little over a year

Why children lie. E. Flory. Am Coop J 14: 118 D '18

**Photographs and photography**

Among the children. il Rural N Y 76:1443; 77:84, 242, 460, 598-9 D 22 '17, Ja 19, F 16, Mr 23, Ap 20 '18

**Children in art**

Some remarkable portraits of children that have won fame for their creators. il Country Life 33:106 N '17

**Children's amusements**

Fun with nature's toys. N. Tachau. Country Gent 81:1777 S 30 '16

See also Play; Toys

**Children's gardens**

- \* Children and the home garden movement. R. W. Shufeldt. Nature Study R (Ithaca, N.Y. 15c) 14:107-9 Mr '18

Children's potato war plot fund. C. F. Bailey. Ag Gaz of Canada 3:564-5 Je '16

Children's public market. P. D. Hunter. il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26:206-7 O '16

Development of children's garden movement. Market Growers J 22:257 Mr 15 '18

Educative and economic possibilities of school directed home gardening in Richmond, Indiana. J. L. Randall. (B. 6) 25p il '17 U.S. Bur. of educ., Washington, D.C.

\$4000 in one season. A. Bethune. Gard M 23: 308 Je '16

Garden clubs in the schools of Englewood, N.J. C. O. Smith. (B. 1917, no. 26) 44p il '17 U. S. Bur. of educ., Washington, D.C.

Gardening for children under school supervision. S. Dickinson. il Minn Hort 46:141-7 Ap '18

Gardening in elementary city schools. C. D. Jarvis. (B. 40) 74p il plans '16 U.S. Bur. of educ., Washington, D.C.

Gardening in the elementary city schools. C. D. Jarvis. Gard M 23:256 My '16

Hon. P. P. Claxton's constructive suggestion in relation to the food shortage. Education (120 Boylston st, Boston 35c) 37:526-8 Ap '17

London children's gardens. A. W. Sutton and J. Hudson. Royal Hort Soc J 42:pts 2-3: 435-7 S '17

Making good boys from bad through fruit growing. F. J. Koch. il Green's Fruit Grower 36:8 D '16

Market growers of the future. E. C. Lindemann. il Market Growers J 22:339 My 1 '18

Report of the committee on children's gardens. H. S. Adams. Mass Hort Soc Trans 1916, pt 2:213-16 '17

Suggestions for teaching household arts and agriculture. 63p il '17 Ga. Dept. of educ., Atlanta

Universal training of children in gardening. P. P. Claxton. Am City (Tribune bldg., N.Y. 35c) 16:401-2 Ap '17

Work of a children's garden club. O. H. Foster. il St Nicholas (353 4th av., N.Y. 25c) 44:435-7 Mr '17

See also School gardens

**Children's reading**

Children's reading. Ohio F 138:558 D 2 '16

Have your children plenty of good reading matter? L. A. Markham. Prog F 32:1049 O 6 '17

Our childhood's reading. H. Richmond. O Judd Farmer 61:22 N 18 '16

**Children's rooms**

Child's own room. A. R. Fairman. il Country Life 33:53-5 D '17

**Chile**

See also subhead Chile under Agricultural education; Agriculture; Plants; Potatoes

**Industries and resources**

Chilean nitrate industry. A. W. Allen. il Eng and Mining J (10th av., at 36th st., N.Y. 15c) 103:230-3 F 3 '17

Chilean nitrate industry. A. H. Rogers and H. R. Van Wagenen. Am Fert 48:46+ Mr 16 '18

Markets for agricultural implements and machinery in Chile and Peru. F. H. von Motz. (Special agents ser. no. 142) 48p '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.; 5c Supt. of doc.

**Chile saltpeter.** See Saltpeter, Chile

**Chilkat Indians**

Historic Chilkat Indian blanket. C. L. Pancoast. il Country Life 32:88 S '17

**Chimney swifts**

Chimney swift. E. S. Jones. Ohio F 139:424 Mr 17 '17

**Chimneys**

Bulletin on fuel. Rural N Y 76:1083 S 15 '17

Chimney construction and building site. Wallaces' F 43:1302 S 13 '18

If the chimney smokes. S: O. Rice. Country Gent 83:21 N 2 '18

Inspect your chimneys. Wallaces' F 41:120 Ja 28 '16

**Chimneys—Continued**

- More about leaky chimneys. C. O. Ormsbee. Rural N Y 77:260 F 16 '18  
 Safe chimneys for farmhouses. H. P. Boynton. Ohio F 140:499 D 1 '17  
 Talk about chimneys. R. H. Smith. Rural N Y 76:1393 D 8 '17  
*See also* Fireplaces

**Chimneys, Concrete**

- Moisture in concrete chimney. Wallaces' F 43:350 F 22 '18

**China**

- See also* subhead China under special sub-jects

**Description and travel**

- Farming in eastern Asia. J. T. Nichols. Wallaces' F 42:947 Je 22 '17

**China asters.** *See* Asters**Chinch bugs**

- Chinchbug. C. F. Stiles and C. E. Sanborn. il Okla Ag Ext C 59 4p '17  
 Chinch-bug outbreak of 1910 to 1915. S. A. Forbes. il maps Ill Ag Exp C 189:1-59 '16  
 Chinch bugs this year in Illinois. W. P. Flint. map O Judd Farmer 64:628 Je 15 '18  
 Democrat corn withstood chinch bugs. J. J. Doerschuk. O Judd Farmer 65:228 S 21 '18  
 How to detect outbreaks of insects and save the grain crops. W. R. Walton. il Farmers' B 835:6-8 '17  
 Suggestions for a new method of destroying chinch-bugs. W. P. Flint. J Econ Entom 11: 186-8 Ap '18  
*See also* False chinch bugs

**Chinese cabbage**

- Chinese cabbage. J. T. Rosa. il Rural N Y 77: 1376 D 14 '18  
 Chinese cabbage under glass. Market Growers J 18:89 F 1 '16  
 Chinese cabbage under glass. J. T. Rosa, jr. il Market Growers J 23:31 Jl 15 '18  
 Experiences with Chinese cabbage; symposium. Market Growers J 23:216-17 D 1 '18  
 Pe-tsai—a coming crop. il Country Gent 81: 512 Mr 4 '16  
 Pe-tsai or Chinese cabbage. A. E. Wilkinson. Country Gent 81:1269 Je 24 '16  
 Praises petsai as substitute for head lettuce —has many advantages. Weekly N L 6:4 N 20 '18; Same. Gard Chron Am 22:276 N '18

**Chinese in the United States**

- Imported Chinese farm labor. T. Pendell. Rural N Y 76:189 F 10 '17  
 Shall we let in the Chinaman? R. L. Adams. il Country Gent 82:1678-9 N 3 '17

**Chinese pearl bush**

- Exochorda Giraldi Wilsonii. Am Flor 46:1118 Je 10 '16

**Chinese wax-tree.** *See* Ligustrum lucidum**Chinese wood oil**

- Chinese wood oil industry. Am Industries (30 Church st, N.Y. 10c) 18:32 O '17

**Chinese wood-oil trees**

- Chinese wood-oil tree. E. N. Ward. il Ag Gaz of New South Wales 29:437-9 Je '18

**Chipmunks.** *See* Ground squirrels**Chipping sparrows**

- Chipping sparrow or hair bird. C. J. Stanwood. il Country Life 30:52 Je '16

**Chisels**

- Cold chisels. il Country Gent 83:40 Ja 26 '18

**Chives**

- Chives in winter. il Country Gent 81:1627 S 2 '16

**Chlamydomonadeae.** *See* Algae**Chloramine**

- Chloramine. Am Vet M Assn J 51:604-5 Ag '17

**Chloranth**

- Further observations on chloranth in drosera intermedia. M. Levine. bibliog il Bot Gaz 62:389-99 N '16

**Chloridea obsoleta.** *See* Corn earworms**Chloridea virescens.** *See* Tobacco budworms**Chlorine**

- Rapid volumetric method for approximate estimation of chlorine in milk. B. W. Hammer and D. E. Bailey. Ia Ag Exp Research B 41:337-48 '17

**Chloroform**

- Chloroform as a paraffin solvent in the imbedding process. D. M. Mottier; W. J. G. Land. Bot Gaz 61:251-3 Mr '16

**Chlorophyll**

- Causation of variegated leaves. il Gard Chron Am 26:22-3 Ja '16  
 Chlorophyll inheritance in maize. E. W. Lindstrom. bibliog il Cornell Ag Exp Memoir 13:1-68 '18  
 Influence of light and chlorophyll formation on the minimum toxic concentration of magnesium nitrate for the squash. R. B. Harvey and R. H. True. il Am J Bot 4:407-10 Jl '17

**Chlorosis (botany)**

- Chlorosis of pineapples induced by manganese and carbonate of lime. P. L. Gile. Science (Science Press, Garrison, N.Y. 15c) n s 44: 855-6 D 15 '16  
 Chlorosis of sugar cane. Porto Rico Ag Exp Rep 1917:10-19 '18  
 Manganese as a cause of the depression of the assimilation of iron by pineapple plants. M. O. Johnson. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:47-9 Ja '17

**Choanephora**

- Squash disease caused by choanephora cucurbitarum. F. A. Wolf. il J Ag Research 8:319-28 F 26 '17

**Chocolate**

- Chocolate and cocoa. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:232 O 12 '18  
 Narcotic plants and stimulants of the ancient Americans. W. E. Safford. il Smithsonian Rep (Smithsonian Inst., Washington, D.C.) 1916:420-3

*See also* Beverages**Analysis**

- Cacao products. Assn Offic Ag Chem J 2,no 3, pt 2:327-30 N '16

**Chores.** *See* Farm management**Chorizagrotis auxiliaris.** *See* Army cutworms**Chow-chow**

- Chinese chow-chow. I. Hay. O Judd Farmer 61:20 S 23 '16  
 Sauerkraut and chow-chows. Mrs L. York. Rural N Y 75:1107 Ag 19 '16

**Christian county, Kentucky**

- Pulled up by its own bootstraps. W: H. Dean. il Country Gent 82:1407 S 15 '17

**Christie, George Irving**

- Sketch. por Purdue Ag 12:473-4 My '18  
 Sketch. M. L. Fisher. por Purdue Ag 10:12 Ap '16

**Christmas**

- Another short-food Christmas. M. G. Philips. Am Bee J 58:416 D '18  
 Christian or pagan? Nat Stock & F 42:862 D 21 '18  
 Christmas in France. K. Wicker. il Nat Stock & F 41:924-5 D 22 '17  
 Christmas in the middle ages. J. W. Thompson. Breeder's Gaz 70:1215 D 21 '16  
 Christmas in war time. A. Fearing. Country Life 35:52 D '18  
 Christmas mistakes. Nat Stock & F 40:944 D 16 '16  
 Dairyman's Christmas abroad. G: Cecil. Jersey B 36:1980 D 19 '17  
 Keeping Christmas. il Cornell Ag Exp Rep 1916, v 2:359-90 '17  
 Merry Christmas. G. B. Griffith. Green's Fruit Grower 36:18 D '16  
 New and larger Christmas. W: E. Barton. Nat Stock & F 42:863 D 21 '18  
 New meaning of Christmas. M. R. Myers. il Am Coop J 14:106 D '18  
 Plea for Christmas. Wallaces' F 42:1564 N 16 '17  
 Strange Christmas customs. W. M. Tait. Jersey B 35:1994-5 D 20 '16



**Christmas—Continued**

- This Christmas. H. A. Caton. Nat Stock & F 42:870 D 21 '18  
Two farm home Christmas pictures. F. S. Wing. il Breeder's Gaz 72:1125 D 20 '17  
War Christmas in Germany. A. Fuchs. Wallaces' F 41:1672-3 D 22 '16  
War-time Christmas. Wallaces' F 42:1711 D 21 '17  
What Christmas means to me. Country Gent 81:2205 D 23 '16  
What is Christmas to me? L. W. Lighty. Nat Stock & F 40:962 D 23 '16  
**Christmas come-back;** story. H. Richmond. Nat Stock & F 41:923-4 D 22 '17  
**Christmas dinners**  
Christmas dinner. Nat Stock & F 40:944 D 16 '16  
Economical Christmas dinner. R. Lampman. Rural N Y 76:1378 D 1 '17  
Mother Sherrod plans her Christmas dinner. I. C. B. Allen. il Country Gent 81:2175 D 16 '16  
Our Christmas dinner. R. Lampman. Rural N Y 75:1524 D 9 '16  
Our Christmas dinner. R. Thomas. Purdue Ag 13:119-21 D 18  
**Christmas echo;** story. B. Bedahn. Nat Wool Grower 7:29-30 D 17

**Christmas gifts**

- Books as Christmas presents. Nat Stock & F 42:832 D 14 '18  
Christmas foresight for girls. I. R. Smith. Ohio F 138:58 Jl 15 '16  
Christmas gifts that girls can make. Nat Stock & F 40:920 D 9 '16  
Christmas gifts the boys can make. Prog F 31:1379 N 25 '16  
Christmas presents for the soldiers. Wallaces' F 42:1433 O 19 '17  
Christmas spent without spending. D. A. Mondore. Rural N Y 75:1572 D 23 '16  
Christmas suggestions from subscribers. Prog F 33:1376 D 14 '18  
Gifts from the country family to city cousins. il Country Gent 81:2157 D 16 '16  
Inexpensive gifts for Christmas. E. De Graff. Rural N Y 76:1441 D 22 '17  
It has been my experience; what I am making for Christmas. il O Judd Farmer 61:26-7 D 2 '16  
Making the Christmas dollar buy a dollar's worth. Gard M 26:151 D 17  
Making the Christmas dollar buy a dollar's worth. F. F. Rockwell. il Gard M 28:142 D 18  
Plants as Christmas gifts. Am Flor 47:1089 D 9 '16  
Speeding the parting gift. A. M. Ashton. O Judd Farmer 63:16 D 22 '17  
Suggestions for Christmas gifts. Prac F 113:413 D 1 '17  
What shall we give this Christmas? Prog F 33:1378 D 14 '18  
What small hands can make. N. Tachau. Country Gent 81:2176 D 16 '16

**Christmas greens**

- Making up the Christmas greens. R. Kift. il Country Gent 82:1999 D 15 '17

**Christmas plants.** See Florists' plants

**Christmas trees**

- Christmas tree farm. J. M. Lee. Ohio F 140:586 D 22 '17  
Christmas-tree industry. E. Secrest. il Ohio Ag Exp B v 1:371-4 D 16  
Christmas tree plantations. A. K. Chittenden. il Mich Ag Exp Spec B 78:1-8 '16; Same. Mich Ag Ed Rep 1916:379-84  
Community Christmas trees. G. Ames. il Gard M 24:162-3 D 16  
Live trees for Christmas. il Country Life 31:36-7 D 16

**Chromosomes**

- Fifteen- and sixteen-chromosome oenothera mutants. A. M. Lutz. bibliog il Am J Bot 4:53-111 F '17  
Oenothera mutants with diminutive chromosomes. A. M. Lutz. il Am J Bot 3:502-26 N '16  
**Chrosperma muscætoxicum.** See Fly poison (plant)

**Chrysanthemum gall-flies**

- Chrysanthemum gall-fly, diarthronomyia hy-pogaea. E. O. Essig. bibliog il J Econ Entom 9:461-8 O '16  
Chrysanthemum gall midge. E. P. Felt. Am Flor 47:994 N 25 '16  
Chrysanthemum midge. A. D. Borden. il Am Flor 48:1061 Je 2 '17  
Chrysanthemum midge or gall fly. E. D. Smith. Am Flor 48:1155 Je 16 '17

**Chrysanthemum society of America**

- 15th annual meeting and exhibition, Philadelphia, Pa., Nov. 8-10, 1916. il Am Flor 47:909-12 N 18 '16  
16th annual meeting, Cleveland, Ohio, Nov. 8. Am Flor 49:917-18 N 17 '17

**Chrysanthemums**

- August care of bench stock. C. W. Johnson. Am Flor 47:162 Ag 12 '16  
Bench plants for cut blooms. C. W. Johnson. Am Flor 47:7 Jl 22 '16  
Bench stock for cut blooms. Am Flor 46:990 My 27 '16  
Bench stock for cut blooms. C. W. Johnson. Am Flor 46:1182 Je 24 '16  
Benching plants for cut blooms. C. W. Johnson. Am Flor 48:1155 Je 16 '17  
Benching the plants. C. W. Johnson. Am Flor 50:1104 Je 22 '18  
Border chrysanthemums. T. Stevenson. il Royal Hort Soc J 42:pts 2-3:282-91 S '17  
Chrysanthemum as a war-time flower. C. H. Totty. il Gard Chron Am 22:42-3 F '18  
Chrysanthemum classification. Am Flor 48:1312 Jl 7 '17  
Chrysanthemums. il Am Flor 47:1232 D 23 '16  
Chrysanthemums. C. W. Johnson. Am Flor 49:751 O 27 '17  
Chrysanthemums. E. H. Jones. il J Ag (Quebec) 20:120 D 16  
Chrysanthemums fill important place. Am Flor 47:807 N 4 '16  
Chrysanthemums for exhibition. A. Patterson. il Gard Chron Am 21:45-6 F '17  
Chrysanthemums for the garden. C. H. Totty. il Gard Chron Am 20:183 Ap 16  
Chrysanthemums for the greenhouse. Gard M 25:90 Mr '17  
Chrysanthemums from trade standpoint. C. H. Totty. Am Flor 50:151 F 9 '18  
Chrysanthemums: propagating. C. W. Johnson. Am Flor 48:507 Mr 24 '17  
Chrysanthemums: spring care. C. W. Johnson. Am Flor 50:671-2 Ap 20 '18  
Dividing up old chrysanthemums. L. H. Cobb. Nat Stock & F 41:1077 Ja 26 '18  
Early chrysanthemums. G. W. Kerr. Country Gent 81:893+ Ap 22 '16  
Early preparations. C. W. Johnson. Am Flor 50:297 Mr 2 '18  
Fall care. C. W. Johnson. Am Flor 47:760 O 28 '16  
Favorites of 1917. C. W. Johnson. Am Flor 49:1212 D 22 '17  
Feeding. C. W. Johnson. Am Flor 47:549 S 30 '16  
General routine. C. W. Johnson. Am Flor 49:436 S 15 '17  
Growing bush plants of chrysanthemums. W. J. Sealey. il Gard Chron Am 21:47 F '17  
Growing chrysanthemums. Prog F 33:660 Je 1 '18  
Growing chrysanthemums. R. Blackwood. Wis Hort Soc Rep 1917:84-8  
Hardy chrysanthemums. Mrs E. W. Gould. Minn Hort 44:326 Ag '16  
Hardy chrysanthemums. R. Vincent, jr. Am Flor 47:493 S 23 '16  
Hardy early flowering chrysanthemums. G. W. Kerr. il Country Gent 83:58 F 9 '18  
History and culture. J. McKee. Am Flor 49:384-5 S 8 '17  
How to raise seedling chrysanthemums. P. A. Cragg. Gard Chron (Lond) 59:203, 214, 227 Ap 8-22 '16  
Indoor chrysanthemums without pots. W. F. Rowles. Gard Chron (Lond) 59:11 Ja 1 '16  
Japanese anemone chrysanthemums. il Gard Chron Am 20:509-10 D 16  
Large chrysanthemums. L. H. Cobb. Nat Stock & F 41:775 N 10 '17

**Chrysanthemums—Continued**

- Methods of plant breeding, with special reference to the chrysanthemum. F. W. Keeble. *Gard Chron* (Lond) 59:238 Ap 29 '16
- October routine work. C. W. Johnson. *Am Flor* 51:475 S 28 '18
- Planting. C. W. Johnson. *Am Flor* 48:845 My 5 '17
- Planting for another season. C. W. Johnson. *il Am Flor* 47:1152-3 D 16 '16
- Small types of chrysanthemums. *il Gard Chron Am* 22:273 N '18
- Specimen plants. C. W. Johnson. *Am Flor* 46:1132 Je 17 '16
- Summer care. C. W. Johnson. *Am Flor* 49:149; 50:1244 Ag 11 '17, J1 13 '18
- Summer treatment. C. W. Johnson. *Am Flor* 48:1311 J1 7 '17
- Summer work. *Am Flor* 51:178 Ag 17 '18
- Taking the bud. C. W. Johnson. *Am Flor* 47:388; 49:200; 51:393 S 9 '16, Ag 18 '17, S 14 '18
- Working up stock for planting. C. W. Johnson. *Am Flor* 46:220 F 19 '16

See also Chrysanthemum society of America

**Diseases and pests**

See also Chrysanthemum gall-flies

**Manganese content**

- Occurrence of manganese in insect flowers and insect flower stems. C. C. McDonnell and R. C. Roark. *biolog J Ag Research* 11:77-82 O 15 '17

**Varieties**

- Chrysanthemum society of America; list of varieties with scores, 1916. C. W. Johnson. *Am Flor* 46:474 Mr 25 '16
- Chrysanthemum varieties. A. D. Shamel. *J Heredity* 9:81-4 F '18
- List of varieties examined by Chrysanthemum society of America, season of 1917. *Am Flor* 50:297 Mr 2 '18

**Chrysomyia.** See Screwworm flies

**Chrysophana placida**

- Buprestid household insect (*chrysophana placida* Lec.). H. E. Burke. *J Econ Entom* 10:406-7 Ag '17

**Chufas.** See Feeding and feeding stuffs—Chufas

**Chuna.** See Chick peas

**Church in the vale;** story. H. W. Ashby. *il Wallaces' F* 42:1730 D 21 '17

**Church unity**

- Possible advance movement in Christian cooperation. R. B. Guild. *Rural Manhood* 7:54-8 Ap '16

What an inter-church federation has done for a county. W. L. Mudge. *Rural Manhood* 7:106-9 J1 '16

**Churning.** See Butter making

**Churns**

- Care of the churn. C. A. Day. *N Y Prod R* 41:994 Ap 5 '16
- Churn care. *N Y Prod R* 43:106 N 15 '16
- Ventilated and unventilated milk churns. *J Bd Ag* 23:353-7 J1 '16

**Cicadas**

- Distribution of the Ohio broods of periodical cicada with reference to soil. H. A. Gossard. *il maps Ohio Ag Exp B* 311:555-77 '17

Distribution of the periodical cicada in Ohio. H. A. Gossard. *maps J Econ Entom* 9:53-8 F '16

Look out for locusts. *Weekly N L* 5:8 My 8 '18

Periodical cicada or seventeen-year locust. *il map Pa Ag Ext B v* 4:1-8 F '17

Seventeen-year locust. C. A. Fowler. *il map Penn State F* 10:75-6 Ap '17

Seventeen-year locust in western New York. C. H. Hadley, jr., and R. Matheson. *J Econ Entom* 10:38-40 F '17

**Cicer arietinum.** See Chick peas

**Cicuta maculata.** See Water hemlock

**Cider**

- Apples king of fruits, cider queen of drinks. F. B. McMillin. *Better Fruit* 13:10 O '18; Same. *Am Fruit Grower* 38:6 N '18

Building a fruit business. E. H. Favor. *il Fruit-Grower* 27:293+ My 15 '16

Cider and cider vinegar. L. M. Montgomery. *Ohio F* 138:498 N 18 '16

Cider and vinegar a by-product of the Minnesota orchard. W. G. Brierly. *il Minn Hort* 45:318-21 Ag '17

Cider from cull apples. A. Dean. *Country Gent* 81:842 Ap 15 '16

Cider from the culls. C. Skott. *Country Gent* 82:1662 O 27 '17

Cider fruit for table use. B. T. P. Barker. *J Bd Ag* 24:394-402 J1 '17

Cider-making. S. F. Anderson. *J Ag New Zealand* 16:92-7 F '18

Concentrated apple cider on a commercial scale. *Minn Hort* 44:155 Ap '16

Concentration of sweet cider. *Green's Fruit Grower* 36:2 O '16

Contribution to the study of the alcohols of cider. E. Kayser. *Int R Sci & Prac Ag* 9,no 2:239-41 F '18

Disorders of cider and perry. B. T. P. Barker and O. Grove. *J Bd Ag* 22:939-49 Ja '16

Home-made cider and vinegar. *Wallaces' F* 41:1173 S 8 '16

Inexpensive method to keep cider sweet. H. Froehling. *Va Ag Dept B* 119:8-9 J1 '17

New York cider and vinegar makers. A. H. Pulver. *Rural N Y* 77:1183 O 19 '18

O. S. U. cider cocktail. W. Paddock. *Better Fruit* 11:19 Ap '17

Scientific cider making. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:373 D 9 '16

**Laws**

Hard cider is now liquor. *Rural N Y* 76:1257 N 3 '17

**Cider brandy**

On the composition of cider brandies. E. Kayser. *Int R Sci & Prac Ag* 7,no 12:1838-40 D '16

**Cigarette beetles.** See Tobacco beetles

**Cigars**

Molds of cigars and their prevention. R. H. True. *U S Ag B* 109:1-8 '14

Some causes of the failure of the Manila cigar on the United States market and a remedy. D. B. Mackie. *il Philippine Ag R* 10, no 3:223-52 '17

**Cimex lectularius.** See Bedbugs

**Cinchona**

Notes on cinchona in Java. P. J. Wester. *il Philippine Ag R* 9,no 4:273-7 '16

**Cinchona botanical station**

Botanical station at Cinchona. D. S. Johnson. *Bot Gaz* 63:412-13 My '17

Lease of the tropical botanical station at Cinchona. *Science* (Science Press, Garrison, N.Y. 15c) n 45:209-10 Mr 2 '17

**Cincinnati, Ohio****Parks**

Cincinnati's invitation to the birds. A. Fear-  
ing. *il Country Life* 30:30-1 Ag '16

**Cinnamon trees**

Cultivation of the sweet cinnamon tree (*cinnamomum burmanni* Blume) in Sumatra. E. W. Wyers. *Int R Sci & Prac Ag* 8,no 12:1226 D '17

**Cinura.** See Silverfish (insect)

**Circulating libraries.** See Libraries, Circulating

**Cirphis unipuncta.** See Army worms

**Cisterns**

Cistern filter. *Country Gent* 81:57 Ja 8 '16

Cistern for water supply. *Rural N Y* 75:38 Ja 8 '16

Handy farm mechanics. S. O. Rice. *il Country Gent* 83:19 Je 22 '18

How to figure size of cistern and material necessary to build it. D. C. Carsen. *Bldg Age* (243 W. 39th st, N.Y. 25c) 40:326 J1 '18

How to have pure cistern water. C. H. McCormick. *Ohio F* 138:15 J1 1 '16

Increasing the usefulness of rain-water cisterns. P. Hansen. *plans Wallaces' F* 41:994 J1 21 '16

Painting a cement cistern. R. H. Smith. *Rural N Y* 75:108 Ja 22 '16



**Cisterns—Continued**

Pure clean cistern water. O Judd Farmer 63:8 O 6 '17  
Pure water from cistern. M. G. Kains. Ohio F 138:615 D 23 '16

**Cisterns, Concrete**

Circular concrete cistern. Rural N Y 75:93 Ja 15 '16  
Concrete cistern and hard water. R. C. Angevine. Rural N Y 75:417 Mr 4 '16  
Concrete cisterns. R. W. Petersen. Farm Eng 5:13 Jl '17  
Good supply of rainwater. E. L. Watson. il Power F 25:17 Je '16  
Water filter and cistern. Country Gent 81:2096 D 2 '16

**Citizenship**

Better citizenship will bring a greater national efficiency. F. A. Vanderlip. Banker-F 3:2 My '16  
Citizenship. Banker-F 3:9 My '16  
Organization for citizenship. J. A. McSparran. Mo Ag Bd Yearbook 1917:56-66

**Citrates**

Report on use of citrates in determination of phosphoric acid. W. J. Jones, jr. Assn Offic Ag Chem J 3:97-9 My '17

**Citric acid**

Solubility of calcium phosphates in citric acid. A. A. Ramsay. J Ag Sci 8:277-98 Je '17

**Citricola scale**

Citricola scale in California. J. Quayle. Int R Sci & Prac Ag 7,no 3:461-2 Mr '16  
Control of citricola scale in Tulare county. C. F. Collins. il Cal State Comm Hort B v 6:475-7 N '17

**Citron.** See Etrogs

**Citropsis**

Citropsis, a new tropical African genus allied to citrus. W. T. Swingle and M. Kellerman. il J Ag Research 1:419-36 F '14

**Citrus blast**

Citrus blast. R. W. Hodgson. il Fla State Plant Bd Quar B v 2:123-33 Ja '18  
Citrus blast—a new bacterial disease. R. W. Hodgson. il Cal State Comm Hort B v 6:229-33 Je '17  
New bacterial citrus disease called citrus blast. H. A. Lee. il J Ag Research 9:1-8 Ap 2 '17

**Citrus canker**

Additional observations on the citrus fruits in the Philippines. P. J. Wester. il Philippine Ag R 10,no 2:104-15 '17  
Brief history of the discovery of citrus canker in Japan and experiments in its control. Tyzaburo Tanaka. Fla State Plant Bd Quar B v 3:1-15 O '18  
Characteristics of citrus canker and of the causal organism. R. A. Jehle. il Fla State Plant Bd Quar B v 1:24-47 Ja '17  
Citrus canker. C. W. Edgerton and J. B. Garrett. il La Ag Ext C 15:1-11 '16  
Citrus canker. W. Newell. il Cal State Comm Hort B v 6:263-8 Jl '17  
Citrus canker. F. A. Wolf. bibliog il J Ag Research 6:69-100 Ap 10 '16  
Citrus canker; description and control. F. A. Wolf. il Ala Ag Exp B 190:91-100 '16  
Citrus canker in Japan. Phyt 8:443-4 Ag '18  
Citrus canker investigations. W. Newell. Fla State Plant Bd Quar B v 1:1-2 O '16  
Citrus canker investigations at the Singalong experiment station. E. D. Doryland; P. J. Wester. Philippine Ag R 9,no 2:133-5, 155-7 '16  
Cooperative work for eradicating citrus canker. K. F. Kellerman. il U S Ag Yearbook 1916:267-72; Same. Separate 711  
Crises in the canker eradication work. Fla State Plant Bd Quar B v 1:128-9 Ap '17  
Effect of disinfectants upon bacterium citri. R. A. Jehle. il Fla State Plant Bd Quar B v 2:112-23 Ja '18  
Effects of formalin-Bordeaux mixture on citrus canker. E. D. Doryland. Philippine Ag R 10, no 1:51-4 '17  
Facts about citrus canker. il Country Gent 81:199 Ja 29 '16  
Means of identifying citrus canker. R. A. Jehle. il Fla State Plant Bd Quar B v 1:2-10 O '16

Notes on citrus canker affection at the Lamao experiment station. P. J. Wester. Philippine Ag R 10,no 3:253-60 '17

Observations on the distribution of citrus canker. D. B. Mackie. Philippine Ag R 9,no 4:278-81 '16

Overwintering of the citrus-canker organism in the bark tissue of hardy citrus hybrids. G. L. Peltier and D. C. Neal. il J Ag Research 14:523-4 S 9 '18

Pseudomonas citri, the cause of citrus canker. C. H. Hasse. il J Ag Research 4:97-100 Ap '15

Report on eradication work for quarter ending September 30, 1918. Fla State Plant Bd Quar B v 3:17 O '18

Some facts about the eradication of citrus canker. A. S. Hoyt. il Cal State Comm Hort B v 6:387-90 O '17

Success in citrus canker eradication begins new era in plant disease control. Weekly N L 5:10 Je 26 '18

Susceptibility and resistance to citrus canker of the wild relatives, citrus fruits, and hybrids of the genus citrus. G. L. Peltier. bibliog il J Ag Research 14:337-58 Ag 26 '18  
Susceptibility of non-citrus plants to bacterium citri. R. A. Jehle. il Phyt 7:339-44 O '17

**Citrus fruits**

Account of the mode of foliar abscission in citrus. R. W. Hodgson. bibliog Cal Univ Pub Botany v 6,no 15 417-28p '18 (10c)  
Additional observations on the citrus fruits in the Philippines. P. J. Wester. il Philippine Ag R 10,no 2:104-15 '17  
Another Philippine citrus fruit. P. J. Wester. Philippine Ag R 10,no 4:456-7 '17  
Citrus culture. H. J. Darwent. J Dept Ag S Australia 20:1009-12 Jl '17  
Citrus culture. A. Smith. Ag Gaz of New South Wales 29:603-4 Ag '18  
Citrus culture in Japan, China and Formosa. C. P. Clausen. il Cal State Comm Hort B v 6:379-83 O '17  
Citrus-fruit culture in New Zealand. J. W. Collard. J Ag New Zealand 17:154-62 S '18  
Citrus fruit improvement; how to secure and use tree-performance records. A. D. Shamel. il Farmers' B 794:1-16 '17  
Citrus growing on the Kurrajong heights. J. G. R. Bryant. il Ag Gaz of New South Wales 27:721-6 O '16  
Citrus ichangensis, a promising, hardy, new species from southwestern China and Assam. W. T. Swingle. il J Ag Research 1:1-14 O '13  
Citrus observations in Brazil. A. D. Shamel. il Cal State Comm Hort B v 5:396-408 N '16  
Comparison of some citrus conditions in Florida, Cuba and California. H. S. Fawcett. il map Cal State Comm Hort B v 5:321-37 S '16  
Detailed description of a new machine for peeling citrus fruits. S. C. Hood. il U S Ag B 339:13-19 '16  
Determination of the volatile oil content of citrus fruits. C. P. Wilson and C. O. Young. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:959-61 O '17  
Experiments with stocks for citrus. W. W. Bonns and W. M. Mertz. il Cal Ag Exp B 267:275-301 '16  
Fertilization of citrus. W. P. Kelley. Cal Ag Exp C 171 4p '17  
From the California standpoint. M. C. Richter. Gleanings 44:271 Ap 1 '16  
Immature citrus fruit. R. E. Rose. Fla Ag Dept Quar B v 26:63-71 O '16  
Jellies and marmalades from citrus fruits. W. V. Cruess. il Cal Ag Exp C 146:1-8 '16  
Mulched-basin system of irrigated citrus culture and its bearing on the control of mottle-leaf. L. J. Briggs and others. il U S Ag B 499:1-31 '17  
Nursery stock. il J Dept Ag Victoria 16:111-14 F '18  
Our present knowledge of citrus fertilization. H. J. Webber. Cal State Comm Hort B v 5:161-3 My '16  
Perfect pollination of citrus groves. E. G. Baldwin. Gleanings 44:269-71 Ap 1 '16

**Citrus fruits—Continued**

Relation of bacterial transformations of soil nitrogen to nutrition of citrus plants. K. F. Kellerman and R. C. Wright. bibliog J Ag Research 2:101-13 My '14

Relation of the transformation and distribution of soil nitrogen to the nutrition of citrus plants. I. G. McBeth. bibliog J Ag Research 9:183-252 My '14 '17

Report on freeze injury to citrus trees for 1916 and 1917, with notes on orange culture in South Alabama. O. F. E. Winberg and others. il maps Ala Ag Exp B 199:1-26 '18

Satsuma day at Mobile. W. A. Weaver. Prog F 31:25 Ja '16

Spotting of citrus fruits due to the action of oil liberated from the rind. H. S. Fawcett. il Cal Ag Exp B 266:261-9 '16

Viticultural nursery. Wahgunyah, visit of inspection. il J Dept Ag Victoria 14:349-53 Je '16

See also Citropsis; Grapefruit; Kumquats; Lemons; Limes; Oranges

**Analysis**

Citrus fruit analyses, 1917. Fla Ag Dept Quar B v 28:182-200 Ja '18

**By-products**

Utilization of cull citrus fruits in Florida. F. A. McDermott. Fla Ag Exp B 135:131-44 '17

**Diseases and pests**

Argentine ant in relation to citrus groves. J. R. Horton. il U S Ag B 647:1-73 '18

Bark diseases of citrus trees in Florida. J. G. Grossenbacher. il Phyt 6:29-50 F '16

Brown spot of emperor mandarins. G. P. Darnell-Smith. Ag Gaz of New South Wales 28:190-6 Mr '17

Citrus diseases. H. E. Stevens. il Fla Ag Exp Rep 1917:66R-75R '18

Citrus diseases of Porto Rico. J. A. Stevenson. il J Dept Ag Porto Rico 2:43-123 Ap '18

Citrus fruit insects in Mediterranean countries. H. J. Quayle. il map U S Ag B 134:1-35 '14

Citrus-root nematode. N. A. Cobb. il J Ag Research 2:217-30 Je '14

Dieback, or exanthema of citrus trees. B. F. Floyd. il Fla Ag Exp B 140:1-31 '17

Florida citrus diseases. H. E. Stevens. il Fla Ag Exp B 150:1-110 '18

Fumigation experiments: the time factor. A. F. Swain. J Econ Entom 11:320-4 Je '18

Fumigation of citrus trees. R. S. Woglum. il Farmers' B 923:1-30 '18

Grower's need of a hand lens. F. M. O'Byrne. Fla State Plant Bd Quar B v 1:174-5 Jl '17

Injury to citrus trees by the improper use of ground limestone. B. F. Floyd. Fla Ag Exp Rep 1917:35R-46R '18

Insect parasites and predators as adjuncts in the control of mealybugs. H. S. Smith. il Cal State Comm Hort B v 6:108-14 Ap '17

Insects of a citrus grove. J. R. Watson. bibliog il Fla Ag Exp B 148:169-267 '18

Natural enemies of chrysomphalus dictyospermi, a coccid injurious to citrus. E. Malenotti. Int R Sci & Prac Ag 9,no 1:125-7 Ja '18

Poison gas for orange foes. il Country Gent 83:2 Ag 31 '18

Some abnormal water relations in citrus trees of the arid southwest and their possible significance. R. W. Hodgson. Cal Univ Pub Ag Sci v 3,no 3 37-54p pl 12 '17 (20c)

Some cases of injury to citrus trees apparently induced by ground limestone. B. F. Floyd. il Fla Ag Exp B 137:163-79 '17

Some reasons for spraying to control insect and mite enemies of citrus trees in Florida. W. W. Yothers. U S Ag B 645:1-19 '18

Spraying for the control of insects and mites attacking citrus trees in Florida. W. W. Yothers. il Farmers' B 933:1-38 '18

Susceptibility of citrus fruits to the attack of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. bibliog il J Ag Research 3:311-30 Ja '15

Theory and practice of sanitary precautions in grove and packing house operations. J. C. Holton. Fla State Plant Bd Quar B v 2:161-79 Jl '18

Work on citrus diseases. Porto Rico Insular Exp Rep 1916-1917:78-83 '17

See also Citricola scale; Citrus blast; Citrus canker; Citrus melanose; Citrus mottle leaf; Citrus scab; Citrus stem end rot; Citrus thrips; Mealy bugs; White flies

**Handling**

Theory and practice of sanitary precautions in grove and packing house operations. J. C. Holton. Fla State Plant Bd Quar B v 2:161-79 Jl '18

**Law**

Immature citrus fruit law. Fla Ag Dept Quar B v 28:18-19 Ja '18

**Marketing**

Principles and practices of cooperation applied to citrus production and distribution. G. H. Powell. (In Pan American scientific congress Pro., 1915, v. 3, p. 665-71) '17

Revolving the consumer's dollar backwards. G. H. Powell. Better Fruit 10:5-9 My '16

See also California fruit growers' exchange

**Citrus melanose**

Melanose. H. E. Stevens. il Fla Ag Exp B 145:103-16 '18

Melanose of citrus. H. S. Fawcett. il Cal State Comm Hort B v 6:280-1 Jl '17

**Citrus mottle leaf**

Composition of citrus leaves at various stages of mottling. C. A. Jensen. bibliog J Ag Research 9:157-66 My '17

More mottle-leaf discussion. C. B. Lipman. Science (Science Press, Garrison, N.Y. 15c) n s: 45:308-9 Mr 30 '17

Mottle-leaf of citrus trees in relation to soil conditions. J. Lyman and others. il J Ag Research 6:721-40 Ag 7 '16; Abstract. Int R Sci & Prac Ag 7,no 11:1704-6 N '16

Mulched-basin system of irrigated citrus culture and its bearing on the control of mottle-leaf. L. J. Briggs and others. il U S Ag B 499:1-31 '17

**Citrus scab**

Citrus scab. H. S. Fawcett. Phyt 6:442-5 D '16

Citrus scab in Porto Rico. J. A. Stevenson. Porto Rico Ag Dept B 17:1-16 '17

**Citrus sour scab**

Sour scab of citrus in Florida, and its prevention. J. G. Grossenbacher. il Phyt 6:127-42 Ap '16

**Citrus stem end rot**

Simple and effective method of protecting citrus fruits against stem-end rot. J. M. Rogers and F. S. Earle. Phyt 7:361-7 O '17

**Citrus thrips**

Citrus thrips. J. R. Horton. bibliog il maps U S Ag B 616:1-42 '18

Thrips damage in Tulare county citrus groves. P. R. Jones. Cal State Comm Hort B v 7:465 Jl '18

**Citrus trifoliata**

Citrus trifoliata (syn. aegle sepiaria). R. I. Lynch. il Gard Chron (Lond) 64:157 O 19 '18

**City and country**

Aunt Amelia learns that it costs to live in the city. H. Richmond. O Judd Farmer 63:24 O 13 '17

Children need farm conditions. O. F. Cook. Am Flor 46:1241 Jl 1 '16

City vs. farm housewives' cares. Ohio F 138:90 Jl 29 '16

City's duty to the farmer; how business men can cooperate. D. F. Houston. Banker-F 3:11 N '16

Closer relationship between city and country. T. N. Wolten. il Va Ag Dept B 109:176-8 '16

Contrast. E. R. Groves. Rural Manhood 9:83-5 Mr '18



**City and country—Continued**

- Country and town co-operate. O Judd Farmer 60:10 Je 17 '16  
 Education of city boys on the land. J. J. Findlay. J Bd Ag 24:21-32 Ap '17  
 Eugenics and agriculture. O. F. Cook. J Heredity 7:249-54 Je '16  
 Farmers and other classes. J Ag (Quebec) 22:xi N '18  
 How the booster club is bringing town and country together. C. B. Hagans. il Banker-F 3:11 Je '16  
 Is city population superior? O. F. Cook. Am Flor 46:1135 Je 17 '16  
 Is getting out of the city getting into paradise? Country Gent 81:667 Mr 18 '16  
 Lure of the country. Va Ag Dept B 109:173-6 '16  
 \* Mental and physical development of rural children. W. H. Pyle and P. E. Collings. School and Soc (Science Press, Garrison, N.Y. 10c) 8:534-9 N 2 '18  
 My ain cuntry. G. Rohan. Breeder's Gaz 70:1288 D 23 '16  
 Net gain. C. E. Snyder. Nat Stock & F 42:652 O 19 '18  
 Scouting for a suburban home. J: R. McMahon. il Country Gent 81:969-70 My 6 '16  
 Stay on the farm. H. Quick. il Country Gent 81:153 Ja 22 '16  
 Suggestion and city-drift. E. R. Groves. Rural Manhood 7:47-52 Ap '16  
 Thirty million meals a day. Kimball's D F 16:446 Je 1 '18  
 Townward migration of the rural population and its possible remedies. Int R Ag Econ 66:119-21 Je '16  
 Urban sterilization. J Heredity 8:268-9 Je '17  
 Which: city or farm life? V. L. Connolly. il Country Gent 83:67 F 16; 55 F 23; 58 Mr 2; 62 Mr 9 '18  
 Why country people seem different. O. F. Hall. il Purdue Ag 10:11-13 F '16  
 \* Wicked town and moral country. Unpopular R (18 W. 45th st, N.Y. 75c) 10:376-92 O '18  
*See also* Country life

**City planning**

- City planning and beautification. H: Busch. Gard Chron Am 21:167-8 Ap '17

**Civet cats**

- Skunk and civet trapping. G: J. Thiessen. Farm Eng 5:12 N '17  
 Talks to young trappers. G: J. Thiessen. il Country Gent 82:1844 N 24 '17

**Civil war**

- My first farm. Country Gent 82:1967+ D 15 '17

**Civilization**

- Rhythm of civilization and agriculture. Wal-laces' F 41:1656-7 D 22 '16  
 War, science, civilization, by W: E. Ritter. Review. J Heredity 7:186-9 Ap '16

**Clark, Thomas**

- Portrait. Breeder's Gaz 70:829 N 2 '16

**Class distinction**

- Brains and social status. il J Heredity 8:261-7 Je '17

**Classification, Decimal**

- A detailed classification of agriculture now printing will be sent to all libraries of agricultural colleges or experiment stations on the printed lists of the U S Dept of Agriculture, and, on request, to other agricultural libraries having enuf interest to test or examin the skeme critically and send the editor notes of faults or suggestions for improvement. This classification is for incorporation in the 10th edition of the Decimal Classification by Melvin Dewey, to be publist next winter. Addres Forest Press, Lake Placid Club, N. Y.  
 Comments on Korstian's classification of forestry literature. J For 16:203-9 F '18  
 Decimal classification for forestry literature. C. F. Korstian. J For 15:449-62 Ap '17

**Clavaria**

- Clavaria fistulosa group. E: T. Harper. il Mycol 10:53-7 Mr '18

**Claviceps.** See Ergot

**Clay soils.** See Soils, Clay

**Cleaning**

- Cleaning walls and ceilings: how and how often is the work done in a creamery? N Y Prod R 46:1020 O 30 '18  
 Cleaning woolen material. Mrs E. O. Swope. O Judd Farmer 62:35 F 3 '17  
 Facts about cleaning and renewing. M. L. Westcott. Fruit-Grower 28:259 My 1 '17  
 Remodeling, care and repair of clothes. R. Smith. Purdue Ag 12:439-40 Ap '18  
 Removal of stains from clothing and other textiles. H. L. Lang and A. H. Whittelsey. Farmers' B 86:1-35 '17  
 Stains and their removal. M. L. Westcott. Nat Stock & F 41:408 Jl 21 '17  
 Textiles—their care and use. N. S. Knowles and others. il Ia Ag Ext Home Econ B 4:1-23 '17-'18  
 To remove stains; How to clean metals. Prog F 33:409 Mr 30 '18  
 Washing and cleaning. W. D. Bancroft. J Home Econ 8:356-60 Jl '16  
*See also* Laundry

**Clearing of land**

- Blasting for a road. G. G. Means. Farm Eng 7:9 Ap '18  
 Blasting stumps. Engineering and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:69-70 Ja 17 '17  
 Blasting stumps in dry soil. G. F. Delamater. O Judd Farmer 61:12 S 23 '16  
 Blasting stumps with dynamite. J. M. Fields. Power F 26:23 Ap '17  
 Blasting sycamore stumps. F. G. Thomas. Prac F 114:70 F 15 '18  
 Bringing idle acres under the plow. il Ag Digest 2:883 Mr '18  
 Broomedge land. Prog F 32:1304 D 15 '17  
 Burning out stumps. O. H. Barnhill. Country Gent 81:1380 Jl 15 '16  
 Burning stumps in place. I. D. Charlton. Western Wash Ag Exp B v 5:7-10 Ap '17  
 Clear the land if you mean to do real farming. A. F. Kidder. Prog F 31:551 Ap 15 '16  
 Clearing and grubbing methods. C. D. Livingston. Engineering and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:175-6 F 21 '17  
 Clearing land. E. D. Strait. il Farmers' B 974:1-29 '18  
 Clearing land a big job for the tractor. A. L. Dahl. il Power F 26:9 O '17  
 Clearing land of rocks for agricultural and other purposes. J. R. Mattern. 62p il '18  
 Inst. of makers of explosives, 103 Park av, N.Y.  
 Clearing land of stumps. 75p il '17  
 Inst. of makers of explosives, 103 Park av, N.Y.  
 Clearing land of stumps. L. F. Livingston. il Hoard's D 55:915 Je 21 '18  
 Clearing land of stumps with dynamite. L. R. Davis. Prac F 112:86 F 15 '16  
 Clearing stony land. A. Marple. il Farm Eng 4:61 O '16  
 Clearing stump land. W. B. Bullock. Hoard's D 53:381 Mr 23 '17  
 Clearing the land. Farm Eng 5:4 Je '17  
 Clearing the land with a stump puller. Fruit-Grower 27:235 Ap 1 '16  
 Construction features and methods in the Little River drainage district. B. F. Burns. il Engineering and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:270-2 Mr 21 '17  
 Conversion of fern-land into grass. A. H. Cockayne. il J Ag New Zealand 12:421-39 Je '16  
 Cooperation in land-clearing. E. R. McIntyre. Breeder's Gaz 70:91 Jl 20 '16  
 Co-operative stump pulling. G. W. Iverson. O Judd Farmer 63:16 S 15 '17  
 Cost and methods of clearing land in the lake states. H. Thompson and E. D. Strait. il U S Ag B 91:1-25 '14  
 Cost of stump removal in land clearing. M. J. Thompson. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:613 Je 19 '18  
 Economy in land clearing. Better Fruit 12:21 S '17  
 Engineering methods of clearing stump land. L. F. Livingston. il Am Soc Ag Eng Trans 11:11-19 '18; Same. Power F 27:11-12 Jl '18

**Clearing of land—Continued**

- Equipment for pulling stumps. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:276 Mr 30 '18
- Flivvers with cleated back wheels pull stumps at army camp site. *il Eng News-Record* (10th av. at 36th st., N.Y. 15c) 79:473 S 6 '17
- From brush to blue grass; goats will do the work. C. A. Le Clair. *il Country Gent* 81:377 F 19 '16
- Getting rid of the stumps. *il Wis Ag Exp B* 295:1-32 '18
- Grubbing new land. J. H. Deniston. *il Country Gent* 81:765 S 30 '16
- Hard job of clearing woodland. R. F. Vann. *Power F* 25:20 O '16
- Hints to settlers in northern Ontario. W. G. Nixon and R. H. Clemens. *il Ontario Ag Dept B* 244:1-22 '16
- Home made stump piler. *il Farm Eng* 5:17 Ap '17
- How clearing increases land values. *il System on the Farm* 1:365-6 D '17
- How I get rid of stumps. P. M. Eames. *Prog F* 33:162 F 9 '18
- How tree stumps are killed. *Rural N Y* 76:284 F 24 '17
- Investigations in cost and methods of clearing land. M. J. Thompson. *il Minn Ag Exp B* 163:1-31 '16
- Land clearing practice. *Power F* 26:27 Ap '17
- Land clearing special. *il Hoard's D* 51:803 Je 9 '16
- Method and cost of clearing cut over land with powder. *il Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:505-7 D 19 '17
- Method of burning stumps in place in land clearing. I. D. Charlton. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:512-13 D 19 '17
- Method of clearing cut over land with fire. C. H. Shattuck. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:68-9 Ja 16 '18
- Methods of clearing logged-off land. C. H. Shattuck. *il Idaho Ag Exp B* 91:1-59 '16
- Mistakes of fruit growers; stump and boulder-strewn ground. C. F. Higgs. *Green's Fruit Grower* 36:4 Je '16
- More work on pasture land. E. L. Vincent. *Hoard's D* 51:347 Mr 17 '16
- My experience in land clearing. T. Cunningham. *Better Fruit* 11:25 Ja '17
- Power required for pulling stumps. *Wallaces' F* 43:934 Je 14 '18
- Pull stumps with his tractor. G. L. Hutchinson. *Power F* 26:25 D '17
- Pulling stumps. B. Jelinek. *Country Gent* 81:909 Ap 22 '16
- Removing stumps. *Hoard's D* 51:338 Mr 17 '16
- Removing tree stumps. S. L. Bastin. *Country Life* 34:80b My '18
- Six ways to get those boulders. J. R. McMahon. *il Country Gent* 81:677-8 Mr 25 '16
- Speeding up agricultural development. *Ag Digest* 1:445 My '17
- Stony lands of Canterbury; a new system of treatment. E. B. Milton. *il J Ag New Zealand* 12:100-4 F '16
- Stump blasting by an expert. N. D. Rand. *Wallaces' F* 43:248 F 8 '18
- Stump burner for logged-off lands requires no blower. L. W. Allison. *Engineering Record* (10th av. at 36th st., N.Y. 15c) 75:495-6 Mr 31 '17
- Stump clearing methods. G. W. Iverson. *il O Judd Farmer* 61:15 N 25 '16
- Stumps and their practical removal. C. D. Livingston. (*In* Cut-over land conf. of the South, 1917, p. 188-95) \$2.50 '17 Southern pine assn., New Orleans, La.
- Tractor pulls stumps. E. R. Wiggins. *il Country Gent* 83:48 F 2 '18
- Turning idle acres into profit. G. M. Stack. *il Gard M* 28:55 S '18
- Use and action of explosives in blasting white pine stumps and performance of explosives; abstract. M. H. Wright. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 47:371-2 Ap 18 '17
- Use of dynamite in clearing land. E. Secrest. *il Ohio Ag Exp B v* 1:236-9 Ag '16; Same. *Power F* 25:35 N '16
- Utilization and reforestation of chestnut-blighted lands. L. C. Barnes. *J For* 15:854-8 N '17
- War time stump removing. J. R. Mattern. *il Field* 11 28:828 N '18
- What the University of Wisconsin is doing with the stump pulling special. W. B. Bullock. *il Farm Eng* 4:60 O '16
- Wisconsin sets example in land clearing. *il Field* 11 27:279 Ap '17
- Clearing of land contests**
- Land clearing contest. W. N. Clark. *Hoard's D* 55:938 Je 21 '18
- Clematis**
- Clematis Montana and its varieties. *Gard Chron* (Lond) 64:66 Ag 17 '18
- Clematises and their cultivation. *Gard Chron* Am 21:247 Je '17
- Loss of the clematis in gardens. W. Robinson. *Gard Chron* (Lond) 64:165 O 26 '18
- Diseases and pests**
- Ascochyta clematidina, the cause of stem-rot and leaf-spot of clematis. W. O. Gloyer. *bibliog il J Ag Research* 4:331-42 Jl '15; Same (Tech. E. 44). N Y State Ag Exp Rep 1915:318-29 '16
- Dying of clematis. *Gard Chron* (Lond) 59:20 Ja 8 '16
- Some fallacies regarding the clematis. A. G. Jackman. *Royal Hort Soc J* 42:pts 2-3:292-5 S '17
- Clemson agricultural college of South Carolina**
- Annual report of the demonstration and extension work in the state of South Carolina for calendar year 1916. W. W. Long. S C Ag Ext 135p '17
- South Carolina's advance; views of work. *Country Gent* 81:323 F 12 '16
- See also* South Carolina agricultural experiment station
- Cleridæe**
- Clerid larva predaceous on codling moth larvae. D. E. Merrill. *J Econ Entom* 10:461-4 O '17
- Clerks**
- Girl who must earn her own living; clerking. *Prog F* 31:297 F 26 '16
- Cleveland, Ohio**
- See also* Milk supply—Cleveland
- Climate**
- Climate in relation to crop adaptation in New Mexico. C. E. Linney and F. Garcia. *maps N M Ag Exp B* 113:1-132 '18
- Climate in relation to fruit growing. J. W. Crow. N Y State Fruit Growers' Assn Pro 1916:80-9
- Climate in the South; tables showing rainfall and frosts. *Prog F* 33:214 F 16 '18
- Climate of Illinois. J. G. Mosier. *maps Ill Ag Exp B* 208:1-125 '18
- Climate of Michigan and its relation to agriculture. D. A. Seeley. *bibliog maps Mich Ag Bd Rep* 1917:679-715
- Climate of upper Michigan. W. S. Prickett. *Am Sheep B & W* 37:733 D '17
- Climatic change and agricultural exhaustion as elements in the fall of Rome. E. Huntington. *Quarterly J Economics* (Harvard Univ. Press, Cambridge, Mass. 75c) 31:173-208 F '17
- Colorado climatology. R. E. Trimble. *Colo Ag Exp B* 245:1-64 '18
- Crop centers of the United States. A. E. Waller. *bibliog maps Am Soc Agron J* 10:49-83 F '18
- Effect of climate and soil upon agriculture. R. R. Spafford. *maps University Studies* (Nebraska Univ., Lincoln) v 16, nos 1,2:91-113 Ja-Apr '16
- Killing frost and length of the growing season in various sections of Kentucky. F. J. Walz. *maps Ky Ag Exp C* 19:120-32 '17
- Meteorology of Brazil. C. M. Delgado De Carvalho (Météorologie du Brésil. 528p *il* '17 John Bale, sons, & Danielsson, Ltd., London) *Exp Station Rec* 37:619-20 N '17



**Climate—Continued**

- Native vegetation and climate of Colorado in their relation to agriculture. W. W. Robbins. il maps Colo Ag Exp B 224:1-56 '17
- Notes on meteorology and climatology. C. F. Brooks. Science (Science Press, Garrison, N.Y. 15c) n s 47:565-7 Je 7 '18
- Surface formations and agricultural conditions of northeastern Minnesota; with a chapter on climatic conditions of Minnesota by U. G. Purssell. (B. 13) p 24-44 maps '17 Univ. of Minnesota, Minneapolis
- Tree growth and climate in the United States. K. W. Woodward. J For 15:521-31 My '17
- Weather and crops. Wallaces' F 43:723 Ap 26 '18
- Weather and honey production. L. A. Kenoyer. Ia Ag Exp B 169:15-26 Mr '17
- See also Meteorology; Plants, Effect of climate on; Rain and rainfall; Trees, Effect of climate on

**Climate and crops.** See Plants, Effect of climate on

**Climatology, Agricultural.** See Plants, Effect of climate on

**Climbing plants**

- Climbers of merit; roses. A. J. Fish. Gard M 23:342 Jl '16
- Climbing roses. E. Molyneux. il Gard Chron (Lond) 60:288 D 16 '16
- Four trustworthy vines. Gard Chron Am 22:146 My '18
- Hardy vines for all purposes. C. L. Meller. il Gard M 22:218 Ja '16
- How to plant and raise vines. H. Findlay. il Art World (2 W. 45th st, N.Y. 35c) 3:sup5-8 Mr '18
- Newer climbing roses of merit. E. I. Farrington. il Gard M 27:72-3 Mr '18
- Seasonable notes on ornamental climbers. Gard Chron Am 20:349 Ag '16
- Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. il Maine Ag Dept B v 15:10-13 S '16
- Special purpose vines. E. I. Farrington. il O Judd Farmer 62:26 Ap 7 '17
- Vines and their uses. W. T. Macoun. (In Ontario horticultural societies, 11th annual report, 1916, p. 76-80) '17 Ontario ag. dept., Toronto, Canada
- Vines for flowers. S. A. Hamilton. Country Gent 82:615 Mr 24 '17
- Vines for shade and ornamental planting. J. J. Thornber. Ariz Ag Exp Timely Hints no 117:1-4 '16
- Vines for shading. S. A. Hamilton. Country Gent 82:566 Mr 17 '17
- Vines that climb; photographs. S. L. Bastin. Country Life 31:56 N '16
- See also Actinidia; Cantua buxifolia; Clematis; Evonymus; Ivy; Morning-glories; Raphidophora; Wistaria

**Clippings**

- Filing of clippings and bulletins. Wallaces' F 42:289 F 16 '17
- Filing system for the farmer. J. C. Knollin. Hoard's D 51:427 Mr 31 '16
- Indexing reference matter. Wallaces' F 42:545 Mr 23 '17

**Clocks**

- Minor American clockmakers. il Country Life 30:60 O '16
- Tompson and his clocks. W. A. Dyer. il Country Life 32:74 Je '17

**Cloth.** See Textile industry and fabrics

**Clotheslines**

- Reel for the clothesline. Country Gent 81:669 Mr 18 '16

**Clothing**

- Americanism the spirit of costume design. E. Miller. J Home Econ 10:207-11 My '18
- Children's clothing. M. J. Newcomb. il Pa Ag Ext C 48:1-20 '16

- Choosing her own clothes. M. A. Bartlett. O Judd Farmer 64:20 Ja 5 '18
- Choosing of textiles and home sewing. C. I. Davis. Ill Farmers Inst Household Sci 1917:36-49 '18
- Clothes and the body. C. G. Baker. J Home Econ 8:320-3 Je '16
- Clothes and the income. C. G. Baker. J Home Econ 8:373-6 Jl '16
- Clothes best suited for farm work. F. D. Brown. Prog F 33:71 Ja 19 '18
- Clothing budgets. J Home Econ 8:376-8 Jl '16
- Clothing conservation for home and community. M. Weller. Minn Ag Ext Spec B 25 4p '18
- Clothing; elementary lessons in sewing; the principles of color in dress, and home dressmaking. N. J. Davis. diags Nev Ag Ext B 6:1-23 '16
- Clothing for children. il J Ag (Quebec) 22:29 Ag '18
- Clothing for the farm women. Prog F 33:408 Mr 30 '18
- Clothing Janet's children. N. K. Jones. il Country Gent 82:1998 D 15 '17
- Clothing; national situation, care, removal of spots, remodeling. Utah Ag Ext C 10 4p '18
- Clothing situation. M. Weller. J Home Econ 10:401-8 S '18
- College girl's wardrobe. M. Myers. J Home Econ 8:189-90 Ap '16
- Cost of women's clothes. J. L. Ashlock. J Home Econ 9:499-502 N '17
- Costume appreciation. M. H. Brown and L. D. Taylor. J Home Econ 8:288-93 Je '16
- Donning the new work dress. A. G. Vestal. il Power F 27:43 Mr '18
- Dress and dressmaking. A. M. Zollman. il J Ag (Quebec) 21:109, 126, 143-4, 159; 22:14 Ja-Apr, Jl '18
- Dress for the work. M. G. Feint. il Nat Stock & F 41:328 Je 23 '17
- Dresses from bran sacks. K. M. Adams. Country Gent 82:982 Je '17
- Few hints on buying clothing. M. L. Matthews. Purdue Ag 10:39+ Ja '16
- Fitness of things. E. Irving. Nat Stock & F 40:1163 F 3 '17
- Furs for the youngsters. R. S. Wheeler. il Country Gent 83:50 Ja 5 '18
- Getting winter clothes ready. il Ohio F 140:302 O 6 '17
- Golden mean in dress. H. H. Murphy. il Country Gent 81:133 Ja 15 '16
- New clothes at small cost. H. Manning. il Wis Ag Ext C 91:1-8 '17
- New things from old. E. Irving. Nat Stock & F 42:680 O 26 '18
- Our grandmothers' clothes. H. Richmond. O Judd Farmer 61:20 Ag 26 '16
- Planning the costume. M. B. Richardson. il Ia Ag Ext Home Econ B 9:1-20 '16
- Ready-made and homemade clothing. C. G. Baker. J Home Econ 8:448-50 Ag '16
- Remodeling, care and repair of clothes. R. Smith. Purdue Ag 12:439-40 Ap '18
- School clothing for the children. Prac F 114:277 Ag 15 '18
- Season's problems in dress. M. Rose. Purdue Ag 12:98-9 N '17
- Sensible and economical dressing. Mrs W. N. Hutt. Prog F 31:1036 Ag 26 '16
- Standardized dress. E. Ronzone. J Home Econ 10:426-8 S '18
- Struggle for a house dress. H. C. Bennett. il Country Gent 81:1209 Je 10 '16
- Style craze and farm folks. C. C. Johnston. Ohio F 138:604 D 16 '16
- Teaching the clothing budget. J. G. Cation. J Home Econ 10:437-43 O '18
- Textiles—their care and use. N. S. Knowles and others. il Ia Ag Ext Home Econ B 4:1-23 '17-18
- Truck gardener's clothes. C. L. Meller. Country Gent 81:1394 Jl 22 '16
- What we shall wear this year and next. A. L. Rolfe. J Home Econ 10:125-9 Mr '18
- When love of dress begins. Nat Stock & F 40:142 Ap 29 '16
- Winter clothes for the farmer. Prog F 32:1219 N 17 '17

**Clothing—Continued**

Women and clothes; what the clubs are doing in the matter of standardization. H. L. Johnson. *J Home Econ* 9:127-36 Mr '17

See also Costume; Dressmaking; Infants—Clothing; Mending; Textile industry and fabrics

**Bibliography**

Conservation in clothing and clothing materials; selected list of references prepared for the Library directors for Illinois and Ohio United States food administration. M. Mitchell and others. 5p mimeo '18 U.S. Food administration for Illinois, Urbana

- \* Economics of textiles and clothing. L. M. Clatworthy and S. J. Swenson, comps. Wash State Coll Lib (Pullman) B 6:1-44 Ag '18 (25c)

**Clover**

Alfalfa and clover in the orchard. A. C. Weed. *Rural N Y* 75:581 Ap 8 '16

Alfalfa, melilotus and red clover. T. Butler. *Prog F* 31:978 Ag 12 '16

Causes of clover failure. E. Van Alstyne. *il N Y Ag Dept B* 87:2878-86 S '16

Clover. A. J. Pieters. *il N Y Ag Dept B* 87:2854-63 S '16

Clover. B. G. Southwick. *il Conn Ag Coll Ext B* 6:1-11 '17

Clover acreage; urgent need for increased planting. *Weekly N L* 5:1 Ja 23 '18; Same. *Coop Manager & F* 7:90 Mr '18

Clover and clover hay. A. Howard and G. L. C. Howard. *Ag J of India* 11:71-8 Ja '16

Clover and clover seed. (*In Report, Quebec Dairymen's assn.*, 1916, p. 333-8) '17

Clover and vetch do well in south Alabama. J. E. Pittman. *il Prog F* 31:1040 Ag 26 '16

Clover for seed means clover for feed. C. A. LeClair. *il Country Gent* 83:8 Ap 27 '18

Clover in irrigated orchards. E. F. Stephens. *Fruit-Grower* 28:135 F 15 '17

Clover in the South. *Rural N Y* 76:277 F 24 '17

Clover means rich lands and big crops. *il Prog F* 31:946 Ag 5 '16

Clover raised corn yield from 25 to 40 bushels per acre. W. H. Chambers. *Prog F* 31:979 Ag 12 '16

Clover seeding; prevent failure of the crop. *Weekly N L* 4:9 Ap 25 '17; Same. *Jersey B* 36:681 My 2 '17

Clover situation in central Illinois. R. C. Bishop. *il O Judd Farmer* 60:3 F 12 '16

Clovers for Arkansas farms. W. C. Lassetter. *Ark Ag Ext* 4p '16

Clovers of Tennessee. J. M. Buchanan. *il Gleanings* 45:520-1 Jl '17

Cowpeas and clover. *Country Gent* 81:904 Ap 22 '16

Cure clover in the shade. *Hoard's D* 53:991 Jl 13 '17

Cutting clover too short. T. M. Cisel. *Hoard's D* 55:181 F 22 '18

Effect of elemental sulphur and of calcium sulphate on plant life. W. Pitz. *il J Ag Research* 5:771-80 Ja 17 '16

Getting a stand of clover. C. B. Hutchison. *Jersey B* 35:394 Mr 15 '16

Getting and keeping a stand of clover. *Kimball's D F* 14:204 Mr 15 '16

Grass and clover planting program. *Prog F* 33:220 F 16 '18

Grass before livestock. C. B. Williams. *il Country Gent* 81:921 Ap 29 '16

Grasses and clovers under irrigation. J. M. Pitt. *il Ag Gaz of New South Wales* 28:78-82 F '17

Growing oats, clover and corn. *il O Judd Farmer* 62:1 Ap 28 '17

Helpful facts for clover growers. map *Prog F* 32:200 F 17 '17

How to recognize some of the clovers and vetches. J. F. Duggar. *il Prog F* 31:948 Ag 5 '16

How to succeed with bur and crimson clover. B. L. Moss. map *Prog F* 31:945 Ag 5 '16

Life of the clovers. *Wallaces' F* 41:310 F 25 '16

Little clover talk. *Rural N Y* 75:590 Ap 8 '16

Loss of organic matter in clover returned to the soil. G. E. Boltz. *Am Soc Agron J* 10:210-14 My '18

Loss of organic matter in clover returned to soil. G. E. Boltz and C. J. Schollenberger. *Ohio Ag Exp B v* 2:397-400 D '17

Mammoth clover experience. R. C. Dimick. *O Judd Farmer* 60:8 Je 3 '16

Mammoth clover for pasture. W. S. Tomlinson. *Ohio F* 142:90 Ag 3 '18

Mammoth clover is favored. *O Judd Farmer* 61:16 Jl 29 '16

Methods of seeding clover. B. G. Southwick. *Rural N Y* 77:666 My 11 '18

Most wonderful legume known. W. J. Beasley. map *Prog F* 32:818 Jl 28 '17

No weather proof clover. *O Judd Farmer* 65:188 S 7 '18

Oats and clover. *Kimball's D F* 16:231 Mr 15 '18

Ohio should grow more clover. F. E. Bear. *Ohio F* 142:499 N 23 '18

Page of clover experience letters. *Prog F* 32:820 Jl 28 '17

Quick returns from the use of lime. G. P. Williams. *il Ohio F* 141:341 Mr 9 '18

Securing a catch of clover. *Wallaces' F* 41:675 Ap 28 '16

Seeding to grass and clover. H. J. Wheeler. (B. 3) 23p *il n.d. Am. agricultural chemical co.*, 92 State st., Boston

Silage from clover and timothy. E. Norman. *Hoard's D* 55:272 Mr 8 '18

Some helps in starting and growing a stand of clover. W. K. Shakes. *Purdue Ag* 10:11-12 Je '16

Some reasons why clover fails. A. E. Grantham. *Prac F* 114:92 Mr 1 '18

Story of a bootstrap lift; Piedmont farmer paid for poor land, and made it rich through clover. B. Howard. *il Country Gent* 83:8 Jl 20 '18

To feed or to plow under. *Nat Stock & F* 40:1146 F 3 '17

Twelve rules for success in seeding clover. P. W. Moore. *Prog F* 32:857 Ag 11 '17

Vetch and clover. W. H. Barton and W. R. Elliott. *S C Ag Ext B A*:1-20 '16 (rev)

Winter injury of alfalfa and clover. C. A. Gearhart. *Ohio Ag Exp B v* 1:199-201 Jl '16

See also Berseem; Clover, Alsike; Clover, Buffalo; Clover, Bur; Clover, Crimson; Clover, Sweet; Clover, White; Clover hay; Feeding and feeding stuffs—Clover; Lespedeza

**Diseases and pests**

Clover insects. C. R. Crosby and M. D. Leonard. *il N Y Ag Dept B* 87:2864-74 S '16

Clover leafhopper and its control in the central states. E. H. Gibson. *il Farmers' B* 737:1-8 '16

Crown rot of clover. J. A. McClintock. *il Va Ag Dept B* 115:50-2 '17

Diseases of alfalfa and clover. C. Gregory. *il N Y Ag Dept B* 87:2898-903 S '16

Important clover insects; damage, description, life history and control. H. A. Gosard. *il Ohio Ag Exp B v* 3:104-6, 190-3 Ap, Je '18

Influence of parasitic fungi on the clover crop. A. I. Lobik. *Int R Sci & Prac Ag* 8:no 2:307-8 F '17

Sclerotinia trifoliorum, the cause of stem rot of clovers and alfalfa. bibliog *il Phyt* 7:432-42 D '17

Some important clover diseases in Ohio. W. Van Pelt. *il Ohio Ag Exp B v* 3:239-43 Ag '18

Three insects affecting clover seed production. G. F. Moznette. *il Ore Ag Ext B* 203:1-4 '17

See also Clover aphid; Clover leaf-tiers; Clover root borers

**Seed**

Boom in clover seed; Idaho raises the seed to enrich eastern soils. *Country Gent* 81:559 Mr 11 '16

Clover and grass seed inspected in 1914. C. P. Smith. *Md Ag Exp B* 197:1-58 '16; Same. *Md Ag Exp Rep* 1916-1917 '17



**Clover—Seed—Continued**

- Clover and timothy receipts and shipments for Chicago, Milwaukee and Toledo markets. See monthly numbers of United States seed reporter
- Clover-growing for seed. L. Lowe. J Ag New Zealand 13:263-6 O '16
- Cloverseed and hay. E. Roberts. Nat Stock & F 41:280 Je 9 '17
- Clover seed outlook. Coop Manager & F 8:83 O '18
- Clover seed prices; monthly average for a five year period, 1913-17. U S Seed Rep 2:6-7 S '18
- Clover seed production. A. J. Pieters. U S Seed Rep 1:3 D '17
- Clover seed stripper. Weekly N L 4:4 My 16 '17
- Clover seed stripper that is cheap and effective. C. R. Hudson. Prog F 31:562 Ap 22 '16
- Common red clover for seed. J Ag (Quebec) 21:55 O '17
- Comparative researches on the dimensions of the seeds of clover and dodder. M. Heinrich. Int R Sci & Prac Ag 7:no 3:364-5 Mr '16
- Estimated acreage, yield, and prices of medium red clover and alsike clover seed. U S Seed Rep 2:3 S '18
- Home grown clover seed in Pontiac county. C. H. Hodge. J Ag (Quebec) 21:7 Jl '17
- Inventory of clover and alfalfa seed. U S Seed Rep 1:1 D '17
- Make your clover stripper now. Prog F 31:282 F 26 '16
- Production of clover seed under irrigation in southern Idaho. L. C. Aicher. Il Idaho Ag Exp B 100:1-19 '17
- Purchase of clover seed. J Bd Ag 22:997-8 Ja '16
- Report of red and alsike clover. map U S Seed Rep 1:3 Mr '18
- Saving clover seed. Prog F 33:242 F 23 '18
- Saving the clover seed. J. L. Justice. Il Ohio F 142:318 O 5 '18
- Shortage of clover seed in Essex in 1917. R. Robson. J Bd Ag 25:176-9 My '18
- Timothy, clover and alfalfa seed prices. U S Seed Rep 2:7 O '18
- Weed seed in clover and grass. Il Wallaces' F 43:87 Ja 18 '18
- Winter threshing of clover seed. C. A. Le Clair. Country Gent 81:1616 S 2 '16

**Statistics**

- Clover and timothy seed; wholesale price. See United States Department of agriculture Yearbooks

**Clover, Alsike**

- Alsike clover growing. Monthly Crop Rep 3:17 F '17
- Alsike clover showing special merit. O Judd Farmer 64:3 Mr 16 '18
- Alsike clover thrives on lowlands and in wet places. Weekly N L 4:3 My 16 '17; Same. Jersey B 36:839 My 30 '17; Same. Irr Age 32:120 Je '17
- More about alsike for Illinois. R. C. Bishop. O Judd Farmer 64:3 Ap 6 '18
- Utility of alsike clover. W. S. Tomlinson. Ohio F 142:499 N 23 '18

**Clover, Buffalo**

- Boiling buffalo clover seed. A. D. McNair. Science (Science Press, Garrison, N.Y. 15c) n s 45:220-1 Mr 2 '17

**Clover, Bur**

- Bur clover and Augusta vetch. R. E. Lambert. Prog F 31:968 Ag 5 '16
- Bur clover for improvement of coastal plain soils. C. B. Williams. Il N C Ag Ext C 20:1-8 '16
- Letter from Lambert, the bur clover man. R. E. Lambert. Prog F 32:829 Jl 28 '17
- Place of bur clover. A. D. McNair. Prog F 32:821 Jl 28 '17

**Seed**

- Producing bur clover seed. A. D. McNair. Prog F 31:1031 Ag 26 '16
- Scalding or boiling burs of bur clover to hasten germination. J. F. Duggar. Prog F 31:11 Ja 1 '16

**Clover, Bush.** See Lespedeza

**Clover, Button**

- Button clover. R. McKee. Il map Farmers' B 730:1-9 '16

**Clover, Crimson**

- Alfalfa and crimson clover in Virginia. W. H. Harrison. Rural N Y 76:851 Jl 7 '17
- Crimson clover. A. E. Grantham. Prac F 112:377 O 15 '16
- Crimson clover. C. B. Williams. Il N C Ag Ext C 15:1-8 Ag '16
- Crimson-clover Bob; South Carolina po'land yields much cotton and other crops. H. S. Stabler. Il Country Gent 81:1319-20 Jl 8 '16
- Crimson clover for green manure. A. E. Grantham. Il Country Gent 82:1346 S 1 '17
- Crimson clover; it pays. R. E. Grigsby. Prog F 32:829 Jl 28 '17
- Crimson clover makes corn. W. H. Barton. Prog F 32:830 Jl 28 '17
- Cultural experiments in Germany with trifolium pratense from 18 different localities. Int R Sci & Prac Ag 7:no 2:225-6 F '16
- Curing red clover. Prac F 112:248 Je 15 '16
- Doubling yields with crimson clover. Prog F 31:791 Je '16
- Effect of fineness of division of pulverized limestone on the yield of crimson clover and lime requirement of soils. N. Kopeloff. Science (Science Press, Garrison, N.Y. 15c) n s 45:363-5 Ap 13 '17
- Energy values of red-clover hay and maize meal. H. P. Armsby and others. J Ag Research 7:379-87 N 27 '16
- Experiments in Germany on the determination and yield of red clover from various sources. K. Müller. Int R Sci & Prac Ag 8:no 5:731-3 My '17
- Facts about crimson clover. E. F. Cauthen. Prog F 32:869 Ag 11 '17
- Helps to secure a good stand of red clover. Il Va Ag Dept B 126:26-30 '18
- Hodges, of crimson clover fame. J. L. Sherard. Il Prog F 32:819 Jl 28 '17
- How to grow crimson clover. J. R. Ricks. Miss Ag Ext C 8 4p '16
- Improvement of red clover. J. Beverley. Il J Ag New Zealand 12:293-4 Ap '16
- More attention should be given to red clover. T. Butler. Prog F 31:1143 S 30 '16
- Of three good things choose the best; red clover, alfalfa, sweet clover. J. Buchanan. Wallaces' F 42:546 Mr 23 '17
- Overgrowth of red clover. W. H. Arnold. Rural N Y 77:995 Ag 24 '18
- Plant some crimson clover. C. R. Hudson. Prog F 31:954 Ag 5 '16
- Red clover as a honey plant. F. C. Pellett. Il Am Bee J 58:238-9 Jl '18
- Says crimson clover has no equal as grazing crop. M. S. Pearson. Prog F 31:968 Ag 5 '16
- Tests of the value of stable manure, commercial fertilizer, and crimson clover for vegetable crops. T. H. White. Md Ag Exp B 199:95-106 '16; Same. Md Ag Exp Rep 1916-1917 '17
- Where and when to sow crimson clover. Prog F 31:975 Ag 12 '16

**Seed**

- Growing crimson clover seed. Prac F 113:32 Ja 15 '17
- Importance of knowing the germination of crimson clover seed. E. Brown. U S Seed Rep 2:1 Jl '18
- Red clover seed and its impurities. J. T. Dymond. (S. B. Pamph. S-2) 20p Il '18 Canada Ag
- Red clover seed production, pollination studies. J. M. Westgate and others. bibliog Il U S Ag B 289:1-31 '15; Summary. Int R Sci & Prac Ag 7:no 1:67-8 Ja '16
- Rotary seed harvester for crimson clover. A. J. Pieters. (F. C. I.—47) 8p Il '18 U S Ag
- Save the crimson clover seed. T. Butler. Prog F 31:531 Ap 15 '16

**Varieties**

- Correlation between the external and internal morphology and the length of the vegetative period of some varieties of trifolium pratense; research-work in Russia. V. Joltkevitch. Int R Sci & Prac Ag 8:no 1: 66-9 Ja '17

**Clover, Crimson—Varieties—Continued**

Red clover and its varieties. E. Breakwell. *il* Ag Gaz of New South Wales 29:105-9 F '18

**Clover, Egyptian. See Berseem****Clover, Sweet**

Alfalfa and sweet clover. C. A. Norcross. *il* New Ag Ext B 5:21-8 '16

Annual variety of *melilotus alba*. H. S. Coe. *Am Soc Agron J* 9:380-2 N '17

Bees in the Middle West; sweet clover favorable for honey production. E. R. Root. *il* Gleanings 45:512-16 J1 '17

Bokhara or sweet clover. E. Breakwell. *il* Ag Gaz of New South Wales 28:731-4 O '17

Crop for soil and stock. *il* Wallaces' F 43:483 Mr 15 '18

Culture of sweet clover and vetch. E. G. Montgomery. *il* Cornell Reading Courses 5, no 108:123-40 '16; Same. Cornell Ag Exp Rep 1916, v 2:1213-30 '17

Curing sweet clover hay. W. E. Bowers. Hoard's D 51:930 J1 7 '16

Danger points in sweet clover production. A. T. Morison. Hoard's D 53:820 Je 8 '17

Decomposition of sweet clover (*melilotus alba* Desr.) as a green manure under greenhouse conditions. L. A. Maynard. *bibliog il* Cornell Ag Exp B 394:121-49 '17

Effect of different methods of inoculation on the yield and protein content of alfalfa and sweet clover. A. C. Army and R. W. Thatcher. *Am Soc Agron J* 9:127-37 Mr '17

Enthusiastic for sweet clover. D. E. Gray. *Rural N Y* 75:513 Mr 25 '16

Facts about sweet clover. *Rural N Y* 75:684 Ap 29 '16

Growing and utilization of sweet clover in Kentucky. G. Roberts. *Ky Ag Ext C* 60:1-11 '18

Growing of sweet clover. E. E. Barton. *Ky Ag Dept Rep* 1916-1917:352-5 '18

Growing sweet clover. *il* Am Bee J 58:84-5 Mr '18

Growing sweet clover. A. E. Grantham. *il* Prac F 112:207 My 15 '16

Handling live stock on sweet clover. Hoard's D 54:58 Ag 10 '17

Hope farm notes; sweet clover. *Rural N Y* 75:886 Je 17 '16

How a weed redeemed a county. F. F. Gilmore. *il* Hoard's D 52:164 S 1 '16

Improving Dakota pastures with sweet clover. Hoard's D 51:818 Je 9 '16

Inoculating sweet clover. D. C. Smith. *Rural N Y* 76:407 Mr 17 '17

Irrigated sweet clover. L. Ogilvy. *Breeder's Gaz* 70:128 J1 27 '16

Of three good things choose the best; red clover, alfalfa, sweet clover. J. Buchanan. *Wallaces' F* 42:546 Mr 23 '17

Possibilities of sweet clover in Pennsylvania. J. M. Fry. *il* Penn State F 9:452-3+ N '16

Raising sweet clover as a farm crop. C. G. Williams. *il* Ohio F 141:173-4 F 9 '18

Rotation with sweet clover. A. Bloomingdale. *Rural N Y* 76:392 Mr 10 '17

Seven good years of sweet clover. *il* O Judd Farmer 60:3 Ap 29 '16

Sow sweet clover right where you are—lots of it and keep at it. V. Weaver. *Gleanings* 46:150 Mr '18

Sow sweet clover seed now. A. Bloomingdale. *Rural N Y* 76:281 F 24 '17

Sweet clover. *il* Va Ag Dept B 109:123-6 '16

Sweet clover. *Wallaces' F* 42:1114 Ag 10 '17

Sweet clover. A. Atkinson. *Mont Ag Exp C* 62:49-55 '17

Sweet clover. H. S. Coe. *il* N Y Ag Dept B 87:2949-60 S '16

Sweet clover. W. G. Eckhardt. *il* Wallaces' F 42:757 My 4 '17

Sweet clover. H. L. Fulmer. *il* Ontario Ag Dept B 235:1-32 '16

Sweet clover. J. G. Haney. 36p *il* 5c '16 Int. harvester co., Chicago

Sweet clover. C. A. Helm. *Mo Ag Ext C* 36:1-8 '17

Sweet clover. J. C. Hurst. *Wallaces' F* 41:488 Mr 24 '16

Sweet clover. O. F. Jensen. *il* Hoard's D 51:772 Je 2 '16

Sweet clover. F. M. Lutts. *il* Ohio Ag Exp B v 2:45-7 F '17

Sweet clover. T. S. Parsons. *il* Wyo Ag Exp B 110:1-15 '16

Sweet clover a coming pasture and fodder crop. *Am Sheep B & W* 36:274-5 My '16

Sweet clover a strong nitrogen gatherer. F. B. Linfield. *Better Fruit* 11:10 J1 '16

Sweet clover, a valuable southern crop. B. K. Watson. *Hoard's D* 52:496 O 27 '16

Sweet clover and alfalfa seed and seeding. G. C. Wooster. *Coop Manager & F* 7:109 J1 '18

Sweet clover and Sudan. O Judd Farmer 60:5 My 27 '16

Sweet clover as a drainage plant. R. Stewart. *Country Gent* 82:1025 Je 16 '17

Sweet clover as a farm crop. *il* Am Bee J 58:7-8 Ja '18

Sweet clover as a soil builder. J. W. Henceroth. *Breeder's Gaz* 71:16 Ja 4 '17

Sweet clover as a soil improver. W. E. Bowers. *il* Country Gent 81:450 F 26 '16

Sweet clover compared with alfalfa. W. E. Bowers. *Rural N Y* 75:911 Je 24 '16

Sweet-clover convert. R. S. Hyde. *il* Country Gent 81:586 Mr 11 '16

Sweet clover experience. *Nat Stock & F* 40:1046 Ja 13 '17

Sweet clover experience. J. Y. Weir. *Wallaces' F* 41:287 F 18 '16

Sweet clover for hay. W. E. Bowers. *il* Country Gent 81:1340 J1 8 '16

Sweet clover for pasture. W. E. Bowers. *Hoard's D* 53:598 Ap 27 '17; Same cond. *Country Gent* 81:790 Ap 8 '16

Sweet clover for pasture. C. S. Weller. *il* Country Gent 81:1947 N 4 '16

Sweet clover from start to finish. C. B. Wing. *Ohio F* 137:558 Ap 15 '16

Sweet clover; growing the crop. H. S. Coe. *il* map Farmers' B 797:1-34 '17

Sweet clover in Iowa. O. F. Jensen. *Rural N Y* 75:73 Ja 15 '16

Sweet clover in New York. A. Bloomingdale. *Rural N Y* 75:320 F 26 '16

Sweet clover in the Northwest. R. A. Morgan. *Am Bee J* 57:378 N '17

Sweet clover in the orchard. F. Sattler. *Ohio F* 137:714 My 20 '16

Sweet clover in the South. W. F. Massey. *Rural N Y* 76:548 Ap 14 '17

Sweet clover is growing in favor. *Va Ag Dept B* 126:42-7 '18

Sweet clover—its value to the beekeeper. M. G. Dadant. *il* Am Bee J 56:51 F '16

Sweet clover on acid soils. W. E. Bowers. *il* Country Gent 81:327 F 12 '16

Sweet clover on stump land. *Rural N Y* 76:1288 N 10 '17

Sweet clover on Sunnyside farm. E. O. Rodehaver. *Ohio F* 141:174 F 9 '18

Sweet clover on the livestock farm. H. P. Miller. *Ohio F* 140:136 Ag 25 '17

Sweet-clover pasture. *Weekly N L* 4:4 J1 11 '17

Sweet clover; utilization. H. S. Coe. *il* Farmers' B 820:1-32 '17; Same cond. *Nat Wool Grower* 7:52 Je '17; Same cond. *Hoard's D* 53:825 Je 8 '17; Excerpt. *Wallaces' F* 42:1093 Ag 3 '17

Sweet clover vs. alfalfa. I. J. Mathews. *Ohio F* 142:71 J1 27 '18

What sweet clover did. R. A. Hayne. *il* Nat Stock & F 40:990 D 30 '16

Winter-sown clover. W. J. Piggott, jr. *il* Country Gent 83:48 Ja 19 '18

**Seed**

Avoid mixed sweet clover. O Judd Farmer 60:3 Je 10 '16

How to cut sweet clover for seed. *Jersey B* 36:1229 Ag 8 '17

New supply of sweet clover seed. J. L. Graff. *Rural N Y* 75:1388 N 4 '16

Producing sweet-clover seed. *Country Gent* 81:1408 J1 22 '16

Producing sweet clover seed. W. E. Bowers. *Hoard's D* 54:64 Ag 10 '17

Scarified sweet clover seed. W. E. Bowers. *Breeder's Gaz* 69:1330 Je 29 '16

Sweet clover for seed. *il* Wallaces' F 41:898 Je 23 '16

Sweet-clover seed. T. S. Parsons. *il* Country Gent 82:482 Mr 10 '17



**Clover, Sweet—Seed—Continued**

Sweet clover; harvesting and thrashing the seed crop. H. S. Coe. *il* plans Farmers' B 836:1-23 '17

**Clover, White**

History of Kentucky bluegrass and white clover in the United States. L. Carrier and K. S. Bort. *Am Soc Agron J* 8:256-66 *Jl* '16  
Shamrock versus white clover. *Am Bee J* 58: 13 *Ja* '18  
Sowing of wild white clover in county Down. W. D. Davidson. *J Dept Ag Ireland* 17,no 1: 30-5 '16  
Trials of wild white clover. D. A. Gilchrist. *J Bd Ag* 22:1063-8 *F* '16  
White clover. T. Butler. *Prog F* 32:815 *Jl* 28 '17  
White clover and its distribution. J. H. Lovell. *il* Gleanings 44:476-8 *Je* 15 '16  
White-clover pollen. J. H. Lovell. *Gleanings* 44:727-8 *Ag* 15 '16

**Seed**

Adulteration of white clover seed. T. Anderson. *J Bd Ag* 23:940-4 *Ja* '17  
Growing wild white clover for seed. *bibliog J Bd Ag* 24:424-8 *Jl* '17  
Ordinary white clover seed versus wild white clover seed. T. J. Jenkin. *J Bd Ag* 23:1202-8 *Mr* '17

**Clover aphid**

Losses caused by the clover aphid. A. C. Burrill. *Idaho Ag Exp B* 104:26-9 '18  
Two clover aphids. E. M. Patch. *il* *J Ag Research* 3:431-3 *F* '15

**Clover bloat. See Cows—Diseases and pests**

**Clover hay**

Clover and clover hay. A. Howard and G. L. C. Howard. *Ag J of India* 11:71-8 *Ja* '16  
Cutting clover hay. E. W. Gage. *Rural N Y* 77:766 *Je* 8 '18  
Making alfalfa and clover hay. A. O. Choate. *Hoard's D* 53:896 *Je* 22 '17

**Clover leaf-tiers**

Clover leaf tier. H. A. Gossard. *bibliog il* Ohio *Ag Exp B* 297:431-43 '16; Same cond. *J Econ Entom* 9:80-1 *F* '16; Same cond. Ohio *Ag Exp B v* 1:181-5 *Je* '16

**Clover midge**

Clover seed midge; damage, description, life history and control. H. A. Gossard. *il* Ohio *Ag Exp B v* 3:150-2 *My* '18  
Control of the clover-flower midge. C. W. Creel and L. P. Rockwood. *il* Farmers' B 971:1-12 '18  
Controlling the clover-flower midge in the Pacific Northwest. C. W. Creel and L. P. Rockwood. *il* Farmers' B 942:1-12 '18  
Save clover seed. *Weekly N L* 5:1 *My* 8 '18

**Clover root borers**

Clover root borers; plowing fields before July reduces injury from pest of legumes. J. R. Stear. *il* Ohio *Ag Exp B v* 3:187-9 *Je* '18

**Club moss. See Lycopodium; Selaginella**

**Clubroot**

Club root of brassicas. *Gard Chron (Lond)* 63:225 *Je* 1 '18  
Studies on clubroot of cruciferous plants. C. Chupp. *bibliog il* Cornell *Ag Exp B* 387:421-52 '17; Same. Cornell *Ag Exp Rep* 1917:421-52 '18  
Tissue invasion by plasmodiophora brassicae. L. O. Kunkel. *bibliog il* *J Ag Research* 14: 543-72 *S* 16 '18

**Clubs**

Handbooks for the young people's clubs. *Prog F* 31:372 *Mr* 11 '16  
Rural clubs in Wisconsin. C. J. Galpin and D. W. Sawtelle. *il* map *Wis Ag Exp B* 271: 1-58 '16  
Story of a neighborhood book club. *Prog F* 32: 73 *Ja* 20 '17  
Why our young folks are contented at home. A. C. Wortman. *Country Gent* 81:490 *F* 26 '16

*See also* Agricultural clubs, and references under that subject; Agricultural college clubs; Boys' clubs; Community clubs;

Country life clubs; Farmers' associations; Girls' clubs; Homemakers' clubs; Women's clubs; also Cheyenne club

**Programs**

Suggested programs for young people's clubs, 1916. *Prog F* 31:311 *F* 26 '16

*See also* Agricultural clubs—Programs; Community clubs—Programs; Women's clubs—Programs

**Clutches, Automobile. See Automobiles—Clutches**

**Clydesdales**

Baron O'Buchlyvie's sale price. D: M. Fyffe. *Breeder's Gaz* 69:495-6 *Mr* 2 '16  
Beginnings of the Clydesdale. *Breeder's Gaz* 74:14 *Jl* 4 '18  
Belgian, Clyde and shire. Wallaces' *F* 42:1623 *N* 30 '17  
Clydesdale affairs in Scotland. A. Mowat. *Breeder's Gaz* 73:378 *F* 21 '18  
Clydesdale and his achievements. J. S. Montgomery. *il* Field *Il* 26:1017-19 *D* '16  
Clydesdale and shires. R. A. Hayne. *il* Nat Stock & F 41:426 *Jl* 28 '17  
Clydesdale and sires that have made it. A: Galbraith. *Breeder's Gaz* 70:774 *O* 26 '16  
Clydesdale auctions in Scotland. A. Mowat. *Breeder's Gaz* 73:64 *Ja* 10 '18  
Clydesdale breeding in Scotland. *il* Field *Il* 28:436 *Je* '18  
Clydesdale show in Scotland. A. Mowat. *Breeder's Gaz* 69:1070 *My* 18 '16  
Clydesdale situation in Scotland. A. Chrystal. *il* Field *Il* 26:113-14 *F* '16  
Clydesdale trade in Scotland. A. Mowat. *Breeder's Gaz* 72:937 *N* 22 '17  
Clydesdales at Scotland's stallion show. A. Mowat. *Breeder's Gaz* 73:708 *Ap* 4 '18  
Clydesdales at the International. *Breeder's Gaz* 70:1127 *D* 14 '16  
Clydesdales at the International. W. L. Houser. *Breeder's Gaz* 73:20 *Ja* 3 '18  
Clydesdales at the royal show. A. Mowat. *Breeder's Gaz* 70:131 *Jl* 27 '16  
Clydesdales at the Scottish stallion show. A. Mowat. *Breeder's Gaz* 69:727-8 *Mr* 30 '16  
Clydesdales from Scotland. A. Mowat. *Breeder's Gaz* 71:1070 *My* 24 '17  
Coming of a sire. *il* Field *Il* 27:936-7+ *D* '17  
Honorable Clydesdale record. *il* Field *Il* 26: 425 *My* '16  
International eclat at Hayfield. *il* Field *Il* 26: 601-2 *Jl* '16  
Lordly Scottish drafter. R. B. Ogilvie. *il* Breeder's *Gaz* 72:1140-1+ *D* 20 '17  
Prepotent Clydesdale sires. A. Galbraith. *Breeder's Gaz* 70:838 *N* 2 '16  
Record price founded on performance. D: M. Tyffe. *Breeder's Gaz* 69:1117 *My* 25 '16  
Selling and earning value of Clydesdales. A. Galbraith. *il* Field *Il* 26:28 *Ja* '16  
Where the Clydesdale is making good. C. W. Gay. *il* Breeder's *Gaz* 70:1208 *D* 21 '16

**Price lists**

Clydesdales in demand; great sales at Lanark, Scotland. J: Lennox. *il* Field *Il* 27:950 *D* '17  
Sale of Montgomery Clydesdales. A. Mowat. *Breeder's Gaz* 73:708 *Ap* 4 '18

**Coaching**

Road coaching revival. A. H. Godfrey. *il* Breeder's *Gaz* 71:513 *Mr* 8 '17

**Coal**

Are you a patriot in conserving fuel? V. H. Manning. *Country Life* 33:48 *F* '18  
Burning question. A. J. Casey. *Coop Manager & F* 8:79 *N* '18  
Buying coal direct from the mines. *Am Coop J* 12:590 *Ap* '17  
Coal contracts. *Am Flor* 48:1157 *Je* 16 '17  
Coal for greenhouse use cut one-half. *Market Growers J* 22:360 *My* 15 '18  
Coal market conditions very uncertain. *Am Coop J* 12:592 *Ap* '17  
Coal preparation. *Am Coop J* 11:535+ *Ja* '16  
Coal shortage or car shortage; the cause and remedy. *Am Coop J* 12:338 *D* '16  
Coal situation. *Am Coop J* 12:632 *My* '17  
Coal situation. *Am Flor* 50:1 *Ja* 19 '18

**Coal—Continued**

- Coal weight losses—how overcome. *Am Coop J* 11:1172 J1 '16
- Coaling up. O. Jacobs. *il Am Coop J* 13:466 Ag '18
- Conservation the order of the day. *Am Coop J* 13:207 Ja '18
- Fuel supply; outlook for adequate winter reserve. *N Y Prod R* 46:796 O 2 '18
- How can we get more benefit out of the money we spend for coal? *Am Coop J* 13:206 Ja '18
- Ideal dealer. J. E. Beebe. *Coop Manager & F* 6:104-5 Ag '17
- Is it wise to store coal now. *Am Coop J* 12:691 Je '17
- Lesson of 1916. *Am Coop J* 12:470 F '17
- 1916 shows largest consumption of coal. *Am Coop J* 12:404 Ja '17
- Refunding the tax collected on anthracite coal. *Am Coop J* 12:67 S '16
- Review of the coal situation. *Coop Manager & F* 6:102 Ag; 7:91 S; 88 O '17; 93 Ja; 104 F; 106-7 Mr '18
- Serious need of saving coal. *Power F* 27:54 F '18
- Some thoughts for the coal consumer as well as the dealer. *Am Coop J* 12:631 My '17
- Spontaneous combustion in hay and coal. A. R. Lamb. *Wallaces' F* 42:1214 S 7 '17
- Testing coal. *N Y Prod R* 42:626 Ag 9 '16
- Trading productive farms for fuel. J. Marsh. *il Ohio F* 141:37 Ja 12 '18
- Wholesale reductions in coal. *Am Coop J* 12:741 J1 '17
- Why some coals do not burn. A. Mitchell. *Am Coop J* 12:72 S '16
- Why the retail coal dealer should employ a modern accounting system. P. Beck. *Coop Manager & F* 7:94-5 Ag '18
- Will we have coal this winter? *Am Coop J* 13:90 N '17

**Prices**

- Coal prices higher. *Am Coop J* 11:966 My '16
- Loi sur la taxation des charbons et la limitation des frets pour le transport de charbons sous pavillon français. *Int Yearbook Ag Leg* 1916:375-6 '17
- Maximum prices on coal. *Am Coop J* 12:767 Ag '17
- What makes coal so high? *Am Coop J* 11:1251 Ag '16
- What will you pay for your winter's coal? *Am Coop J* 13:38 S '17

**Storage**

- Coal screenings danger. *Am Flor* 51:129 Ag 10 '18

**Transportation**

- Loss of coal in transit. *Am Coop J* 11:1173 J1 '16
- Shippers' conference. Watertown, S.D., July 19-20. *Coop Manager & F* 6:64-5 Ag '17

**Coal handling**

- Concrete coal pockets at Watertown, Wis. *il Am Coop J* 11:1175 J1 '16
- Efficient machinery will solve the coal handling problem. *Coop Manager & F* 7:94 My '18

**Cobblestones**

- Unknown colonial type. C. L. Rose. *il Country Life* 32:67-9 Je '17

**Coccidae. See Mealy bugs; Scale insects****Coccidiodal granuloma**

- Occurrence of coccidiodal granuloma (oidiomyces) in cattle. L. T. Giltner. *bibliog il J Ag Research* 14:533-41 S 16 '18

**Coccidiosis**

- Canine coccidiosis, with a note regarding other protozoan parasites from the dog. M. C. Hall and M. Wigdor. *bibliog Am Vet M Assn J* 53:64-76 Ap '18
- Coccidia in subepithelial infections of the intestines of birds. P. B. Hadley. *J Bact* 2:73-8 Ja '17
- Coccidiosis in cattle and carabaos in the Philippine Islands and its relation to rinderpest; with discussion. C. H. Schultz. *bibliog Am Vet M Assn J* 48:687-705 Mr '16

- Coccidiosis in poultry. S. Dodd. *Ag Gaz of New South Wales* 28:851-7 D '17
- Intestinal coccidiosis. W. J. Lentz. *Am Vet M Assn J* 54:155-6 N '18
- Mortality of rabbits in wet years in consequence of coccidiosis. *Int R Sci & Prac Ag* 9,no 1:73 Ja '18

**Coccinellidae. See Ladybirds****Cocomyces**

- Inoculation experiments with species of cocomyces from stone fruits. G. W. Keitt. *il J Ag Research* 13:539-70 Je 10 '18

**Cockchafers. See June bugs****Cocklebur**

- Cockle-burs poison hogs. *Coop Manager & F* 7:87 S '17
- Interesting modification in xanthium. C. A. Shull. *il Am J Bot* 4:40-3 Ja '17

**Cockroaches**

- Cockroach pest of greenhouses. M. P. Zappe. *bibliog Conn State Ag Exp B* 203:302-13 '18
- Cockroaches and their control. V. R. Haber. *il Ohio Ag Exp B v* 1:233-5 Ag '16
- Household and camp insects. E. P. Felt. *il N Y State Museum (Albany) B* 194:60-2 F '17
- Suggestions as to getting rid of cockroaches. *Wallaces' F* 41:740 My 12 '16

**Cocoa. See Cacao****Cocoa grass. See Nut grass****Coconut**

- Coconut industry in Nicaragua. *il Pan Am Magazine* (70 5th av., N.Y. 25c) 24:124-8 Ja '17
- Coconut, its culture and uses. P. J. Wester. *il Philippine Ag R* 11,no 1:5-57 '18
- Coconut products—a new American industry. *il Literary Digest* (354 4th av, N.Y. 10c) 58:22-3 Ag 10 '18
- Double coconut or coco de mer. *il Gard Chron (Lond)* 59:141 Mr 11 '16
- Germinating coconuts. O. F. Cook and C. B. Doyle. *il J Heredity* 7:148-57 Ap '16
- \* Importance of Trinidad's coconut industries. H. D. Baker. (Commerce Reports no. 263) p 535-43 (N 8) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Diseases and pests**

- Brassolis sophorae, a butterfly injurious to coconut palms in British Guiana. L. D. Cleare, jr. *Int R Sci & Prac Ag* 7,no 3:462 Mr '16
- Cocoon-tree caterpillar (*brassolis isthmia*) of Panama. L. H. Dunn. *il J Econ Entom* 10:473-88 O '17
- Oryctes rhinoceros in the Philippines. D. B. Mackie. *il Philippine Ag R* 10, no 4:315-34 '17

**Laws**

- Loi n. 2598 instituant un office des produits des noix de coco pour encourager l'amélioration des produits des noix de coco et visant aussi d'autres fins aux Iles Philippines. *Int Yearbook Ag Leg* 1916:570-3 '17

**Coconut cake. See Feeding and feeding stuffs—Coconut cake****Coconut crab. See Purse crabs****Coconut oil**

- Good milk with cows 10,000 miles away. *Sci Am* (233 Broadway, N.Y. 10c) 119:295 O 12 '18
- Production and industrial employment of vegetable oils. *il Engineer* (33 Norfolk st., Strand, London, W. C. 2) 123:169-71 F 23 '17

**Extraction**

- Local processes of coconut-oil extraction in the Philippines. C. A. Gardiner. *il Philippine Ag R* 10, no 1:27-31 '17

**Coccus citricola. See Citricola scale****Codling moths**

- Apple worm, how it comes and how it goes. *il Fruit-Grower* 27:325+ Je 15 '16
- Calliphialtes parasite of the codling moth. R. A. Cushman. *bibliog il J Ag Research* 1:211-38 D '13



**Codling moths—Continued**

- Clerid larva predaceous on codling moth larvae. D. E. Merrill. *J Econ Entom* 10:461-4 O '17
- Climate and variations in the habits of the codling moth. E. P. Felt. *J Econ Entom* 9: 107-10 F '16
- Codling moth. H. R. Hagan. *il Utah Ag Exp C* 30:1-4 '18
- Codling moth. A. L. Melander. *Better Fruit* 10:11+ Ap '16
- Codling moth control in the Northwest. S. W. Foster. *Better Fruit* 10:33+ Ja '16
- Codling moth control, results of dusting spraying experiments 1917. W. P. Flint. *Ill State Hort Soc Trans* 1917:169-78 '18
- Codling moth investigations for 1915. E. L. Childs. *Better Fruit* 11:12 Ja '17
- Codling moth situation. L. Childs. *Better Fruit* 13:3 Ag '18
- Codling moth survey. T. O. Morrison. *Better Fruit* 10:7-9 Ja '16
- Codling moth trap. *il Weekly N L* 4:5 Ap 25 '17; Same. J. Ag (Quebec) 21:52 O '17
- Codling moth trap. E. H. Siegler. *il J Econ Entom* 9:517-21 D '16
- Codling moth trap. A. M. Wilson. *il Better Fruit* 12:7 Mr '18
- Codling moths in 1916. P. A. Glenn. *il Ill State Hort Soc Trans* 1916:197-214 '17
- Control of the codling moth. C. O. Ormsbee. *Fruit-Grower* 27:216 Mr 15 '16
- Control of the codling moth in the Pecos valley in New Mexico. A. L. Quaintance. *il U S Ag B* 88:1-8 '14
- Experiment with block trap for catching codling-moth larvae. P. A. Glenn. *il Ill State Hort Soc Trans* 1917:180-5 '18
- How to prevent wormy apples. J. G. Sanders. *Fruit-Grower* 28:16 Ja 1 '17
- Irregular emergence of codling moth at Hood River. L. Childs. *Better Fruit* 12:10+ F '18; Same. *J Econ Entom* 11:224-31 Ap '18
- Life history of the codling moth in Maine. E. H. Siegler and F. L. Simanton. *il U S Ag B* 252:1-50 '15; Summary. *Int R Sci & Prac Ag* 7,no 1:169-70 Ja '16
- Life history of the codling moth in the Pecos valley, New Mexico. A. L. Quaintance and E. W. Geyer. *il U S Ag B* 429:1-90 '17
- Make drive on the codling moth. T. J. Talbert. *Fruit-Grower* 27:311 Je 1 '16
- Nicotine spray an effective ovicide for codling moth eggs. *J Econ Entom* 11:149-50 F '18
- Nicotine sulphate for codlin moth control. (Reprint from annual report) 11p '16 Horticultural dept., Yakima county, Wash.
- Nicotine sulphate for codling moth. F. E. De Sellem. *Fruit-Grower* 27:52 Ja 15 '16
- Nine year band record of the codling moth. J. W. Rigney and A. B. Fite. *il N M Ag Exp B* 110:1-60 '18
- Notes on some fungous diseases and a new codling moth attacking the persimmon in Japan. T. Tanaka. *bibliog Cal State Comm Hort B v* 7:461-3 Jl '18
- Screens check codling moth. M. G. Kirkpatrick. *O Judd Farmer* 60:11 Mr 18 '16
- Side injury and codling moth control; Hudson Valley experiment; with discussion. E. P. Felt. *J Econ Entom* 10:60-5 F '17
- Side injury and the codling moth; Hudson Valley experiments. E. P. Felt. *N Y Ag Dept B* 86:2662-8 Ag '16
- Side injury by the codling moth. E. P. Felt. *N Y State Fruit Growers' Assn Pro* 1916: 29-33
- Spraying for codling moth. *Fruit-Grower* 28: 18 Ja 1 '17
- Studies of the codling moth in the central Appalachian region. F. E. Brooks and E. B. Blakeslee. *il U S Ag B* 189:1-49 '15; Summary. *Int R Sci & Prac Ag* 7,no 1:170-2 Ja '16
- Codman, James M., 1831-1917**  
Portrait. *Breeder's Gaz* 71:281 F 8 '17  
Sketch. *por Hoard's D* 53:143 F 16 '17
- Coeducation**  
Coeducation and eugenics. H. J. Banker. *J Heredity* 8:208-14 My '17

Coeducation and marriage. *J Heredity* 8:43-5 Ja '17

**Coffee**

- Brazil fills coffee cups. M. L. Horst. *il Penn State F* 11:237 Ja '18
- Coffee. Porto Rico Ag Exp Rep 1916:6-7, 21-2 '18
- Coffee and tea. (*In* Geography of the world's agriculture, p. 93-6) maps '17 U S Ag
- Effect of different methods of transplanting coffee. T. B. McClelland. *il Porto Rico Ag Exp B* 23:1-11 '17
- How we make coffee; symposium. *Prac F* 113:305 S 1 '17
- Introduction of the cultivation of the coffee-tree into Reunion. A. De Villèle. *Int R Sci & Prac Ag* 8,no 1:77-9 Ja '17
- Namay, a Colombian coffee plantation. L. Neugass. *il Pan Am Union B* (17th and E sts., N. W., Washington, D.C. 25c) 44:776-8 Je '17
- Notes on coffee in Java; Coffee experiment station, Bangelan, Java. P. J. Wester. *il Philippine Ag R* 9,no 2:120-32, 150-2 '16
- Shield budding of coffee. P. J. Wester. *Philippine Ag R* 9,no 4:337-8 '16
- Some profitable and unprofitable coffee lands. T. B. McClelland. *il Porto Rico Ag Exp B* 21:1-13 '17

**Analysis**

- Coffees. Assn Offic Ag Chem J 2,no 3,pt 2: 331-4 N '16
- Report on tea and coffee. J. M. Bartlett. Assn Offic Ag Chem J 1,no 4,pt 1:552-6 F '16
- Report on tea and coffee. J. M. Bartlett. Assn Offic Ag Chem J 3:21-4 My '17

**Diseases and pests**

- Insects affecting coffee in Porto Rico. R. H. Van Zwaluwenburg. *J Econ Entom* 10:513-17 D '17

See also Coffee leaf-blight

**Coffee, Substitutes for**

- Imitation or pseudo coffees. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:340-1 D 1 '17

**Coffee industry**

- Brazilian coffee crop of 1917-1918 promises to be exceptionally large. *Econ World* (128 Water st, N.Y. 25c) n s 14:771 D 1 '17
- Brazilian coffee situation. (Commerce Reports no. 219) p 1044-6 (S 18) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Coffee industry of French Indo-China. L. P. Briggs. (Commerce Reports no. 186) p 534-42 (Ag 10) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Side lights on the coffee industry; facts and scenes from Central America. H. M. Wright. *il Sci Am Sup* (233 Broadway, N.Y. 10c) 86:168-9 S 14 '18
- Use of gas in the coffee roasting industry. E. F. Davis. *il Gas Age* (52 Vanderbilt av, N.Y. 20c) 42:60-5 Jl 15 '18

**Laws and regulation**

- Arrêté n. 5131 concernant l'importation du café étranger, relatif aux ordonnances n. 4951 et 5122 du conseil fédéral du 11 novembre 1915 et du 4 avril 1916 en Allemagne. *Int Yearbook Ag Leg* 1916:322-4 '17
- Arrêté n. 5132 concernant le café, pris en vertu des ordonnances n. 4951 et 5122 du 11 novembre 1915 et du 4 avril 1916 en Allemagne. *Int Yearbook Ag Leg* 1916:175-7 '17
- Food administration and the coffee market. A. R. Marsh. *Econ World* (128 Water st, N.Y. 25c) n s 15:183-4 F 9 '18

**Statistics**

- \* Coffee situation; Jan.-Aug. 1918. (*In* Official statement no. 5, p. 30) '18 U.S. Food administration, Washington, D.C.
- \* Coffee situation; July 1918. (*In* Official statement no. 4, p. 19) '18 U.S. Food administration, Washington, D.C.
- \* Coffee situation; 1917-1918. (*In* Official statement no. 3, p. 16) '18 U.S. Food administration, Washington, D.C.

**Coffee industry—Statistics—Continued**

Coffee trade of the United States. (Commerce Reports no. 222) p 1114-17 (S 22) '17  
U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Coffee trade of the United States. Econ World (128 Water st, N.Y. 25c) n s 15:477-8 Ap 6 '18

\* General summary of the coffee situation in the United States for September, 1918. (In Official statement, no. 7, p. 32) '18 U.S. Food administration, Washington, D.C.  
International trade; wholesale prices. See United States Department of agriculture Yearbooks

\* Monthly summary of coffee, March, 1918. (In Official statement no. 1, p. 10) '18 U.S. Food administration, Washington, D.C.

\* Monthly summary of coffee, May and June, 1918. (In Official statement no. 2, p. 16) '18 U.S. Food administration, Washington, D.C.

\* World's production of coffee and the consumption of coffee in the United States. Econ World (128 Water st, N.Y. 25c) n s 16: 589-90 O 26 '18

**Coffee leaf-blight**

Pellicularia koleroa on coffee in Porto Rico. G. L. Fawcett. J Ag Research 2:231-3 Je '14

**Cog wheels.** See Gearing

**Cohune oil**

\* New source of vegetable fat. il Sci Am (233 Broadway, N.Y. 10c) 119:357 N 2 '18

**Cold (disease)**

Colds. W. H. Galland. Wallaces' F 41:133 Ja 28 '16

Colds. E. Mellen. O Judd Farmer 62:31 F 10 '17  
Colds—causes, prevention, cure. H. Mason. Ohio F 137:20 Ja 1 '16

Preventing children's colds. Country Gent 81: 2241 D 30 '16

**Cold frames**

Cold-frame beets. J. T. Rosa, jr. il Country Gent 82:1694 N 3 '17

Cold frame vegetable forcing in north Jersey. R. W. DeBaun. il Market Growers J 20:47-8 Ja 15 '17

Combination cold frame and storage. Market Growers J 19:277-8 D 15 '16

Concrete cold frame for a market gardener. J. R. Bechtel. Market Growers J 23:25 Jl 15 '18

Every good garden should have cold frames. W. F. Massey. Prog F 32:1060 O 13 '17

Frame crops. Market Growers J 20:37+ Ja 15 '17

Getting the garden under glass. F. F. Rockwell. il Gard M 26:130-1 N '17

Home garden; you can grow vegetables for winter in cold frames and hotbeds. il Country Gent 82:1413 S 15 '17

Hot and cold frames (C. 35). J. W. Wellington. N Y State Ag Exp Rep 1915:669-72 '16

Hotbed and cold-frame crops; with list of vegetables and time of planting. H. W. Doyle. Country Gent 81:456 F 26 '16

Hotbed and cold-frame making. il Country Gent 81:1880 O 21 '16

Hot beds and cold frames. il Mass Ag Ext C 58 6p '18

Hot beds and cold frames. Prog F 31:1144 S 30 '16

Hotbeds and cold frames. Prog F 32:109 Ja 27 '17

Hot beds and cold frames. C. S. Adams. il Ky Ag Exp C 11:1-22 '16

Hotbeds and cold frames. T. F. Limbocker. Colo Ag Exp B 22:1-8 '17

Hotbeds and coldframes. A. H. Mac Lennan. il J Ag (Quebec) 19:165 F '16

Hotbeds and cold frames. W. F. Massey. il Prog F 33:95 Ja 26 '18

Hotbeds and cold frames. J. L. Stahl. Western Wash Ag Exp B v 6:92-3 O '18

Hotbeds and cold frames for the home garden. R. E. Marshall and C. Woolsey. Va Ag Ext B 22:1-14 '17

Hotbeds and cold frames for the home gardener. il Country Gent 82:257 F 10 '17

Hotbeds and cold frames nine months in the year; with discussion. N. A. Rasmussen. il Minn Hort 45:162-6 Ap '17

Hotbeds—cold frames. J. T. Rosa, jr. il Country Gent 82:345 F 17 '17

Hotbeds, cold frames and forcing boxes. E. L. Kirkpatrick. il Rural N Y 75:35 Ja 8 '16

Hotbeds, cold frames and plant forcers. B. S. Brown and R. T. Muller. Maine Ag Ext B 115:1-13 '18

How to make hotbeds and cold frames. C. J. Hayden. il Prog F 31:1306 N 11 '16

Portable frames for garden. W. F. Massey. il O Judd Farmer 60:12 Mr 4 '16

Putting it simply, for the beginner; making hotbeds and coldframes, sowing seeds, watering. Gard M 27:70-2 Mr '18

Use of cold frames. Prac F 112:378 O 15 '16

Use of hotbeds and cold frames. il Country Gent 83:42 Ja 26 '18

Vegetables for cold frames. D. Henniger. (In Pro. N. J. state hort. soc., 1916, p 115-22) '17

H. G. Taylor, sec., Riverton, N. J.  
Winter garden. Prac F 112:7 Ja 1 '16

See also Flats (horticulture); Hotbeds

**Cold Spring Harbor biological laboratory, Long Island**

New York city's biological reserve; the biological laboratory at Cold Spring Harbor, Long Island. 20p il '17 Brooklyn inst. of arts and sciences, Dept. of biological laboratory, Brooklyn, N.Y.

**Cold storage**

Best cold storage practice. O Judd Farmer 65:405 N 2 '18

Building of Minneapolis cold storage co. il N Y Prod R 41:744 Mr 1 '16

Changes in fresh beef during cold storage above freezing. R. Hoagland and others. bibliog U S Ag B 433:1-100 '17; Excerpts and summary. Int R Sci & Prac Ag 8,no 6: 934-7 Je '17

Cold storage. Am Flor 49:1244 D 22 '17

Cold storage as a factor in marketing dairy products. V. Schwarzkopf. Purdue Ag 12: 261-2 Mr '18

Cold storage costs for apples. Country Gent 81:1790 O 7 '16

Cold storage for fruit juices. Green's Fruit Grower 36:16 Ja '16

Cold storage for vegetables. Am Flor 45:1396 Ja 15 '16

Cold storage house for curing meat on the farm. H. E. Savely. Wallaces' F 41:124 Ja 28 '16

Cold storage in Canada. Int R Ag Econ 84:53-65 D '17

Cold storage industry; its relation to the public welfare during and after the war. F. A. Horne. N Y Prod R 44:1090-1+ O 24 '17

Cold storage: its capabilities and how to best utilize and extend them. F. A. Horne. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:221-7 Mr '18

Cold storage plants for the commercial apple grower, by F. A. Simpson; Local cold storage problems for southern Illinois, by E. W. Bailey; with discussion. Ill State Hort Soc Trans 1916:160-5, 523-40 '17

Cold storage supervision in California. N Y Prod R 41:966 Mr 29 '16

Come-back of Major Foot; ice-making plants and hog products. H. Quick. il Country Gent 81:1023 My 13 '16

Concerns not engaged in commercial storage business in position to take up this work. Weekly N L 4:7 Jl 25 '17

Effect of cold-storage temperatures upon the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. bibliog J Ag Research 5: 657-66 Ja 10 '16

Effect of cold-storage temperatures upon the pupae of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. J Ag Research 6:251-60 My 15 '16

Equipment for modern cold storage plants. A. Ritter, Metal Worker (50 Union square, N.Y. 10c) 87:72 Ja 12 '17

Farmer and cold storage. E. I. Burrridge. il Ohio F 139:3 Ja 6 '17

Farmers' own cold storage. C. Crow. il Country Gent 82:1627 O 27 '17



**Cold storage—Continued**

- Fifth report of the committee on cold storage. W: T. Sedgwick and others. Am J Public Health (126 Massachusetts av., Boston 30c) 7:306-15 Mr '17
- Five new plants for France. Nat Wool Grower 8:56 S '18
- Foods from the freezer. R. D. MacManus. il Country Gent 82:1549-50 O 13 '17
- Government storage stock reports. N Y Prod R 41:1070; 42:4 Ap 19-26 '16
- Govt. warehouse reports. C: J. Brand. N Y Prod R 42:372 Je 21 '16
- Handling and storage of apples in the Pacific Northwest. H. J. Ramsey and others. il U S Ag B 587:1-31 '17; Abstract. Better Fruit 12:8 D '17
- Ice-house and cold-storage insulation. Building Age (50 Union square, N.Y. 20c) 39:29-30 Ja '17
- Keeping vegetables in cold storage. Market Grovers J 22:86 F 1 '18
- Last word in cold storage; new plant of Merchants' refrigerating co. il N Y Prod R 45:803+ Ap 3 '18
- Poultry men confer with chief C. J. Brand. N Y Prod R 44:417 Jl 11 '17
- Poultryman's complaint; do as the middleman does and put eggs into storage. H. A. Roberts. il Country Gent 82:1677-8 N 3 '17
- \* Science and the cold-storage industry. J. W. Anderson. Nature (St Martin's st, London, W. C. 5s) 100:455-6 F 7 '18
- Service of cold storage in the conservation of foodstuffs. I. C. Franklin. U S Ag Yearbook 1917:363-70; Same. Separate 745; Abstract. N Y Prod R 46:378 Jl 3 '18
- Storage eggs in 1917. N Y Prod R 45:725 Mr 13 '18
- Storage men cooperate. Weekly N L 4:5 Ag 1 '17
- Success and failure in cold storage. S. J. T. Bush. il Fruit-Grower 27:341+ Jl 1 '16
- Suitable storage conditions for certain perishable food products. U S Ag B 729:1-10 '18
- Taking care of the winter supply. N. H. Ellsworth. il House Beautiful (3 Park st., Boston 25c) 42:194-6 S '17
- Various methods of refrigeration and its advantage to the public. G: H. McKay. il N Y Ag Dept B 79,pt 1:662-8 Ja '16
- Venture in cold storage. H. C. Bennett. il Country Gent 81:256-7 F 5 '16
- Warehousemen and dealers. C. L. Criss. N Y Prod R 42:1054+ O 18 '16
- What's in cold storage: the government is relying on the refrigerated surplus. J: E. Pickett. il Country Gent 82:1955-6+ D 15 '17
- Work of the American association of refrigeration. F. A. Horne. N Y Prod R 41:630 F 9 '16

See also Refrigeration and refrigerating machinery

**Laws and regulation**

- Acts relating to cold storage. Ag Gaz of Canada 4:712-13 Ag '17
- \* Cold storage act and rules and regulations governing the licensing of cold storage warehouses. 16p '17 Wis. Dairy and food comr., Madison
- Cold storage butter rules; special regulations of profits imposed by United States Food administration. Creamery 7:20-1 Jl '18; Same. N Y Prod R 46:355 Jl 3 '18
- Cold storage rates; maximum charges fixed by United States food administration. N Y Prod R 46:691 S 11 '18
- Comparison of two legal opinions regarding constitutionality of ten month provision of state law. N Y Prod R 41:822 Mr 8 '16
- Egg stamping question; federal food board will not enforce the local regulation. N Y Prod R 46:434 Jl 17 '18
- Food administration matters; some interesting poultry and egg questions. N Y Prod R 45:169 N 28 '17
- General regulations governing licensees doing business as or with cold storage houses. H. Hoover. N Y Prod R 45:579 F 27 '18
- Illinois cold storage law. N Y Prod R 44:1034 O 17 '17

- Illinois cold storage law now being enforced by Illinois officials. N Y Prod R 45:168 D 5 '17
- Manual of laws pertaining to the Department of farms and markets; cold storage. N Y Farms & Markets Dept Ag B 108:249-57 Je '18
- New Jersey cold storage law. N Y Prod R 41:937 Mr 29 '16
- New rules governing dealers in cold storage eggs and frozen poultry as amended and formally adopted by Food administration. H. Hoover. N Y Prod R 45:631+ Mr 6 '18
- Pa. storage law limiting storage period of butter constitutional. N Y Prod R 44:536 Ag 1 '17
- Penn. storage law suspended in respect to provisions regarding cold stored eggs. N Y Prod R 45:185 D 12 '17
- Special rules and regulations governing wholesalers, retailers and all other dealers in cold storage eggs. Market News & Exchange B (Ohio Dept of ag., Columbus) 1:1-2 Ag 24 '18
- Status of cold storage law. N Y Prod R 42:810-11 S 13 '16

**Statistics**

- Food now in storage. Fruit-Grower 28:238 Ap 15 '17
- Foods in cold storage in Canada, July, 1917 to Jan. 1918. Labour Gazette (Canada Department of Labour, Ottawa 3c) 18:50-1 Ja '18
- Reports of storage holdings of certain food products. J: O. Bell and I. C. Franklin. maps U S Ag B 709:1-43 '18
- Summary of cold storage reports for May 1, 1918, issued by the cold storage division of the Bureau of markets; tabulation. U S Food Surveys 1:8 My 21 '18
- Summary of cold storage reports for August 1, 1918, issued by the cold storage division of the Bureau of markets. U S Food Surveys 2:8 Ag 26 '18
- Summary of cold storage reports for November 1, 1918, issued by the cold storage division of the Bureau of markets. U S Food Surveys 2:8 N 25 '18
- The U.S. Bureau of markets issues mimeographed Monthly reports of cold storage holdings of eggs, creamery butter, frozen and cured fish which will be sent by mail to any one upon request. Upon request also any or all of the information contained in the cold storage reports will be telegraphed immediately upon its release, charges collect

**Coleophora volckei.** See Apple leaf-mining case-bearers

**Coleoptera**

- Biological observations on some coleoptera of the Department of Héroult, France. J. L. Lichtenstein. Int R Sci & Prac Ag 9,no 5: 638-9 My '18

**Coleosporium**

- Aecial stage of coleosporium ribicola. W. H. Long. Mycol 8:309-11 N '16

**Coleus**

- Study of bud variations in coleus. J Heredity 8:518 N '17

**Collecting of accounts**

- How to collect when you sell farm products on credit. M. L. Hayward. System on the Farm 1:303-4 O '17
- Some legal points on collecting old debts. M. L. Hayward. System on the Farm 2:93 Mr '18

**Collection and preservation of plants.** See Plants—Collection and preservation

**Collectors and collecting**

- One collector's hobbies. W. A. Dyer. il Country Life 34:72+ Jl '18

**College architecture**

- Agricultural engineering; what Nebraska is doing to develop this science. L. W. Chase. il Farm Eng 4:8-9 Jl '16
- New physics building. O. A. C., Guelph. W. B. Roadhouse. il Ag Gaz of Canada 3:261-4 Mr '16

**College clubs. Agricultural.** See Agricultural college clubs

**College dormitories.** See Dormitories, College

### College education, Value of

Collegiate training for business. J. V. Bowen. Miss Ag Coll B 13 5p O '16

Does college education pay? C. Benst. Am Flor 50:674 Ap 20 '18

Does college help financially? Rural N Y 76: 1288 N 10 '17

Farmers and college education. R. V. Gunn. Rural N Y 77:33 Ja 12 '18

Value of a college education. H. B. Dorner. Am Flor 50:628 Ap 13 '18

### College girls

Contribution to the standardization of conditions in college halls for women. A. Borthwick. J Home Econ 9:139-40 Mr '17

### College graduates

Business of journalism. Rural N Y 75:121 Ja 22 '16

Field of endeavor for agricultural graduates. M. L. Fisher. Purdue Ag 11:9-11 Mr '17

Harvard and Yale birth rates. J. C. Phillips. J Heredity 7:565-9 D '16

Letter from son to father. Hoard's D 51:453 Ap 7 '16

Stanford's marriage rate. J Heredity 8:170-3 Ap '17

What the universities are doing for floriculture. H. B. Dorner. Gard Chron Am 22:59-60 F '18

### College libraries

Agricultural library. J. C. Gray. il Penn State F 9:343 Mr '16

### College professors

Exchange of instructors in agricultural college work. H. L. Russell. Assn Am Ag Coll & Exp Pro 1915:192-4

Jefferson college—the professors. H. Wallace. Wallaces' F 42:784 My 11 '17

Preparation required for the college teacher in agriculture. R. A. Pearson. Assn Am Ag Coll & Exp Pro 1915:156-9

### College students

City-raised college student. Rural N Y 76: 575 Ap 21 '17

College girl's wardrobe. M. Myers. J Home Econ 8:189-90 Ap '16

College students' accounts. S. Macleod. J Home Econ 10:457-60 O '18

Farming their way through college. P. C. Harvey. il Country Gent 82:2008-9 D 22 '17

Living expenses of women students at the University of Illinois. C. E. Gray. J Home Econ 8:85-7 F '16

Student labor on New York farms; with discussion. A. C. King. N Y State Fruit Growers' Assn Pro 1916:298-310

Wisconsin student housekeeping. E. Kellogg. il Country Gent 81:1741 S 23 '16

See also Boston students' union; College girls

### Housing problem

See also Dormitories, College

### Colleges and universities

Advantages and disadvantages of the division of the college year into four terms of twelve weeks each; with discussion. H. J. Waters. Assn Am Ag Coll & Exp Pro 1916:185-95 '17

Ohio idea in cooperative education. A. Vivian. Nat Stock & F 41:460 Ag 11 '17

See also Agricultural colleges; also names of universities, e.g. California university, Fort Hays normal school, Illinois university, Lincoln memorial university

### Agricultural courses

Agricultural teaching at the university. J Dept Ag Victoria 15:358-66 Je '17

College teaching in agriculture. F. A. Waugh. School and Soc (Science Press, Garrison, N.Y. 10c) 7:130-2 F 2 '18

### Courses of study

College course in home economics. E. C. Jenkins. J Home Econ 9:301-14 Jl '17

### Colleges for women

Babies in the curriculum. A. E. Hamilton. il J Heredity 7:387-94 S '16

### Collemaceae. See Lichens

### Colletias

New or noteworthy plants. N. E. Brown. il Gard Chron (Lond) 60:108, 121, 131 S 2-16 '16

### Collies

Collie dog sheep trials. R. Fleesh. Breeder's Gaz 69:306 F 10 '16

Dairy side line. G. H. Dacy. Country Gent 82: 836 My 5 '17

Shore's revenge; story. R. Fleesh. il Breeder's Gaz 70:1185 D 21 '16

Training collies to work sheep. E. A. Rogers. Am Sheep B & W 36:327 Je '16

### Colloids

Absorption of gold from colloidal solutions by fungi. M. Williams. Ann Bot 32:531-4 O '18

Colloidal swelling of wheat gluten in relation to milling and baking. F. W. Upson and J. W. Calvin. il Neb Ag Exp Research B 8: 1-26 '16

See also Soil colloids

**Colombia.** See Botany—Colombia; Cattle—Colombia; Plants—Colombia

### Colon bacilli

Ability of color bacilli to survive pasteurization. S. H. Ayres and W. T. Johnson, jr. bibliog J Ag Research 3:401-10 F '15

Brief note on the use of gentian violet in presumptive tests for b. coli in milk with reference to sporulating anaerobes. I. C. Hall and L. J. Ellefson. bibliog J Bact 3: 355-60 Jl '18

Characteristics of bacteria of the colon type occurring in human feces. L. A. Rogers and others. bibliog J Bact 3:231-52 My '18

Colon-aerogenes group from silage. O. W. Hunter. bibliog J Bact 2:635-9 N '17

Elimination of spurious presumptive tests for b. coli in water by the use of gentian violet. I. C. Hall and L. J. Ellefson. bibliog J Bact 3:329-54 Jl '18

Geometrical mean as a b. coli index. W. F. Wells. Science (Science Press, Garrison, N.Y. 15c) n s 47:46-8 Ja 11 '18

Note on the geometrical means as a b. coli index. W. D. Cairns. Science (Science Press, Garrison, N.Y. 15c) n s 47:239-40 Mr 8 '18

Occurrence of different types of the colon-aerogenes group in water. L. A. Rogers. bibliog J Bact 3:313-28 Jl '18

Statistical classification of the colon-cloacae group. M. Levine. bibliog J Bact 3:253-76 My '18

Synthetic medium for the direct enumeration of organisms of the colon-aerogenes group. S. H. Ayres and P. Rupp. J Bact 3:433-6 S '18

See also Milk—Bacteriology

**Colonial architecture.** See Architecture, Colonial

### Color

Color in country houses. A. Embury. il Country Life 32:27-40 O '17

Food color fads. J Ag (Quebec) 19:151 Ja '16

Light and colour. P. A. Boving. J Ag (Quebec) 19:204 Mr '16

### Color of animals

Breeding horses to color. W. S. Anderson. Breeder's Gaz 70:95 Jl 20 '16

Color in horses. J. W. Thompson. Breeder's Gaz 69:1020 My 11 '16

Color inheritance in mammals. S. Wright. J Heredity 8:224-35, 373-8, 426-30, 473-89, 521-7, 561-4; 9:33-8, 87-90, 139-44, 227-40 My, Ag-D '17, Ja-Mr, My '18

Color inheritance in swine. B. O. Severson. il J Heredity 8:379-81 Ag '17; Same. Int R Sci & Prac Ag 9,no 1:80-3 Ja '18

Color of hens' legs. M. K. Boyer. Am P Advocate 25:726 N '17

Coloration of birds. A. A. Allen. il Am For 22: 461-7 Ag '16



**Color of animals—Continued**

- Correlation between body pigmentation and egg production in the domestic fowl. J. A. Harris and others (Genetics, 2, no. 136-77p. '17). Exp Sta Record 38,no 3:276 '18
- Feeding during molt to improve color and gloss of feathers. L. J. Brosemer. Reliable P J 23:708-9+, 776+, 868-9+ S-N '16
- Inheritance of coat colours in horses. W. S. Anderson. Int R Sci & Prac Ag 7,no 3:399-400 Mr '16
- Inheritance of color and horns in blue gray cattle. O. Lloyd-Jones and J. M. Evvard. bibliog il la Ag Exp Research B 30:67a-106a '16
- Inheritance of color in horses. L. P. McCann. Breeder's Gaz 69:1331 Je 29 '16
- Inheritance of Jersey colors. J. J. Hooper. Jersey B 37:1009 Je 26 '18; Same. Breeder's Gaz 74:264 Ag 22 '18
- Pigmentation in guinea-pig hair. H. R. Hunt and S. Wright. J Heredity 9:178-81 Ap '18
- Sex-limited color in Ayrshire cattle. E. N. Wentworth. bibliog J Ag Research 6:141-7 Ap 24 '16
- Some breeding statistics. R. Branford. Ag J of India 12:573-8 O '17
- Sorrel color in horses. L. P. McCann. J Heredity 7:370-2 Ag '16
- Spotted asses. A. E. Jenks. il J Heredity 7: 165-8 Ap '16

**Color of flowers**

- Anthocyanins. W. Crocker. Bot Gaz 61:349-52 Ap '16
- Anthocyanins. C. J. West. Bot Gaz 64:255-60 S '17
- Colours of flowers. Gard Chron (Lond) 60: 311; 62:130 D 30 '16, S 29 '17
- Heredity of color in phlox drummondii. A. W. Gilbert. il J Ag Research 4:293-302 Jl '15
- Reasons for the colors of the flower. J. H. Lovell. Gleanings 44:918 O 1 '16

**Color of fruit**

- Color as an indication of the picking maturity of fruits and vegetables. L. C. Corbett. il U S Ag Yearbook 1916:99-106; Same. Separate 686
- Iron and apple color. U. P. Hedrick. Rural N Y 75:584 Ap 8 '16

**Color of fungi**

- Endothia pigments. L. A. Hawkins and N. E. Stevens. il Am J Bot 4:336-53 Je '17

**Color of insects**

- Color and color-pattern mechanism of tiger beetles. V. E. Shelford. (Ill. biol. monographs, v. 3, no. 4) 135p bibliog il (Ap) '17 Univ. of Illinois, Urbana

**Color of meat.** See Hemoglobin

**Color of plants**

- Autumn foliage. Gard Chron Am 21:365 O '17
- Causation of variegated leaves. il Gard Chron Am 20:22-3 Ja '16
- Color classification of wheat. Am Soc Agron J 9:281-4 S '17
- Colour of the seed in the descendants of a natural hybrid of two varieties of phaseolus vulgaris, in Sweden. J. Lundberg and A. Ackerman. Int R Sci & Prac Ag 8,no 11: 1091-3 N '17
- Coloration of the seed coat of cowpeas. A. Mann. il J Ag Research 2:33-56 Ap '14
- Flavones of rhus. C. E. Sando and H. H. Bartlett. Am J Bot 5:112-19 Mr '18
- Inheritance of endosperm color in maize. O. E. White. bibliog Am J Bot 4:396-406 Jl '17
- Observations on the inheritance of anthocyan pigment in paddy varieties. G. P. Hector. Int R Sci & Prac Ag 8,no 8:1113-14 Ag '17
- Preservation of phytopathological specimens in their natural colors. O. Butler. Phyt 8: 66-8 F '18
- Protective coloration in seeds of Bolivian maize. J. H. Kempton. il J Heredity 8:200-2 My '17
- Researches on the pigmentation of the ear of wheat in Russia. Int R Sci & Prac Ag 9,no 1:45-7 Ja '18
- Variegated leaves. il Rural N Y 75:197 F 5 '16
- See also Color of flowers; Color of fruit; Color of fungi; Color of vegetables

**Color of soils**

- Loess soils of the Nebraska portion of the transition region; humus, humus-nitrogen and color. F. J. Alway and M. J. Blish. Soil Sci 1:239-58 Mr '16
- Organic matter of the soil: a study of carbon and nitrogen in seventeen successive extracts; with some observations on the nature of the black pigment of the soil. R. A. Gortner. Soil Sci 2:539-48 D '16

**Color of vegetables**

- Color as an indication of the picking maturity of fruits and vegetables. L. C. Corbett. il U S Ag Yearbook 1916:99-106; Same. Separate 686
- Colors in vegetable fruits. B. D. Halsted. J Heredity 9:18-23 Ja '18

**Color prints**

- Prints for the country home. F. Weitenkamp. il Country Life 33:27-40 D '17

**Colorado**

- See also Rocky mountains; also subhead Colorado under special subjects, e.g. Agriculture—Colorado, Dairying—Colorado

**Entomologist, State**

- Ninth annual report 1917. (C. 26) 52p '18 State Entomologist, Fort Collins, Colo.

**Forester, State**

- 3d biennial report, 1915-1916. 22p '16 Colo. State forester, Fort Collins

**Industries and resources**

- Colorado demands adequate drainage. A. A. Weiland. Irr Age 31:104 My '16

**Colorado agricultural college**

- Dairying at Colorado agricultural college. il Kimball's D F 14:583 S 15 '16

**Extension service**

- Annual report, year ending June 30, 1917. il Colo Ag Ext Rep 1917:1-32 '17

**Colorado agricultural experiment station**

- 29th annual report, 1916. Colo Ag Exp Rep 1916:1-39
- 30th annual report, 1917. Colo Ag Exp Rep 1917:1-32 '17

**Colorado beet growers' association**

- Colorado beet growers combine. Rural N Y 76: 279 F 24 '17

**Colorado honey producers' association**

- Annual meeting, Denver, Dec. 27-28, 1915. W. Foster. Am Bee J 56:170 My '16

**Colorado potato beetles**

- Colorado potato beetle. H. A. Gossard. il Ohio Ag Exp B v 2:199-202 Je '17
- Colorado potato beetle. G. W. Herrick. il Cornell Rural School Leaflet v 11, no 1:118-21 '17
- Colorado potato beetle. V. A. Lowry. Purdue Ag 12:569 Je '18
- Fighting the potato bug. J. G. Milward. il Wis Ag Ext C 83 4p '17
- German troops battle potato bugs. B. F. Lutzman. Country Gent 81:1308 Jl 1 '16
- Life-history of the Colorado potato beetle. P. M. Johnson and A. M. Ballinger. il J Ag Research 5:917-26 F 14 '16
- Poison the potato beetle. G. L. Tiebout. Prog F 32:529 Ap 28 '17
- Potato bug—description and methods of control. P. L. Guilbeau. Prog F 31:662 My 13 '16
- Spraying for potato beetles. C. W. Waid. Market Growers J 19:63 Ag 1 '16

**Colorado river**

- Colorado river drainage basin. J. M. Hess. Irr Age 33:41-2, 73-5, 106-9, 142-4, 170-3, 188-91, 204-7 Ap-N '18
- Notes from southeastern California; Imperial Valley flood. P. B. Crosby. Rural N Y 75: 221 F 5 '16
- Resolution in reference to Colorado river regulation. Irr Age 33:53 Ap '18
- West basin of the Colorado river. J. M. Hess. map Irr Age 33:8-11 Mr '18

**Colorado river—Continued****Grand canyon**

Grand canyon of the Colorado. M. Daniels. *il*  
Am For 22:202-8 Ap '16

**Coloring matter**

Coloring matters in foods. bibliog Assn Offic  
Ag Chem J 2,no 2,pt 2:155-69 Ag '16

*See also* Dyes and dyeing

**Analysis**

Report on colors. W. E. Mathewson. Assn  
Offic Ag Chem J 2,no 3,pt 1:160-9 N '16

Separation and identification of food coloring  
substances. W. E. Mathewson. U S Ag B  
448:1-56 '17

**Colrain fruit growers' cooperative association.**

Massachusetts fruit growers' association.  
H. M. Eastman. Rural N Y 76:959 Ag 11 '17

**Columbia highway**

Columbia highway in Oregon. H: L. Bowlby.  
*il* Am For 22:411-16 J1 '16

**Columbine leaf miners**

Columbine leaf-miner. E. N. Cory. *il* J Econ  
Entom 9:419-24 Ag '16

**Columbines**

Long-spurred hybrid aquilegia. *il* Country  
Gent 82:903 My 19 '17

National floral emblem. A. A. Hansen. Science  
(Science Press, Garrison, N.Y. 15c) n s 47:  
365-7 Ap 12 '18

New hybrid columbine. T. D. A. Cockerell.  
Bot Gaz 62:413-14 N '16

North American species of aquilegia. E. B.  
Payson. (U.S. Nat. herbarium Contribu-  
tions v. 20,pt. 4) 157p, pls 8-14 '18 Smith-  
sonian inst., Washington, D.C.

**Diseases and pests**

Wilt disease of the columbine. J. J. Tauben-  
haus. *il* Phyt 6:254-7 Je '16

**Colytic** process for preserving eggs and remov-  
ing taint from stale eggs. N Y Prod R 45:  
158 D 5 '17

**Comandra umbellata.** *See* Parasitic plants

**Combustion**

Ignition of gasoline by electricity. Power F  
25:22-3 S '16

Spontaneous combustion in hay and coal.  
A. R. Lamb. Wallaces' F 42:1214 S 7 '17

**Comfrey**

Comfrey, a healing herb. E. S. Johnson. Gard  
M 22:208 Ja '16

**Commerce**

*See also* Export trade; Marketing; Rail-  
roads; Shipping; also names of articles of  
commerce, subhead Transportation, and  
names of countries, subheads Commerce  
and Industries and resources

**Statistics****Laws**

Décret relatif à l'organisation de la statis-  
tique du commerce extérieur à l'Uruguay.  
Int Yearbook Ag Leg 1916:4-13 '17

Loi concernant les services de la statistique  
de l'importation et de l'exportation et du  
transit aux Pays-Bas. Int Yearbook Ag Leg  
1916:2-4 '17

**Commercial correspondence**

Good sales letters—and one that failed to  
sell. H. K. Goodall and F. Pyle. System  
on the Farm 1:254-6 S '17

Neglected corner of farm business. A. C.  
Page. *il* O Judd Farmer 62:3 Mr 31 '17

**Commercial geography.** *See* Geography, Com-  
mercial

**Commission markets**

Teamwork between the farmer and his agent.  
C. E. Bassett. U S Ag Separate 736:1-7 '18

**Commission merchants**

Another market twist. O Judd Farmer 60:14  
My 20 '16

Cole law bulletin; list of licensed commission  
merchants. N Y Prod R 41:1019 Ap 5 '16

Commission man and shipper. Country Gent  
81:1369 J1 15 '16

Commission man as a market necessity. E. S.  
Gill. Better Fruit 10:41+ F '16

Commission merchant. O. T. Newhouse.  
Coop Manager & F 6:38-9 Ag '17

Commission merchant and the farmer. Am  
Coop J 11:997-8 Je '16

Commission merchants and the new food  
control bill. Coop Manager & F 6:22-4 J1  
'17

Distribution as the farmer sees it. E. Daven-  
port. *il* Country Gent 82:1314-15 Ag 25 '17

Farmer's share of retail prices. L. D. H.  
Weld. *il* Country Gent 82:1814-15 N 24 '17

Food dealers to be licensed. O Judd Farmer  
63:6 O 20 '17

Food situation; a general consideration of  
conditions and the objects of government  
control. G. H. Powell. N Y Prod R 44:1066  
O 24 '17

He was caught red-handed. W. C. Covey. Am  
Fruit Grower 28:12 D '18

Let Congress pass commission merchant law!  
Green's Am Fruit Grower 37:11 D '17

Manual of laws pertaining to the Department  
of farms and markets; sale of farm produce  
on commission. N Y Farms & Markets Dept  
Ag B 108:167-72 Je '18

Marketing on consignment. J. J. Castellini. W  
Va Ag Dept B 13:37-40 Ja '16

Necessary middleman. E. P. Sandsten. Coun-  
try Gent 81:1574 Ag 26 '16

Plain words to the public; the Wicks and  
Perkins report. Rural N Y 76:45 Ja 13 '17

Problems of distribution and the middlemen.  
Ag Digest 1:331-2 Mr '17

Selling on commission and buying direct from  
producers. J. H. Killough. N Y Ag Dept B  
79,pt 1:906-10 Ja '16; Same. N Y Ag Dept  
Rep 1916,pt 2:906-10 '17

Teamwork between the farmer and his agent.  
C. E. Bassett. U S Ag Yearbook 1917:321-5

Terminal market in New York; cutting out  
the profitless parasites. Rural N Y 76:15 Ja  
6 '17

Two sides. Gleanings 44:782 S 1 '16

What's wrong with the middleman? E. P.  
Miller. *il* Country Gent 82:1594+ O 20 '17

*See also* National league of commission  
merchants

**Directories**

List of commission merchants bonded and  
licensed for the year July 1, 1917, to June 30,  
1918, pursuant to the provisions of article  
12-a of the agricultural law as amended.  
N Y Farms & Markets Dept Ag B 101:1-32  
N '17

List of fruit buyers. W Va Ag Dept B  
27:1-22 '17

**Commonwealth advisory council of science and  
industry.** *See* Council of science and indus-  
try

**Communities.** *See* Village communities—Eng-  
land

**Community canning**

Bankers: organize a community canning  
center—help Mr Hoover. *il* Banker-F 4:7 Ag  
'17

Canning for the community; how an Idaho  
town stopped food waste and fed itself.  
R. R. Howard. *il* Country Gent 83:6 Je 22  
'18

Community cannery. J: R. McMahon. *il* Coun-  
try Gent 82:6-7 Ap '18

Community canning. M. E. Anderson. Ohio F  
141:510 Ap 6 '18

Community canning in De Kalb co., Ill. Mrs  
S: E. Bradt. O Judd Farmer 64:682 Je 29  
'18

How to cooperate in drying and canning. *il*  
Gard M 27:224 Je '18

**Community centers.** *See* Social centers

**Community clubs**

Community club. L. O. Lantis. Ohio F 140:  
423, 446 N 10-17 '17

Community club in Woodford. O Judd Farmer  
61:15 N 4 '16

Community clubs. Wallaces' F 43:1000 J1 5 '18

Community clubs have changed country life.  
E. Lloyd. 6p *il* n.d. S. C. Toof and co., Mem-  
phis



**Community clubs—Continued**

Community war clubs win out. E. Lloyd. *il Banker-F* 5:10-11 Ag '18  
County with community clubs. Wallaces' *F* 41:839 Je 9 '16  
Farmers' clubs; with select bibliography for use in community clubs. L. O. Lantis. *il Ohio Ag Ext B v* 13, no 6 20p '17-'18  
How southern community clubs have changed country life. E. Lloyd. *il Banker-F* 4:5 O '17  
How to build up rural communities through co-operative clubs. B. R. Murphy. (*In Agricultural extension*, p 88-92) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago  
Pettis county's twelve clubs. J. Deare. *County Gent* 83:54 Mr 9 '18  
Rural club. Hoard's *D* 53:228 Mr 2 '17  
Rural community club in Iowa. I. L. Mast. *Am Coop J* 12:723 Jl '17  
Two successful community clubs. Wallaces' *F* 42:845 My 25 '17  
Tying city and country together. B. F. Faast. Hoard's *D* 52:916 Ja 19 '17  
Work of our agricultural club. Mrs G. R. Payton. *Mo Ag Bd B v* 14:21-5 Ap '16

**Programs**

Programs and suggestions for rural schools and community meetings. (C. 111) 17p n.d. Ill. Supt. of public instruction, Springfield

**Community fairs**

Community fair. J. S. Moran. *il Farmers' B* 870:1-11 '17  
Community fair—a factor in rural education. S. G. Rubinow. *School and Society* (Science Press, Garrison, N.Y. 10c) 6:96-101 Jl 28 '17  
How a community fair helps. W. I. Wright. *Prog F* 31:1050 S 2 '16  
How to hold a community fair. R. Thomas. *il Prog F* 32:989 S 22 '17  
How to succeed with community fairs. C. Davis. *il Prog F* 32:901 Ag 25 '17  
Local fairs. L. O. Lantis. *Ohio F* 141:790 Je 22 '18  
Make plans now for a community fair. W. N. Hutt. *Prog F* 32:469 Ap 14 '17  
Making a go of the community fair. C. Davis. *il Country Gent* 82:1409 S 15 '17  
Our community fair. *Prog F* 32:826 Jl 28 '17  
Successful community fair. *Rural N Y* 75:1045 Ag 5 '16  
Successful community fair. R. Thomas. *il Prog F* 31:1465 D 23 '16  
Test of a community. H. B. Potter. *il Purdue Ag* 11:9-10 Ja '17

**Community gardens**

Allotments in the year 1793 and in 1917. *il Gard Chron (Lond)* 62:256 D 29 '17  
Community potato crop. *Rural N Y* 77:32 Ja 12 '18  
Experiences of a garden supervisor. *Rural N Y* 76:836 Je 30 '17  
\* Ideal village. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 11:48-9 Ap 20 '18  
Our first year war gardens. G. Tabor. *il Country Life* 33:67-9 F '18  
Production of food in urban centres: Birkenhead. *J Bd Ag* 24:551-5 Ag '17

**Community institutes**

Community institutes; notes on the purpose and the method of the institutes held in twenty-three cities in 1915 and 1916. W. S. Bittner. (B. v. 2, no. 5) 27p '17 Extension division, Indiana univ., Bloomington

**Community kitchens**

\* Communal kitchens and the birth-rate. Lens. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 10:277-8 D 22 '17  
Communal kitchens in European countries. A. L. Whitney. *Monthly Review* (U.S. Bur. of labor statistics, Washington, D.C.) 6:1420-5 Je '18  
\* Community kitchen in a neighborhood house. F. Ingram. (Pamph. 146) 5p 5c '18 Nat. conference of social work, Kansas City, Mo. England is turning to communal kitchens as a means of conserving food. Six of these kitchens have already been established under Lord Rhondda, and have been fairly suc-

cessful. Nearly 50,000 meals have been served the past eight months in two kitchens maintained in West Ham, near London. The average charge has been 10 cents per meal to consumers, although nourishing meals are sold for as little as 2 cents. A communal kitchen with capacity for 1,000 meals daily, opened recently in North Woodwich Road, represented an investment of only \$1,500 and gives great economies in fuel and labor, as well as furnishing properly cooked foods with full nutritive value and the avoidance of waste

Public service and the private kitchen; with discussion. C. P. Gilman. (*In Sagamore sociological conference*, Proc., 1917, p. 33-42) '17 W: C. Ewing, sec., 985 Washington st, Boston

\* Science of national kitchens. Lens. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 11:68-9 Ap 27 '18

See also People's kitchens

**Bibliography**

List of references on community kitchens. 9p mim (My 18) '18 U.S. Library of Congress, Division of bibliography, Washington, D.C.

**Community life**

Church of the small community and the conservation of community spirit. E. R. Groves. *Rural Manhood* 7:94-6 Jl '16  
Community center; what it is and how to organize it. H: E. Jackson. (B. 1918, no. 11) 52p *il* '18 U.S. Bur. of educ., Washington, D.C.  
Community organization. T: N. Carver. *N H Ag Dept Rep v* 34:41-53 '16  
Community spirit and rural development. G. M. Frier. *Purdue Ag* 13:103-4 D '18  
Community Sunday program. D. E. Lorentz. *Rural Manhood* 7:69-70 Ap '16  
Duty of the farmer to the community. A. R. Mann. *il N Y Farms & Markets Dept Ag B* 97:291-305 Jl '17: Same. *Am Assn Farmers' Inst Workers* 1:90 1917:65-73 '18  
Mobilizing the rural community. E. L. Morgan. *il Mass Ag Ext B* 23:1-54 '18  
Penn Center picnic. E. J. Bosley. *il Wallaces' F* 42:779 My 11 '17  
\* Plan for a definite community program and examples of work done by rural communities. (Sup. to Extension service news, v. 1, no. 4) 4p maps (O) '18 N.Y. State coll. of ag., Ext. dept., Ithaca  
School as a factor in community life. *Am City* —Town and county ed (Tribune bldg., N.Y. 35c) 17:515-16 D '17  
Social life of the rural community. G. Dawson. *il Purdue Ag* 11:54-5 F '17  
Working with other folks: suggestions for January. C. Poe. *Prog F* 32:1355 D 29 '17

**Community meat clubs.** See Meat clubs

**Community theater.** See Theater, Community

**Companion crops**

Doubling up crops. B. Howard. *il Country Gent* 83:37 Mr 2 '18  
Experience in intercropping. D. C. Kauffman. *Nat Stock & F* 41:1141 F 9 '18  
Growing orchard crops. C. I. Lewis. *Better Fruit* 12:12 Mr '18  
Intercropping. *Market Growers J* 18:316-17+ My 1 '16  
Intercropping and catch cropping in Belgium. *J Bd Ag* 24:646-9 S '17  
Inter-cropping in Ohio. J. W. Henceroth. *il Ohio F* 140:430 N 10 '17  
Intercropping in orchards. C. I. Lewis. *il Country Gent* 83:22 Mr 9 '18  
Intercropping of young irrigated orchards. R. S. Vaile. *Cal Ag Exp C* 194:1-11 '18  
Intercropping strawberries. G. A. Balden. *Market Growers J* 22:112 F 1 '18  
Intercropping the orchard. E. H. Favor. *il Fruit-Grower* 28:214 Ap 1 '17  
Intercropping the young orchard—from an economic standpoint. M. C. Burritt. *il N Y Ag Dept B* 79, pt 1:794-802 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 2:794-802 '17  
Intercropping to keep up fertility and provide some cash. M. Rosby. *il Country Gent* 81:1631 S 2 '16

**Companion crops—Continued**

- Orchard intercrops. W. A. Radspinner. *Purdue Ag* 11:48-9 My '17  
 Planting the orchard and growing war crops. P. C. Stark. *Green's Am Fruit Grower* 38: 13 Mr '18  
 Vegetables in the orchard. J. T. Rosa, jr. *il Country Gent* 83:24 F 9 '18

**Compass**

- Hunting that buried treasure. *Rural N Y* 77: 1131 O 5 '18

- Compass and pack-saddle;** story. L. B. Miller. See weekly numbers of *National stockman* and farmer December 1, 1917-June 8, 1918

**Competition**

- My town. *il Country Gent* 82:2017+ D 22 '17

**Complement fixation test**

- Diagnosis of tuberculosis by complement fixation, with special reference to bovine tuberculosis. A. Eichhorn and A. Blumberg. *bibliog J Ag Research* 8:1-20 Ja 2 '17; Excerpts. *Int R Sci & Prac Ag* 8,no 5:758-60 My '17  
 Improved method for recovering trypanosomes from the blood of rats for antigen purposes in connection with complement fixation. F. H. Reynolds and H. W. Schoening. *J Ag Research* 14:573-6 S 23 '18  
 Specific and non-specific action of rabbit blood serum in the complement fixation test (*J. Immunology* 2, no. 2 F '17); Summary. *Mich Ag Bd Rep* 1917:275-80  
 Studies relative to the apparent close relationship between bact. pertussis and b. bronchisepticus. N. S. Ferry and H. C. Klix. *J Bact* 3:309-12 Jl '18

**Compost**

- Compost. K. Irwin. *Purdue Ag* 11:45 F '17  
 Compost pit; fall ditchings; general work. *Country Gent* 82:1317 Ag 25 '17  
 Disposal of vegetable waste. *Fruit-Grower* 27: 430 S 15 '16  
 Does composting kill weed seeds? J. F. Duggar. *Prog F* 33:144 F 2 '18  
 Experiments with sulfur-phosphate composts conducted under field conditions. J. G. Lipman and H. C. McLean. *Soil Sci* 5:243-50 Mr '18  
 Garden compost, etc. *Prac F* 112:264 Jl 1 '16  
 New light on composting. J. F. Duggar. *Prog F* 31:319 Mr 4 '16  
 Oxidation of sulfur by microorganisms in its relation to the availability of phosphates. H. C. McLean. *bibliog Soil Sci* 5:251-90 Ap '18

- Concentration of schools.** See *Rural schools—Consolidation*

**Concrete**

- Concrete mixtures. *Hoard's D* 52:73 Ag 11 '16  
 How concrete is made. H. H. Rice. *Farm Eng* 3:223 Ap '16  
 How to make concrete on the farm. *Va Ag Dept B* 109:127-9 '16  
 How to use water, gas tar and coal tar on concrete. *Irr Age* 31:103 My '16  
 Oil-mixed Portland cement concrete; with physical tests. L. W. Page. *il U S Ag B* 230: 1-26 '15  
 Proportioning concrete. *Rural N Y* 75:72 Ja 15 '16  
 Selecting concrete material. G. W. Iverson. *O Judd Farmer* 61:14 O 14 '16

**Aggregate**

- Influence of grading on the value of fine aggregate used in Portland cement concrete road construction. F. H. Jackson, jr. *J Ag Research* 10:263-74 Jl 30 '17

**Testing**

- Cracks in concrete. *Weekly N L* 5:6 D 19 '17  
 Effect of temperature on the strength of concrete. *Int R Sci & Prac Ag* 7,no 4:572 Ap '16  
 Influence of grading on the value of fine aggregate used in Portland cement concrete road construction. F. H. Jackson, jr. *J Ag Research* 10:263-74 Jl 30 '17

**Concrete, Reinforced**

- Tests of three large-sized reinforced-concrete slabs under concentrated loading. A. T. Goldbeck and E. B. Smith. *il J Ag Research* 6:205-34 My 8 '16

**Testing**

- Tests of a large-sized reinforced-concrete slab subjected to eccentric concentrated loads. A. T. Goldbeck and H. S. Fairbank. *J Ag Research* 11:505-20 D 3 '17

- Concrete barns and stables.** See *Barns and stables, Concrete*

**Concrete blocks**

- Concrete block machine. *Rural N Y* 76:1438 D 22 '17

- Concrete bridges.** See *Bridges, Concrete*

- Concrete chimneys.** See *Chimneys, Concrete*

- Concrete cisterns.** See *Cisterns, Concrete*

**Concrete construction**

- Cold weather concrete work on the farm. *Am Coop J* 12:330 D '16  
 Concrete construction in cold weather. H. C. Campbell. *il Power F* 25:9 D '16  
 Concrete construction on the farm—its durability and economy. W. C. Dalzell. *N Y Ag Dept B* 80:1478-86 F '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1478-86 '17  
 Concrete crank. C. W. Covey. *Nat Stock & F* 40:719 O 14 '16  
 Concrete feeding floors, barnyard pavements and concrete walks. *Sp il '16 Portland cement assn., Chicago*  
 Concrete fits in the dairy farm scheme. H. C. Campbell. *il Kimball's D F* 16:210+ Mr 15 '18  
 Concrete for the farm. *Ag Digest* 2:713 N '17  
 Concrete house on the farm. H. C. Campbell. *il Hoard's D* 52:909+ Ja 19 '17  
 Concrete in cold weather. H. A. Roberts. *il Country Gent* 82:1912-13 D 8 '17  
 Concrete lining as applied to irrigation canals. S. Fortier. *il U S Ag B* 126:1-86 '14  
 Concrete troughs, tanks, hog wallows, manure pits and cisterns. *34p il '16 Portland cement assn., Chicago*  
 Construction of concrete feeding floors. W. G. Kaiser. *il Bldg Age* (243 W. 39th st, N.Y. 25c) 40:208-9 Ap '18  
 Essentials of concrete construction on the farm. *il Am Coop J* 11:632 F '16  
 Farm structures. F. L. Morrison. *il Farm Eng* 53:3-4 F '17  
 Farmer's handbook on concrete construction. 20p '16 *Portland cement assn., Chicago*  
 Fighting rats and disease with concrete. F. W. Ives. *Ohio F* 142:158 Ag 24 '18  
 Making concrete on the farm. F. H. Sweet. *Green's Fruit Grower* 37:12 Mr '17  
 Proportioning concrete mixtures and mixing and placing concrete. 22p *il '16 Portland cement assn., Chicago*  
 Protecting concrete work done in warm weather. 7p *il '17 Portland cement assn., Chicago*  
 Protection of newly placed concrete. *Irr Age* 33:183 S '18; Same. *Power F* 27:18 O '18  
 Repairing leaks in concrete structures. H. C. Campbell. *Hoard's D* 53:208 F 23 '17  
 Simple design marks cold storage building for apples. S. T. Smith. *il plans Eng News-Record* (10th av at 36th st, N.Y. 15c) 80: 1175-7 Je 20 '18  
 Timely work with concrete. F. W. Ives. *Ohio F* 140:130 Ag 25 '17  
 Use of concrete on the farm. F. C. Fenton. *il la Ag Ext B* 42:1-16 '16  
 Uses for concrete on the farm. *Prac F* 114:98 Mr 1 '18  
 Waterproofing concrete. *Rural N Y* 77:674 My 11 '18  
 Waterproofing concrete. P. T. Hines. *Country Gent* 83:15 Ja 12 '18  
 Why farmers fail with concrete. *Power F* 25: 43 F '16  
 See also *Barns and stables, Concrete; Bridges, Concrete; Chimneys, Concrete; Cisterns, Concrete; Dipping vats, Concrete; Drain tile, Concrete; Fence posts, Concrete; Fireproof construction; Floors, Concrete;*



**Concrete construction—Continued**

Foundations, Concrete; Grain bins, Concrete; Grain elevators, Concrete; Guide posts, Concrete; Ice houses, Concrete; Posts, Concrete; Roads, Concrete; Septic tanks, Concrete; Ships, Concrete; Sidewalks, Concrete; Silos, Concrete; Smokehouses, Concrete; Stairways, Concrete; Swine houses, Concrete; Tile, Concrete; Walls, Concrete; Water tanks, Concrete

**Study and teaching**

College instruction in concrete construction. A. J. R. Curtis. *Am Soc Ag Eng Trans* 10, no 2:156-60 '17

Scoates concrete construction laboratory manual. 34p '17 D. Scoates, Miss. ag. and mechanical college, Agricultural College, Miss.

**Concrete dipping vats.** See Dipping vats, Concrete

**Concrete drain tile.** See Drain tile, Concrete

**Concrete fence posts.** See Fence posts, Concrete

**Concrete floors.** See Floors, Concrete

**Concrete foundations.** See Foundations, Concrete

**Concrete grain blns.** See Grain bins, Concrete

**Concrete grain elevators.** See Grain elevators, Concrete

**Concrete ice houses.** See Ice houses, Concrete

**Concrete mixers**

Concrete mixer on the farm. K. J. T. Ekblaw.

*Country Gent* 82:1322 Ag 25 '17

Concrete mixers for community use—elevator should handle. *Am Coop J* 11:516 Ja '16

Economy in a concrete mixer. H. A. Roberts.

*il Country Gent* 82:2052-3 D 29 '17

Home-made concrete mixer. H. G. Niesley. *il Penn State F* 10:6 Ja '17

**Concrete posts.** See Posts, Concrete

**Concrete roads.** See Roads, Concrete

**Concrete septic tanks.** See Septic tanks, Concrete

**Concrete ships.** See Ships, Concrete

**Concrete sidewalks.** See Sidewalks, Concrete

**Concrete silos.** See Silos, Concrete

**Concrete smokehouses.** See Smokehouses, Concrete

**Concrete stairways.** See Stairways, Concrete

**Concrete swine houses.** See Swine houses, Concrete

**Concrete tile.** See Tile, Concrete

**Concrete walls.** See Walls, Concrete

**Concrete water tanks.** See Water tanks, Concrete

**Condensed milk.** See Milk, Condensed

**Condenseries**

Condensed milk plant to suspend (?). H. H. Lyons. *Hoard's D* 55:1024 Jl 12 '18

Creamery or condensery? *N Y Prod R* 44:554 Ag 1 '17

Farmer and the condenser. J. H. McKenney. *Hoard's D* 54:575 N 16 '17

List of butter and cheese factories, milk stations and condensing plants in New York state. *N Y Ag Dept B* 88:1-72 O '16

Public spirited condensery. *O Judd Farmer* 62:9 Mr 24 '17

See also Milk, Condensed

**Condiments**

**Analysis**

Spices and other condiments. *Assn Offic Ag Chem J* 2, no 3, pt 2:317-26 N '16

**Conduct of life**

Assets and liabilities. G. M. McPherrin. *Wallaces' F* 43:701 Ap 19 '18

Big brother. J. Field. *Rural Manhood* 7:127-30 O '16

Prickly pears and prickly people. H: Wallace. *Wallaces' F* 41:312 F 25 '16

See also Ethics

**Cone beetles**

Cone beetles: injury to sugar pine and western yellow pine. J: M. Miller. *il U S Ag B* 243:1-12 '15

**Confectionery**

Candies cakes and cookies. 12p *il 10c '16 Ladies' home journal*, Independence sq., Philadelphia

Candying fruits and flowers. G. Shull. *O Judd Farmer* 61:22 Jl 15 '16

Christmas candies. *Prog F* 32:1317 D 15 '17

Christmas candies for home or for market. *Nat Stock & F* 40:800 N 4 '16

Christmas candies without sugar. *il J Ag (Quebec)* 22:98 D '18

Christmas candy. *Green's Fruit Grower* 36:13 D '16

Christmas candy. F. D. Wills. *il Purdue Ag* 11:46-7 D '16

Confectionery industry. *Pa Ag Dept Dairy B v* 15:19-20 O '17

How to make honey candy from candied extracted honey or from candied comb honey. Mrs C. W. Aeppler. *Am Bee J* 58:131 Ap '18

Liberty candies. *Nat Stock & F* 41:895 D 15 '17

More candies. S. E. Blau. *Nat Stock & F* 40:945 D 16 '16

My holiday candies. M. Kintigh. *Country Gent* 81:2179 D 16 '16

Wartime Christmas candies. V. C. Lee. *O Judd Farmer* 63:15 D 22 '17

**Statistics**

Commercial stocks of candy, Jan. 1. *U S Food Surveys* 1:14-16 Je 14 '18

Commercial stocks of candy, July 1. *U S Food Surveys* 2:12-14 S 18 '18

**Conference of agricultural, live stock, irrigation and engineering societies of Idaho**

Resolutions passed by the joint conference held at Idaho Falls, Jan. 14-19. *Irr Age* 33:26 Mr '18

**Conference of agricultural representatives, St Louis.** See Agricultural conference, St Louis, 1917

**Conference of agricultural scientists**

Conference held at Melbourne, Nov. 9-16, 1917. *J Dept Ag S Australia* 21:388-90 D '17; Same. *J Dept Ag Victoria* 15:751-3 D '17

**Conference of cereal pathologists**

Meeting, 1918, Lafayette, Indiana. C: W. Hungerford. *Science (Science Press, Garrison, N. Y. 15c) n s* 48:148-50 Ag 9 '18

**Conference of cut-over lands in the South.** See Cut-over land conference of the South

**Conference of dairy interests.** See Dairy conference

**Conference on agricultural legislation**

First conference, Albany, N.Y., Dec. 10, 1915. *Hoard's D* 50:791 Ja 7 '16

**Conference on irrigation, credits, drainage, Salem, Ore.**

Conference, Salem, Mar. 9-10, 1916. *Irr Age* 31:90 Ap '16

**Conference on rural education**

Conference, 1918, Worcester, Mass. Education (120 Boylston st, Boston 35c) 38:733-91 Je '18

**Conference on urban and rural development in Canada**

Report of conference held at Winnipeg, May 28-30, 1917. 98p *Canada Comm. of conservation, Ottawa*

Includes: Rural production and development, by Jas. W. Robertson; Civic efficiency and social welfare in planning of land, by W. F. Burditt

**Confessions of a novice.** *Gard Chron (Lond)* 63:111, 195 Mr 16, My 11 '18

**Conglutination test**

Conglutination test for the diagnosis of glanders. H. W. Shoening. *bibliog J Ag Research* 11:65-75 O 15 '17

Conglutination test with special reference to the diagnosis of glanders. C. P. Fitch. *bibliog Am Vet M Assn J* 48:566-74 F '16

**Congo, Belgian****Agricultural department**

Organisation of the agricultural department in the Belgian Congo. B. F. Fallon. *Int R Sci & Prac Ag* 8,no 2:177-85 F '17

**Congregational love feast**; story. B. B. Kaiser. *Ohio F* 142:175 Ag 24 '18

**Congrès international de l'enseignement ménager**. See International congress for teaching home economics

**Conifers**

Best hardy conifers. *Gard Chron* (Lond) 59: 57 Ja 29 '16

Bisporangiate cones of *pinus Montana*. W. N. Steil. *il Bot Gaz* 66:68 Jl '18

Color in conifer planting. *il Gard Chron Am* 22:127 Ap '18

Conifers and taxads of Japan, by E. H. Wilson. Review. *il Gard Chron* (Lond) 61:179 My 5 '17

Conifers of the northern Rockies. J. E. Kirkwood. (B. 1917,no. 53) 61p il '18 U.S. Bur. of educ., Washington, D. C.

Development of Santol's bars in *pinus inops*. W. Rushton. *bibliog il Ann Bot* 30:419-25 Jl '16

Evolution of forest types. *For Quar* 14:504-8 S '16

Experimental investigations on the genus *drimys*. E. C. Jeffrey and R. D. Cole. *Ann Bot* 30:359-68 Jl '16

Ground-wood pulp. J. H. Thickens and G. C. McNaughton. *il maps U S Ag B* 343:1-151 '16

Interrelationships of the taxineae. M. C. Bliss. *il Bot Gaz* 66:54-9 Jl '18

Laboratory tests on the durability of American woods. C. J. Humphrey. *il Mycol* 8:80-92 Mr '16

Miscellaneous conifers of the Rocky Mountain region. G. B. Sudworth. *il maps U S Ag B* 680:1-44 '18

Moving the farm south. *il Wallaces' F* 41:160 F 4 '16

Notes on conifers; abies firms. A. B. Jackson. *il Gard Chron* (Lond) 64:137 O 5 '18

Notes on conifers; abies Fraseri. A. B. Jackson. *il Gard Chron* (Lond) 63:215 My 25 '18

Notes on conifers; callitris oblonga. A. B. Jackson. *Gard Chron* (Lond) 62:3 Jl 7 '17

Notes on conifers; cupressus glabra. A. B. Jackson. *il Gard Chron* (Lond) 61:95 Mr 3 '17

Notes on conifers; cupressus obtusa. A. B. Jackson. *il Gard Chron* (Lond) 59:278 My 27 '16

Notes on conifers; prumnopitys elegans. A. B. Jackson. *il Gard Chron* (Lond) 63:12 Ja 12 '18

\* Notes on some North American conifers based on leaf characters. L. W. Durrell. (Contribution 66) 519-82p *bibliog il '17 Ia*. State coll., Dept. of botany, Ames

Relative resistance of various conifers to infection with creosote. C. H. Teesdale. *il U S Ag B* 101:1-43 '14

Reproduction in the coniferous forests of northern New England. B. Moore. *bibliog Bot Gaz* 64:149-58 Ag '17

Significance of resinous tracheids. S. J. Record. *Bot Gaz* 66:61-7 Jl '18

Structure of the bordered pits of conifers and its bearing upon the tension hypothesis of the ascent of sap in plants. I. W. Bailey. *il Bot Gaz* 62:133-42 Ag '16

Suspensor and early embryo of *pinus*. J. T. Buchholz. *bibliog il Bot Gaz* 66:185-228 S '18

See also Christmas trees; also names of conifers, e.g. Cedar, Evergreens, Fir, Hemlock, Keteleeria, Larch, Pine, Sequoia, Spruce, Yew

**Anatomy**

Note on the vegetative anatomy of *phorphaera Fitzgeraldi*. F. v. M. P. Groom. *il Ann Bot* 30:311-14 Ap '16

**Diseases and pests**

Blight of coniferous nursery stock. C. Hartley. *U S Ag B* 44:1-21 '13

Control of damping-off of coniferous seedlings. C. Hartley and R. G. Pierce. *il U S Ag B* 453:1-32 '17

Damping off control. *Am Flor* 46:256 F 19 '16

Effects of mistletoe on young conifers. J. R. Weir. *il J Ag Research* 12:715-18 Mr 18 '18

Forest insect investigation in Stanley park, Vancouver, British Columbia. R. N. Chrystal. *il Ag Gaz of Canada* 3:794-8 S '16

Host relationships of the North American rusts, other than gymnosporangiums, which attack conifers. A. S. Rhoads and others. *bibliog Phyt* 8:309-52 Jl '18

Hylobius pales as a factor in the reproduction of conifers in New England. E. E. Carter. *il Soc Am For Pro* 11:297-307 Jl '16

Insect damage to the cones and seeds of Pacific Coast conifers. J. M. Miller. *il U S Ag B* 95:1-7 '14

Mistletoe injury to conifers in the Northwest. J. R. Weir. *bibliog il U S Ag B* 360:1-39 '16

Practical method of preventing the damping off of coniferous seedlings. C. A. Scott. *il J For* 15:192-6 F '17

Red rot of conifers (B. 191). F. H. Abbott. *bibliog il (In Vt Ag Exp Report, 1915-1916)* 20p '16

*Sparassis radicata*, an undescribed fungus on the roots of conifers. J. R. Weir. *il Phyt* 7: 166-77 Je '17

Unidentified fungus injurious to the conifer *cedrus deodara* in India. H. M. Glover. *Int R Sci & Prac Ag* 9,no 4:519 Ap '18

See also Sequoia pitch moths

**Conifers, Fossil**

Early type of the abietineae (?) from the cretaceous of New Zealand. M. C. Stopes. *bibliog il Ann Bot* 30:111-25 Ja '16

**Coniophora**

Acidifying action of the basidiomycete coniophora cerebella on timber. I. Petri. *Int R Sci & Prac Ag* 8,no 10:1431-2 O '17

**Coniothyrium**

Dimorphism in coniothyrium pirinum Sheldon. C. H. Crabill. *il Am J Bot* 2:449-67 N '15

**Conn, Herbert William**, 1859-1917

Professor H. W. Conn: life and work. W. M. Esten. *por J Bact* 2:501-3 S '17

**Connecticut**

See also subhead Connecticut under special subjects, e.g. Agriculture—Connecticut, Dairying—Connecticut

**Domestic animals, Commissioner of**

\* Report for two years ending September 30, 1916. 23p il '16 The commissioner, Hartford  
Not available for distribution

**Entomologist, State**

16th report of the state entomologist, 1916. *il Conn State Ag Exp Rep* 1916, pt 2:65-146 '17

Partial list of contents: Controlling the gipsy and brown-tail moths; Destructive aphid on turnips; Control of aphids in fields of seed beets; White-marked tussock moth; Rose chafer; Experiments in controlling the striped cucumber beetle and the squash borer; Outbreak of the eight-spotted forer; Pine tip moth; Parallel spittle-insect on pine; Anti-mosquito work in Connecticut in 1916

17th report, for 1917. W. E. Britton. *il Conn State Ag Exp B* 203:231-370, 1-32pl '18

**Forester, State**

Report of the forester for 1916. *Conn State Ag Exp Rep* 1916, pt 6:379-427 '17

**Highway commissioner**

Annual report for the term beginning October 1, 1916 and ending September 30, 1917. (Pub. Doc. 36) 97p il '17 *Conn. Highway comr., Hartford*

Biennial report for the term beginning October 1, 1914, and ending September 30, 1916. (Pub. Doc. 36) 103p il '16 *Conn. State highway comr., Hartford*



**Connecticut agricultural college**

**Extension service**

Biennial report of the extension service for the two years ended September 30, 1916. *Conn Ag Coll Ext B* 3:1-46 '17

**Connecticut dairymen's association**

35th annual convention, Hartford, Conn., Jan. 25-27, 1916. *N Y Prod R* 41:580 F 2 '16; Kimball's *D F* 14:92+ F 15 '16  
36th annual convention, Hartford, Jan. 23-25, 1917. Hoard's *D* 53:102 F 9 '17  
37th annual convention, Hartford, Jan. 22-24, *N Y Prod R* 45:436 Ja 30 '18; *Rural N Y* 77:296 F 23 '18

**Connecticut poultry association**

Annual mid-summer meeting, Storrs, Aug. '16. *N. W. Sanborn. Am P Advocate* 24:724-5 S '16  
11th annual meeting, Hartford, Jan. 30-31. A. F. Hunter. *Reliable P J* 24:141+ Ap '17  
Summer meeting, Connecticut agricultural college, Storrs, Aug. 6-8, 1917. *Reliable P J* 24:640-1 O '17  
Summer meeting of 1917. *N. W. Sanborn. Am P Advocate* 25:603-4 S '17

**Connecticut state agricultural experiment station**

Report, 1916. 6 pts *Conn State Ag Exp Rep* 1916:1-63, 64-146, 147-84, 185-304, 305-77, 378-450 '16-'17  
Pt 1, Fertilizers, 1916; Pt 2, 16th report of the state entomologist, 1916; Pt 3. Commercial feeding stuffs, 1916; Pt 4. Food products and drugs, 1916; Pt 5, Report of the plant breeder, by D. F. Jones; Co-operative potato spraying in 1916, by G. P. Clinton; Report of orchard work at Mt. Carmel, 1911-1916, by E. M. Stoddard; Pt 6, Report of the forester; Tests of wheat; Tests of Babcock apparatus

**Connecticut vegetable growers' association**

Annual meeting, Hartford, Feb. 5. *Market Growers J* 22:132 F 15 '18  
Connecticut growers' outing at Wethersfield, August 27. *Market Growers J* 23:116 S 15 '18  
5th annual convention, Hartford, February 6-8, 1917. H. T. Huber. *Market Growers J* 20:150 F 15 '17  
Joint meeting with the Connecticut pomological society, Hartford, Feb. 1-3. H. F. Huber. *Market Growers J* 18:117-18 F 15 '16

**Consanguinity**

Consanguineous marriage. P. Popenoe. *J Heredity* 7:343-6 Ag '16

**Conservation at Oak Hill; story. H. Richmond.**

*O Judd Farmer* 64:35 F 2 '18

**Conservation of food. See Food conservation**

**Conservation of resources**

Biennial report of the State conservation commission of Wisconsin for the years 1915 and 1916. 160p il map '16 *Wis. State conservation comm.*, Madison

Includes: Commissioners' report and recommendations; Fisheries division; Protection of fish and game division; Forestry and park divisions; Statistics

**Conservation and regulation in the United States during the world war; an outline for a course of lectures to be given in higher educational institutions. C. R. Van Hise.**

2 pts 63; 233p '17 *U.S. Food administration*, Washington, D.C.

Conservation in relation to agriculture. G: E. Pratt. *N Y Ag Dept B* 92:30-9 F '17

Conservation law in relation to lands and forests; chapter 451, laws of 1916, as amended, 1918. 41p '18 *N. Y. State conservation comm.*, Albany

Gifts of land and water power. H. Reed. il *Irr Age* 31:117 Je '16

Moral element of conservation. C: W. Eliot. *Am For* 22:165-6 Mr '16

Our forests in time of war. *Am For* 22:341-4 Je '16

Proceedings of the 2d Pan-American scientific congress, Washington, D. C., Dec. 27, 1915-Jan. 8, 1916: Section 3, George M. Rommel, chairman. (v. 3) '17 *Pan-American union*, Washington, D. C.; \$1 Supt. of doc.

Public water power. G. Pinchot. *Am Flor* 46: 326 My 20 '16

Review of work of the Commission of conservation, C. Sifton. (Reprinted from 8th annual report of the Comm. of conservation) 16p '17 *Commission of conservation*, Ottawa, Canada

Save our water power. G. Pinchot. *Wallaces' F* 41:1567 D 1 '16

See also Forest conservation; Reclamation of land; also Canada—Conservation, Commission of

**Consolidated grain growers**

Canadian farmers' organization. G. C. Porter. *Wallaces' F* 43:1796 D 6 '18

**Consolidation of schools. See Rural schools—Consolidation**

**Construction. See Building**

**Consumers' leagues**

Organization by consumers. H. A. Smith. (*In* *Pan American scientific congress Pro.*, 1915, v. 3, p. 749-60) '17

**Contagion and contagious diseases. See Infectious diseases**

**Containers**

Canning outlook. J. R. McMahon. il *Country Gent* 83:3-4 Mr 23 '18

Cashing in on containers. H. A. Roberts. il *Country Gent* 83:8-10 Je 15 '18

Honey-container situation. *Gleanings* 45:428-30 Je '17

Neat packages that help sell. il *System on the Farm* 1:258 S '17

Substitutes for tin cans. Hoard's *D* 53:963 JI 6 '17

Substitutes for tin cans. *Int R Sci & Prac Ag* 9,no 2:248-9 F '18

See also Butter tubs; Fiber containers; Paper containers

**Contests, Agricultural. See Agricultural contests**

**Contests, Efficiency. See Efficiency contests**

**Contracts**

Dispositions réglementant la formation des contrats commerciaux. *Int Yearbook Ag Leg* 1916:408-10 '17

**Convallaria. See Lilies of the valley**

**Conveyancing**

See also Land titles; Torrens system

**Conveying machinery**

Labor saver that should be investigated. D. E Fryer. *Better Fruit* 13:3 Ag '18

**Convict labor**

Beekeeping as a prison industry. O. H. L. Wernicke. *Am Bee J* 56:311 S '16

Convict labor for road work; with appendix: A digest of state laws. J. E. Pennybacker and others. bibliog il plans *U S Ag B* 414: 1-218 '16

County jails as farm labor centers. O. F. Lewis. il *Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:215-16 Mr '18

14th biennial report of the prison division, Department of agriculture of Florida, 1915 and 1916. il *Fla Ag Dept Rep* (Prison Division) 1915-1916: 1-85 '17

Making the Rockies accessible; difficult road construction by convict labor. il *Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 17:502-3 D '17

Report on experimental convict road camp, Fulton county, Ga. H. S. Fairbank and others. il *U S Ag B* 583:1-64 '18

Something worth watching in Wisconsin. *Prac F* 112:24 Ja 15 '16

Use of convict labor on the public highways. il (*In* 5th Report, 1913-1916, p. 149-61) '17 *Ill. State highway dept.*, Springfield

**Cook, Albert John, 1842-1916**

Sketch. por *Cal State Comm Hort B v* 5:354-5 O '16

**Cooke, Mordecai Cubitt, 1825-1914**

Life and work. H. T. Güssow. *Phyt* 6:1-4 F '16

## Cookery

- Alabama chicken dinner. M. A. Parker. Rural N Y 75:1012 J1 22 '16
- All made without eggs. G. V. Gray. Country Gent 82:519 Mr 10 '17
- Are you a good cook? M. H. Neil. il Country Gent 82:225 F 3 '17
- Being sweet without sugar. M. G. Phillips. Am Bee J 58:198-9 Je '18
- Breakfast breads and cakes. M. E. Kramer. O Judd Farmer 60:19 Je 3 '16
- Breakfasts. Nat Stock & F 42:704 N 2 '18
- Camouflage cookery. Wallaces' F 42:1533 N 9 '17
- \* Christmas cakes and puddings. Delineator (Butterick bldg., Spring and MacDougal sts, N.Y. 20c) 93:28 D '18
- Christmas candies, cakes and pies. Prac F 113:433 D 15 '17
- Christmas recipes. H. A. Lyman. Rural N Y 77:1360 D 7 '18
- Conservation recipes and suggestions. il map Minn Ag Ext B 64:1-16 '18
- Conserving the food supply. M. Corbett. Rural N Y 76:291 F 24 '17
- Contribution to exactness in cookery. J Home Econ 8:503-4 S '16
- Cooking and serving. N. K. Jones. Country Gent 81:1635 S 2 '16
- Cooking for a crew; a Michigan farm woman's way of feeding the threshers. G. Swanger. Country Gent 83:36 J1 27 '18
- Cooking in glass. I. C. B. Allen. il Country Gent 81:1601 Ag 26 '16
- Cooking rules. Prog F 33:412-13 Mr 30 '18
- Cotton seed flour as a human food. A. E. Richardson. Texas Univ (Austin) B 1727:1-13 '17
- Cut the cooking cost. G. V. Gray. Country Gent 81:1955 N 4 '16
- Dairy products and their food value. Ia Ag Ext Short Course Notes 16:1-12 '17-'18
- Dairy recipes. See bi-weekly numbers of Kimball's dairy farmer
- Dinner of hog and hominy. Rural N Y 75:1344 O 21 '16
- Doing without; emergency recipes. B. E. Shapleigh. 15p 25c '17 Am. home economics assn., 19 W. 44th st., N.Y.
- Drying and serving fruits and vegetables in the home. J. M. Hoover. il Idaho Ag Exp B 110:19-28 '18
- Economical and healthful war time foods. Prog F 33:419 Mr 30 '18
- Economical diet and cookery in time of emergency. M. S. Rose and others. (Technical educ. B. 30) 8p '17 Teachers college, Columbia univ., N.Y.
- Emergency meals at low cost. Ia Ag Ext Short Course Notes 25:1-11 '17-'18
- Emergency recipes now being used in the Saint Louis food conservation schools. A. Chamberlin. (In Suggestions for food conservation, p. 78-100) '17 Women's central committee on food conservation, St Louis
- Family dinner for Christmas. Prog F 33:1379 D 14 '18
- Farm women talk war foods. Ohio F 141:576 Ap 20 '18
- Farmer's wife on food conservation. Rural N Y 76:1015 Ag 25 '17
- Fats and oils in cookery; Cooking temperatures. A. W. Williams and C. E. Gray. Ill Univ (Urbana) B v 14:1-19 J1 23 '17
- Food combinations; how to make use of left overs. Weekly N L 4:8 My 2 '17
- Food conservation to help win the war; recipes for saving wheat, sugar, meat, and fat. M. M. Lawrence. Texas Univ (Austin) B 1756:1-47 O 5 '17
- Food emergency demonstrations; milk and its products. N H Ag Ext C 27 4p '18
- Food emergency demonstrations; what to eat in war time. N H Ag Ext C 30 4p '18
- Food for the family. 15p 5c '17 N.Y. assn. for improving the condition of the poor, 105 E. 22nd st., N.Y.
- Food for young children. C. L. Hunt. il Farmers' B 717:1-20 '16
- Food preparation club; bread making. M. B. Richardson. il Ia Ag Ext Junior C 37:1-24 '16
- Food preparation club; vegetables, fruits and cereals. M. B. Richardson. il Ia Ag Ext Junior C 40:1-16 '16
- Food question. 96p il n.d. Pacific press pub. assn., Mountain View, California
- Food thrift. Mrs A. E. Harvey. Mass Bd of Educ (Boston) B v 2:1-11 S '17 (2d ed rev)
- Food; what to buy, how to cook it, how to eat it. E. L. Fisk. 77p 25c '17 Life extension institute, 25 W. 45th st., N.Y.
- For Thanksgiving dinner. Ohio F 138:480 N 11 '16
- For the homemaker; modifying your cook book to meet present conditions. A. Bradley. J Home Econ 10:219-22 My '18
- For the table department. Mrs G. M. Curtis. See monthly numbers of Reliable poultry journal
- For the Thanksgiving dinner. Am Coop J 12:209 N '16
- For your Thanksgiving dinner. O Judd Farmer 65:489 N 23 '18
- From biscuit dough. M. M. Wright. Country Gent 82:175 Ja 27 '17
- Gardening time meals. Mrs M. R. Morris. Ohio F 137:724 My 20 '16
- Good things for the party. Country Gent 81:1920 O 28 '16
- High cost of living. G. V. Gray. il Farm Eng 5:20+ Mr '17
- Hints to housewives. 111p '17 Mayor Mitchel's Food supply committee, 71 Broadway, N.Y.
- Holiday cakes that ripen. A. B. Dunn. Country Gent 81:2103 D 2 '16
- Home canning of meats and sea foods with the steam-pressure canner. F. P. Lund. (Doc. 80) 28p il '18 U. S. States relations service, Washington, D. C.
- Home economics circulars 1-6. '17 B. R. Murphy, Business men's club, Memphis, Tenn.
- Titles are: What every home-maker should know about foods; Sweet potato as a food; Peanuts for breakfast, dinner and supper; Legumes—peas—beans; Rice for breakfast, dinner and supper; Corn meal
- Homemade beet syrup. Rural N Y 76:902 J1 21 '17
- Honey and its uses in the home. J Home Econ 8:87-90 F '16
- Hooverism in the kitchen. Nat Stock & F 41:1149 F 9 '18
- Household conservation; food. Ia Ag Ext Emergency Leaflet 4:1-8 '17
- How to cook soybeans and cowpeas. W. Windsor. Mo Ag Ext C 45:1-4 '18
- How to feed the family. M. S. Liftman. (Keep well leaflet no. 2) 16p n.d. Bur. of pub. health educ., Dept. of health, 139 Centre st., N.Y.
- Contains strictly Kosher recipes and menus in both English and Yiddish. Author is visiting housekeeper and dietitian of United Hebrew charities
- Important things to know about boiling. M. H. Neil. il Country Gent 81:2135 D 9 '16
- Information and recipes on war-time foods and cooking. Ontario Ag Dept C 11:1-32 '18
- It has been my experience. O Judd Farmer 62:30 F 10 '17
- Latest in goodies. O Judd Farmer 63:20 S 1 '17
- Leftover foods. Ia Ag Ext Home Econ C 2:1-4 '17-'18
- Left overs for lunch. F. Spring. Country Gent 81:818 Ap 8 '16
- Lessons in food values and economical menus. A. Bradley. 29p 25c '17 Miss Farmer's school of cookery, 30 Huntington av., Boston
- Liberty cook book. 27p n.d. City teachers club, Trinity auditorium, Los Angeles, Cal.
- Liberty recipes. A. Doddridge. Del Ag Ext 12p n.d.
- Like grandmother used to make; a book of old-fashioned recipes. 11p il 15c '17 Ladies' home journal, Independence sq., Philadelphia
- Low-cost meals for high-cost times. 31p 15c '17 Ladies' home journal, Independence sq., Philadelphia



**Cookery —Continued**

- Low-cost recipes that make patriotic as well as tempting dishes. G. V. Gray. Country Gent 82:1273+ Ag 11 '17
- Make every crumb count. W. Moses. Cornell Reading Course Farm Home 116:21-4 '18
- Meat substitutes. Ohio Ag Ext B v 13, no 8 19p '17-18
- Meat substitutes. G. Erickson. Md Ag Ext Letter no 31 4p n.d.
- Meats and meat substitutes. P. MacDonald. Pa Ag Ext C 69:1-12 '17
- Menus for national needs. A. L. Weeks. Univ of Rochester (N.Y.) Ext B v 1, no 3:1-15 '17
- Menus for wheatless days. M. L. Matthews. Purdue Ag Ext Leaflet 98:1-6 '18
- Moderate cost menus and recipes from Florida food materials. N. Henderson. Florida state college for women B 15:1-25 '17
- Much from little. E. L. Ragdale. Nat Stock & F 40:1001 D 30 '16
- Ninety tested, palatable and economical recipes. (Technical educ. B. 34) 26p '17 Teachers college, Columbia univ., N.Y.
- Nourishment in honey. M. A. Porter. Am Bee J 58:95-6 Mr '18
- Official recipe book; what to eat, how to cook it. (Educ. doc. no. 5) 61p 5c '18 State council of defense of Illinois, 120 W. Adams st, Chicago
- One dish luncheons. H. M. Stokes. Fruit-Grower 28:114 F 1 '17
- \* One-dish meals. O. A. Sheets. (C. 10) 16p '18 Kansas State council of defense, State House, Topeka
- 100 thrift recipes that use little wheat, meat, fat and sugar. 23p il 10c '18 Ladies' Home Journal, Independence square, Philadelphia
- Our best hearty supper dish in winter. O Judd Farmer 61:13 D 16 '16
- Our club diary; we plan our family meatless meals. M. C. Hessler. Country Gent 82:1755 N 10 '17
- Patriotic food show; official recipe book containing all demonstrations given during patriotic food show, St Louis, Feb. 2-10, 1918. 48p 10c n.d. Women's central com. on food conservation, 905 Locust st, St Louis
- Plans for community club work in the study of foods and household conveniences. N C Ag Ext C 7:7-44 '16
- Practical patriotic recipes. E. Church and B. A. Leete. Hampton (Hampton, Va.) B v 14:1-16 F '18
- Providing meals for threshers. C. B. Williams. Ohio F 138:130 Ag 12 '16
- Recent contributions to our knowledge of food preparation. L. Stanley. J Home Econ 9:537-45 D '17
- Recipes for iron-rich dishes. C. L. Hunt. J Home Econ 8:603-5 N '16
- Recipes used in the patriotic food show given at the University of Illinois. 11p mim '18 Library publicity committee, Ill. food administration, Univ. of Ill., Urbana
- Saturday's baking. M. B. Stafford. Rural N Y 76:1159 O 6 '17
- Save our sugar; emergency recipes. B. E. Shapleigh. 11p 10c '17 Am. home economics assn., Emergency committee, 19 W. 44th st, N.Y.
- Save the fat; 24 recipes using animal fat substitutes. M. M. Lawrence. Tex Univ Ext Food Conservation Leaflet (Austin) 4:1-13 n.d.
- Save the sugar; 24 recipes using sugar substitutes. M. M. Lawrence. Tex Univ Ext Food Conservation Leaflet (Austin) 2:1-15 '17
- Saving food and time by casseroles. E. R. Chase. Ohio F 142:62 Jl 20 '18
- Simple course in home economics for rural schools with suggestions for school noon lunch. M. E. Gearing and others. Texas Univ (Austin) B 49:1-162 S 1 '17
- Simple menus for informal occasions. M. R. McPheeters and D. Sexauer. Okla Ag Ext C 39 10p '16
- Slow cooking conservation. Wallaces' F 43: 1826 D 13 '18
- Some of grandmother's good things. N. K. Jones. Country Gent 81:1707 S 16 '16
- Some old-time recipes. Prog F 33:1171 O 26 '18
- Standardized recipes. G. McCheyne and H. White. Utah Ag Ext C v 6, no 17 4p '18
- \* Stock-pots and potato-pies. Spectator (1 Wellington st, Strand, London, W. C. 6d) 120: 344-5 Mr 30 '18
- Stretching the household purse. G. V. Gray. Farm Eng 4:86 N '16
- Substitutes for meat. N. Rowe. Purdue Ag Ext Leaflet 94:1-6 '18
- Substitutes for potatoes in the diet. M. Beall. Purdue Ag Ext Leaflet 76:1-6 '17
- Subtropical cookery. K. S. Lawson. Country Gent 81:955 Ap 29 '16
- Sugar in war time. V. J. Anderson. Ill Univ (Urbana) B v 15, no 47 3p Jl 22 '18
- Suggestions for meatless meals. R. K. Bliss. Ia Ag Ext Short Course Notes 21:1-8 '18 (rev.)
- Suggestions for sugar saving. Ia Ag Ext Emergency Leaflet 43:1-4 '18
- Suggestive menus. Ia Ag Ext Short Course Notes 23:1-12 '16-'17
- Suggestive ways of using dried vegetables and fruits in the diet. W Va Ag Ext November Lesson 5p '17 (Mim.)
- Supper for the ladies' aid. L. R. Stephen. Country Gent 81:1279 Je 24 '16
- Table delicacies. A. Remsen. See monthly numbers of Country life in America
- Ten lessons on food conservation. Lessons 1-10 64p '17 U. S. Food administration, Washington, D.C.
- \* Tested international recipes. M. B. Van Arsdale and D. Monroe. Teachers Coll Record (525 W. 120th st, N.Y. 40c) 19:68-86 Ja '18
- Tested menus and recipes. A. L. Weeks. Univ of Rochester (N.Y.) Ext B v 1, no 2: 1-19 '17
- Tested recipes. Utah Ag Ext C v 6, no 19 4p '18
- Thanksgiving dinner. Ohio F 140:490 N 24 '17
- Thanksgiving substitute. S. E. Wilcox. Nat Stock & F 40:848 N 18 '16
- Timely suggestions and economical recipes. 34p 10c n.d. Drexel institute, Philadelphia
- United States food leaflets 1-20. 4p ea '18 U.S. food administration, Washington, D.C.
- Use less sugar. M. L. Matthews. Purdue Ag Ext Leaflet 93:1-4 '18
- Use soy-bean flour to save wheat, meat, and fat. U S Ag C 113:1-4 '18
- Use up stale bread. Weekly N L 4:7 My 2 '17
- Using the leftovers. Mrs M. Kennedy. Rural N Y 77:600 Ap 20 '18
- Utilization of food. 44p n.d. Council of national defense, Ohio branch, State house, Columbus
- Utilization of food; recipes. Ohio Ag Ext B v 13, no 10 45p '17-'18
- Utilize left-overs. Prog F 32:974 S 15 '17
- Utilizing the left-overs. R. Lampman. Rural N Y 76:1038 S 1 '17
- War breads and meat substitutes. M. B. Vail. 23p '17 Dept. of home econ., Mills college, Oakland, Cal.
- War time menus. N H Ag Ext C 33 4p '18
- War-time recipes. Mrs E. W. Gould. Minn Hort 45:360-1 S '17
- Watch your kitchen waste. Prog F 32:538 Ap 28 '17
- What shall we eat on wheatless and meatless days? Wis Ag Ext C 106:1-47 '18
- Wheat and sugar substitute recipes. M. Hepworth. W Va Ag Ext C 215:1-15 '18
- Wheat saving. R. Wheeler. Ill Univ (Urbana) B v 15, no 24 4p F 11 '18
- Wheat substitutes; suggestions for conservation of wheat for the spring and summer of 1918. K. R. McMurray. (War papers no. 3) 4p '18 Oberlin college, Oberlin, O.
- When flour is high. C. Steen. Country Gent 81:2243 D 30 '16
- Why we cook and how. H. Mason. Ohio F 139: 814 Je 23 '17
- With an Easter touch; ways to make the ordinary dishes more attractive. M. M. Wright. il Country Gent 82:709 Ap 7 '17

**Cookery—Continued**

Women's municipal league leaflets. ea 5c '17  
 Women's municipal league of Boston, Nottingham Chambers, Copley Square

Titles follow: Balanced menus for children; Breakfasts that nourish; Attractive and inexpensive salads; Recipes for sandwiches; Use of economical fats; Drying of fruits and vegetables; Fifteen ways of serving rice; Home preservation of eggs; Use of milk as a food; Fifteen recipes for fruits and vegetables; Meat substitutes; Preparation of inexpensive meats and fish; Fifteen recipes for inexpensive meats and meat substitutes; Cold pack method for canning fruits and vegetables; Canning and preserving fruits; Food as an energy producer

Women's municipal league lists. 35c per hundred '18 Women's municipal league of Boston, Nottingham Chambers, Copley Square

Titles follow: Corn products; Oils and substitute fats; Meat substitutes; Are you eating sea food; Cereals; Milk as a food; Use these instead of cane sugar; War candies

*See also* Baking; Bread; Breakfasts; Cake; Canning and preserving; Chow-chow; Cookery for the sick; Cookies; Custards; Desserts; Diet; Doughnuts; Electric cooking; Fireless cookers; Food; Home economics; Muffins; Ovens; Pastry; Puddings; Salads; Sandwiches; School lunches; Soup

**Bibliography**

Bibliography of food economy. State Coll of Washington Lib (Pullman) B (Home econ.) sup no 1:1-8 '17 (Mim)

Supplement to accompany Bulletin 3, entitled Food economy for the housewife

Bibliography of food economy for the housewife. Wash State Coll Lib (Pullman) B no 5:1-59 Mr '18 (2d ed 25c)

Foods and cooking; canning and cold storage; publications relating to the above subjects, for sale by the superintendent of documents. (Price list 11—8th ed) 16p '17 Supt. of doc., Washington, D.C.

**Study and teaching**

Domestic science course of study; elementary cooking. M. G. Conway. Tenn Ag Ext Pub 52:1-12 '17

Extension course in vegetable foods. A. Barrows. U S Ag B 123:1-78 '16

Public instruction in cookery in London. K. Merrill. (Commerce Reports no. 270) p 666-8 (N 17) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.

**Apples**

Food from waste apples. Nat Stock & F 42: 490 Ag 24 '18

Home canning; apples. A. M. Johnson. Country Gent 82:1215 Jl 28 '17

Just apple sauce. Wallaces' F 41:1605 D 8 '16  
 More apple recipes. O Judd Farmer 63:20 N 3 '17

National apple day, Nov. 1st. O Judd Farmer 63:26 O 27 '17

New kinds of apple jam. Ohio F 142:515 N 23 '18

Out of the apple barrel. M. H. Northend. Country Gent 82:129 Ja 20 '17

Seasonable recipes. Prog F 31:1013 Ag 19 '16

Timely recipes. Prog F 32:1017 S 29 '17

Uses for apples. K. C. Wivel. Ohio F 137:146 Ja 29 '16

*See also* Apple butter

**Cereals**

Grains and grain products. P. MacDonald. Pa Ag Ext C 68:1-12 '17

Home preparation of breakfast foods and flour from whole grain. G. A. Olson. il Wash Ag Exp Pop B 112:1-15 '17

How to select foods; cereal foods. C. L. Hunt and H. W. Atwater. il Farmers' B 817:1-22 '17

How to use other cereals. Wis Ag Ext C 105: 1-12 '18

Practical bran recipes. R. M. Fletcherberry. Country Gent 81:1817 O 7 '16

Twelve ways to use barley. A. L. Daniels.

Wis Ag Ext C 80:1-8 '17 (rev. '18); Same cond. J Home Econ 9:333-6 Jl '17; Excerpts.

Rural N Y 76:902 Jl 21 '17

Use oats to save wheat. il U S Ag C 118:1-4 '18

\* Use of wheat-saving cereals. H. L. Green and others. (C. 9) 12p '18 Kansas State council of defense, State House, Topeka

Using graham and cornmeal. M. Corbett. Rural N Y 76:625 Ap 28 '17

Wise-awake girls learn how to cook cereals. Mrs W. N. Hutt. Prog F 31:410 Mr 18 '16

*See also* Cookery—Corn; Cookery—Rice

**Cheese**

Cheese. C. Frandsen. Hoard's D 56:594 N 22 '18

Cheese a substitute for meat. 8p '18 U. S. Food administration, Washington, D. C.

Cheese playing center. Better Fruit 12:22 F '18

Neufchâtel and cream cheese: farm manufacture and use. K. J. Matheson and F. R. Cammack. Farmers' B 960:24-35 '18

Other cheese ways. O Judd Farmer 63:16 D 1 '17

Plenty of good cheese. M. H. Talbott. Country Gent 81:914 Ap 22 '16

Some good cheese dishes. Rural N Y 77:1197 O 19 '18

Three appetizing cheese dishes for the children. B. E. Hyde. Country Gent 81:87 Ja 8 '16

*See also* Cottage cheese

**Corn**

Appetizing dishes made from corn. R. McNeill. Purdue Ag Ext Leaflet 80:1-6 '17

Appetizing dishes made from corn. H. Plummer. Purdue Ag 12:301 F '18

Corn and corn products. Penn State F 9:373+ Ap '16

Corn and corn products used as food. L. Wheeler. Ill Ag Ext C 9:1-19 '17

Corn time. Am Coop J 12:771 Ag '17

Plantation corn dishes as mammy used to make them. 15p il '17 Ladies' home journal, Independence sq., Philadelphia

Use corn meal and corn flour to save wheat. il U S Ag C 117:1-4 '18

Ways of using corn. Wis Ag Ext C 95:1-11 '18

*See also* Corn meal

**Eggs**

Just plain eggs. O Judd Farmer 64:18 Ap 20 '18

**Fish**

Burbot; fresh-water cousin to the cod. (Econ. C. 25) 4p il '17 U. S. Bur. of fisheries, Washington, D.C.

Carp; a valuable food resource. (Econ. C. 31) 7p il '17 U. S. Bur. of fisheries, Washington, D.C.

Dried fish dishes. M. H. Talbott. il Country Gent 81:670 Mr 18 '16

Eat more fish. 14p il '17 Canada Food controller, Ottawa

Fish recipes. Wallaces' F 41:275 F 18 '16

Fish roe and buckroe; with 85 recipes. L. Radcliffe. (Econ. C. 36) 11p '18 U. S. Bur. of fisheries, Washington, D.C.

Fish were never better. U. Inman. Ohio F 141:710 My 25 '18

Grayfish; try it. (Econ. C. 22) 8p il '17 U. S. Bur. of fisheries, Washington, D.C.

Sablefish, alias black cod. H. F. Moore. (Econ. C. 23) 6p il '17 U. S. Bur. of fisheries, Washington, D.C.

Sharks as food; with thirty recipes. L. Radcliffe. (Econ. C. 35) 8p '18 U. S. Bur. of fisheries, Washington, D.C.

Skates and rays. (Econ. C. 34) 7p il '18 U. S. Bur. of fisheries, Washington, D.C.

Some New England fish dinners. Rural N Y 76:990 Ag 18 '17

Steamed fish with sauce. O Judd Farmer 64: 542 My 18 '18

Tuna fish makes a fine chicken substitute. M. H. Talbott. Country Gent 81:1852 O 14 '16



**Cookery—Fish—Continued**

Twelve ways to cook carp. A. L. Marlatt and A. L. Daniels. Wis Ag Ext C 93 3p '17  
Use of fish. M. Beall. Purdue Ag Ext Leaflet 97:1-6 '18  
Why and how to use salt and smoked fish. H. F. Moore. (Econ. C. 29) 8p '17 U. S. Bur. of fisheries, Washington, D.C.

**Fruit**

Adaptable peach. E. Irving. O Judd Farmer 61:20 Ag 26 '16  
Berry recipes. H. A. Lyman. O Judd Farmer 61:35 Jl 29 '16  
Cooking cranberries. Mrs S. N. Whittlesey. Wis Hort Soc Rep 1917:34-7  
Cooking the dried fruits. O Judd Farmer 64:29 Mr 9 '18  
Cooking the dried fruits; apples and apricots. O Judd Farmer 64:26 Mr 16 '18  
Cranberry jelly made with honey. il Country Gent 83:35 N 16 '18  
Dates, figs and raisins. J. W. Andrews. Kimball's D F 15:401 Je 1 '17  
Delectable raisin. M. E. Kramer. O Judd Farmer 61:26 N 4 '16  
Dietetic value of fruit. I. S. Harrington. N Y Ag Dept B 79:pt 2:1401-7 Ja '16; Same. N Y Ag Dept Rep 1916:pt 3:1401-17 '17  
Different cherry recipes. H. A. Lyman. O Judd Farmer 61:16 Jl 8 '16  
Good recipes. Green's Fruit Grower 36:12 Ag '16  
Gooseberry recipes. H. A. Lyman. O Judd Farmer 61:19 Ag 5 '16  
Grape recipes. C. Marshall. O Judd Farmer 61:21 S 30 '16  
Have fruit with every meal. Prog F 32:740 Je 30 '17  
Have some strawberries. E. P. Loomis. il Ohio F 137:802 Je 10 '16  
Kindly fruits of the earth; recipes for the use of the same and of vegetables. il O Judd Farmer 63:16 Ag 25 '17  
Mulberries, strawberries and pineapples. Rural N Y 75:987 Jl 15 '16  
Not for the sweet tooth. A. B. Dunn. il Country Gent 81:491 F 26 '16  
Our club diary: we give a prize for the best fruit dessert. Country Gent 81:2208 D 23 '16  
Quince dainties. J. E. Clemmens. Ohio F 138:397 O 21 '16  
Rhubarb recipes. H. A. Lyman. O Judd Farmer 60:22 My 6 '16  
Ripening cherries. M. Allen. O Judd Farmer 61:34 Jl 29 '16  
Serving early fruits. M. E. Kramer. il O Judd Farmer 60:18 Je 17; 16 Je 24 '16  
Serving the melons. E. Locke. Ohio F 138:130 Ag 12 '16  
Strawberry luxuries. il Ohio F 139:772 Je 9 '17  
Sweetening the cranberries. Ohio F 142:514 N 23 '18; Same cond. Nat Stock & F 42:790 N 30 '18; Same cond. Better Fruit 13:19 D '18  
Tested rhubarb recipes. H. A. Lyman. Rural N Y 77:421 Mr 16 '18  
Using fruits and vegetables wisely. il Gard M 26:87-8 O '17  
Ways of using rhubarb. L. Brewer. il Cornell Reading Courses 5,no 107:95-107 Je '16  
What to do with cherries. il Ohio F 138:34 Jl 8 '16  
What to do with dates. E. L. Gilbert. Country Gent 81:770 Ap 1 '16  
When food costs soar; bananas still stay at a reasonable price. G. V. Gray. Country Gent 82:750 Ap 14 '17  
When you cook figs. M. H. Neil. il Country Gent 81:1779 S 20 '16  
Wholesome rhubarb. V. C. Lee. O Judd Farmer 64:587 Je 1 '18  
Wide-awake girls learn how to serve fruit. Mrs W. N. Hutt. Prog F 31:838 Jl 1 '16

See also Canning and preserving; Cookery—Apples

**Macaroni**

Tested recipes. Green's Fruit Grower 36:26 F '16

**Meat**

Butchering day rules and recipes. O Judd Farmer 61:16 D 30 '16; 62:28 Ja 6 '17  
Economical meat dishes. Rural N Y 75:1037 Jl 29 '16  
Economy in using meat. Weekly N L 4:9 My 2 '17  
Economy stew. O Judd Farmer 64:17 Mr 23 '18  
Hog-killing-time recipes. Prog F 33:1290 N 23 '18  
How to make hasenpfeffer. T. Schwenk. Rural N Y 77:93 Ja 19 '18  
How to prepare cheap cuts of beef. H. Plumb. Rural N Y 75:137 Ja 22 '16  
Making a little meat go a long way. Mrs J. Vanderleek. J Ag (Quebec) 21:174 My '18  
Many ways of cooking tongues. M. H. Neil. il Country Gent 81:1351 Jl 8 '16  
Meat. M. E. Sutherland. Wash Ag Ext Pub Ser 1, no 14 4p '16  
Meat for the farm table. I. C. B. Allen. il Country Gent 81:609 Mr 11 '16  
Meat shortage; how to save meat; recipes for economical use of meat. Utah Ag Ext C 4 4p '18  
Meat; what to use—how to use it. L. Wheeler. Ill Univ (Urbana) B v 15,no 43 8p Je 24 '18  
Meats. il Idaho Ag Ext B 16:1-24 '16  
Meats: place in the diet; curing and preserving; use of substitutes. (Ser. 2, no. 10) 29p '17 Winthrop normal and industrial college, Rock Hill, S.C.  
Our supply of rabbit meat. Ohio F 138:632 D 23 '16  
Rare pork dangerous. Va Ag Dept B 115:108-10 '17  
Save the tripe. M. H. Talbott. Country Gent 81:1740 S 23 '16  
Serving the rabbit. M. E. Kramer. O Judd Farmer 62:30 F 17 '17  
Some different ways with beef. E. Irving. Nat Stock & F 41:248 My 26 '17  
Tempting hot-weather supper dishes. R. Lampman. Rural N Y 75:986 Jl 15 '16  
Use meat in many ways. M. G. Conway. Tenn Ag Ext Home Econ Ser 9 (Pub. 23): 1-3 '16  
Wartime meats; ways to serve the cheaper cuts. G. V. Gray. il Country Gent 82:1245 Ag 4 '17  
Waste of meat in the home. S. Usher. il Cornell Reading Course 109:1-40 '16

See also Cookery—Poultry; Meat canning

**Milk**

Milk. R. Wheeler. Ill Univ (Urbana) B v 15, no 42 4p Je 17 '18  
Milk and skimmed milk. J Home Econ 9:277-81 Je '17  
Uses for sweet and sour cream. M. Palmer. Kimball's D F 15:471 Jl 1 '17  
Uses of milk. Mass Ag Ext C 72 4p '18  
Ways of using junket. E. P. Swallow. J Home Econ 8:258-9 My '16

See also Custards

**Nuts**

How to grow the peanut and 105 ways of preparing it for human consumption. G. W. Carver. Tuskegee Exp B 31:1-35 '16; Same cond. Rural N Y 75:630 Ap 15 '16  
Many ways of using peanuts; one of the cheapest and best foods. Weekly N L 5:7 My 15 '18  
Peanut, a great American food. H. S. Bailey and J. A. Le Clerc. il U S Ag Yearbook 1917:289-301  
Use peanut flour to save wheat. U S Ag C 110:1-4 '18  
Uses of the peanut on the home table. J. R. Arms. Fla State College for Women B 17:1-16 '17

**Potatoes**

Can you cook a potato? E. M. Robinson. il Gard M 26:134 N '17  
Cooking with Mrs Jones. N. K. Jones. il Country Gent 82:787 Ap 21 '17  
Dozen potato recipes. Prog F 33:391 Mr 23 '18  
Economy in using potatoes. J Bd Ag 23:874-6 D '16; Abstract. Wallaces' F 42:452 Mr 9 '17  
Many good ways to prepare Irish potatoes. A. Stewart. La Ag Bd 14p n.d.

**Cookery—Potatoes—Continued**

- Other ways to cook potatoes. Wis Ag Ext C 98:1-16 '18
- Patriotic potatoes. A. G. Vestal. Power F 27:31 Jl '18
- Potato as a food. I. S. Harrington. N Y Ag Dept Rep 1916, pt 2:410-15 '17; Same. N Y Farms & Markets Dept Ag B 102:156-61 D '17
- From N Y Ag Dept B 77
- Potato dinner dishes. Weekly N L 5:7 O 24 '17
- Potato dish for each day of the week. Prog F 32:1186 N 10 '17
- Potato dishes. Weekly N L 5:6 Ja 23 '18
- Potato from soup to salad. A. Remsen. Country Life 30:128 My '16
- Potato spraying pays. Weekly N L 5:8 Mr 13 '18
- Potato week. Weekly N L 5:6 O 17 '17
- Potatoes as a war food. M. M. Johnson. il Nev Ag Ext B 17:1-8 '18
- Potatoes as conservers. I. Arnquist. Wash Ag Ext Ser 1, no 42 4p '18
- Potatoes back wheat. Weekly N L 5:6 My 8 '18
- Savory potatoes for home-supplies. Am Coop J 13:200 Ja '18
- Some Irish potato desserts. R. M. F. Berry. Rural N Y 76:595 Ap 21 '17
- Substantial Irish potato soups. R. M. F. Berry. Rural N Y 76:1301 N 10 '17
- Sweet potatoes. O Judd Farmer 61:22 O 28 '16
- Use of potatoes in bread making. Prac F 113:323 S 15 '17
- Use potatoes to save wheat. U S Ag C 106:1-8 '18 (rev.)
- Well-served potatoes mean no waste. N. K. Jones. il Country Gent 82:949 My 26 '17
- When potatoes are plentiful. bibliog il Cornell Reading Course Farm Home 118:53-68 '18

**Poultry**

- Canning the old hen. Country Gent 81:770 Ap 1 '16
- Chicken recipes. Rural N Y 77:122 Ja 26 '18
- Food value and uses of poultry. H. W. Atwater. U S Ag B 467:1-29 '16
- Let us start campaign for chicken in the jar. Mrs A. Stocker. il Reliable P J 24:518+ Ag '17
- Making boned chicken. G. V. Gray. Country Gent 81:1247 Je 17 '16
- Poultry meat as an economical food. Mrs H. A. Daniels. Am P J 48:1132+ D '17
- Vary the chicken dinner; good recipes. G. V. Gray. Country Gent 81:1005 My 6 '16
- Waste of meat in the home. S. Usher. il Cornell Ag Exp Rep 1916, v 2:1021-6 '17

**Rice**

- How to serve rice. M. E. Kramer. O Judd Farmer 61:24 S 2 '16
- Rice as prepared for food in Bengal. Jitendra Nath Rakshit. Ag J of India 11:174-98 Ap '16
- Rice is delicious cooked in many ways. Prog F 31:375 Mr 11 '16
- Rice recipes. Better Fruit 12:29 F '18
- Rice vs. wheat in cookery. Mrs F. H. Willison. Ohio F 141:782 Je 15 '18
- Use rice flour to save wheat. il U S Ag C 119:1-4 '18

**Vegetables**

- Appetizing tomato recipes. M. Allen. O Judd Farmer 61:20 Ag 12 '16
- Beans once a week. H. V. Davis. Country Gent 81:304 F 5 '16
- Cabbage recipes. Wallaces' F 41:21 Ja 7 '16
- Canning and using asparagus. L. O. Knapp. Rural N Y 76:698 My 19 '17
- Cooking of vegetable fruits, &c. C. H. Senn. Royal Hort Soc J 42, pts 2-3:253-9 S '17
- Cooking of vegetables. L. Stanley. Va Ag Dept B 109:143-7 '16
- Cooking squash, cucumbers and carrots. Prac F 113:274 Ag 1 '17
- Cooking with Mrs Jones; how to dress up the root vegetables. N. K. Jones. il Country Gent 82:1541 O 6 '17
- Cooking with Mrs Jones; our friends the top vegetables. N. K. Jones. il Country Gent 82:1333 Ag 25 '17

- Dried peas and beans. Ohio F 141:511 Ap 5 '18
- Dried vegetables for everyday economy. G. V. Gray. Country Gent 82:405 F 24 '17
- Extension course in vegetable foods. A. Barrows. U S Ag B 123:1-78 '16
- Fresh fruits and vegetables as conservers of other staple foods. C. L. Hunt. Farmers' B 871:1-11 '17
- Garden wealth for cooks. Mrs M. R. Morris. Ohio F 137:749 My 27 '16
- How to cook soy beans. Wis Ag Ext C 79 4p '17; Same. Kimball's D F 15:502 Jl 15 '17
- How to grow the cow pea and 40 ways of preparing it as a table delicacy. G. W. Carver. il Tuskegee Exp B 35:1-24 '17
- How to grow the tomato and 115 ways to prepare it for the table. G. W. Carver. Tuskegee Exp B 36:1-39 '18
- Important sources of mineral foods; non-starchy vegetables. Ia Ag Ext Short Course Notes 15:1-12 '17-'18
- In pumpkin season. M. H. Talbott. Country Gent 81:1989 N 11 '16
- Kept-over vegetables. Weekly N L 5:5 Ap 24 '18
- Losses in iron in cooking vegetables. K. Blunt and F. A. Otis. J Home Econ 9:213-18 My '17
- New flavors for canned vegetables. C. L. Hunt. il Country Gent 81:871 Ap 15 '16
- Okra and its uses. Rural N Y 75:1163 S 2 '16
- Out of a can of tomatoes. il Country Gent 81:137 Ja 15 '16
- Preparation and the preservation of vegetables. H. W. Calvin and C. A. Lyford. (B. 1917, no. 47) 24p '18 U.S. Bur. of educ., Washington, D.C.
- Preparing cauliflower. E. I. Locke. Kimball's D F 15:535 Ag 1 '17
- Recipes for the preparation of the dasheen. (F. S. & P. I.—2) 3p '16 U.S. Bur. of plant industry, Washington, D. C.
- Salsify or vegetable oyster. L. O. Knapp. Rural N Y 77:496 Mr 30 '18
- Salt down the surplus. Better Fruit 13:16 O '18
- Sauer kraut at home. J. R. Bechtel. Nat Stock & F 41:634 S 29 '17
- Some cabbage recipes. Weekly N L 5:7 O 17 '17
- Some cucumbers. G. Shockey. Ohio F 140:178 S 1 '17
- Some ways with squash. M. G. Feint. il Rural N Y 75:1107 Ag 19 '16
- Soy bean cookery. N. Beaubien. J Home Econ 9:273-4 Je '17
- Soy beans as food. Weekly N L 5:6 Mr 27 '18
- Spinach in a number of ways. M. H. Neil. il Country Gent 82:1132 Jl 7 '17
- To be soaked overnight; dried vegetables. M. H. Talbott. Country Gent 81:429 F 19 '16
- Tomatoes for winter use. Rural N Y 75:1163 S 2 '16
- Turnip recipes. M. H. Talbott. Country Gent 81:368 F 12 '16
- Uplift of the vegetable. F. Spring. il Gard M 27:239-40 Je '18
- Use of beans. Mass Ag Ext C 67 3p '18
- Use of dried fruits and vegetables. Mrs A. W. Parks. Neb Ag Ext Emergency B 33:1-12 '18
- Use plenty of vegetables. Ia Ag Ext Emergency Leaflet 44:1-4 '18
- Using dried beans, peas and other legumes as food. M. L. Matthews. il Purdue Ag Ext Leaflet 85:1-6 '17
- Using fruits and vegetables wisely. il Gard M 26:87-8 O '17
- Vegetable cookery. M. R. McPheeters. Okla Ag Ext C 50 4p '17
- Vegetables in the dead of winter. R. M. F. Berry. Country Gent 81:37 Ja 1 '16
- War vegetarianism. Mrs W. Y. Schepp-Cornelissen. Rural N Y 77:924 Jl 27 '18
- Ways of using vegetables. Mass Ag Ext C 71 4p '18
- Wide-awake girls learn how to cook vegetables. Prog F 31:334 Mr 4 '16

See also Canning and preserving

**Cookery, Italian**

- Gastronomic tour. L. H. Cox. J Home Econ 8:165-70 Ap '16



**Cookery, Roman**

Menus of the ancient Roman world. C. G. Harcum. J Home Econ 10:343-7 Ag '18

**Cookery, Vegetarian**

Few meatless meals. H. P. Knapp. Rural N Y 76:84 Ja 20 '17

**Cookery for the sick**

Feeding the sick. L. Portch. Purdue Ag 11: 56-7 My '17

Home invalid's tray. I. C. B. Allen. Country Gent 81:550 Mr 4 '16

Recipes for the influenza convalescent. Prog F 33:1263 N 16 '18

Use of diabetic flours. A. L. Daniels and G. Dulaney. J Home Econ 8:137-43 Mr '16

Wide-awake girls learn how to prepare foods for the sick. Mrs W. N. Hutt. Prog F 31: 656 My 12 '16

Work of the dietitian in the Canadian military hospitals. V. M. Ryley. J Home Econ 10:108-13 Mr '18

See also Diet

**Cookery laboratories**

Costume in the cookery laboratory. I. E. Lord. il J Home Econ 8:55-67 F '16

**Cookies**

Cookies, pie—and strength. M. A. Bartlett. O Judd Farmer 65:513 N 30 '18

Essentials of cooky making. Mrs E. G. Feint. O Judd Farmer 61:24 S 2 '16

**Cooking clubs**

Nebraska girls' cooking club; lessons 1-9. Neb Ag Ext n.d.

Subjects are: Purpose of the study of food; Starch and its use in the diet; Starch and sugar vegetables; Cereals; Milk and milk products; Meat and its use in the diet; Quick breads; Eggs; Preparation of a meal  
Soups, cereals, vegetables, salads. N. J. Davis. Nev Ag Ext B 9:1-16 '16

**Cooking utensils. See Kitchen utensils**

**Cooling**

Care of food in warm weather. B. Bell. Fruit-Grower 27:367 Jl 15 '16

See also Fruit, Cooling of; Milk cooling; Refrigeration and refrigerating machinery; Refrigerators

**Cooling appliances. See Refrigeration and refrigerating machinery**

**Cooling of cream and milk. See Milk cooling**

**Cooling of fruit. See Fruit, Cooling of**

**Cooling of milk. See Milk cooling**

**Cooling of vegetables. See Vegetables, Cooling of**

**Cooling tanks. See Milk cooling**

**Cooling towers**

Water cooling towers with special reference to the Hart tower. Creamery 7:47 My '18

**Cooper, John S.**

Portrait. Breeder's Gaz 70:1061 D 7 '16

**Cooper, T. S., 1849-**

Colonel T. S. Cooper of Coopersburg. por Field II 26:320 Ap '16

**Cooperation**

Community organization. T: N. Carver. N H Ag Dept Rep v 34 p 41-53 '16

Confidence and economy in rural work. T. N. Carver. Penn State F 9:413 Je '16

Consumers' co-operation during the war. A. Sonnichsen. 15p chart 5c '17 Cooperative league of Am., 70 Fifth av, N.Y.

The Cooperative league of America publishes other pamphlets of interest in connection with the cooperative movement. Apply to the League

Co-operation. M. L. Nolan and P. H. Knappstein. J Dept Ag S Australia 20:487-9 Ja '17

Co-operation and community spirit; with discussion. A. D. Wilson. (In Am. sociological soc., Pub. v. 11, p. 113-28); Same. Wallaces' F 42:371-2 F 23 '17

Co-operation applied Christianity. H: Wallace. Wallaces' F 41:485 Mr 24 '16

\* Cooperation between country and city. O. S. Morgan. Columbia Univ. Quar (Columbia Univ. Press, N.Y. 30c) 20:116-24 Ap '18

Co-operation in business. G. F. Briggs. Am Coop J 12:668 Je '17

Co-operation in practice. Am Coop J 12:522 Mr '17

Co-operative buying and selling. E. G. McCollum. Am Coop J 12:441 F '17

Co-operative commonwealth. il Am Coop J 12:726-7 Jl '17

Cooperative democracy. M. R. Myers. Am Coop J 13:298+ Mr '18

Co-operative dollar. Am Coop J 13:196 Ja '18

Co-operative movement. C. C. Caldwell. Am Coop J 11:590 F '16

Cooperative organization business methods. W. H. Kerr and G. A. Nahstoll. bibliog U S Ag B 178:1-24 '15

Cooperative organization by-laws. C. E. Bassett and O. E. Jesness. U S Ag B 541:1-23 '18

Corporate and co-operative management. Coop Manager & F 6:32 Je '17

Dairy interests must get together. Kimball's D F 14:222 Ap 1 '16

Distributive co-operation. J. Ford. (Reprint 112 Pro. 1917) 4p 6c '17 Nat. conf. of social work, 315 Plymouth court, Chicago

Getting together through co-operation. T. N. Vail. Field II 27:23+ Ja '17

How cooperation is being applied in a far western university. J. B. Rothgeb. J Home Econ 10:460-1 O '18

Laying the foundation. A. H. Shaver. Wallaces' F 42:500 Mr 16 '17

Miscellaneous information relating to co-operation and association in various countries. See monthly numbers of International review of agricultural economics

Necessity for cooperation in agriculture. G. N. Lauman. N Y Ag Dept B 86:2356-60 Ag '16

Organization and co-operation. M. L. Davey. Gard Chron Am 22:25-7 Ja '18

Pioneers in co-operation. Am Coop J 11:920 My '16

Review of co-operative work. Rural N Y 76: 161 D 3 '17

Some recollections and reflections. H. R. Crosthwaite. Ag J of India 13:131-8 Ja '18

Two cooperative ventures. J Home Econ 8: 554-5 O '16

What cooperation can do and is doing in lowering food costs. P: Hamilton. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:268-80 N '17

Whatever we do in life we do for ourselves. B. F. Harris. Prog F 31:1349 N 18 '16

When town and country cooperate. Survey (112 E. 19th st, N.Y. 10c) 39:420-1 Ja 12 '18

Where town and county work together. il Prog F 31:1333 N 18 '16

Working together. Wallaces' F 43:787 My 10 '18

World wide co-operation. Am Coop J 13:190-1, 234, 282-3 Ja-Mr '18

World's greatest force. J. P: Warbasse. il Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:9 D 31 '17

See also Agricultural cooperative credit associations; Agriculture, Cooperative; Banks and banking, Cooperative; Building and loan associations; Canneries, Cooperative; Cheese factories, Cooperative; Cooperation in housekeeping; Cooperative buying; Cooperative stores; Creameries, Cooperative; Dairies, Cooperative; Dairying, Cooperative; Fruit growers' associations; Laundries, Cooperative; Live stock breeders' associations; Live stock shipping associations; Milk depots, Cooperative; Olive oil mills, Cooperative; Packing houses, Cooperative; also Association of the agriculturists of Spain, Irish agricultural organisation society, National agricultural organization society

**Bibliography**

\* Annotated bibliography of consumers' cooperation. J. Ford. Survey (112 E. 19th st, N.Y. 10c) 39:517-18 F 9 '18

**Cooperation—Continued****Austria-Hungary**

Activity of the Hangya society, the wholesale selling society and consumers' union of the Federation of Hungarian agriculturists. Int R Ag Econ 9:114-16 F '18

**Bulgaria**

Central co-operative bank of Bulgaria. Int R Ag Econ 79:1-7 J '17

**France**

Co-operative societies for the abandoned lands and the reconstruction of destroyed villages. Int R Ag Econ 79:22-4 J1 '17

**India**

Co-operation: a review. J. Mackenna. Ag J of India 12:406-12 J1 '17

New measures in reference to the statistics of co-operative societies. Int R Ag Econ 69:40-2 S '16

Progress of co-operation in India. W. Sayer. Ag J of India 12:667-8 O '17

Spread of co-operation in the Punjab. C. F. Strickland. Ag J of India 13:671-84 O '18

**Italy**

Co-operative societies legally constituted on June 30th, 1913. Int R Ag Econ 64:28-9 Ap '16

Development of co-operative labour societies in the province of Parma. Int R Ag Econ 9, no 2:122-3 F '18

See also National institute of credit for cooperation

**Japan**

Arrêté n. 8 du ministère de l'agriculture et du commerce portant règlement pour l'application de la loi visant les corporations et les coopératives des principaux produits. Int Yearbook Ag Leg 1916:903-9 '17

Décret n. 14 du ministère de l'agriculture et du commerce portant règlement pour l'exécution de la loi concernant les coopératives de pêche dans les mers extra-territoriales. Int Yearbook Ag Leg 1916:910-11 '17

Décret n. 15 du ministère de l'agriculture et du commerce portant règlement des coopératives de produits aquatiques. Int Yearbook Ag Leg 1916:911-12 '17

Present position of co-operation in Japan. Int R Ag Econ 83:1-11 N '17

**Russia**

Crisis in hops and co-operation. Int R Ag Econ 63:44-5 Mr '16

Growth of Russian cooperative societies. (Commerce Reports 50) p 806-7 (Mr 1) '17

U. S. Bureau of foreign and domestic commerce, Washington, D.C.

Russian co-operative movement during the war. Int R Ag Econ 80:12-20 Ag '17

**Siberia**

Co-operation in Siberia. Int R Ag Econ 9, no 2:123-6 F '18

**Switzerland**

Statistics of Swiss co-operative societies at the end of 1914. Int R Ag Econ 63:45-7 Mr '16

**United States**

Cooperation in a Massachusetts county. B. R. Walton. Rural Manhood 8:150-1 Ap '17

Co-operation in Kansas. C. E. Eckerle. Am Coop J 11:1012 Je '16

Cooperation in Minnesota. L. D. H. Weld. Int R Ag Econ 62:12-27; 63:25-32 F-Mr '16

Cooperation in Wisconsin. B. H. Hibbard and A. Hobson. il maps Wis Ag Exp B 282:1-44 '17

Cooperative purchasing and marketing organizations among farmers in the United States. O. B. Jesness and W. H. Kerr. il map U S Ag B 547:1-78 '17

Covering a county with co-operation. Am Coop J 12:376-7 Ja '17

Dangerous bill to amend the co-operative law of Illinois. Am Coop J 12:682 Je '17

Farmers' mutual insurance. H. E. Erdman. il Country Gent 83:11+ Mr 9 '18

Farmers own prosperous Iowa town. il O Judd Farmer 60:3 Ja 15 '16

Gleaner co-operative law of Michigan; an act to provide for the organization, operation and regulation of co-operative corporations, companies and associations. Coop Manager & F 7:84-5 Mr '18

Manual of laws pertaining to the Department of farms and markets; provisions of membership corporation law, relating to cooperative agricultural, dairy or horticultural associations. N Y Farms & Markets Dept Ag B 108:259-69 Je '18

New York co-operative law. Hoard's D 56:24 J1 26 '18

Some defects in the New York laws of co-operative associations. R. Ingalls. N Y Farms & Markets Dept Ag B 105:30-6 Mr '18

Statistical enquiry into co-operative organizations. Int R Ag Econ 9, no 2:90-109; no 3:175-90 F-Mr '18 (to be cont)

Suggestions for a state cooperative law designed to conform to section 6 of the Clayton act. Coop Manager & F 6:75-7 Mr '17

Survey of cooperative activities in the United States. Am Coop J 13:227-8+ F '18

Town owned by farmers. M. G. Franklin. il Country Gent 82:1449 S 22 '17

What co-operation has meant to a Tennessee community. W. C. McKenzie. il Prog F 32:252 F 24 '17

With the signing of House bill no. 16 it became easy to change from a corporation to a co-operative society in Illinois. Am Coop J 12:693 Je '17

**Cooperation in housekeeping**

City comforts in the country; how one group shares the expense and profits. Mrs W. J. McLondon. il plan Prog F 32:314 Mr 10 '17

Cooperative venture. E. S. Wiers. J Home Econ 10:234 My '18

\* High standards of living at low cost by co-operative housekeeping. A. S. Matthews. Teachers Coll Record (525 W. 120th st, N.Y. 40c) 19:57-67, 185-95 Ja-Mr '18

Woman's committee survey of agencies for the sale of cooked food. H. W. Atwater. J Home Econ 10:419-24 S '18

See also Community kitchens

Cooperative abattoirs. See Slaughter-houses, Cooperative

Cooperative agriculture. See Agriculture, Cooperative

**Cooperative associations**

Co-operative enterprises. J. P. Warbasse. (In Sagamore sociological conference, Pro., 1917, p. 29-33) '17 W: C. Ewing, sec., 985 Washington st, Boston

See also Farmers' cooperative associations; also Quebec cheesemakers' cooperative agricultural society; Quebec seed-growers' cooperative agricultural society; Union expérimentale des agriculteurs de Québec

Cooperative banks. See Banks and banking, Cooperative

**Cooperative buying**

Buying by farmers' clubs. Wallaces' F 42:1463 O 26 '17

Buying for ten thousand farmers. G: F: Stratton. il Country Gent 83:18 S 14 '18

Clubbing the consumer. J. Leavitt. Country Gent 81:2148 D 16 '16

Collective buying and selling. C. A. Lyman; W. H. Hayes; O. J. Baer. Am Coop J 13:108-9 N '17

Co-operation in Washington. D. C. L. S. Perkins. Rural N Y 75:1253, 1276, 1305, 1330 S 30-O 21 '16

Co-operative agricultural trading—the purchase of farm requirements. J. Masson. Ag Gaz of Canada 5:876-7 S '18

Co-operative buying by farmers' clubs in Minnesota. E. D. Durand and H. B. Price. maps Minn Ag Exp B 167:1-44 '17

Co-operative land purchase in Denmark. il Ag Gaz of Canada 3:370-1 Ap '16



**Cooperative buying—Continued**

- Coöperative merchandising risky. J. Z. Green. *Prog F* 31:550 Ap 15 '16
- Cooperative purchase of farm supplies. C. E. Bassett. *il U S Ag Yearbook* 1915:73-82
- Cooperative purchasing and marketing organizations among farmers in the United States. O. B. Jesness and W. H. Kerr. *il map U S Ag B* 547:1-78 '17
- Co-operative purchasing of farm requirements. *Ag Gaz of Canada* 5:457-70 My '18
- Co-operative seed organization. *Rural N Y* 76:5 Ja 6 '17
- Co-operative trading operations of farmers' organizations. C. Rice-Jones. *Better Business* (605 Ashdown block, Winnipeg, Manitoba 15c) 1:39+ Mr '18
- Feed survey and purchasing feed. *Hoard's D* 55:1053 Jl 19 '18
- How eleven banks cooperate to bring better cows and bigger milk checks. H. I. Wood. *il Banker-F* 4:6-7 Ja '17; Same cond. *Ag Digest* 1:295-6 F '17
- How twenty-five families cut costs. G. C. Smith. *Country Gent* 81:601 Mr 11 '16
- How we tackled the high cost of living. W. H. Main. *il Country Gent* 81:1928 N 4 '16
- Marketing clubs of Pittsburgh. A. Y. Johnson. *J Home Econ* 10:27-9 Ja '18
- Psychology of do and don't. M. H. Abel. *J Home Econ* 10:137-8 Mr '18
- Saying through large buying. *Rural N Y* 76:72 Ja 20 '17
- Side lights on co-operative buying of cows. H. I. Wood. *il Hoard's D* 52:655 D 1 '16
- Simple form of rural distributive co-operation. *Int R Ag Econ* 63:43-4 Mr '16
- When you buy dairy feeds. J. H. McKenney. *Hoard's D* 54:918 Ja 18 '18
- See also* Cooperative stores; also Farmers' general sales and supply company; Missouri farmers' exchange
- Cooperative canneries.** *See* Canneries, Cooperative
- Cooperative cheese factories.** *See* Cheese factories, Cooperative
- Cooperative cheese schools.** *See* Cheese schools, Cooperative
- Co-operative Christmas; story.** G. E. A. Coley. *il Am Coop J* 14:119+ D '18
- Cooperative creameries.** *See* Creameries, Cooperative
- Cooperative credit associations, Agricultural.** *See* Agricultural cooperative credit associations
- Cooperative dairying.** *See* Dairying, Cooperative
- Cooperative electricity societies**  
Farmers' co-operative electricity societies. C. L. Stewart. *Penn State F* 9:414+ Je '16
- Cooperative flour mills.** *See* Flour mills, Cooperative
- Cooperative housekeeping.** *See* Cooperation in housekeeping
- Cooperative kitchens.** *See* Community kitchens; Cooperation in housekeeping
- Cooperative laundries.** *See* Laundries, Cooperative
- Cooperative law.** *See* Corporation law
- Cooperative live stock shipping associations.** *See* Live stock shipping associations
- Cooperative milk depots.** *See* Milk depots, Cooperative
- Cooperative olive oil mills.** *See* Olive oil mills, Cooperative
- Cooperative packing houses.** *See* Packing houses, Cooperative
- Cooperative slaughter-houses.** *See* Slaughter-houses, Cooperative
- Cooperative stores**  
Business practice and accounts for cooperative stores. J. A. Bexell and W. H. Kerr. *bibliog il U S Ag B* 381:1-56 '16
- Consum verein shop (and the lady). E. H. Wilson. *J Home Econ* 9:521-2 N '17
- Co-operation at Rocky Ridge, Ohio. *il Am Coop J* 13:449-50 Jl '18

- Co-operative store management. W: A. Kraus. 15p '17 Co-operative league of Am., 70 5th av, N.Y.
- Cooperative stores in Minnesota, 1914. E. D. Durand and F. Robotka. *Minn Ag Exp B* 171:1-31 '17
- Co-operative stores pay. *Fruit-Grower* 27:512 D 1 '16
- Cooperative venture. E. S. Wiers. *J Home Econ* 10:234 My '18
- Credit union and the cooperative store. A. H. Ham. 8p '17 Russell Sage Foundation, Division of remedial loans, 130 E. 22d st., N.Y.
- Does anyone believe co-operative stores are a failure? W. F. Vedder. *il Am Coop J* 12:620 My '17
- General merchandise stores. B. H. Hibbard and A. Hobson. *il map Wis Ag Exp B* 282:26-30 '17
- How farmers are working together. *Rural N Y* 75:1519 D 9 '16
- Successful co-operative store at Neosho. F. W. Vedder. *il Am Coop J* 12:782 Ag '17
- Survey of typical cooperative stores in the United States. J. A. Bexell and others. *il U S Ag B* 394:1-32 '16
- Cooperative threshing.** *See* Threshing, Cooperative
- Cooperative warehouses.** *See* Warehouses, Cooperative
- Cooper's fort; story.** *See* weekly numbers of National stockman and farmer, Oct. 7, 1916-Feb 24, 1917
- Coops, Poultry.** *See* Poultry coops
- Copper**  
Presence of copper in tomatoes and tomato preserves. G. Liberi and others. *Int R Sci & Prac Ag* 7:no 5:662-4 My '16
- Copper arsenate**  
*See also* Plants, Effect of copper arsenate on
- Copper sulfate**  
Action of copper sulphate on vine mildew. *Int R Sci & Prac Ag* 7:no 6:894-5 Je '16
- Certain effects under irrigation of copper compounds upon crops. R. H. Forbes. *bibliog il Cal Univ Pub Ag Sci v* 1, no 12 395-494p '17 (\$1); Same. *ARIZ Ag Exp B* 80:145-238 '16
- Copper sulfate as a disinfectant for potatoes. G. R. Bisby and A. G. Tolaas. *Phyt* 8:240-1 My '18
- Statistics**  
International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 52-4 My '18 *Int. inst. of ag., Rome*
- International movement of fertilisers; chemical products useful to agriculture. *Int Crop Report and Ag Statistics* (Int. inst. of agriculture, Rome) 7th year, no 9 p 673-5 S '16
- Coprinus**  
Origin and development of the lamellae in coprinus micaceus. M. Levine. *bibliog il Am J Bot* 1:343-56 Jl '14
- Corchorus.** *See* Kerria japonica
- Coreopsis**  
Coreopsis for market. J. H. Sperry. *il Country Gent* 82:553 Mr 17 '17
- Cork spot.** *See* Apples—Diseases and pests
- Corkwood.** *See* Balsa tree
- Corn**  
Acre yield of corn. Wallaces' *F* 41:4 Ja 7 '16
- Agricultural situation for 1918: corn; a large acreage of corn needed. *U S Ag C* 91:1-16 '18
- Agriculture of the Hidatsa Indians. A. E. Jenks. *Science* (Science Press, Garrison, N.Y. 15c) n s 44:864-6 D 15 '16
- Alfalfa in corn. G. W. Fenn. *Kimball's D F* 15:325 My 1 '17
- Alfalfa versus corn. C: B. Wing. *Ohio F* 138:539 D 2 '16
- Assimilation of organic nitrogen by zea mays and the influence of bacillus subtilis on such assimilation. R. O. Bringham. *bibliog il Soil Sci* 3:155-95 F '17
- Barren stalks in the cornfield. J. D. Harper. *Country Gent* 81:1592 Ag 26 '16

**Corn—Continued**

- Barren stalks in the corn field. S. B. Haskell. Coop Manager & F 6:91 F '17
- Big corn yields depend upon enriched soil, selected seed and a vigorous stand. E. V. Laughlin. *il Country Gent* 81:231 Ja 29 '16
- Blessed art thou, Simon Barjona; how to grow corn perpetually on the same land. L. J. Stadler. *il Hoard's D* 54:868 Ja 11 '18
- Bob's experience with pure-bred corn. *il Hoard's D* 56:710 D 13 '18
- Boys' corn contest, instruction sheets nos. 1-7. W Va Ag Ext C 51, 58, 64, 68, 76, 82, 89 '16
- The titles follow: Seed corn testing; Preparing corn ground; Planting corn; Corn cultivation; Corn insects and diseases; Growing plant; Field selection of seed corn
- Cashing in on the corn crop. H. C. Campbell. *Prac F* 114:218 Je 15 '18
- Community corn improvement. F. S. Bucher. *Penn State F* 9:290-1 Ja '16
- Comparative study of the root systems and leaf areas of corn and the sorghums. E. C. Miller. *bibliog il J Ag Research* 6:311-32 My 29 '16
- Comparative transpiration of corn and the sorghums. E. C. Miller and W. B. Coffman. *il J Ag Research* 13:579-604 Je 10 '18
- Conserving wheat and consuming corn. H. N. Lawrie. *Oregon Voter* (Portland, Ore. 10c) 12:80-1+ Ja 19 '18
- Corn. (*In* Geography of the world's agriculture, p. 29-34) maps '17 U S Ag
- Corn. F. App. N J Ag Exp C 69:1-7 '17
- Corn and education. A. F. Blakeslee. *il J Heredity* 8:51-7 F '17
- Corn and its uses. *la Ag Ext Short Course Notes* 20:1-4 '17-'18
- Corn crop and rainfall. Wallaces' F 41:1064 Ag 11 '16
- Corn crop fertilized by fire. *il Rural N Y* 76:1201 O 20 '17
- Corn experiments. H. B. Brown and J. R. Ricks. *Miss Ag Ext C* 3 4p '16
- Corn: fertilizers, varieties, culture, etc. B. L. Moss. *Prog F* 31:778 Je 17 '16
- Corn growing. Coop Manager & F 7:70 Ap '18
- Corn growing: suggestions to members of boys' corn clubs. V. M. Shoesmith. *il Mich Ag Ext Club B* 7:1-16 '16
- Corn growing under droughty conditions. C. P. Hartley and L. L. Zook. *il Farmers' B* 773:1-24 '16; Excerpt. *Hoard's D* 53:757 My 25 '17; Excerpt. *Power F* 26:13 Je '17; Excerpt. *Kimball's D F* 15:454 Je 15 '17
- Corn of the world. map Wallaces' F 43:1006 Jl 5 '18
- Corn problems. C. A. Gearhart. *il Ohio Ag Exp B v* 2:105-9 Ag '17
- Corn production. H: G. Bell and C. A. Waugh. (Soil improvement com. B. 15) 15p *il '16 Nat fertilizer assn., Chicago*
- Corn selection in Livingston. O Judd Farmer 61:6 D 2 '16
- Corn that beats early frosts. E. B. Heaton. O Judd Farmer 63:1 O 27 '17
- Corn, the king of grains. *Hoard's D* 50:840 Ja 14 '16; Same. J Ag (Quebec) 21:x Ag '17
- Corn time. *Am Coop J* 12:771 Ag '17
- Corn vs. gold as money. Wallaces' F 41:761 My 19 '16
- Corn with small stalks. E. W. Ferguson, jr. Wallaces' F 41:768 My 19 '16
- Crop insurance. D. N. Barrow. *Prog F* 31:844 Jl 1 '16
- Crops to grow with corn. P. Tabor. *Ga Ag Ext C* 56 4p '17
- Cutting and shocking corn. *Prog F* 31:1100 S 16 '16
- Dent corn that beats frost. A. D. Shamel. *il Country Gent* 83:5 Mr 30 '18
- Discusses funk corn. J. R. Holbert. O Judd Farmer 62:5 Mr 24 '17
- Drought-resisting adaptation in seedlings of Hopi maize. G. N. Collins. *bibliog il J Ag Research* 1:293-302 Ja '14
- Drying corn. *Nat Stock & F* 41:446 Ag 4 '17
- Effect of soil moisture on growth and maturity in maize. T. B. Hutcheson and T. K. Wolfe. *bibliog Va Ag Exp Tech B* 14:73-92 '17; Same. *Va Ag Exp Rep* 1915-1916:73-92 '17
- Factors influencing corn yields. J. C. Pridmore. *Prog F* 31:377 Mr 11 '16
- Facts for corn growers. *Country Gent* 81:17 Ja 1 '16
- Favor score card type of corn. O Judd Farmer 62:1 Mr 17 '17
- 5 bushels more corn per acre—let's try for it this year. *Prog F* 33:493 Ap 13 '18
- Flint corn. P. E. Davis. *Rural N Y* 75:621 Ap 15 '16
- Flint corn for grain. J Ag (Quebec) 21:165 My '18
- Flooded cornfields. C. P. Hartley. *Weekly N L* 4:8 Ap 25 '17
- Foods—corn and plant foods. H: G. Bell. *Am Fert* 48:72+ Ap 27 '18
- Frost damage to corn. maps *Monthly Crop Rep* 3:110 N '17
- Getting ready for the corn crop. H. Markley. *Rural N Y* 75:657; 76:576-7 Ap 22 '16, Ap 21 '17
- Give corn an even chance. C. P. Hartley. *Weekly N L* 4:3 Ap 18 '17
- Good stands of corn. *Weekly N L* 4:9 My 9 '17
- Great American crop. I. W. Ingham. *Hoard's D* 51:787 Je 2 '16
- Grow soy beans with corn. J. L. Justice. O Judd Farmer 60:2 My 13 '16
- Growing a record corn crop. G: H. Dacy. *il Field* 11 26:406-7 My '16
- Growing and feeding corn. *il O Judd Farmer* 60:3 Je 10 '16
- Growing corn. C. P. Hartley. *il Ag Digest* 1: 447-8 My '17
- Growing corn profitably. J. W. Henceroth. *il Am Coop J* 12:524 Mr 17
- Growing corn year after year. Wallaces' F 41:567 Ap 7 '16
- Growing oats, clover and corn. *il O Judd Farmer* 62:1 Ap 28 '17
- Growing soybeans with corn. O. W. Mansfield. *Purdue Ag* 11:22 Ap '17
- Higher yields from corn planted in wide rows. F. B. Nichols. *Hoard's D* 55:376 Mr 22 '18
- Hill vs. drill corn. W. H. Cronk. *Rural N Y* 76:640 My 5 '17
- Hilled or drilled corn. I. F. Wickes. *Rural N Y* 76:695 My 19 '17
- Home canning. A. M. Johnson. *Country Gent* 82:1302 Ag 18 '17
- Hope Farm flint corn. *il Rural N Y* 76:1231 O 27 '17
- How I ripened my 1917 corn crop. N. Raessler. *Hoard's D* 55:182 F 22 '18
- How much corn? Wallaces' F 42:644 Ap 13 '17
- How thick to plant corn. Wallaces' F 41:668; 42:544 Ap 28 '16, Mr 23 '17
- How to prepare for a bumper corn crop. A. E. Grantham. *il Prac F* 114:133-4 Ap 1 '18
- How we may handle larger areas of corn. G: P. Williams. *il Nat Stock & F* 40:46 Ap 8 '16
- Ideal corn field. Wallaces' F 41:730 My 12 '16
- Importance of the right variety of corn. *Prac F* 113:125 Mr 15 '17
- Increase corn yield; list of leading corn-producing counties. *Weekly N L* 4:3 My 2 '17
- Indian corn and its culture. H. J. Wheeler. (B. 8) 62p *il n.d. American agricultural chemical co., 92 State st., Boston*
- Influence of lime on the yield and nitrogen content of corn. A. W. Blair and H. C. McLean. *bibliog Soil Sci* 1:489-504 My '16
- Influence of soil temperature upon seedling corn. B. D. Halsted and S. A. Waksman. *Soil Sci* 2:393-8 Ap '17
- Irrigation and manuring studies. F. S. Harris and D. W. Pittman. *Utah Ag Exp B* 154:1-29 '17
- Large ears of corn. *Prac F* 114:48 F 1 '18
- Line increases corn crop. C: E. Thorne. *Hoard's D* 54:685 D 7 '17
- Listing, drilling or checking. Wallaces' F 41: 698 My 5 '16
- Lobed leaves in maize. J. H. Kempton. *il J Heredity* 7:508-10 N '16
- Looking to better corn and wheat. A. E. Grantham. *Prac F* 113:330+ O 1 '17
- Making corn go further. J. F. Duggar. *Prog F* 32:765 Jl 7 '17
- Making the corn crop. G: A. Crabb. *Ga Ag Coll (Ext) C* 53 4p '17



**Corn—Continued**

- Miscellaneous experiments with corn. B. L. Hartwell and S. C. Damon. R I Ag Exp B 173:1-27 '18
- More corn, less water. C. P. Hartley. Weekly N L 4:9 Ap 18 '17
- More corn suggestions. A. E. Grantham. Prac F 114:186 My 15 '18
- More corn to the acre. C. E. Thorne. Ohio Ag Exp B v 2:163-7 My '17
- Plant corn. F. App. N J Ag Dept C 5 4p '17
- Practical suggestions regarding culture. F. L. Kennard. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 91-3) '17
- Prepare for a big corn crop. Wallaces' F 42: 617 Ap 6 '17
- Preparing for a large corn crop. G. A. Crabb. Ga Ag Coll (Ext) C 43:1-4 '17
- Preparing for next season's crop. M. Coverdell. Jersey B 35:1566 O 4 '16
- Profitable ideas on fall field work. A. E. Grantham. Prac F 113:346 O 15 '17
- Raise things. Nat Stock & F 41:213 My 19 '17
- Rates of planting in corn. R. Summerby. il J Ag (Quebec) 19:257 Je '16
- Relation of the vigor of the corn plant to yield. A. E. Grantham. Am Soc Agron J 9:340-3 O '17
- Relative water requirement of corn and the sorghums. E. C. Miller. il J Ag Research 6: 473-84 Je 26 '16
- Relatives of corn. il Wallaces' F 41:769 My 19 '16
- Renter's champion corn. C. Lowden. il Country Gent 82:419 Mr 3 '17
- Rotating for corn. il Wallaces' F 43:35 Ja 11 '18
- Sam Jordan's corn talk. S. M. Jordan. il Mo Ag Bd B v 15:1-31 Je '17
- Seed time for broad acres. O Judd Farmer 62: 3 Ap 7 '17
- Short corn crop of good quality. B. W. Snow. O Judd Farmer 61:12 N 11 '16
- Shrinkage of corn. Prac F 112:460 D 15 '16
- Shrinkage of corn. A. E. Grantham. Prac F 114:30 Ja 15 '18
- Shrinkage of ear corn. Wallaces' F 43:1257 S 6 '18
- Significance of a kernel of corn. G. M. Twit- chell. Mass Ag Bd C 80:1-16 '18
- Smashes corn records. R. H. Birlingmaer. O Judd Farmer 60:8 Ap 29 '16
- Some variable ears of dent corn. A. D. Sham- el. il J Heredity 9:29-32 Ja '18
- Soy beans no harm to corn. W. E. Farver. Nat Stock & F 42:72 Ap 13 '18
- Soy beans with corn. S. W. Huff. Country Gent 82:1021 Je 16 '17
- Soybeans planted with corn. W. S. Tomlinson. Ohio F 137:707 My 20 '16
- Soybeans with corn. J. C. Beavers. Breeder's Gaz 69:1160 Je 1 '16
- Space the corn right. A. T. Morison. Hoard's D 55:535 Ap 12 '18
- Specialist in corn. C. C. Crain. il Ohio F 139: 395 Mr 17 '17
- Straight corn checking. G. W. Iverson. O Judd Farmer 62:10 Ap 7 '17
- Suckers on corn. J. D. Harper. il Country Gent 81:1372 Jl 15 '16
- Suggestions for corn club members. il Ill Ag Ext C 7:1-23 '17
- Superior white flint corn. J. T. Pine. il Rural N Y 77:4 Ja 5 '18
- Teachable father: corn on marsh lands. H. E. West. Hoard's D 55:604 Ap 26 '18
- Telling the yield of an ear of corn by its looks. Wallaces' F 41:1676 D 22 '16
- Timely corn suggestions. F. C. Grannis. O Judd Farmer 60:8 Je 24 '16
- Twenty-year comparison of different rotations of corn, potatoes, rye and grass. B. L. Hart- well and S. C. Damon. R I Ag Exp B 167: 1-38 '16
- Two reasons for soft corn. Ohio F 141:103 Ja 26 '18
- Uses made of the corn crop. Monthly Crop Rep 3:50 Je '17
- Wartime corn production. J. W. Henceroth. Am Fert 48:62+ F 2 '18
- Ways of a champion. F. I. Odell. Country Gent 81:586 Mr 11 '16
- We must make paying corn crops. W. F. Mas- sey. Prog F 31:644 My 13 '16

- What becomes of our corn. W. P. Cutler. Am Coop J 12:614 My '17
- What comes from corn. E. E. Slosson. il In- dependent (119 W. 40th st. N.Y. 10c) 93:416- 17 Mr 9 '18
- What is the matter with the corn crop? W. O. Wing. il Ohio F 139:105 Ja 27 '17
- What makes the corn crop? Wallaces' F 41:793 My 26 '16
- What's the matter with corn? J. M. Evvard. Country Gent 81:1180 Je 10 '16
- When to sell corn. H. E. Mern. Ohio F 138:406 O 28 '16
- Where drouth endangers the corn crop. J. F. Duggar. Prog F 33:847 Jl 27 '18
- Wide-row corn and cowpeas. I. O. Schaub. Country Gent 81:392 F 19 '16
- Will American corn feed France? W. H. Dean. il Country Gent 83:17 F 16 '18
- Work the corn land. C. P. Hartley. Weekly N L 4:4 Ap 25 '17
- World's corn champions; Willard Zeller fam- ily. O. R. Geyer. il Country Gent 81:265 F 5 '16
- See also Popcorn: also headings begin- ning Corn; also Missouri corn growers' as- sociation

**Breeding**

- Abandoned show corn type. H. J. Stevens. O Judd Farmer 62:15 Mr 3 '17
- Anomalous seed in zea mays. T. K. Wolfe. bibliog il Va Ag Exp Rep 1915-1916:193-9 '17
- Another breeder's opinion. C. E. Russell. il O Judd Farmer 62:18 Ap 14 '17
- Artificial pollination of corn. J Ag (Quebec) 20:30 Ag '16
- Breeding corn for yield. O Judd Farmer 60:6 Mr 18 '16
- Chlorophyll inheritance in maize. E. W. Lindstrom. bibliog il Cornell Ag Exp Mem- oir 13:1-68 '18
- Community corn breeder. E. D. Holden. Hoard's D 54:454 O 26 '17
- Composition of hybrids of zea mays L. as re- gards the structure of the endosperm. F. Kenjiro and K. Yoshinari. Int R Sci & Prac Ag 8,no 5:716-17 My '17
- Corn breeding plot. Wallaces' F 42:791 My 11 '17
- Corn breeding plot. Wallaces' F 43:578 Mr 29 '18
- Corn controversy waxes warm. O Judd Farmer 62:3 F 24 '17
- Corn improvement. J. D. Harper. il Country Gent 82:961 Je 2 '17
- Corn selection and breeding. G. L. Jones. il Rural N Y 77:313-14 Mr '18
- Corn type and yield. E. G. Montgomery. O Judd Farmer 62:5 Mr 10 '17
- Correlated characters in maize breeding. G. N. Collins. bibliog il J Ag Research 6:435-54 Je 19 '16
- Correlations between ear characters and yield in maize. H. H. Love and J. B. Wentz. Am Soc Agron J 9:315-22 O '17; Same cond. Int R Sci & Prac Ag 9,no 3:310-12 Mr '18
- Cross breeding corn. Wallaces' F 41:94 Ja 21 '16
- Developing a valuable strain of corn. P. L. Gates. il Penn State F 11:129-30+ Ap '18
- Ear type selection and yield in corn. P. J. Olson and others. il Minn Ag Exp B 174:1-60 '18
- Effect of hybridization on maturity and yield in corn. T. B. Hutcheson and T. K. Wolfe. bibliog Va Ag Exp Tech B 18:161-70 '17; Same. Va Ag Exp Rep 1915-1916:161-70 '17
- Experiments with corn. il N J Ag Exp Rep 1916:434-8 '17
- Experiments with corn. C. F. Noll. Pa Ag Exp B 139:14-23 '16
- Form for describing maize ears. H. Wenzel. Ag Gaz of New South Wales 27:701-2 O '16; Same. J Dept Ag Victoria 16:183-5 Mr '18
- High yielding corn not show type. il O Judd Farmer 62:1+ F 10 '17; Same. Wallaces' F 42:656 Ap 13 '17
- Hour with a plant breeder. H. A. Wallace. il Wallaces' F 41:869 Je 16 '16
- Hybrids of zea ramosa and zea tunicata. G. N. Collins. bibliog il J Ag Research 9: 383-96 Je 11 '17

**Corn—Breeding—Continued**

- Improving corn at home. T. W. Harvey. Country Gent 81:17 Ja 1 '16
- Improving the corn crop by selection and breeding. F. P. Russell. il Cornell Reading Course 129:111-28 '17
- Increased yields of corn from hybrid seed. J. H. Leforge. Purdue Ag 12:156-8 D '17
- Increasing the yield of corn by crossing. D. F. Jones and others. bibliog il Conn State Ag Exp Rep 1916, pt 5:323-47 '17
- Influence of hybridization and cross-pollination on the water requirement of plants. L. J. Briggs and H. L. Shantz. il J Ag Research 4:391-402 Ag '15
- Inheritance of a mosaic pericarp pattern color of maize. H. K. Hayes (Genetics 2, no. 3: 261-81 '17). Exp Sta Record 38, no 6:531-2 '18
- Inheritance of endosperm color in maize. O. E. White. bibliog Am J Bot 4:396-406 Jl '17
- It's a long, long way to go. H. R. O'Brien. il Country Gent 83:9+ O 19 '18
- Learning truth about strains of corn. il O Judd Farmer 64:3 Ja 12 '18
- \* Linkage in maize: the C aleurone factor and waxy endosperm. T. Bregger. Am Naturalist (Science Press, Garrison, N.Y. 40c) 52: 61 Ja '18
- Mass mutation in zea mays. H. de Vries. Science (Science Press, Garrison, N.Y. 15c) n s 47:465-7 My 10 '18
- Method for determining the percentage of self-pollination in maize. A. E. Waller. Am Soc Agron J 9:35-7 Ja '17
- More accurate method of comparing first-generation maize hybrids with their parents. G. N. Collins. J Ag Research 3:85-91 O '14
- New-place effect in maize. G. N. Collins. J Ag Research 12:231-43 F 4 '18
- Normal self-fertilization in corn. H. K. Hayes. bibliog Am Soc Agron J 10:123-6 Mr '18
- Outline of a plan for corn breeding. L. H. Smith. Ill Ag Exp C 221:1-4 '18
- Progress in maize improvement. H. Wenholz. il Ag Gaz of New South Wales 28:153-63 Mr '17
- Protective coloration in seeds of Bolivian maize. J. H. Kempton. il J Heredity 8:200-2 My '17
- Reggiano maize: a new variety of early dwarf maize obtained in Italy by hybridisation and selection. A. Succi. Int R Sci & Prac Ag 9, no 4:441-3 Ap '18
- Relation between yield and ear characters in corn. T. B. Hutcheson and T. K. Wolfe. bibliog Am Soc Agron J 10:250-5 S '18
- Relation of cob to other ear characters in maize. A. E. Grantham. bibliog il Am Soc Agron J 9:201-17 My '17; Abstract. Int R Sci & Prac Ag 9, no 2:174-6 F '18
- Results of 20 years experiments on maize at the agricultural experiment station, Ohio. C. G. William and F. A. Welton. Int R Sci & Prac Ag 7, no 10:1439-43 O '16
- Seed corn selection and results. O Judd Farmer 62:3 Je 9 '17
- Segregation of susceptibility to parasitism in maize. D. F. Jones. bibliog Am J Bot 5:295-300 Je '18
- Selecting and improving corn. G. Gardiner. il Field II 27:862 N '17
- Selection of seed maize. H. Wenholz. il Ag Gaz of New South Wales 28:533-49 Ag '17
- Show corn and utility. A. F. Troyer. il O Judd Farmer 62:3 F 17 '17
- Significance of a kernel of corn. G. M. Twitchell. Mass Ag Bd Yearbook 1917, pt 2:85-98 '18
- Some 1916 corn experiments. G. M. Allee. Wallaces' F 42:351 F 23 '17
- Special corn breeding plot. Wallaces' F 43:757 My 3 '18
- Statistical study of some indirect effects of certain selections in breeding Indian corn. H. L. Rietz and L. H. Smith. J Ag Research 11:105-46 O 22 '17
- Ten years of corn breeding. il O Judd Farmer 60:5 Ja 15 '16
- Twenty years of corn breeding. L. H. Smith. O Judd Farmer 61:3 N 4 '16

**Composition**

- Composition of the maize plant. J. W. Ince. il N D Ag Exp B 117:1-32 '16
- Daily variation of water and dry matter in the leaves of corn and the sorghums. E. C. Miller. il J Ag Research 10:11-46 Jl 2 '17
- Improved apparatus for use in making acidity determinations of corn. H. J. Besley and G. H. Baston. il U S Ag C 68:1-4 '16

**Costs**

- Cost of growing corn. O Judd Farmer 60:6 My 27 '16
- Cost of producing an acre of corn, today and yesterday. Ag Digest 2:567 Ag '17
- Cost of producing corn. Ohio F 141:642 My 11 '18
- It costs more to grow corn this year. H. R. O'Brien. il Country Gent 82:1822-3 N 24 '17
- See also Corn—Prices

**Cultivation**

- Blind plowing corn. F. Sherwin. Kimball's D F 16:288 Ap 1 '18
- Cheap cultivation of corn. J. H. Davis. Prog F 31:436 Mr 25 '16
- Common sense cultivation. D. N. Barrow. Prog F 32:799 Jl 21 '17
- Cooperative fertilizer experiments with corn, 1908-1914. G. S. Fraps. Tex Ag Exp B 184:1-64 '16
- Corn cultivating. Wallaces' F 41:799 My 26 '16
- Corn cultivating. Wallaces' F 43:877 My 31 '18
- Corn cultivation. il Wallaces' F 42:835 My 25 '17
- Corn cultivation. G. A. Crabb. il Ga Ag Coll (Ext) C 21 8p '16
- Corn cultivation. P. H. Eaton. Hoard's D 53: 642 My 4 '17
- Corn cultivation. C. P. Hartley. il Farmers' B 414:1-35 '18 (rev)
- Corn culture. T. B. Hutcheson and others. il Va Ag Exp B 214:1-12 '17
- Corn in hills or drills. J. S. Woodward. Rural N Y 76:141 F 3 '17
- Corn planting and cultivating. il O Judd Farmer 63:5 Jl 21 '17
- Cultivating corn for highest yields. J. D. Harper. Breeder's Gaz 72:10 Jl 5 '17
- Cultivating corn to save moisture. Prog F 32: 718 Je 23 '17
- Cultivation of corn. J. D. Harper. Breeder's Gaz 69:1208 Je 8 '16
- Cultivation of maize. H. Wenholz. il Ag Gaz of New South Wales 29:457-67, 609-23, 697-704, 761-7 Jl, S-N '18
- Cultivation of the corn crop. J. F. Trost. Purdue Ag 11:19-20 Je '17
- Deep seed bed preserves corn roots. A. T. Morison. Hoard's D 54:694 D 7 '17
- Depth of corn planting. Wallaces' F 41:666 Ap 28 '16
- Does it pay to cultivate corn? W. E. Bowers. il Hoard's D 53:757 My 25 '17
- Don't plant corn too deep. L. F. Graber. il Country Gent 83:26 My 18 '18
- Early and late corn planting. L. C. Greene. Wallaces' F 41:672 Ap 28 '16
- Excessive corn cultivation bad. S. C. Salmon. O Judd Farmer 61:10 Jl 15 '16
- Extension circulars. Mass Ag Ext C 15, 20 '17
- Titles are: How to grow more corn per acre. E. Jones; Massachusetts farmers—raise more corn
- Farm practice in the cultivation of corn. H. R. Cates. il U S Ag B 320:1-66 '16
- Farmers' experiment plots; maize experiments for grain, 1915-16. Ag Gaz of New South Wales 27:698-700, 779-82 O-N '16
- Favor shallow cultivation. O Judd Farmer 60: 12 Je 3 '16
- Fertilizing America's greatest cereal. C. E. Thorne. il Ohio F 139:573 Ap 21 '17
- Getting the corn crop well started. J. L. Justice. il O Judd Farmer 60:3 My 27 '16
- Good cultivation for corn. J. L. Justice. Ohio F 138:66 Jl 22 '16
- How to apply fertilizer to corn. G. P. Williams. il Nat Stock & F 41:164 My 5 '17
- Increasing the corn yield. G. A. Collins. il Field II 28:239 Ap '18



**Corn—Cultivation—Continued**

- Maize culture. W. White, jr. Ag Gaz of New South Wales 27:746-8 O '16  
 More corn without labor. C. P. Hartley. il Country Gent 83:5 Je 1 '18  
 Phosphate on corn. G. M. Twitchell. Rural N Y 76:891 Jl 21 '17  
 Rate of seeding maize. H. Wenholtz. Ag Gaz of New South Wales 27:609-14 S '16  
 Rate of seeding maize; experiments at Grafton farm, 1915-16. H. Wenholtz. Ag Gaz of New South Wales 27:783-6 N '16  
 Relation of cultivation and of number of stalks per hill to yield of maize crop. C. P. Bull. Int R Sci & Prac Ag 7,no 3:367-70 Mr '16  
 Seeded for corn. F. Blackford. Ohio F 137:486 Ap 1 '16  
 Shall we fertilize corn in the hill? C. E. Thorne. Ohio Ag Exp B v 1:159-60 My '16  
 Shallow vs. deep plowing for corn. E. P. Snyder. Ohio F 141:791 Je 22 '18  
 Side dressing to increase corn yields. Coop Manager & F 6:83 My '17  
 Spare the corn roots. il Country Gent 82:958 Je 2 '17  
 Talk about level culture; experience with corn and potatoes. G. W. Rogers. Rural N Y 77:641 My 4 '18  
 Thirty years of surface cultivation. il O Judd Farmer 60:3 My 6 '16  
 Using fertilizer for increasing my corn yield. F. Suhre. il System on the Farm 1:302-3 O '17  
 Why not fertilize in the hill? C. E. Thorne. Ohio Ag Exp B v 3:182-3 Je '18  
 Working the corn the first time. Prac F 112:212 My 15 '16

**Diseases and pests**

- Aphis immunity of teosinte-corn hybrids. W. B. Gernert. Science (Science Press, Garrison, N.Y. 15c) n 5 46:390-2 O 19 '17  
 Controlling cornstalk diseases. O Judd Farmer 61:8 Ag 12 '16  
 Corn root worm and the corn root louse. il Wallaces' F 43:1043 Jl 12 '18  
 Corn weevil control. W. E. Hinds. Prog F 31:1228 O 21 '16  
 Democrat corn withstood chinch bugs. J. J. Doerschuk. O Judd Farmer 65:228 S 21 '18  
 Diplodia zeae, the cause of dry rot in maize. P. A. Van Der Bijl. Int R Sci & Prac Ag 7,no 9:1377-8 S '16  
 Injurious corn insects. H. C. Severin. il S D Ag Exp B 178:780-813 '18  
 Insect pests of maize. W. R. Gurney. il Ag Gaz of New South Wales 29:641-50 S '18  
 Results of corn disease investigations. G. N. Hoffer and J. R. Holbert. Science (Science Press, Garrison, N.Y. 15c) n 5 47:246-7 Mr 8 '18  
 Shuck protection for ear corn. C. H. Kyle. il U S Ag B 708:1-16 '18  
 Studies on a fusarium disease of corn and sorghum. L. H. Pammel and others. il Ia Ag Exp Research B 33:115-36 '16  
 Toxic chlorosis of maize: the internal secretion and natural resistance of higher plants to poisons and to parasitic diseases. P. Mazè. Int R Sci & Prac Ag 8,no 5:799-802 My '17  
 Trailing fusarium in McLean county, Ill. O Judd Farmer 63:4 N 10 '17  
 See also Corn billbugs; Corn ear rot; Corn earworms; Corn-leaf blotch miners; Corn root lice; Corn rootrot; Corn rootworms; Corn smut; Corn weevils; Cornstalk beetles. Roughheaded; Cornstalk borers; Cornstalk borers, Lesser; Desert corn flea-beetles; European cornstalk borers; Pink corn worms; Seed corn maggots

**Grading**

- Grades for commercial corn. J. W. T. Duvel. il U S Ag B 168:1-11 '15  
 Grades of seed corn. E. D. Eddy. (In Report, Live stock branch, 1916, p. 24-31) '17 Ontario ag. dept., Toronto, Canada  
 Standardization of the market grades of corn. I. L. Baldwin. Purdue Ag 11:20-1 Ap '17  
 See also Corn—Standards

**Harvesting**

- Harvesting the corn crop. A. E. Grantham. Prac F 114:304 S 15 '18  
 How the corn crop is harvested. Monthly Crop Rep 4:140 N '18

**Judging**

- Corn judging contest. W. H. Darst. Penn State F 11:91 Mr '18  
 High yielding corn not show type. il O Judd Farmer 62:1+ F 10 '17; Same. Wallaces' F 42:656 Ap 13 '17  
 Judging ear corn. il Hoard's D 50:880 Ja 21 '16  
 Preparing corn for showing. A. I. Foard. Breeder's Gaz 70:166 Ag 3 '16  
 Revised score cards needed. A. D. Cromwell. Breeder's Gaz 70:49 Jl 13 '16  
 True corn judging basis. P. G. Holden. O Judd Farmer 62:4 Mr 31 '17

**Marketing**

- Selling new or old corn. H. A. Bereman. Country Gent 81:180 Ja 22 '16

**Moisture content**

- Shrinkage of shelled corn while in cars in transit. J. W. T. Duvel and L. Duval. U S Ag B 48:1-21 '13  
 Squeezing the water out of corn. J. D. Harper. Country Gent 81:342 F 12 '16

**Prices**

- Affinity markets; hogs and corn. F. H. Higgins. Ohio F 140:113 Ag 18 '17  
 Balancing hogs against corn. C. E. Gapen. il Country Gent 82:1836 N 24 '17  
 Corn market after the Civil war. Wallaces' F 43:1709 N 22 '18  
 Corn price hog ratio. Ag Digest 2:745 D '17  
 Cost of hog production in terms of corn. Wallaces' F 42:1456 O 26 '17  
 County guarantee on corn prices. S. R. Parker. Hoard's D 55:844 Je 7 '18  
 Geographical phases of farm prices: corn. L. B. Zapoleon. maps U S Ag B 696:1-53 '18  
 Hog and corn figuring. M. Green. Coop Manager & F 7:101 Mr '18  
 Hog and corn ratios. 11p '17 Meat division, U.S. Food administration, Washington, D.C.  
 Hogs and corn. C. V. Truax. Swine World 5:1-2 Ja '18  
 Hogs and corn in war times; Civil war ratios and corn prices. Prog F 32:1310 D 15 '17  
 Our live stock-corn ratios. Wallaces' F 42:1305 S 28 '17  
 Price of the 1917 monster corn crop to control the price of hogs. Reliable P J 24:319+ D '17  
 Profits and losses in corn production for the past sixty years. Wallaces' F 43:809 My 17 '18  
 Shall we sell or feed our corn? J. Begg. Nat Stock & F 41:86 Ap 14 '17  
 What are the corn and hog states? Wallaces' F 43:1513 O 18 '18  
 What do hogs pay for corn? J. I. Thompson. Breeder's Gaz 73:548 Mr 14 '18

**Roots**

- Number of temporary roots in the cereals. R. G. Wiggins. il Am Soc Agron J 8:31-7 Ja '16

**Seed**

- Abnormal ears of maize obtained from seeds treated with copper. A. Jungelson. Int R Sci & Prac Ag 9,no 2:176-7 F '18  
 Acidity as a factor in determining the degree of soundness of corn. H. J. Besley and G. H. Baston. il U S Ag B 102:1-45 '14  
 Ample seed corn for 1918 planting. E. D. Eddy. Ag Gaz of Canada 5:771-2 Ag '18  
 Anomalous seed in zea mays. T. K. Wolfe. bibliog il Va Ag Exp Rep 1915-1916:193-9 '17  
 Approval of export shipments of corn to Canada. U S Seed Rep 1:2 Mr '18  
 Are we in the corn belt? W. E. Gernert. il O Judd Farmer 64:1 F 23 '18  
 Backing the seed corn drive: how county bankers got behind the farm bureau. A. T. Kearney. il Banker-F 5:11 O '18  
 Be sure of seed corn. Weekly N L 5:1 Ja 23 '18

**Corn—Seed—Continued**

- Bottles energy in his seed corn. H. J. Stelford. *il O Judd Farmer* 65:276 O 5 '18
- Campaigning for corn and wheat in Indiana. R. S. Bundy. *il Purdue Ag* 12:94-5 N '17
- Care of seed corn. Weekly N L 5:4 S 5 '17
- Care of seed maize. H. Wenzholz. *il Ag Gaz of New South Wales* 28:229-43 Ap '17
- Corn belt short of seed corn. O Judd Farmer 64:10 Ja 12 '18
- Corn-crop insurance. C. R. Weidle. *il Country Gent* 81:762 Ap 1 '16
- Corn kernel. Wallaces' F 41:1544 N 24 '16
- County agent proves his worth. W. E. Hanger. maps Ohio F 142:133-4 Ag 17 '18
- Curing and storing seed corn. R. Summerby. *il J Ag (Quebec)* 22:90 D '18
- Curing seed corn. J. D. Harper. *il Country Gent* 81:1872 O 21 '16
- Ear-to-row test of corn. J. C. Pridmore. *Prog F* 31:345 Mr 4 '16
- First steps in selecting seed corn. *Prac F* 112:344 S 15 '16
- Following the seed corn situation. O Judd Farmer 64:3 F 2 '18
- Freezing injury of seed corn. T. A. Kiesselbach and J. A. Ratcliff. *il Neb Ag Exp B* 163:1-16 '18
- Germination test of seed corn. N. Schmitz. *il Pa Ag Ext C* 71:1-7 '18
- Good seed corn. Va Ag Dept B 116:7-8 Ap '17
- Good seed corn and its relation to increasing the yield per acre in Indiana. C. R. Hoffer. *il Purdue Ag* 10:22-3+ Ap '16
- Good seed corn for next year. P. C. Taff. *il Ia Ag Ext B* 45:1-4 '16
- Good seed from near-ripe corn. L. F. Graber. *il Country Gent* 82:1674 N 3 '17
- Good seed means more and better corn. *il Mich Ag Ext B* 11:1-4 '17
- Grades of seed corn. E. D. Eddy. (*In Report, Live stock branch, 1916, p. 24-31*) '17 Ontario ag. dept., Toronto, Canada
- Growing and marketing pedigreed seed corn. N. Raessler. *Hoard's D* 50:826 Ja 14 '16
- Handling seed corn in Iowa. O Judd Farmer 60:8 Ja 15 '16
- How I doubled the returns from my corn crop. F. J. Rist. *il System on the Farm* 1:146-8 Je '17
- How Iowa found a seed corn supply. L. M. Mathewson. *il O Judd Farmer* 60:3 Mr 11 '16
- How to plant poor seed corn. Wallaces' F 43:657 Ap 12 '18
- How to test seed corn. J. C. Hackleman. *il Mo Ag Ext C* 48:1-16 '18
- How to use low-germinating seed corn. T. A. Kisselbach. *il Breeder's Gaz* 73:705 Ap 4 '18
- Influence of position of grain on the cob on the growth of maize seedlings. B. D. Halsted and E. J. Owen. *Am Soc Agron J* 9:267-74 S '17; Same cond. *Int R Sci & Prac Ag* 9:no 3:299-302 Mr '18
- Iowa seed corn week. Wallaces' F 41:264 F 18 '16
- Iowa's corn campaign. *il Country Gent* 81:1807 O 7 '16
- Jimmie's seed corn venture. *il Hoard's D* 53:296 Mr 9 '17
- Live corn has white germs. T. F. Longenecker. *Nat Stock & F* 41:1352 Mr 23 '18
- Making sure of a crop. F. A. Koenig. *il Kimball's D F* 14:231 Ap 1 '16
- Method of sale of war emergency seed corn to farmers in certain states by the United States Department of agriculture. *U S Ag C* 105:1-3 '18
- Methods of testing seed corn. E. R. Hodgson. *Va Ag Ext B* 27:4p '18
- Methods of testing seed corn. F. H. Tobias. *O Judd Farmer* 60:4 Mr 25 '16
- Missouri seed corn. *il Country Gent* 81:322 F 12 '16
- New maize secret. *J Dept Ag Victoria* 16:123-4 F '18
- Next year's corn crop. *il Wallaces' F* 42:1335 O 5 '17
- 1918 seed corn. C: McIntire. *Ohio F* 141:70 Ja 19 '18
- Ohio corn census. *Ohio F* 141:422 Mr 23 '18
- Picking, drying and testing seed corn. R. M. Ainsworth. *il O Judd Farmer* 61:1 S 16; 4 S 23 '16
- Picking out seed from 50-percent corn. C. J. Willard and H. W. Schuer. *Ohio F* 141:586 Ap 27 '18
- Plant southern grown seed corn. A. F. Kidder. *Prog F* 31:60 Ja 8 '16
- Poor quality of seed corn. G. W. Koiner. *Va Ag Dept B* 127:3-5 Ap '18
- Practical 150-ear rag-doll tester. Wallaces' F 41:575 Ap 7 '16
- Prepare now to select planting seed. A. F. Kidder. *Prog F* 31:870 Jl 8 '16
- Preparedness for crop production. C. A. Zavitz. (*In Report, Ontario corn growers' assn., 1916, p. 14-22*) '17 Ontario ag. dept., Toronto
- Primitive methods of maize seed preparation. H. H. Biggar. *Am Soc Agron J* 10:183-5 Ap '18
- Principles of corn improvement. *Prac F* 112:360 O 1 '16
- Rag-doll corn tester. W. E. Bowers. *il Country Gent* 81:740 Ap 1 '16
- Rag doll method for testing seed corn. O. F. Jensen. *Rural N Y* 75:405 Mr 4 '16
- Rag-doll seed tester; its use in determining what ears of corn are fit for seed. G. J. Burt and others. *il Farmers' B* 948:1-7 '18
- Rag-doll tester for corn. W. L. Burlison and G. H. Dungan. *il Ill Ag Ext C* 19:1-8 '18
- Raising good seed ears. C. E. Russell. *il Field* 11:26:674 Ag '16
- Rounding up seed corn shortage. O Judd Farmer 64:10 Ja 12 '18
- Save plenty of seed corn. A. E. Grantham. *Prac F* 113:426 D 15 '17
- Save your seed corn. P. L. Fancher. *Ontario Ag Dept C* 14:1-4 n.d.
- Saving seed corn. C. P. Hartley. *il Country Gent* 83:1+ S 21 '18
- Scarcity of seed corn threatens 1918 crop. R. H. Moulton. *il Hoard's D* 55:136-7 F 15 '18
- Seed corn. Wallaces' F 41:1201 S 15 '16
- Seed corn. C. P. Hartley. *il Farmers' B* 415:1-11 '17 (rev.); Excerpts. *Va Ag Dept B* 109:35-40 '16
- Seed corn. R. A. Hayne. *il Nat Stock & F* 41:670 O 13 '17
- Seed corn again. *il Hoard's D* 54:232 S 14 '17
- Seed corn campaign. *Ohio F* 141:103 Ja 26 '18
- Seed corn deficiency for 1918. map Monthly Crop Rep 4:29 Mr '18
- Seed corn; do you know that it will grow? P. G. Holden and J. E. Waggoner. 27p *il '17 International harvester co., Agricultural extension dept., Chicago*
- Seed corn experience. C. E. Prescott. *Hoard's D* 55:554 Ap 19 '18
- Seed corn for Canadian growers. G. H. Clark. *Ag Gaz of Canada* 5:351-2 Ap '18
- Seed corn for Iowa. *il Kimball's D F* 14:198 Mr 15 '16
- Seed corn for 1918. C. G. Williams. *il Ohio Ag Exp B v* 3:69-71 Mr '18
- Seed corn for the 1916 crop. H. D. Hughes and W. W. Stanfield. *il Ia Ag Exp C* 28:1-16 '16
- Seed corn now war material. O Judd Farmer 64:1 Ja 26 '18
- Seed corn patch. F. M. Lutts. *il Ohio F* 141:527 Ap 13 '18
- Seed corn plot. *il Hoard's D* 51:712 My 19 '16
- Seed corn preparedness. L. F. Graber. *il Hoard's D* 56:183 S 6 '18
- Seed corn researches by an Illinois farmer. *il O Judd Farmer* 63:1 S 1 '17
- Seed corn selection. *Hoard's D* 54:258 S 21 '17
- Seed corn selection. J. D. Harper. *il Breeder's Gaz* 70:407 S 14 '16
- Seed corn selection. L. E. Rast. *il Ga Ag Coll (Ext) B* 111:1-12 '16; Same. *C* 64:1-8 '17
- Seed corn situation. *Breeder's Gaz* 73:129 Ja 17 '18
- Seed corn situation. *U S Seed Rep* 1:4 D '17; 3 Ja; 4-6 Mr '18
- Seed corn situation. Wallaces' F 41:76 Ja 21 '16
- Seed corn situation. J: Cownie. *il Wallaces' F* 41:637 Ap 21 '16
- Seed corn situation. A. E. Grantham. *Prac F* 114:123 Mr 15 '18

\* Note on the vitality of seed corn six years old. J. A. Drushel. *Nature Study R* (Ithaca, N.Y. 15c) 14:123 Mr '18



**Corn—Seed—Continued**

Seed corn situation. E. G. Montgomery. *il* Cornell Countryman 15:453-5 My '18  
Seed-corn situation for 1918. W. L. Burlison and G. H. Dungan. *il* Ill Ag Exp C 211:1-8 '18  
Seed corn situation in Indiana. J. H. Lefforge. *il* Purdue Ag 12:352-4 Mr '18  
Seed corn situation in the Northwest. U S Seed Rep 1:2 N '17  
Seed corn storage. Kimball's D F 16:850 N 1 '18  
Seed corn testers and their work. C. H. Knopf. *il* Hoard's D 51:327 Mr 17 '16  
Seed corn testing experience. D. E. Fish. Wallaces' F 43:297 F 15 '18  
Seed corn time. Wallaces' F 43:1375 S 27 '18  
Seed for the victory corn crop a work well done—a bit of history made. O Judd Farmer 65:32-3 Jl 13 '18  
Select seed corn in fall to bring big 1919 yields. Weekly N L 6:3 Ag 7 '18; Same. Coop Manager & F 8:82 S '18  
Select seed corn in the field. R. E. Stephenson. Rural N Y 76:1049 S 8 '17  
Select seed corn on the stalk. Ohio F 142:267 S 21 '18  
Select your seed corn early. *il* Hoard's D 52:184 S 1 '16  
Select your seed corn now. Kimball's D F 16:671 S 1 '18  
Selecting and caring for seed corn. E. J. Kinney. *il* Ky Ag Ext C 63:1-6 '18  
Selecting and curing seed corn. A. Atkinson and M. L. Wilson. *il* Mont Ag Exp C 54:165-84 '16  
Selecting and storing seed corn. A. T. Wiancko. *il* Purdue Ag 13:17-19 O '18  
Selecting and testing seed corn. C. W. Goodman. *il* Tex Ag Dept B 53:1-23 Ja '17  
Selecting corn in the field for another bumper crop next year. C. P. Hartley. *il* Country Gent 82:1478-9 S 29 '17  
Selecting corn seed. E. B. Babcock. *il* Cal Ag Exp C 180:1-7 '17  
Selecting, curing, and testing seed corn. R. A. Moore and J. J. Garland. *il* Wis Ag Ext C 58:1-20 '16  
Selecting seed corn. C. O. Cromer. Kimball's D F 16:671 S 1 '18  
Selecting seed corn increases yield. Prog F 31:1171 O 7 '16  
Selection and care of seed corn. C. G. Williams. *il* Ohio F 142:210 S 7 '18; Abstract. Ohio Ag Exp B v 3:300-2 O '18  
Selection and preservation of seed corn. A. T. Wiancko. *il* Purdue Ag Ext Leaflet 87:1-4 '17  
Selection and storage of seed corn. W. L. Burlison and E. A. White. *il* map Ill Ag Exp C 225:1-16 '18  
Seriousness of seed corn situation in 1918. E. J. Kinney. *il* Ky Ag Ext C 55:1-7 '18  
Significance of a kernel of corn. G. M. Twitchell. Mass Ag Bd Yearbook 1917, pt 2: 85-98 '18  
Simple directions for testing seed corn to eliminate kernels that won't grow. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2235: 35 Mr 16 '18  
Speeding up the corn crop. L. L. Rummell. *il* Country Gent 83:13 Ja 12 '18  
Suggests government seed corn control. C. B. Wing. Breeder's Gaz 73:427 F 28 '18  
Summary of the seed corn situation. U S Seed Rep 1:2 My '18  
System for marketing seed corn in the ear. G. H. Clark. Ag Gaz of Canada 3:226-7 Mr '16  
Test seed corn before the busy season. Ohio F 139:254 F 17 '17  
Test the seed corn. R. A. Hayne. *il* Nat Stock & F 40:1424 Mr 24 '17  
Test your seed corn. Weekly N L 4:5 Ap 18 '17  
Test your seed corn. F. D. Gardner. *il* Nat Stock & F 41:1239 Mr 2 '18  
Test your seed corn. H. B. Welsh. Breeder's Gaz 73:257 F 7 '18  
Testing and preparing seed corn. A. T. Wiancko and J. A. McCarty. *il* Purdue Ag Ext Leaflet 90:1-4 '18  
Testing seed corn. *il* Hoard's D 51:164 F 18 '16

Testing seed corn. *il* Hoard's D 55:202 F 22 '18  
Testing seed corn. *il* Ia Ag Ext B 50:1-4 '17  
Testing seed corn. Prac F 113:76 F 15 '17  
Testing seed corn. H. P. Cooper. Penn State F 11:83+ Mr '18  
Testing seed corn. C. G. Williams. Ohio Ag Exp B v 1:96 Mr '16  
Testing seed corn at home. Ohio F 139:462 Mr 24 '17  
Testing the seed corn. Wallaces' F 43:230 F 8 '18  
Testing the seed corn. Wallaces' F 43:293 F 15 '18  
Time to pick seed corn. Wallaces' F 42:1351 O 5 '17  
War emergency corn satisfactory. W. E. Hanger. Ohio F 142:398 O 26 '18  
Ways to keep seed corn snug. *il* O Judd Farmer 65:205 S 14 '18  
Weekly reports on seed corn. map U S Seed Rep 1:1-2 Ap '18  
When to select seed corn. C. O. Cromer. Purdue Ag 11:22 O '16  
You select the seed corn. *il* Hoard's D 56:236 S 13 '18

**Standards**

Notice of public hearing relating to official grain standards of the United States for shelled corn and wheat. Coop Manager & F 7:27-8 D '17  
Official corn standards. Wallaces' F 43:734 Ap 26 '18  
Official grain standards of the United States for wheat and corn; tabulated and abridged. 24p '17 Simonds-Shields-Lonsdale grain co., Exchange bldg., Kansas City, Mo.  
Official grain standards of the United States for wheat, and official grain standards of the United States for shelled corn. (Service and regulatory announcements—Markets 33) 30p '18 U S Ag  
These standards for wheat and for shelled corn supersede, on July 15, 1918, those which were published in Service and regulatory announcements nos. 11 and 22, respectively  
Standards for shelled corn. Monthly Crop Rep 4:77 Jl '18

**Statistics**

Commercial stocks of corn, Jan. 1. U S Food Surveys 1:1-3 Je 8 '18  
Commercial stocks of corn, July 1. U S Food Surveys 2:1-3 S 9 '18  
Commercial stocks of corn and corn food products in the United States on August 31, 1917. U S Ag C 99:3-9 '18  
\* Corn in Ontario. (In Report, Bur. of industries, 1917, p. 32) '18 Ontario ag. dept., Toronto  
Corn in the United States and other countries, including exports and imports. See United States Department of agriculture Yearbooks  
Corn, yields per acre and prices, by states, 50 years 1866-1915. U S Ag B 515:1-16 '17  
Farm stocks March 1, 1917, and shipments out of county. Monthly Crop Rep 3:23 Mr '17  
How the corn crop is harvested. Monthly Crop Rep 4:140 N '18  
Mature corn, 1915 and usual year. maps Wallaces' F 41:188-9 F 4 '16  
Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no. 4) p 62-73 (O) '16 Bureau of statistics, International inst. of agriculture, Rome  
Summary of facts ascertained from reports made to the Secretary of agriculture by inspectors licensed to inspect and grade shelled corn under the United States grain standards act and from voluntary reports of elevators or warehouses in grain markets of the United States. (Service and regulatory announcements—Markets 23) 47p '17 U S Ag  
White, yellow, and mixed corn. Monthly Crop Rep 3:17 F '17

**Storage**

Corn ventilating device. *il* Wallaces' F 43:1371 S 27 '18  
Handling and storing corn. J. F. Duggar. Prog F 32:1019 S 29 '17

**Corn—Storage—Continued**

How to save Alabama's corn crop. W. E. Hinds. Ala Ag Exp Press B 90 3p n.d.  
See also Corn houses

**Study and teaching**

Lessons on corn for rural elementary schools. C. H. Lane. il U S Ag B 653:1-19 '18  
Nature study with corn (maize). H. Wenzholz. Ag Gaz of New South Wales 28:111-20 F '17  
Soil in relation to the growth of crops; Lessons on corn growing. Neb Ag Ext Lessons 1-8 32p n.d.  
Teaching agriculture; corn lesson. G. A. Bricker. Ohio F 142:462, 489, 510, 534, 560 N 9-D 7 '18

**Transportation**

Conover grain company secure judgment against carrier for delay in transit. Coop Manager & F 7:38-9 Ja '18  
Maximum loads increased in shipping shelled corn. Weekly N L 6:9 Ag 7 '18

**Varieties**

Best type of corn to plant. F. R. Curtis. Prog F 32:66 Ja 20 '17  
Breeds of corn. Wallaces' F 43:12 Ja 4 '18  
Co-operative testing of varieties of corn. Prac F 112:421 N 15 '16  
Corn and cotton varieties. C. K. McClelland. Ga Ag Exp C 75:1-8 '17  
Corn types in northeastern Illinois. E. B. Heaton. O Judd Farmer 64:644 Je 22 '18  
Corn varieties. il Wallaces' F 41:3 Ja 7 '16  
Corn—varieties and limiting factor tests; season 1916. W. L. Hutchinson. S C Ag Exp B 190:1-7 '17  
Corn—varieties, ear-row, and limiting factor tests. W. L. Hutchinson. S C Ag Exp B 186:1-14 '16  
Corn varieties for Quebec. J. Murray. il J Ag (Quebec) 19:168-9 F '16  
Corn varieties test at Mississippi Delta station. Prog F 33:481 Ap 13 '18  
Corn variety tests 1915 and 1916. L. W. Osborn. Ark Ag Exp B 130:1-31 '17  
Early history of Reid's yellow dent. Wallaces' F 41:267 F 18 '16  
Early varieties of corn. J. F. Duggar. Prog F 32:247 F 24 '17  
Experiments with corn. C: F. Noll. Pa Ag Exp B 139:1-23 '16  
High yielding corn varieties. O Judd Farmer 61:4 D 16 '16  
Importance of test corn varieties. M. V. Manoukian. il Rural N Y 77:184 F 9 '18  
Increasing the yield of corn by crossing. D. F. Jones and others. bibliog il Conn State Ag Exp Rep 1916, pt 5:323-47 '17  
Influence of hybridization and cross-pollination on the water requirement of plants. L. J. Briggs and H. L. Shantz. il J Ag Research 4:391-402 Ag '15  
Maize and broom millet experiments, 1916-17. H. Wenzholz. Ag Gaz of New South Wales 28:645-9 S '17  
More accurate method of comparing first-generation maize hybrids with their parents. G. N. Collins. J Ag Research 3:85-91 O '14  
Relation of ear characters of corn to yield. C. C. Cunningham. Am Soc Agron J 8:188-96 My '16  
Report on corn and cotton varieties, 1915. C. K. McClelland. Ga Ag Exp C 74:1-8 '16  
Right variety of corn. J. Lawrence. Nat Stock & F 40:1384 Mr 17 '17  
Seed corn. L. C. Raymond. il J Ag (Quebec) 19:214-15 Ap '16  
Seed corn—variety and color. Purdue Ag 10:23 Ap '16  
Silage corn tests in northern New York. C. J. Phelps. Hoard's D 51:335 Mr 17 '16  
Silver King corn continues leader. E. B. Heaton. il O Judd Farmer 65:453 N 16 '18  
Studies concerning the elimination of experimental error in comparative crop tests. T. A. Kiesselbach. bibliog il Neb Ag Exp Research B 13:1-95 '18  
Tests of corn varieties on the great plains. L. L. Zook. il map U S Ag B 307:1-19 '15

Tests of varieties of corn at Auburn. E. F. Cauthen. il Ala Ag Exp B 200:30-6 '18  
Tropical varieties of maize. G. N. Collins. il J Heredity 9:147-54 Ap '18; Same. (In Pan American scientific congress Pro., 1915, v. 3, p. 579-84) '17  
Varieties of corn and their utilization under present conditions. J. R. Fain and others. Ga Ag Coll (Ext) B 147:1-12 '18  
Varieties of maize for grain and green fodder. Ag Gaz of New South Wales 28:559-62; 29:624-6 Ag '17, S '18  
Varieties of maize in New South Wales. H. Wenzholz. il Ag Gaz of New South Wales 28:635-44, 685-93 S-O '17  
Variety tests of corn in Missouri. C. B. Hutchinson and others. il maps Mo Ag Exp B 143:1-56 '16; Abstract. Int R Sci & Prac Ag S, no 2:232-4 F '17  
What type of silage corn shall we use? C. G. Williams. il Ohio F 137:61-2 Ja 15 '16  
Yields of different varieties of corn in Illinois. W. L. Burlison and O. M. Allyn. Ill Ag Exp B 191:409-21 '16

**Argentina**

Argentine corn. Wallaces' F 41:993 J1 21 '16

**Arizona**

Growing corn and the grain sorghums in Arizona. S. F. Morse. Ariz Ag Ext C 3:1-22 '16

**Arkansas**

Corn in Arkansas. C. O. Carpenter. Prog F 32:581 My 12 '17

**Australia**

Cultivation of maize. H. Wenzholz. il Ag Gaz of New South Wales 29:457-67, 609-23, 697-704, 761-7 Ag-N '18  
Farmers' experiment plots; maize experiments, 1916-17. map Ag Gaz of New South Wales 29:13-26 Ja '18  
Farmers' experiment plots; maize experiments, 1917-18. G. G. Potts. Ag Gaz of New South Wales 29:786-94 N '18  
Growing maize under irrigation. H. C. Churches. J Dept Ag Victoria 15:635 O '17  
Maize experiments, 1916-17. Ag Gaz of New South Wales 28:787-92 N '17  
Maize experiments, 1916-1917. E. Golledge. il Ag Gaz of New South Wales 28:847-9 D '17  
Maize-growing on the Clarence. Ag Gaz of New South Wales 27:787-8 N '16  
Maize-growing on the Murrumbidgee irrigation area. H. Wenzholz. Ag Gaz of New South Wales 27:533-41 Ag '16  
Maize improvement; season 1916-17. H. Wenzholz. Ag Gaz of New South Wales 28:793-808 N '17

**Brazil**

4th Brazilian corn show inaugurated. R: P. Momsen. (Commerce Reports no. 247) p 284 (O 21) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Egypt**

Work in connection with Egyptian maize. G. C. Dudgeon. Egypt Ag Tech & Sci B 9:1-5 '16 (5c)

**Hungary**

Compulsory degerming of maize in Hungary. Int R Sci & Prac Ag 8, no 2:293-4 F '17

**Illinois**

Studying Livingston county (Ill.) corn. O Judd Farmer 63:3 N 3 '17

**Indiana**

Corn fertilizers for Indiana soils in 1918. S. D. Conner. il Purdue Ag 12:435-7 Ap '18  
Favor shallow cultivation. O Judd Farmer 60:12 Je 3 '16

**Italy**

Reggiano maize; a new variety of early dwarf maize obtained in Italy by hybridisation and selection. A. Succi. Int R Sci & Prac Ag 9, no 4:441-3 Ap '18

**Michigan**

Sheeping down corn in Michigan. E. G. Read. Am Sheep B & W 36:160-1 Mr '16



**Corn —Continued**

**Missouri**

Best farmer in Missouri; H. B. Windsor. J: E. Pickett. il Country Gent 83:8-9 Ja 5 '18  
Rural progress in Missouri; a leading corn state. W. L. Nelson. Mo Ag Bd B v 14:11-13 Mr '16

**Montana**

Corn in Montana. A. Atkinson and M. L. Wilson. il Mont Ag Exp C 53:109-63 '16  
Corn planting and cultivation in Montana. A. Atkinson and M. L. Wilson. il Mont Ag Exp C 67:107-28 '17

**Nebraska**

Rotations and tillage methods in western Nebraska. W. P. Snyder and W. M. Osborn. Neb Ag Exp B 155:13-16 '16

**New York**

Growing corn on Long Island. Rural N Y 76: 725 My 26 '17

**Ohio**

Growing 100 bushels of corn to the acre. C. M. Baker. il Ohio F 141:421-2 Mr 23 '18

**South Dakota**

Corn culture in South Dakota. M. Champlin and G. Winright. il maps S D Ag Exp B 181:854-911 '18

**Southern states**

Corn: its place in the agriculture of the South. T. Butler. Prog F 31:753 Je 10 '16  
Corn production in the cotton states. M. V. Calvin. Am Fert 48:58+ My 11 '18  
Corn production in the South. J. C. Pridmore. (B. 19) 12p il n.d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.; Same. Am Fert 48:46 F 16 '18  
How to make corn despite drouth. T. Butler. Prog F 33:811 Jl 20 '18  
How to make good corn yields in the South. T. Butler. Prog F 31:827 Jl 1 '16  
Why the South should grow more corn this year: six reasons. Prog F 33:450 Ap 6 '18

**United States**

Corn culture in the southeastern states. C. H. Kyle. bibliog il Farmers' B 729:1-20 '16  
Corn, milo, and kafir in the southern great plains area: relation of cultural methods to production. E. F. Chilcott and others. U S Ag B 242:1-20 '15  
Drouth and hot winds cut corn. B. W. Snow. O Judd Farmer 65:175 S 7 '18  
Farm practice in the cultivation of corn. H. R. Cates. il U S Ag B 320:1-66 '16  
Maize—the greatest of American food products. E: Albes. il Reclamation Record (Reclamation service, Washington, D.C. 50c per yr.) 8:278-83 Je '17  
Reprinted from Bulletin of Pan Am Union, Jl '16  
Planting corn in six states; our experience pool. Prac F 114:126 Mr 15 '18  
Tests of corn varieties on the great plains. L. L. Zook. il map U S Ag B 307:1-19 '15  
Utilization and efficiency of meat situation in the United States. pt 4, Feed stuffs. W. F. Ward and S. H. Ray. U S Ag Rep 112:13-15 '16  
Western corn situation; why grain does not come. I. L. Sears. Rural N Y 77:223 F 16 '18

**Virginia**

Corn growing in Virginia. il Va Ag Dept B 110:4-10 Mr '16

**West Virginia**

Corn growing in West Virginia. F. W. Stemple. il W Va Ag Ext C 173:1-11 '18

**Western states**

Corn in the great plains area: relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 219:1-31 '15

**Corn (feed)**

Advantages of hogging off corn. P. S. Richey. il Purdue Ag 13:12 O '18  
Austria—requisition of maize cobs after shelling. Doc Leaflets 1, no 1:5 Jl '17  
Care of corn stover. A. E. Smith. Ohio F 138: 515 N 25 '16  
Concerning corn as a source of protein and ash for growing animals. A. G. Hogan. Am Soc Animal Production Pro 1915-1916:227-32 '17  
Corn and alfalfa feeding trial. Hoard's D 56: 428 O 18 '18  
Corn and soy beans compared as feeds. Prog F 33:1023 S 21 '18  
Corn by-products for hogs. Purdue Ag 12:139-40 D '17  
Corn shucks versus corn silage. T. Butler. Prog F 33:903 Ag 17 '18  
Corn stover as a feed. Purdue Ag 11:22 N '16  
Cost of shredding; being a comparison of hand and machine methods. F. N. G. Kranick. il Country Gent 81:2092 D 2 '16  
Dietary deficiencies of the maize kernel. E. V. McCollum and others. Int R Sci & Prac Ag 8, no 2:262-3 F '17  
Does it pay to hog off corn? P. S. Richey. il Purdue Ag Ext Leaflet 102:1-6 '18  
Early corn for hogging down. Wallaces' F 41: 525 Mr 31 '16  
Energy values of hominy feed and maize meal for cattle. H: P. Armsby and J. A. Fries. bibliog J Ag Research 10:599-613 S 17 '17  
Energy values of red-clover hay and maize meal. H: P. Armsby and others. J Ag Research 7:379-87 N 27 '16  
Farmers' experiment plots, maize fodder, 1915-16. Ag Gaz of New South Wales 27:615-20 S '16  
Feeding value of cob meal. T. Butler. Prog F 32:1255 D 1 '17  
Feeding value of corn cobs. T. Butler. Prog F 31:35 Ja 8 '16  
Harvesting the corn crop. I. G. Shellabarger. Rural N Y 75:1536 D 16 '16  
High-priced corn for lambs. J. W. Hammond. il Nat Stock & F 41:920 D 22 '17  
Hog as a hired man. H. W. Collingwood. il Country Life 29:50-1 Mr '16  
Hogging down corn. Coop Manager & F 8:93 O '18  
Hogging down corn. C. R. Arnold. Ohio F 140:119 Ag 18 '17  
Hogging down corn. W. J. Carmichael. Nat Stock & F 42:292 Je 15 '18  
Hogging down corn. W. L. Robison. Ohio Ag Exp B v 3:229-32 Ag '18  
Hogging down corn. L. A. Weaver. Mo Ag Ext C 37:1-4 '17  
Hogging off corn. P. E. Thompson. il Purdue Ag Ext B 48:1-11 '16  
Hogging off corn profitable. I. G. Shellabarger. Ohio F 138:594 D 16 '16  
Hogs cannot be most economically grown on an all-corn ration. Prog F 33:35 Ja 12 '18  
Hogs in the corn field. Wallaces' F 43:1166 Ag 16 '18  
How to handle dry corn stalks. Rural N Y 75: 1389 N 4 '16  
King korn. W. H. Card. Am P Advocate 25: 16 D '16  
Let hogs harvest corn. O Judd Farmer 63:3 S 22 '17  
Let your hogs work and grow fat. S. Jordan. il Country Gent 83:8 Ag 10 '18  
Make beef on minimum of corn. O Judd Farmer 62:5 Ap 7 '17  
Organizing for feed defense. S. Sosland. Hoard's D 56:157 Ag 30 '18  
Pasturing cornstalks. J. L. Justice. Ohio F 142:425 N 2 '18  
Planting corn expressly for fodder. M. Coverdell. Hoard's D 51:807 Je 9 '16  
Pork without labor. F. G. Ketner. Ohio F 142:502 N 23 '18  
Preparation of corn for fattening lambs. J: M. Evvard. Am Soc Animal Production Pro 1915-1916:242-51 '17  
Preparation of corn for fattening steers. H. O. Allison. il Mo Ag Exp B 149:1-35 '17  
Preparation of corn for hogs. F. G. King. il Mo Ag Bd B v 14:12-21 Ag '16; Same. Mo Ag Bd Yearbook 1916:532-40

**Corn (feed)—Continued**

- Proportions of supplements to corn for fattening swine. W. L. Robison. *il Ohio Ag Exp B 316:1-57 '17*
- Save the corn crop with a tractor. E. L. Watson. *il Power F 26:22 N '17*
- Save the corn fodder. D. Malcolm. *il Kimball's D F 15:580 S 1 '17*
- Save the whole corn plant for feed. *Prog F 32:775 J 14 '17*
- Self-huskers and self-feeders. *il Ohio F 142:164 Ag 24 '18*
- Sheeping-down corn. W. C. Coffey. *il Ill Ag Ext C 21:1-8 '18; Excerpt. Wallaces' F 43:716 Ag 26 '18*
- Sheeping off corn. G. H. Dacy. *Prac F 112:285 J 15 '16*
- Shredding fodder. W. F. Purdue. *Ohio F 140:390 N 3 '17*
- Some nutritive properties of corn. J. S. Hughes. *bibliog il Kan Ag Exp Tech B 5:1-39 '18*
- Sorghum grains versus corn for fattening swine. H. E. Dvorachek and H. A. Sandhouse. *Ark Ag Exp C 34 4p n. d.*
- Supplements in hogging down corn. *Wallaces' F 43:1186 Ag 23 '18*
- Utilizing the corn crop. H. P. Miller. *Ohio F 140:243 S 22 '17*
- Value of corn and cob meal. J. W. Ingham. *Breeder's Gaz 71:389 F 22 '17*
- Value of shredded fodder. J. L. Justice. *il Hoard's D 56:335 O 4 '18*
- Western corn fodder problem. J. C. Nicholls. *Rural N Y 75:3 Ja 1 '16*
- Western lambs as harvesters of corn. W. C. Coffey. *il Nat Wool Grower 8:15-17 My '18*
- What is the value of corn stover? *Prog F 32:939 S 8 '17*
- Where to feed stalks. R. A. Hayne. *il Nat Stock & F 40:1153 F 3 '17*
- Why the corn shredder is needed. C. White. *il Power F 27:42 O '18*

**Silage**

- Against silage. *Wallaces' F 43:1743 N 29 '18*
- Associative digestibility of corn silage and cottonseed meal in steer rations; pt 2. P. V. Ewing and others. *il Ga Ag Exp B 125:151-64 '17*
- Beet pulp vs. corn silage. R. E. Hundertmark. *Hoard's D 51:805 Je 9 '16*
- Composition and market qualities of butter when corn silage is fed with cottonseed meal. L. S. Palmer and D. P. Crockett. *J Dairy Sci 1:235-45 S '17*
- Cooking corn silage by steam. E. D. Funk. *Rural N Y 75:581 Ap 8 '16*
- Corn for silage. I. G. Shellabarger. *Hoard's D 51:596 Ap 28 '16*
- Corn for the silo. *Wallaces' F 41:482 Mr 24 '16*
- Corn in silo saves \$37 an acre on a 50-bushel crop. *Weekly N L 5:11 Je 19 '18*
- Corn silage and velvet beans found to be good feed for fattening cattle. *Weekly N L 6:6 S 11 '18*
- Corn silage for beef production. G. Gusler. *il Field 11 27:930-1 D '17*
- Corn silage for lambs. J. W. Wilson. *il S D Ag Exp B 165:377-90 '16; Same cond. Int R Sci & Prac Ag 8, no 1:116-18 Ja '17*
- Corn silage in rations for fattening steers. H. O. Allison. *il Mo Ag Exp B 150:1-24 '17*
- Corn stover for silage. C. M. Long. *Hoard's D 55:286 Mr 8 '18*
- Corn-stover silage. J. M. Sherman and S. I. Bechdel. *bibliog J Ag Research 12:589-600 Mr 4 '18*
- Cornfield to silo at least expense. J. L. Justice. *il O Judd Farmer 60:3 Je 24 '16*
- Cost of silage. *Wallaces' F 43:1693 N 15 '18*
- Cut the corn short. F. N. G. Kranich. *il Country Gent 82:1394 S 8 '17*
- Cutting corn for silage. O Judd Farmer 61:10 J 12 '16
- Digestibility of corn silage, velvet-bean meal, and alfalfa hay when fed singly and in combinations. P. V. Ewing and F. H. Smith. *J Ag Research 13:611-18 Je 17 '18*
- Ensilage corn. *Weekly N L 5:8 My 8 '18*
- Growing and feeding corn. *il O Judd Farmer 60:3 Je 10 '16*
- Hoosiers launch silo campaign. C. R. George. *il Hoard's D 55:721 My 17 '18*

- Indiana committee on food production and conservation. R. E. Caldwell. *Purdue Ag 12:488-9+ My '18*
- Kind of corn for silage. W. S. Tomlinson. *Ohio F 141:620 My 4 '18*
- Legume crops ensiled with corn taint milk? J. L. Justice. *Ohio F 137:817 Je 17 '16*
- Making corn silage. B. J. Ruetenik. *il Country Gent 82:1086 Je 30 '17*
- Mangels versus silage. *Prog F 33:1048 S 28 '18*
- Mature corn makes the best silage. B. C. Southwick. *il Hoard's D 55:917 Je 21 '18*
- Maturity in silage corn. W. H. de Graff. *Country Gent 81:790 Ap 8 '16*
- Moving corn silage from silo to silo. *Wallaces' F 41:219 F 11 '16*
- One-eared versus prolific varieties of corn for silage. T. Butler. *Prog F 31:799 Je 24 '16*
- Preventing corn losses with a silo. *il Ohio F 141:820 Je 29 '18*
- Relative influence of microorganism and plant enzymes on the fermentation of corn silage. A. R. Lamb. *bibliog J Ag Research 8:361-80 Mr 6 '17; Same. Ia Ag Exp Research B 40:313-32 '17*
- Shall we ensile ears as well as stalks. P. Clawson. *Hoard's D 54:264 S 21 '17*
- Silage. *Wallaces' F 43:1201 Ag 23 '18*
- Silage advantages. J. M. Evvard. *Wallaces' F 43:1190 Ag 23 '18*
- Silage from shock corn. C. H. Eckles. *Jersey B 35:1646 O 18 '16*
- Silage from soft corn. J. L. Justice. *Hoard's D 56:480 N 1 '18*
- Silage from stover. *Weekly N L 4:1 J 18 '17; Same. Jersey B 36:1175 Ag 1 '17*
- Silage in beef production. W. H. Tomhave. *Nat Stock & F 42:222 My 25 '18*
- Studies on the residual effect of the winter feeding of corn silage on the ability of steers to gain on pasture. E. S. Good. *Am Soc Animal Production Pro 1915-1916:193-6 '17*
- Value of corn in silage. W. S. Tomlinson. *Ohio F 137:102 Ja 2 '16*
- What is the value of silage? T. Butler. *Prog F 33:635 My 25 '18*
- What type of silage corn shall we use? C. G. Williams. *il Ohio F 137:61-2 Ja 15 '16*
- When is water organic water? J. Schafer. *Jersey B 36:1634 O 17 '17*

**Soft corn**

- Be careful with new corn. *Am P J 49:34 Ja '18*
- Best methods of utilizing the soft corn. W. E. McCoy. *Ohio F 140:527 D 8 '17*
- Confer on soft corn. *Coop Manager & F 7:60 Ja '18*
- Drying soft corn. H. D. Hughes. *il Wallaces' F 43:486+ Mr 15 '18; Excerpts. Hoard's D 55:434 Mr 29 '18*
- Feeding soft corn. W. S. Tomlinson. *Ohio F 140:555 D 15 '17*
- Feeding soft corn in Iowa. C. M. Morgan. *Breeder's Gaz 73:517 Mr 7 '18*
- Feeding the soft corn. W. H. Tomhave. *Prac F 113:438 D 15 '17*
- Handling the soft corn crop. P. S. Richey. *Breeder's Gaz 72:842 N 8 '17*
- Making the most out of soft corn. W. G. Eckhardt. *Am Coop J 12:158 O '16*
- More about soft corn. *Kimball's D F 16:220 Mr 15 '18*
- More information on salted corn. *il O Judd Farmer 65:89 Ag 3 '18*
- Much soft corn can be saved. *il O Judd Farmer 64:1+ Mr 23 '18*
- Problem of soft corn. *Neb Ag Ext Emergency B 24 7p '17*
- Results with salted corn. O Judd Farmer 64:14 Ja 5 '18
- Salting soft corn. *Breeder's Gaz 72:991 N 29 '17*
- Salting soft corn. L. S. Griffith. *Wallaces' F 42:1655 D 7 '17*
- Salting soft corn. H. D. Hughes. *Ia Ag Exp C 41:1-7 '17; Same abr. Wallaces' F 42:1754 D 28 '17*
- Salting soft corn is good practice. *Swine World 5:6 Ja '18*
- Salvaging soft corn. *Breeder's Gaz 72:932 N 22 '17*



**Corn (feed)—Soft corn—Continued**

- Save the corn with salt. O Judd Farmer 63: 9 D 15 '17  
 Save the soft corn. Weekly N L 5:3 Ja 23 '18  
 Saving Livingston county's soft corn. il O Judd Farmer 63:1 D 8 '17  
 Saving soft corn. il Ag Digest 2:787-8 Ja '18  
 Saving the soft corn. il Am Coop J 13:137-8+ D '17  
 Silage from soft corn. J. L. Justice. Hoard's D 56:480 N 1 '18  
 Soft corn. C. J. Mann. Farm Eng 6:10 Ja '18  
 Soft corn and how to save it. Kimball's D F 16:254 Ap 1 '18  
 Soft corn can be saved. C. W. Raymond. Kimball's D F 16:5 Ja 1 '18  
 Soft corn problem. J: M. Evvard. Ia Ag Exp C 40 Sp '17  
 Soft corn problem. J: M. Evvard. Wallaces' F 42:1556+ N 16 '17  
 The two preceding articles are practically the same  
 Soft corn problem. L. W. Lighty. Nat Stock & F 41:888 D 15 '17  
 Soft corn to save hogs. R. P. Crawford. Breeder's Gaz 73:156 Ja 24 '18  
 Survey to aid prompt movement of soft corn. Coop Manager & F 7:29 Mr '18  
 Utilizing soft corn. Ohio F 140:550 D 15 '17  
 Utilizing the soft corn. O Judd Farmer 63:4 D 22 '17  
 What can be done with the soft corn? Jersey B 36:1966 D 12 '17  
 What to do with soft corn. A. R. Jaqua. Country Gent 82:2031 D 22 '17

**Corn, Soft. See Corn (feed)—Soft corn**

**Corn, Sweet**

- All about sweet corn. il Country Gent 83:42-3 Mr 23 '18  
 Breeding sweet corn resistant to the corn earworm. G. N. Collins and J. H. Kempton. J Ag Research 11:549-72 D 10 '17  
 Canning and drying corn. M. S. Ellis. Kimball's D F 15:596 S 1 '17  
 Corn as market-garden crop. H: M. Howard. il Mass Ag Bd B 5:148-9 '18 (3d ed. rev.)  
 Corn for canning factories. Rural N Y 76: 323 Mr 3 '17  
 Corn for the canners. il Wallaces' F 42:523 Mr 23 '17  
 Corn for the canning factory. C. B. Sayre and F. C. Gaylord. Purdue Ag Ext Leaflet 99: 1-4 '18  
 Does it pay to sucker sweet corn? R. W. De Baun. il Rural N Y 76:789 Je 16 '17  
 Drying corn. Nat Stock & F 41:446 Ag 4 '17  
 Experiences with sweet corn. Market Growers J 22:347+ My 1 '18  
 Fertilizers for sweet corn. Rural N Y 75:188 F 5 '16  
 Green corn for market. Mrs E. M. Anderson. Rural N Y 76:1020 Ag 25 '17  
 Growing beans and sweet corn. P. B. Marien. il Minn Hort 44:172-6 Ap '16  
 Growing sweet corn. A. L. Dacy. W Va Ag Ext C 195 3p '18 (Reprint C. 127)  
 Growing sweet corn only. E. G. McCloskey. Prac F 113:286 Ag 15 '17  
 Respiration and catalase activity in sweet corn. C: O. Appleman. Am J Bot 5:207-9 Ap '18  
 Success with sweet corn. C. H. Chesley. Market Growers J 18:148 F 5 '16  
 Sugar corn for canning. il Country Gent 83: 38 Mr 9 '18  
 Sweet corn. Market Growers J 18:345-7 My 15 '16  
 Sweet corn a staple Indiana crop. il O Judd Farmer 60:3 Ap 8 '16  
 Sweet corn for market. E. I. Farrington. il Country Gent 81:745 Ap 1 '16  
 Sweet corn for the cannery. A. T. Erwin. O Judd Farmer 60:6 My 6 '16  
 Sweet corn for the cannery. E. L. Kirkpatrick. Ohio F 137:263+ F 19 '16  
 Sweet-corn harvest. C. E. Brehm. il Country Gent 81:1198 Je 10 '16  
 Sweet corn or table maize. H. Wenzholz. Ag Gaz of New South Wales 28:381-90 Je '17  
 Sweet corn—some reflections. J. B. Townsend. Wallaces' F 41:670 Ap 28 '16  
 Which sweet corn and why? A. Kruhm. il Gard M 25:103-4 Mr '17

**Diseases and pests**

- Morphological and cultural note on the organism causing Stewart's disease of sweet corn. L. McCulloch. il Phyt 8:440-2 Ag '18  
 New sweetcorn disease in Kentucky. H. Garman. il Ky Ag Exp C 13:1-4 n.d.  
 Quarantine on account of Japanese beetle. D. F. Houston. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 91-2 '18 U S Ag  
 Spray sweet corn for worms. J. W. McColloch. O Judd Farmer 61:6 Jl 8 '16

**Seed**

- Report of stocks of peas, beans, spring vetch and sweet corn. U S Seed Rep 1:6 Ap '18  
 Seed sweet corn for canners. U S Seed Rep 1:1 Ja '18  
 Sweet corn seed situation. Am Flor 49:1193 D 15 '17

**Corn as food**

- Corn an economical human food. Wallaces' F 42:13 Ja 5 '17  
 Corn as a breadstuff. Weekly N L 4:10 Ap 18 '17  
 Corn is king: will it become the base food? Sci Am Sup (233 Broadway, N.Y. 10c) 86: 106-7 Ag 17 '18  
 Eat new corn. Weekly N L 5:7 S 5 '17  
 Getting real food out of corn. il Sci Am (233 Broadway, N. Y. 10c) 119:298 O 12 '18  
 Hulled corn. E. S. Pettee. il Country Gent 82:1951 D 8 '17  
 Learn to eat corn, says Uncle Joe Cannon. Country Gent 82:1077-8 Je 30 '17  
 Mon-dah-min, and the red man's world old uses of Indian corn as food. Hen-Toh. J Home Econ 10:444-51 O '18  
 New breakfast food. Weekly N L 5:8 S 26 '17  
 On the greater use of Indian foods. H. J. Spinden. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:7 Jl 7 '17  
 Saving corn for food. W: W. Higgins. Country Gent 82:1552 O 13 '17  
 Story of corn as human food. R. H. Moulton. il Hoard's D 53:943 Jl 6 '17  
 \* Will corn become the base food? Pan Am Union B (17th and B sts, N.W., Washington, D.C. 25c) 46:483-90 Ap '18

See also Cookery—Corn; Corn meal

**Statistics**

- Commercial stocks of miscellaneous corn food products (hominy, grits, corn breakfast foods, etc.). Jan. 1. U S Food Surveys 1:17-19 Je 8 '18  
 Commercial stocks of miscellaneous corn food products (hominy, grits, corn breakfast foods, etc.). July 1. U S Food Surveys 2: 21-3 S 9 '18

**Corn belt**

- Are we in the corn belt? W. E. Gernert. il O Judd Farmer 64:1 F 23 '18  
 Corn belt farm—how big shall it be? O. R. Johnson. Mo Ag Bd Yearbook 1916:554-8  
 Corn-belt farming system which saves harvest labor by hogging down crops. J. A. Drake. il map Farmers' B 614:1-16 '17 (rev.)  
 Economic study of the farm tractor in the corn belt. A. P. Yerkes and L. M. Church. Farmers' B 719:1-24 '16; Same cond. Irr Age 31:123 Je '16  
 Grain farming in the corn belt; with live stock as a side line. C. Vrooman. Farmers' B 704: 1-47 '16  
 Hood river of the corn belt. il Wallaces' F 41: 1087 Ag 18 '16  
 Iowa 103, an oat for the cornbelt. Breeder's Gaz 69:367 F 17 '16  
 Landlordism in the corn belt. Wallaces' F 41: 76 Ja 21 '16  
 More tractors in the corn belt. P. S. Rose. il Country Gent 83:7 S 7 '18  
 Oats in the corn belt. Wallaces' F 41:209 F 11 '16  
 Rotations for the corn belt. L. L. Rummell. il Country Gent 82:1961 D 15 '17  
 Spring tour of cornbelt farm homes. il Breeder's Gaz 69:1247 Je 15 '16  
 Tractors gaining popularity in the corn belt. Power F 27:56 Jl '18

**Corn belt—Continued**

Why three-hundred-dollar land? E. Davenport. *il Country Gent* 83:15 Ap 6 '18

See also subhead Corn belt under Cattle, Beef; Fruit culture; Live stock; Sheep

**Corn belt meat producers' association**

Address of President Sykes. Wallaces' F 43: 10 Ja 4 '18

13th annual meeting. Des Moines, Jan. 23-24, 1917. Wallaces' F 42:193 F 2 '17; Ia Ag Bd Yearbook 1916:389-435

14th annual meeting. Des Moines, Dec. 11-12. Wallaces' F 42:1738 D 21 '17

Work during 13 years. Wallaces' F 42:184 F 2 '17

**Corn billbugs**

Biological investigation of *sphenophorus callosus* Oliv. Z. P. Metcalf. *il N C Ag Exp Tech B* 13:1-123 '17; Same. *N C Ag Exp Rep* 1917:1-123

How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:18 '17

Minnesota bill bugs. O. G. Babcock. (*In Report State entomologist, 1915-1916*) p 153-9 '16 Minn. ag. exp. station. St Paul

Study of the life-history of the maize billbug; with discussion. W. P. Hayes. *il J Econ Entom* 9:120-30 F '16

**Corn clubs**

Boys' and girls' corn and cotton clubs. *il La Ag Ext B* 25:1-28 '17

Boys' corn club lessons and instructions for 1918. W. T. Conway. *N M Ag Ext C* 30: 1-11 F '18

Boys' corn club work closely related to school work. J. A. Linke. *Purdue Ag* 11: 13-15 O '16

Corn club work in Tennessee. H. D. Tate. *Prog F* 31:358 Mr 11 '16

Corn clubs; final report and record book for members. Kan Ag Ext x—Form 1:1-15 '16

Extension circulars. W Va Ag Ext C 51, 58, 64, 68, 76, 82, 89 '16

The titles follow: Seed corn testing; Preparing corn ground; Planting corn; Corn cultivation; Corn insects and diseases; Growing plant; Field selection of seed corn Lessons from the corn contests of 1917. L. L. Rummell. *Ohio F* 141:587 Ap 27 '18

Winners in our 1916 boys' corn club contest. *Prog F* 32:942 S 8 '17

**Corn cobs**

Austria—requisition of maize cobs after shell-ing. Doc Leaflets l.no 1:5 Jl '17

Missouri meerschaum. W. L. Nelson. *il Country Gent* 82:284 F 10 '17

\* Preparation of several useful substances from corn cobs. F. B. LaForge and C. S. Hudson. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10: 925-7 N '18

\* Preparation of xyllose from corn cobs. C. S. Hudson and T. S. Harding. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr) 40:1601-2 O '18

Products derived from corn cobs; abstract. F. B. La Forge. *Am Soc Mechanical Eng J* (29 W. 39th st, N.Y. 35c) 40:496-7 Je '18

**Corn contests**

Corn contest. Wallaces' F 41:604 Ap 14 '16

Five acre corn growing contest. J. D. Harper. *il Purdue Ag* 11:17-18 Je '17

Indiana corn contests. J. D. Harper. *Country Gent* 81:1116 My 27 '16

Lessons from a corn-growing contest. J. D. Harper. *Breeder's Gaz* 71:1272 Je 28 '17

Minnesota's acre-yield corn contest. R. P. Speer. *Breeder's Gaz* 69:723 Mr 30 '16

209 bushels of corn per acre. G. H. Dacy. *il Country Life* 31:64 Ja '17

See also Corn clubs

**Corn cribs. See Corn houses****Corn ear rot**

Triphleps insidiosus as the probable transmitter of corn-ear rot. J. A. Hyslop. *J Econ Entom* 9:435-8 Ag '16

**Corn earworms**

Best way to eradicate troublesome pest that injures several different crops. Fla Ag Dept Quar B v 28:36-7 O '18

Bollworm or corn ear worm. *Purdue Ag* 13:30 O '18

Bollworm or corn earworm. F. C. Bishopp. *il map Farmers' B* 872:1-15 '17

Breeding sweet corn resistant to the corn earworm. G. N. Collins and J. H. Kempton. *J Ag Research* 11:549-72 D 10 '17

Corn ear worm. A. W. Morrill. *il Ariz Ag Exp Timely Hints* 120:1-5 '16

Corn ear-worm. *il Okla Ag Ext C* 60 3p '17

Corn ear worm. *Purdue Ag* 12:19 O '17

Record of the corn earworm attacking beans and a suggestion as to the reason of the outbreak. E. O. Essig. *il Cal State Comm Hort B v* 7:544-5 S '18

Use of dust sprays against the corn-ear worm. J. W. McColloch. *J Econ Entom* 9:395-8 Ag '16

**Corn festivals**

Corn festivals. *Weekly N L* 5:4 N 14 '17

Corn festivals. A. Barrows. *J Home Econ* 9:460-4 O '17

**Corn flea-beetles, Desert. See Desert corn flea-beetles****Corn flour****Prices**

\* Corn product prices. (*In Official statement, no. 7, p. 10*) '18 U.S. Food administration, Washington, D.C.

**Statistics**

Commercial stocks of corn meal and corn flour, Jan. 1. U S Food Surveys 1:14-16 Je 8 '18

Commercial stocks of corn flour, July 1. U S Food Surveys 2:16-18 S 9 '18

**Corn harvesting machinery**

Binders and platform harvesters save man power in cutting corn. *Weekly N L* 5:14 Jl 24 '18

Corn harvesting machinery. J: Marsh. *il Hoard's D* 52:31 Ag 4 '16

Efficient corn cutter. *il Ag Digest* 1:81 Je '16

New stalk cutter. *il Ag Digest* 1:81 Je '16

Use of machinery in cutting corn. H. R. Tolley. *il Farmers' B* 992:1-16 '18

**Corn houses**

Corn crib with a basement. A. D. Cromwell. *il Wallaces' F* 43:538 Mr 22 '18

Farm seed corn house. W. E. Frudden. *plan Breeder's Gaz* 70:314 Ag 31 '16

Grain storage buildings. K. J. T. Ekblaw. 16p plan '16 Nat. lumber mfrs. assn., Chicago

Ideal corn crib. D: Brock. *il Country Gent* 81: 1193 Je 10 '16

Large grain storage building. *plans Am Coop J* 12:780 Ag '17

Making the corn crib rat-proof. *Prog F* 32:320 Mr 10 '17

Much corn saved by new combination crib-granary. *il plan Weekly N L* 6:6 O 2 '18; Same. *Coop Manager & F* 8:44 N '18

Old-fashioned corn crib. *plan Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2260: 46 S 7 '18

Permanent corn crib that saves the corn. R. Olney. *il Power F* 27:12 S '18

Practical corn crib. *Va Ag Dept B* 109:160-2 '16

Rat-proof corn crib saves money. F. T. Feller. *il diags plan Building Age* (243 W. 39th st, N.Y. 25c) 40:385-7 Ag '18

Rat-proof corn house. *Rural N Y* 76:404 Mr 17 '17

Seed corn storehouse for the farm. C: Taylor. *Country Gent* 82:1285 Ag 18 '17

Silo corn crib. *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2261:42 S 14 '18

Small concrete corn crib. W. E. Frudden. *Country Gent* 81:326 F 12 '16

Storage for the seed corn reserve; types of buildings discussed in new Illinois circular. F. M. White. *il plans O Judd Farmer* 65:88 Ag 3 '18

Storing seed corn. W. E. Frudden. *il plan Hoard's D* 52:239 S 15 '16

Substantial corn cribs. *il Wallaces' F* 41:1434 N 3 '16

Twin corn cribs; round corn crib. *plans Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2259:46 Ag 31 '18



**Corn houses—Continued**

- Two new corn cribs. H. R. Richardson. *il plan Country Gent* 82:958 Je 2 '17  
Two-story cornerrib and grain house. H. Shearer. *il plan Breeder's Gaz* 72:1264 D 27 '17  
Two-story cornerrib and granary. W. A. Radford. *Power F* 27:24+ My '18  
Two very necessary farm buildings; corn crib and piggery. W. E. Frudden. *il plans Building Age* (243 W 39th st., N.Y. 20c) 39: 351-3 Jl '17  
Ventilator in the cornerrib. *Breeder's Gaz* 70: 1066 D 7 '16

**Corn husking**

- Corn husking. F. N. G. Kranick. *Country Gent* 81:1930 N 4 '16

**Corn leaf beetles**

- Southern corn leaf-beetle. E. O. G. Kelly. *bibliog il map U S Ag B* 221:1-11 '15

**Corn leaf blotch miners**

- Corn-leaf blotch miner. W. J. Phillips. *bibliog il map J Ag Research* 2:15-32 Ap '14

**Corn meal**

- Composition of corn (maize) meal manufactured by different processes and the influence of composition on the keeping qualities. A. L. Winton and others. *U S Ag B* 215:1-31 '15  
Cornmeal as a food. W. C. Smith. *Green's Fruit Grower* 37:12 Je '17  
Corn meal as a food and ways of using it. C. F. Langworthy and C. L. Hunt. *Farmers' B* 565:1-28 '17 (rev.)  
Corn meal at its best in bread and muffins. J. C. B. Allen. *il Country Gent* 81:240 Ja 29 '16  
Corn meal bread. Mrs F. L. Stevens. *J Home Econ* 9:376 Ag '17  
Corn meal—how to use it. *Prog F* 32:1314 D 15 '17  
Corn meal in the diet. *Weekly N L* 4:4 Ap 11 '17  
Corn meal mush. W. P. Jenney. *J Home Econ* 9:456-9 O '17  
Corn meal once a day. *Cornell Reading Course Farm Home* 115:17-20 '18  
Corn meal recipes. *J Home Econ* 9:477-8 O 17  
Corn reserve. *Weekly N L* 4:6 Jl 18 '17  
Do you know corn meal? *J Home Econ* 10: 30-2 Ja '18  
Food value of corn. *Weekly N L* 5:7 D 5 '17  
Keeping of corn meal. *Va Ag Dept B* 109:121-3 '16  
Preparation of germ-free maize flour; investigations in Hungary. E. Weiser. *Int R Sci & Prac Ag* 7, no 9:1350-2 S '16  
Shall we eat corn meal? M. H. Keith. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84: 75 Ag 4 '17  
Southern corn breads. M. B. Foulks. *il Country Gent* 82:1015 Je 9 '17  
Tennessee corn notes. *Rural N Y* 76:1014 Ag 25 '17  
Use more corn meal. *Prog F* 32:784 Jl 14 '17  
Using graham and cornmeal. M. Corbett. *Rural N Y* 76:625 Ag 28 '17  
What you can make from corn meal. *Prog F* 31:19 Ja 1 '16

See also *Cookery—Corn*

**Prices**

- \* Corn product prices. (*In* Official statement, no. 7, p. 10) '18 U.S. Food administration, Washington, D.C.

**Statistics**

- Commercial stocks of corn meal and corn flour, Jan. 1. *U S Food Surveys* 1:14-16 Je 8 '18  
Commercial stocks of corn meal, July 1. *U S Food Surveys* 2:19-21 S 9 '18  
Corn meal as feeding stuff. See *Corn (feed)*  
**Corn milling**  
Home milling for home folks. H. C. Filley. *il Am Coop J* 14:129 D '18

**Corn oil**

- Some American vegetable food oils, their sources and methods of production; corn oil. H. S. Bailey. *U S Ag Yearbook* 1916:173-6; Same. Separate 691:15-18

**Statistics**

- Commercial stocks of corn oil, July 1. *U S Food Surveys* 2:19-20 S 16 '18

**Corn products**

- \* Change in corn products regulations. (*In* Official statement no. 2, p. 5) '18 U.S. Food administration, Washington, D.C.  
Compulsory degerming of maize in Hungary. *Int R Sci & Prac Ag* 8, no 2:293-4 F '17  
\* Special regulations of certain corn products. (*In* Official statement no. 1, p. 5) '18 U.S. Food administration, Washington, D.C.  
Touring the East: corn in Iowa. J. M. Evvard. *Wallaces' F* 43:831 My 17 '18

**Corn root lice**

- Corn root-aphis and methods of controlling it. J. J. Davis. *il Farmers' B* 891:1-12 '17  
Corn root louse. F. S. Prince. *Ohio F* 138:42 Jl 15 '16  
Do ants bother your young corn? W. R. Butler. *Country Gent* 81:887 Ap 22 '16  
Root-aphis saps corn. *Weekly N L* 4:4 Je 13 '17  
Swat the corn root louse. *Wallaces' F* 41:562 Ap 7 '16  
Watch for root lice. C. H. Oathout. *O Judd Farmer* 60:3 My 27 '16

**Corn rootrot**

- Corn-rootrot and wheatscab. G. N. Hoffer and others. *J Ag Research* 14:611-12 S 23 '18  
Root rot of corn. A. D. Selby. *Ohio Ag Exp B v* 3:313-14 O '18

**Corn rootworms**

- Corn root worm pest. P. G. Holden. *il Breeder's Gaz* 70:271 Ag 24 '16  
How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:18-21 '17  
Southern corn rootworm and farm practices to control it. P. Luginbill. *il Farmers' B* 950:1-10 '18  
Southern corn rootworm, or budworm. F. M. Webster. *il U S Ag B* 5:1-11 '12  
Western corn rootworm. F. M. Webster. *il U S Ag B* 8:1-8 '13

**Corn shellers**

- Proper size of corn sheller to buy. C. White. *il Power F* 25:22+ O '16

**Corn shows**

- Bank's corn show. *il Banker-F* 5:16 Ja '18  
Brazil's national corn show. *Breeder's Gaz* 71: 35 Ja 4 '17  
How a Pennsylvania bank has popularized its corn contests. *il Banker-F* 3:15 Ap '16  
Illinois corn show at International. *O Judd Farmer* 65:548 D 14 '18  
Local corn show. *Prac F* 112:440 D 1 '16  
Maize competition at Grafton, September, 1916. *Ag Gaz of New South Wales* 27:773-7 N '16

**Corn shredders**

- Why the corn shredder is needed. C. White. *il Power F* 27:42 O '18

**Corn smut**

- Corn smut. *il Purdue Ag* 12:81 N '17  
Corn smut and its control. *il Va Ag Dept B* 111:6-7 Ap '16  
Corn smut—what it is and what to do for it. D. Mercier. *Prog F* 31:935 Jl 29 '16  
Factors affecting the parasitism of ustilago zee. F. J. Piemeisel. *bibliog Phyt* 7:294-307 Ag '17  
Head smut of sorghum and maize. A. A. Potter. *bibliog il J Ag Research* 2:329-72 Ag '14  
Segregation of susceptibility to parasitism in maize. D. F. Jones. *bibliog Am J Bot* 5: 295-300 Je '18

**Corn starch**

- Corn starch in the textile industry. W. R. Cathcart. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 54:401+ Jl 27 '18

**Corn weevils**

- Corn weevil control. W. E. Hinds. *Prog F* 31: 1228 O 21 '16  
Destroy the corn weevil now. W. E. Hinds. *Prog F* 33:1007 S 14 '18  
Fighting insect pests in August: preventing corn weevil damage. A. F. Conradi. *Prog F* 32:861 Ag 11 '17

**Corn weevils—Continued**

- How to reduce weevil waste in southern corn. C. H. Kyle. *il Farmers' B* 915:1-7 '18  
 Kill corn weevils. A. P. Spencer. *Fla Ag Ext B* 10 4p '17  
 Preventing corn weevil damage. W. E. Hinds. *Prog F* 32:1046 O 6 '17  
 Saving the corn crop; weevil damage. A. F. Kidder. *Prog F* 32:871 Ag 11 '17

**Corn worms, Pink.** See Pink corn worms**Corned beef.** See Beef, Corned**Cornell agricultural experiment station**

- 29th annual report of the New York state college of agriculture at Cornell university and of the agricultural experiment station, 1916. *il maps Cornell Ag Exp Rep* 1916 2v v 1, lxxxii, 816, 10p; v 2, 829-1435p '17  
 V 1 contains experiment station bulletins and circulars; v 2 contains publications of the extension department  
 30th annual report of the New York state college of agriculture at Cornell university and of the agricultural experiment station, 1917. *Cornell Ag Exp Rep* 1917: various paging '18

**Cornell dairy students' association**

- 11th annual meeting, Feb. 10th, 1916. *N Y Prod R* 41:1004-5 Ap 5 '16  
 12th annual meeting, Ithaca, N.Y., Feb. 15, 1917. C. S. Thompson. *N Y Prod R* 43:847 Mr 21 '17

**Cornell university****New York state college of agriculture**

- Affairs of the college. A. R. Mann. *Cornell Countryman* 14:550-1 Ap '17  
 Farmers' week at Cornell [Feb. 12-17, 1917]. *il map Cornell Reading Courses v* 5, no 100 27-50p '15  
 Contains information regarding the general plan for the week, descriptions of, and guide to the buildings, etc.  
 Publications issued by the New York state college of agriculture at Cornell university. 16p '17 N.Y. State college of agriculture, Cornell university, Ithaca  
 Smith-Hughes act and the College of agriculture of Cornell university. School and Soc (Science Press, Garrison, N.Y. 10c) 6:558-9 N 10 '17  
 29th annual report of the New York state college of agriculture at Cornell university and of the agricultural experiment station, 1916. *il maps Cornell Ag Exp Rep* 1916 2v v 1, lxxxii, 816, 10p; v 2, 829-1435p '17  
 V 1 contains experiment station bulletins and circulars; v 2 contains publications of the extension department  
 30th annual report of the New York state college of agriculture at Cornell university and of the agricultural experiment station, 1917. *Cornell Ag Exp Rep* 1917: various paging '18  
 What the college did. *il Cornell Countryman* 25:82-8+ N '17  
 Where the Empire state goes to school; views. *Country Gent* 82:95 Ja 20 '17

**Poultry husbandry, Department of**

- Cornell poultry project is a real success. R. S. Moseley. *Reliable P J* 25:410-11+ Je '18

**Cornish Indian fowl**

- Dark cornish. W. H. Card. *il Country Gent* 81: 169 Ja 22 '16  
 Poultry culture; Indian game. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:67 F 2 '18

**Cornstalk beetles, Rough-headed**

- Rough-headed corn stalk-beetle in the Southern states and its control. W. J. Phillips and H. Fox. *il Farmers' B* 875:1-12 '17

**Cornstalk borers**

- Larval characters and distribution of two species of diatraea. T. E. Holloway. *il J Ag Research* 6:621-6 Jl 17 '16

**Cornstalk borers, European.** See European cornstalk borers**Cornstalk borers, Lesser**

- Lesser corn stalk-borer. P. Luginbill and G. G. Ainslie. *bibliog il map U S Ag B* 539:1-27 '17

**Cornstalks**

- Cutting cornstalks with a tractor. E. R. Wiggins. *il Country Gent* 82:1932 D 8 '17

- Where to feed stalks. R. A. Hayne. *il Nat Stock & F* 40:1153 F 3 '17

**Cornstalks as fertilizer**

- Fertilizing value of cornstalks. *Rural N Y* 76:1289 N 10 '17

**Cornus.** See Dogwood**Corporation law**

- Cooperative organization by-laws. C. E. Bassett and O. B. Jesness. *U S Ag B* 541:1-23 '18  
 Gleaner co-operative law of Michigan; an act to provide for the organization, operation and regulation of co-operative corporations, companies and associations. *Coop Manager & F* 7:84-5 Mr '18  
 Manual of laws pertaining to the Department of farms and markets; provisions of membership corporation law, relating to co-operative agricultural, dairy or horticultural associations. *N Y Farms & Markets Dept Ag B* 108:259-69 Je '18  
 New York co-operative law. *Hoard's D* 56:24 Jl 26 '18  
 Some defects in the New York laws of co-operative associations. R. Ingalls. *N Y Farms & Markets Dept Ag B* 105:30-6 Mr '18  
 Suggestions for a state cooperative law designed to conform to section 6 of the Clayton act. *Coop Manager & F* 6:75-7 Mr '17  
 With the signing of House bill no. 16 it became easy to change from a corporation to a cooperative society in Illinois. *Am Coop J* 12:693 Je '17

**Corpsé plant.** See Indian pipe**Corrals, Trap**

- Trap corrals in Arizona. J. H. Sizer. *il Breeder's Gaz* 72:9 Jl 5 '17

**Correlation**

- Theory of correlation as applied to farm-survey data on fattening baby beef. H. R. Tolley. *U S Ag B* 504:1-14 '17

**Correlation (biology)**

- Chemical basis of correlation; production of equal masses of shoots by equal masses of sister leaves in bryophyllum calycinum. J. Loeb. *Bot Gaz* 65:150-74 F '18

**Correspondence.** See Commercial correspondence**Correspondence schools and courses**

- Comment concerning T. E. Quisenberry and the correspondence courses of the American school of poultry husbandry. P. T. Woods. *Am P J* 49:148-9 F '18  
 Correspondence courses in agriculture. *W Va Ag Ext C* 85:1-15 '16  
 Home economics correspondence courses of collegiate grade. A. Loomis. *J Home Econ* 8:227-31 My '16

**Corrosion and anti-corrosives**

- Rusting of iron; with suggestions for applying protective coatings. *Power F* 25:25 Ag '16

**See also Waterproofing****Corsica.** See Forests and forestry—Canada**Cortinari**

- Development of cortinarius pholideus. W. H. Sawyer, jr. *bibliog il Am J Bot* 4:520-532 N '17  
 Study of development in the genus cortinarius. G. E. Douglas. *il Am J Bot* 3:319-35 Je '16

**Corythucha ciliata.** See Sycamore lace-bug**Cosmophila erosa.** See Okra caterpillars**Cosmos**

- Cosmos for market. J. H. Sperry. *Country Gent* 82:934 My 26 '17

**Cost accounting**

- Accounting records for country creameries. J. R. Humphrey and G. A. Nahstoll. *U S Ag B* 559:1-37 '17  
 Accounting the cost of farming. F. F. Rockwell. *il Country Life* 32:70-2 My '17  
 Analyzing farm business. *Weekly N L* 4:2 Ja 31 '17  
 Basis of cost in wheat production. H. Ross and P. G. Gilder. *Ag Gaz of New South Wales* 28:869-80 D '17 (to be cont)  
 Business practice and accounts for cooperative stores. J. A. Bexell and W. H. Kerr. *bibliog il U S Ag B* 381:1-56 '16



**Cost accounting—Continued**

Cost accounting. M. S. Libbert. *Purdue Ag* 11: 30-1+ N '16

Cost accounting. J. P. Mensch. *N Y Prod R* 43:358 D 27 '16

Cost accounting; Federal trade commission offers cooperation with manufacturers. *N Y Prod R* 42:846 S 20 '16

Cost accounting; items to consider in operating an ice cream factory. P. B. Warner. *N Y Prod R* 43:322 D 20 '16

Cost accounts on some New York farms. C. E. Ladd. *Cornell Ag Exp B* 377:773-815 '16; Same. *Cornell Ag Exp Rep* 1916:773-815 '17; Excerpt. *N Y Ag Dept B* 87:2781-3 S '16

Cost keeping and the farm business. T. Butler. *Prog F* 32:855 Ag 11 '17

Cost of keeping farm horses and cost of horse labor. M. R. Cooper. *il U S Ag B* 560:1-22 '17

Cost of manufacture of cheese. *N Y Prod R* 44:520 J 25 '17

Cost production on the farm. S. J. Rice. *Wallaces' F* 41:270 F 18 '16

Cost system on Ashtabula co. farms. L. W. Lee. *Ohio F* 137:395 Mr 11 '16

Cutting operating expenses by knowing costs. C. W. Carrigan. *System on the Farm* 2: 125-8 Ap '18

Determination of the cost of production of farm crops. J. Willie. *J Bd Ag* 24:403-16 J 1 '17

Easy way of keeping track of labor. E. P. Jones. *System on the Farm* 1:251 S '17

Farm accounts as they should be kept. D. Buffum. *Country Life* 30:84 Je '16

Farm bookkeeping. F. H. Demaree. *Farm Eng* 5:13 S '17

Farm cost accounting. A. E. Chandler. *Hoard's D* 51:91 F 11 '16

Farm cost accounting. A. B. Tweddle. *Ag Gaz of Canada* 5:504-5 My '18

Farm cost accounting made easy. M. C. Burritt. *Power F* 25:14 Ja; 14 F; 24 Mr; 30 Ap '16

Farm cost keeping system. B. G. Randall. *Wallaces' F* 41:571 Ap 7 '16

Farm costing. L. F. Foster. *J Bd Ag* 25:153-65 My '18

Farm records and accounts. H. P. Barrows. (Doc. 38) 10p '17 U.S. States relations service, Washington, D.C.

Farm records that reduce costs. C. I. Hammet. *il System on the Farm* 1:215-18 Ag '17

Farming accounts; cost of production. *J Bd Ag* 23:1077-80 F '17

Farming without guesswork. J. C. Marquis. *Country Gent* 82:2010-11 D 22 '17

Getting together in Iowa. F. Crissey. *il Country Gent* 82:1974-5 D 15 '17

How I reduced the cost of marketing. A. L. Brown. *il System on the Farm* 1:175-8 J 1 '17

How Kansas bankers are bringing better business to the farm. E. C. Johnson and P. E. McNall. *Banker-F* 3:14 My '16

How to figure the profits from investments in farm equipment. W. L. Cavert. (*In Minnesota farmers' institute annual*, 1916, p 46-8) '16 Extension division, University Farm, St Paul

How we study our records in cutting expense bills. R. Williams. *System on the Farm* 1:362-4 D '17

Keep farm accounts. *J Ag (Quebec)* 22:32 Ag '18

Keeping records to lower production costs. H. V. Stanley. *System on the Farm* 1:337-8 N '17

Keeping separate crop accounts. J: H. Davis. *Prog F* 31:300 F 26 '16

Labor charge in farm cost accounting. E. L. Currier. *Hoard's D* 54:494 N 2 '17

Making poor land pay. *il System on the Farm* 1:323-6 N '17

Management plan that makes 17% a year for me. P. Hackett. *il System on the Farm* 1: 11-14 Mr '17

Method of determining the cost of production of agricultural products. E. Marengi. *Int R Sci & Prac Ag* 8,no 1:147-8 Ja '17

More about uniform accounting. *Am Coop J* 12:68 S '16

My experience with cost accounting. J. E. Ryan. *Farm Eng* 5:10 Ap '17

Old problem again. *Hoard's D* 54:538 N 9 '17

Orchard accounting system that works. J. R. Mattern. *Country Life* 29:45 F '16

Overhead expenses in fruit growing. *Nat Stock & F* 41:1248 Mr 2 '18

Plea for better cow accounting. S. R. Mann. *Hoard's D* 51:735 My 26 '16

Report blank that helped lower cattle feeding costs. C. C. Fisher. *System on the Farm* 3:16-17 J 1 '18

Report of cost system committee of National fertilizer association. *Am Fert* 45:104-6+ J 1 22 '16

Short cut to knowing crop costs. H. P. Demarest. *System on the Farm* 1:21-2 Mr '17

Sources of farm profits and their relative importance. D. H. Otis and R. V. Gunn. *Hoard's D* 51:900+ Je 30 '16; Abstract. *Int R Sci & Prac Ag* 7,no 11:1663-7 N '16

System that spells success. J. R. Mattern. *il Country Life* 29:43 Ja '16

Trade associations and better business methods. E: N. Hurley. *Am Fert* 44:21-3 Ap 1 '16

What is your labor income? A. F. Kidder. *Prog F* 32:51 Ja 13 '17

*See also Dairy farm management; Farm management; also subheads Accounting and Costs under special subjects, e.g., Ice cream factories—Accounting, Apples—Costs, Cattle, Beef—Costs, Crops—Costs, Milk—Costs*

**Cost of living**

\* Cash and social values of household arts education. F: G. Bonser. *Teachers Coll Record* (525 W. 120th st, N.Y. 40c) 19:54-6 Ja '18

Cost of living. Kimball's *D F* 16:861 N 15 '18

Cost of living and the remedy. City Club B (City club of Chicago, 315 Plymouth Court, Chicago, Ill.) 10:5-8 Ja 15 '17; Same. (*In Nat. conf. on marketing and farm credits*, 1916, p. 435-44) \$2 '17 C. W. Holman, sec., Madison, Wis.

\* Cost of living and wages in Germany; general relation of wages to cost of living. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:880-90 Ap '18

\* Cost of living and wages in Russia. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:81-3 J 1 '18

\* Cost of living in Germany, April, 1916. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:505-28 Mr '18

\* Cost of living in Holland. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1156-7 My '18

\* Cost of living in New South Wales. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1469 Je '18

Cost of living on farms and in cities. Gas Age (52 Vanderbilt av., N.Y. \$3 per yr.) 39:110 F 1 '17

Cost of living on Minnesota farms—1905-1914. F. W. Peck. *il map Minn Ag Exp B* 162:1-31 '16

Cost of women's clothes. J. L. Ashlock. *J Home Econ* 9:499-502 N '17

Famine prices for wheat. E. W. Gage. *Scientific Am* (233 Broadway, N.Y. 10c) 117:43 J 1 21 '17

High cost of living. M. H. Abel. *J Home Econ* 9:271-2 Je '17

High cost of living. C: J. Brand. *J Home Econ* 9:423-5 S '17

High cost of living and the farmer. *Ag Digest* 1:255 Ja '17

\* High standards of living at low cost by co-operative housekeeping. A. S. Matthews. *Teachers Coll Record* (525 W. 120th st, N.Y. 40c) 19:57-67, 185-95 Ja-Mr '18

Increase in living costs. H. Coombs and E. L. Bishop. *J Home Econ* 10:57-63 F '18

Investigation? W. A. Paxson. *Nat Stock & F* 40:1080 Ja 20 '17

Living expenses of women students at the University of Illinois. C. E. Gray. *J Home Econ* 8:85-7 F '16

\* Living on twenty-five cents a day. M. S. Rose and others. *Teachers Coll Record* (525 W. 120th st, N.Y. 40c) 19:269-77 My '18

Lower cost of living. M. M. Marks. *N Y Ag Dept B* 81:1720-6 Mr '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1720-6 '17

**Cost of living—Continued**

- My money won't reach; the experience of 377 self-supporting families in New York city in endeavoring to make their incomes provide the essentials for healthful living. 22p '18 Charity organization soc., Committee on home economics, 105 E. 22d st., N. Y.
- Net gain. C. E. Snyder. *Nat Stock & F* 42: 652 O 19 '18
- New Jersey—Gov. Edge recommends state control of the fisheries industries, in order that consumers may buy fish under state supervision and at a cost plus only the actual expense of catching and handling
- \* Nimble dollar. J. F. Howell. *Investment Weekly* (42 Broadway, N.Y. 15c) 20:19 D 22 '17
- Our marketing problems: the consumer's part. A. Hobson. *Hoard's D* 54:489 N 2 '17
- Reducing living costs in Europe. A. J. Stemple. *il Am Coop J* 13:468 Ag '18
- Scientific marketing and transportation. T. C. Powell. *Railway Age* (Woolworth bldg., N.Y. 15c) 64:134-5 Ja 11 '18
- Study of the cost of living of working class families in Roxbury, Mass. S. H. Stites. *J Home Econ* 10:147-56 Ap '18
- \* War-time wages and the cost of living in Norway. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:723-5 O '17
- Waste and the high cost of living. H. C. Campbell. *Hoard's D* 53:969 J1 13 '17
- Whose prosperity? *Ag Digest* 1:253-4 Ja '17
- See also* Domestic finance; Food, Cost of

**Bibliography**

- \* List of recent references on cost of living. 9p '18 U.S. Lib. of Congress, Washington, D.C.
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 45c)
- \* Select bibliography on cost of living in the United States. H. G. Estey, comp. *Special Libraries* (70 5th av., N.Y. 25c) 9:203-9 N '18 (to be cont)

**Statistics**

- Comparative statistics on foodstuffs and fuel for four years as shown in a budget of the annual cost of living of a family of five persons, based on prices prevailing in the month of April of each year; April, 1917. 2p '17 Wash. State bur. of labor, Olympia; Same for five years: April 1918. 2p '18
- \* Cost of living in shipbuilding districts. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:948-9 O '18
- \* Cost of living of a family in Norway. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1466-9 Je '18
- Prices and cost of living. 20p '18 U.S. Bur. of labor statistics, Washington, D.C.
- From the *Monthly Review* of Feb. 1918
- Costa Rica.** *See* Botany—Costa Rica; Forests and forestry—Costa Rica
- Costa Rican Indians**
- Change in sex-ratio. H. Pittier. *J Heredity* 7: 406-11 S '16
- Costs**
- Keeping records to lower production costs. H. V. Stanley. *System on the Farm* 1:337-8 N '17
- See also* Cost accounting; Cost of living; Food, Cost of; Prices; Value; also sub-heads Cost of operation and Costs under special subjects, e.g. Creameries—Cost of operation, Cattle, Beef—Costs, Cheese—Costs, Horses—Costs, Poultry—Costs
- Costume**
- Costume in the cookery laboratory. I. E. Lord. *il J Home Econ* 8:55-67 F '16
- Dress and dressmaking; the history of costume. A. M. Zollman. *il J Ag* (Quebec) 21: 109-10 Ja '18
- Evolution of fashions of dress for women. Mrs C. Lee. *J Home Econ* 8:236-8 My '16
- See also* Clothing; Dressmaking; Fashion
- Costume designing.** *See* Clothing
- Cottage cheese**

- Cottage cheese. Wallaces' *F* 42:1219 S 28 '17
- Cottage cheese. *Weekly N L* 5:1 Ap 24 '18

- Cottage cheese; an economical and easily prepared food. M. Beall. *il Purdue Ag* 12:500-1 My '18
- Cottage cheese dishes. *il U S Ag C* 109:1-19 '18; Same. Kimball's *D F* 16:483-4+ Je 15 '18
- Cottage cheese from pasteurized butter-milk. *N Y Prod R* 44:426+ J1 11 '17
- Cottage cheese ideas. *Ohio F* 141:684 My 18 '18
- Cottage cheese industry. *Country Gent* 81: 1458 J1 29 '16
- Cottage cheese; its manufacture at creameries and milk plants described. *N Y Prod R* 44:390 J1 4 '17; Same. *Hoard's D* 53:973 J1 13 '17
- Cottage cheese the new ways. P. Dorsey. *il Ohio F* 141:758 Je 8 '18
- Cottage cheesemaking. L. G. Rinkle. *Mo Ag Ext C* 50:1-4 '18
- Directions for making cottage cheese. *Hoard's D* 55:889 Je 14 '18
- Directions for making cottage cheese on the farm. *il Hoard's D* 56:549 N 15 '18
- Elements of success in the manufacture of cottage cheese for market distribution. *N Y Prod R* 46:382 J1 3 '18
- How to make cottage cheese. W. H. Eaton. *il Prog F* 31:504 Ap 8 '16
- How to make cottage cheese on the farm. K. J. Matheson and F. R. Cammack. *il Farmers' B* 850:1-15 '17; Abstract. *Hoard's D* 54:582 N 16 '17
- How to make palatable and nourishing food from skim milk. *Weekly N L* 4:6 Ap 25 '17; Same. *N Y Prod R* 43:1028 Ap 18 '17
- Kitchen cheese making. R. B. Stoltz. *il Ohio F* 142:334, 364 O 5-12 '18
- Make cottage cheese. *Weekly N L* 4:8 Je 6 '17; Same. *N Y Prod R* 44:964 O 10 '17
- Making cottage cheese. W. E. Wintermeyer. *Prog F* 33:516 Ap 20 '18
- Making cottage cheese on the farm. E. H. Liendecker. *Purdue Ag* 12:231+ Ja '18
- Manufacturing of cottage cheese in creameries and milk plants. A. O. Dahlberg. *U S Ag B* 576:1-16 '17; Same (pt 1). *N Y Prod R* 46:250-1+ Je 12 '18
- Meat substitute. *Weekly N L* 4:8 My 16 '17
- Neglected source of valuable human food. A. E. Perkins. *Ohio Ag Exp B v* 3:128-34 Ap '18
- Some ways to use cottage cheese. *Weekly N L* 4:7 Je 13 '17; Same. *Jersey B* 36:1035 J1 4 '17; Same. *Hoard's D* 53:993 J1 13 '17
- Use more cottage cheese. Mrs F. W. Stillman. *Rural N Y* 77:1169 O 12 '18
- Use of cottage cheese in food conservation. E. W. Prichard. *Jersey B* 36:1727 O 31 '17

**Storage**

- Storage of cottage cheese; report of a research by H. B. Ellenberger, dairy husbandryman, Vermont experiment station. *N Y Prod R* 46:704-5 S 11 '18; Same cond. *Hoard's D* 56:476 N 1 '18

**Cottages**

- See also* Bungalows; Teachers' homes

**Cotton**

- Analyses of agricultural yield; the influence of natural environmental factors upon the yield of Egyptian cotton. W. L. Balls (Phil. Trans. Roy. Soc. London, Ser. B, 203 no. 352, 157-223p. '17). *Exp Sta Record* 38:338-40 Mr '18
- Bee keeping may increase the cotton crop. R. M. Meade. *il J Heredity* 9:282-5, 288 O '18
- Boll weevil problem. B. L. Moss. *Prog F* 32: 650 Je 2 '17
- Boll weevil problem; growing the crop. B. L. Moss. *Prog F* 32:556 My 5 '17
- Brachysm, a hereditary deformity of cotton and other plants. O. F. Cook. *il J Ag Research* 3:387-400 F '15
- Care that makes quality cotton. A. C. Hartenbower. *Country Gent* 82:1516 O 6 '17
- Chemistry and histology of the glands of the cotton plant, with notes on the occurrence of similar glands in related plants. E. R. Stanford and A. Viehoever. *bibliog il J Ag Research* 13:419-36 My 20 '18
- Common sense with cotton. C. Edward. *il Country Gent* 82:429 Mr 3 '17



**Cotton—Continued**

Cotton. (*In* Geography of the world's agriculture, p. 50-4) maps '17 U S Ag  
 Cotton as a seed crop. O. F. Cook. Science (Science Press, Garrison, N.Y. 15c) n s 48: 167-8 Ag 16 '18  
 Cotton—capitalist or thief? H. L. Staples. il Country Gent 82:1872-3 D 1 '17  
 Cotton experiments, 1916. il Miss Ag Exp B 178:1-40 '16  
 Cotton ginning information for farmers. F. Taylor and others. il Farmers' B 764:1-24 '16; Abstract. Prog F 33:883 Ag 10 '18  
 Cotton growing and ginning. L. E. Hurst. il Ohio F 137:546 Ap 8 '16  
 Cotton growing in British colonies. R. P. Skinner. (Commerce Reports no. 206) p 854-7 (S 3) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Cotton: its place in southern agriculture. T. Butler. Prog F 31:701 My 27 '16  
 Cotton production. J. N. Harper. (B. 20) 19p il n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.  
 Cotton production and distribution; season of 1916-17. (B. 135) 144p maps '18 U.S. Census bur., Washington, D.C.  
 Cotton production and farm labor situation. Congressional Record (Washington, D.C.) 56:1340-2 Ja 25 '18  
 Cotton production under boll weevil conditions. L. E. Rast. il Ga Ag Coll (Ext) B 115: 1-32 D '16 (2d ed Mr '17)  
 Cotton spacing experiments. W. E. Ayres. Ark Ag Exp B 153:1-8 '18  
 Cotton: useful facts about varieties, culture, etc. B. L. Moss. Prog F 31:726 Je 3 '16  
 Cotton yields and cotton acreage. J. E. Latham. Prog F 32:454 Ap 7 '17  
 Cover crops for cotton land. B. Howard. il Country Gent 83:31 Jl 27 '18  
 Cultivate cotton late. J. A. Wade. Prog F 31: 966 Ag 5 '16  
 Dairy cattle and cotton. W. C. Barnes. Breeder's Gaz 73:60 Ja 10 '18  
 Facts and figures for cotton farmers. maps Prog F 32:196 F 17 '17  
 Facts for cotton farmers. Prog F 33:199 F 16 '18  
 Farm practice in the cultivation of cotton. H. R. Cates. il U S Ag B 511:1-62 '17  
 Fertilizer the limit of cotton acreage. J. F. Duggar. Prog F 32:1293 D 8 '17  
 Getting a stand of cotton. A. M. Latham. Prog F 33:520 Ap 20 '18  
 Growing cotton in spite of the boll weevil. J. A. Evans. Am Fert 46:41-2+ Ja 20 '17  
 Growing wings for airplanes. J. R. McMahon. il Country Gent 82:2046-7 D 29 '17  
 Handling and care of cotton. G. J. McConnell. Prog F 32:1178 N 10 '17  
 Handling and marketing of the Arizona-Egyptian cotton of the Salt River valley. J. G. Martin. il U S Ag B 311:1-16 '15  
 Handling, marketing and warehousing cotton. (B 33) p 11-16 '17 Warehouse and marketing dept., Austin, Texas  
 High cost of idleness. Country Gent 81:390 F 19 '16  
 How the quarantine division protects the cotton producer. F. Maskew. il Cal State Comm Hort B v 5:311-20 S '16  
 In defense of the cotton farmer. J. T. Ashcraft. Prog F 33:751 Je 29 '18  
 Is cotton a slacker crop? H. L. Staples. il Country Gent 82:1587-8+ O 20 '17  
 Is cotton only a profiteer? G. F. Stratton. il Country Gent 83:6-7 Ap 27 '18  
 Large cotton acreage increase. Am Fert 44:86 Je 24 '16  
 Leaf nectaries of gossypium. E. L. Reed. il Bot Gaz 63:229-31 Mr '17  
 Length of cotton lint, crops 1916 and 1917. W. L. Pryor. U S Ag B 733:1-8 '18  
 Length of cotton lint, crops of 1916 and 1915; with statistics. Monthly Crop Rep 3:52-3 Je '17  
 Lessons on cotton for the rural common schools. C. H. Lane. il U S Ag B 294:1-16 '15  
 Lint percentage and lint index of cotton and methods of determination. G. S. Meloy. il U S Ag B 644:1-12 '18

Little farm well-tilled. R. H. Forbes. Ariz Ag Exp Timely Hints 133:1-8 '18  
 Long cotton makes a long purse. J. R. McMahon. il Country Gent 83:14-15 Ja 5 '18  
 Meade cotton. O. F. Cook. Science (Science Press, Garrison, N.Y. 15c) n s 48:11-12 Jl 5 '18  
 Methods of growing cotton under bollweevil conditions. (Doc. 36) 8p '17 U. S. States relations service, Washington, D.C.  
 Methods of improving cotton by seed selection on the farm. M. A. Beeson. Okla Ag Ext C 37:1-4 '16  
 Minimizing boll weevil damage through proper cultivation and fertilization. A. M. Soule. il Ga Ag Coll B 116:1-12 D '16  
 Mixing a fertilizer for cotton. T. Butler. Prog F 33:531 Ap 27 '18  
 More cotton. 27p il map '17 Barrett co., 17 Battery Place, N.Y.  
 More light on spacing cotton to get the biggest yields. Prog F 32:508 Ap 21 '17  
 Morgan warns against curtailed cotton crop. S. T. Morgan. Am Fert 46:24 Ap 28 '17  
 Notes on the destruction of cotton bushes by burning. F. R. Shepherd. Ag J of India 12: 120-1 Ja '17  
 Pick cotton early and pick it clean, make quality high. Weekly N L 6:3 S 18 '18  
 Pick dry, gin dry, store dry. J. P. Cooper. Prog F 31:1147 S 30 '16  
 Quest of the long staple cotton. W. I. Bullard. 31p map '17 Merchants nat. bank, 28 State st., Boston  
 Snapped and bolly cotton. Monthly Crop Rep 4:120 O '18  
 Sowing date experiment with Egyptian cotton. L. V. Balls and F. S. Holton. Int R Sci & Prac Ag 8,no 3:377-9 Mr '17  
 Thirty years of southern upbuilding. Am Fert 45:23-6 Ag 5 '16  
 This year's cotton acreage. T. Butler. Prog F 31:391 Mr 18 '16  
 Time at which cotton uses the most moisture. C. K. McClelland. Am Soc Agron J 10:185-9 Ap '18  
 Types and designations of Egyptian cotton. A. Garrels. (Commerce Reports no. 145) p 1108-9 (Je 21) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Unpromising outlook for the world's production of fine cotton of long staple. Econ World (128 Water st, N.Y. 25c) n s 15:550-1 Ap 20 '18  
 What will become of your low-grade cotton? N. T. Blackwell. Prog F 33:963 Ag 31 '18  
 What you ought to know about cotton. map Prog F 31:212 F 12 '16  
*See also* Cotton trade; Gingham; Kokio; Textile industry and fabrics

**Breeding**

Budding incompatible cottons. J Heredity 9:181 Ap '18  
 Cotton growing trials at the Palermo royal colonial garden, Sicily, in 1915. Int R Sci & Prac Ag 8,no 6:871-3 Je '17  
 Some lint characters of Sea Island cotton. S. C. Harland. Ag J of India 12:115-20 Ja '17

**Composition**

Analysis of cotton at the chief stages of its development. B. V. Rogalskij. Int R Sci & Prac Ag 7, no 10:1451-4 O '16  
 Chemistry of the cotton plant, with special reference to upland cotton. A. Viehoever and others. bibliog J Ag Research 13:345-52 My 13 '18

**Costs**

Cost of cotton grown by tenants. L. J. Wanner. Prog F 33:844 Jl 27 '18  
 Cost of cotton production. T. Butler. Prog F 33:727 Je 22 '18  
 Cost of cotton production—season, 1917-18. 27p '18 H. F. Bachman & Co., Bankers, 61 E'way, N.Y.  
 Cost of producing cotton. W. B. Yeary. Prog F 33:70 Ja 19 '18  
 Shall the price of cotton be fixed? J. E. Pickett. Country Gent 83:5-6+ S 21 '18

## Cotton—Continued

## Diseases and pests

- Alternaria leaf-spot of cotton. R. C. Faulwetter. *il Phyt* 8:98-105 Mr '18
- Cotton insects. (*In* 9th annual report, p. 53-9) *il* '17 Arizona Comm. of ag. and horticulture, Phoenix
- Cotton pests in the arid and semi-arid Southwest. A. W. Morrill. *bibliog J Econ Entom* 10:307-17 Je '17
- Cotton plants which resist disease. *Rural N Y* 75:881 Je 17 '16
- Cotton variety tests. A. C. Lewis and C. A. McEndon. *il Ga Entom Bd* 50:1-30 '18
- Cotton wilt and anthracnose or boll rot. B. L. Moss. *Prog F* 31:1172 O 7 '16
- Dissemination of the angular leafspot of cotton. R. C. Faulwetter. *bibliog J Ag Research* 8:457-75 Mr 19 '17
- How insects affect the cotton plant and means of combating them. W. D. Pierce. *il Farmers' B* 890:1-27 '17
- Insect injury to cotton seedlings. B. R. Coad and R. W. Howe. *il J Ag Research* 6:129-40 Ap 17 '16
- New parasitic nema found infesting cotton and potatoes. N. A. Cobb. *il J Ag Research* 11:27-33 O 1 '17
- On a sudden outbreak of cotton rust in Texas. J. J. Taubenhaus. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:267-9 S 14 '17
- Red spider on cotton. E. A. McGregor and F. L. McDonough. *bibliog il map U S Ag B* 416:1-72 '17
- Red spider on cotton and how to control it. 2d rev ed E. A. McGregor. *il map Farmers' B* 831:1-15 '17
- See also* Boll weevils; Bollworms; Pink; Cotton anthracnose; Cotton caterpillars; Cotton leaf perforators; Cotton root-knot; Cotton wilt

## Laws

- Loi n. 17 portant les mesures à prendre pour la destruction des vers de la capsule du coton en Egypte. *Int Yearbook Ag Leg* 1916:860-1 '17
- Loi n. 26 edictant des mesures en vue de la destruction du ver rose de la graine du coton. *Int Yearbook Ag Leg* 1916:862-3 '17

## Grading

- Agriculture appropriation bill, 1917 (cotton-futures amendment); hearings before the U. S. Senate committee on agriculture and forestry on H. R. 12717. (May 17, 18, and 19, 1916.) 117p '16 Apply to congressmen
- Classification of American upland cotton. D. E. Earle and F. Taylor. *il maps Farmers' B* 802:1-28 '17
- For a better cotton crop. A. C. Hartenbower. *il Country Gent* 81:825 Ap 15 '16
- North Carolina's cotton grading. F. H. Jeter. *Country Gent* 82:291 F 10 '17
- Relation of cotton buying to cotton growing. O. F. Cook. *U S Ag B* 60:1-21 '14
- Study of cotton market conditions in North Carolina with a view to their improvement. O. J. McConnell and W. R. Camp. *map U S Ag B* 476:1-18 '17

## Marketing

- Co-operative societies for sale of cotton in the southern Maratha country. G. F. Keatinge. *Ag J of India* 13:121-30 Ja '18
- Cotton marketing—a page of good ideas. *Prog F* 33:930 Ag 24 '18
- Disadvantages of selling cotton in the seed. C. F. Creswell. *U S Ag B* 375:1-18 '16
- Don't sell cotton in the seed. *Prog F* 31:1040 Ag 26 '16
- Handling and marketing Durango cotton in the Imperial valley. J. G. Martin and G. C. White. *il map U S Ag B* 458:1-22 '17
- Losses from selling cotton in the seed. C. F. Creswell. *Farmers' B* 775:1-8 '16
- No calamity in cotton if we do not lose our heads. *Weekly N L* 5:1-2 Jl 31 '18
- Sell your cotton slowly. J. Z. Green. *Prog F* 33:884 Ag 10 '18
- Selling the cotton crop. A. C. Hartenbower. *Country Gent* 82:1589 O 13 '17

- To stabilize the cotton crop. C. J. Brand. *il Banker-F* 5:6 Ag '18
- Unginned cotton. *Country Gent* 81:2095 D 2 '16
- Warehouse and marketing department bulletin no 22. F. C. Weinert and P. Radford. 20p *il* '16 Permanent warehouse dept., Houston, Texas
- What improvements in marketing will increase the growers' profits? O. J. McConnell. *Prog F* 33:896 Ag 10 '18
- See also* Texas—Warehouse and marketing department

## Prices

- American-Egyptian cotton brings high prices; reports on surveys of crops. *Weekly N L* 6:4 O 2 '18
- Arbitrary prices for cotton. *Prog F* 32:925 S 1 '17
- Buying and selling prices of Egyptian cotton. A. Garrels. (Commerce Reports no. 231) p 26-7 (O 2) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Cost of cotton production—season, 1917-18. 27p '18 H. F. Bachman & Co., Bankers, 61 E'way, N.Y.
- Cotton and cottonseed prices to producers. Monthly Crop Rep 3:60 Jl '17
- Cotton farmer. Wallaces' F 43:1289 S 13 '18
- Cotton prices in the United Kingdom. R. P. Skinner. (Commerce Reports no. 205) p 844-5 (Ag 31) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Cotton quotations approach normal during investigation. *Weekly N L* 6:8 O 23 '18
- Disadvantages of selling cotton in the seed. C. F. Creswell. *U S Ag B* 375:1-18 '16
- Don't sell for less than 25 cents. *Prog F* 32:1009 S 29 '17
- Don't sell your cotton for less than 25 cents! *Prog F* 33:877 Ag 10 '18
- Expediency of governmental price-fixing for cotton. A. R. Marsh. *Econ World* (128 Water st, N.Y. 25c) n s 15:154-5 F 2 '18
- Extension of remarks of Hon. John T. Watkins, in the House of representatives, Sept. 23, 1918. *Congressional Record* (Washington, D.C.) 56:11938-9 O 1 '18
- Four reasons why cotton must bring 25 cents. *Prog F* 32:1005 S 29 '17
- How to get a fair price for this year's cotton crop. B. L. Moss. *Prog F* 33:889 Ag 10 '18
- Latest facts about cotton price fixing. *Prog F* 33:1094 O 5 '18
- No reason for low-priced cotton. J. A. Wade. *Prog F* 33:962 Ag 31 '18
- Peace will bring low-priced cotton. J. S. Williams. *Prog F* 33:394 Mr 23 '18
- \* Price of cotton and wheat. T. P. Gore. *Congressional Record* (Washington, D.C.) 56:12477-9 O 24 '18
- Relation between primary market prices and qualities of cotton. F. Taylor. *U S Ag B* 457:1-13 '16
- Shall the price of cotton be fixed? J. E. Pickett. *Country Gent* 83:5-6+ S 21 '18
- Study of cotton market conditions in North Carolina with a view to their improvement. O. J. McConnell and W. R. Camp. *map U S Ag B* 476:1-18 '17
- Thinks cotton should be over 30 cents. T. W. Thackston. *Prog F* 32:1047 O 6 '17
- Why every farmer should hold his cotton. *Prog F* 33:1204 N 2 '18

## Seed

*See* Cotton seed

## Standards

- Brief history of the movement to secure universal cotton standards. (Service and regulatory announcements—Markets 7) 33-50p *il* '16 U S Ag
- Manufacturing tests of the official cotton standards for grade. W. S. Dean and F. Taylor. *U S Ag B* 591:1-27 '17
- Official cotton standards of the United States. (Service and regulatory announcements—Markets 6) 32p *il map* '16 U S Ag
- To prescribe standards for American Egyptian cotton. *Weekly N L* 5:3 Jl 3 '18



**Cotton—Continued**

**Statistics**

See Cotton trade—Statistics

**Storage**

- Cotton warehouse construction. R. L. Nixon. il plans U S Ag B 277:1-38 '15  
Cotton warehouses; storage facilities now available in the South. R. L. Nixon. U S Ag B 216:1-26 '15  
Proposed rules and regulations of the Secretary of agriculture for cotton warehouses under the United States warehouse act. (Service and regulatory announcements—Markets 27) 40p '17 U S Ag; U S Ag C 94:1-43 '18

**Testing**

- Manufacturing tests of cotton fumigated with hydrocyanic-acid gas. W: S. Dean. U S Ag B 366:1-12 '16  
Manufacturing tests of the official cotton standards for grade. W: S. Dean and F. Taylor. U S Ag B 591:1-27 '17  
Spinning tests of Arizona-Egyptian and Sea Island and Sakellaridis Egyptian cottons. F. Taylor and W: S. Dean. U S Ag B 359:1-20 '16  
Spinning tests of upland long-staple cottons. F. Taylor and W. A. Sherman. U S Ag B 121:1-20 '14  
Tests of the waste, tensile strength, and bleaching qualities of the different grades of cotton as standardized by the United States government. N. A. Cobb. U S Ag B 62:1-8 '14

**Transportation**

- \* Cotton from New Orleans. (Investigation and suspension docket no. 1108; Opinion 5185) 751-8p '18 U. S. Interstate commerce commission, Washington, D. C.

**Varieties**

- Bate's big boll an American variety of cotton tested in Sicily. N. Prestianni. Int R Sci & Prac Ag 9,no 2:194 F '18  
Corn and cotton varieties. C. K. McClelland. Ga Ag Exp C 75:1-8 '17  
Cotton experiments, 1915. H. B. Brown. il Miss Ag Exp B 173:1-29 '16  
Cotton—varieties and limiting factor tests. W. L. Hutchinson. S C Ag Exp B 185:1-19 '16  
Cotton—varieties and limiting factor tests 1916. W. L. Hutchinson. S C Ag Exp B 189:1-8 '17  
Cotton varieties in Georgia. L. E. Rast. il Ga Ag Coll B 121:1-36 '17  
Cotton variety tests. A. C. Lewis and C. A. McLendon. il Ga Entom Bd B 50:1-30 '18  
Cotton variety tests. L. E. Rast and S. H. Starr. Ga Ag Coll (Ext) C 21:1-4 '16  
Cotton variety tests for boll-weevil and wilt conditions in Georgia. A. C. Lewis and C. A. McLendon. il Ga Entom Bd B 46:1-34 '17  
Cotton variety tests for 1917. R. Y. Winters and V. R. Herman. N C Ag Dept B v 39:1-10 Mr '18  
Cotton variety tests in Mississippi. Prog F 33:396 Mr 23 '18  
Cotton variety tests, 1916. L. E. Rast and M. W. H. Collins. Ga Ag Coll (Ext) C 40 4p '17  
Cotton variety tests, 1917. L. E. Rast. Ga Ag Coll C 71:1-4 '18  
Mutation in Egyptian cotton. T: H. Kearney. bibliog il J Ag Research 2:287-302 Jl '14  
Plant industry based upon mutation; varieties of Egyptian cotton have arisen largely through mutation. T: H. Kearney. il J Heredity 9:51, 61 F '18  
Report on corn and cotton varieties, 1915. C. K. McClelland. Ga Ag Exp C 74:1-8 '16  
Report on varieties of cotton in 1916 in Arkansas. Prog F 32:455 Ap 7 '17  
Sea Island cotton. W. A. Orton. il map Farmers' B 78:1-40 '16  
Sidelights on Sea Island cotton. Country Gent 82:189 F 3 '17  
Some lint characters of Sea Island cotton. S. C. Harland. Ag J of India 12:115-20 Ja '17

- Spinning tests of Arizona-Egyptian and Sea Island and Sakellaridis Egyptian cottons. F. Taylor and W: S. Dean. U S Ag B 359:1-20 '16  
Spinning tests of upland long-staple cottons. F. Taylor and W. A. Sherman. U S Ag B 121:1-20 '14  
Study of certain environmental factors and varietal differences influencing the fruiting of cotton. E. C. Ewing. bibliog Miss Ag Exp Tech B 8:1-93 '18  
Tests of Pima Egyptian cotton in the Salt River valley, Arizona. T: H. Kearney. (Alkali and drought resistant plant investigations—1) 4p '16 U.S. Bureau of plant industry, Washington, D.C.  
Tests of varieties of cotton in Alabama in 1916. E. F. Cauthen. Prog F 32:81 Ja 20 '17  
Tests of varieties of cotton in Alabama in 1917. E. F. Cauthen. Prog F 33:99 Ja 26 '18  
Varieties of cotton, 1916. W. E. Ayres. il Ark Ag Exp B 129:1-32 '17  
Varieties of cotton—summary 1909-1917. W. E. Ayres. Ark Ag Exp C 44 4p '18  
Varieties of cotton—summary report 1917. W. E. Ayres. Ark Ag Exp C 39:1-8 '18  
Varieties of cotton tested in Arkansas. J. F. Duggar. Prog F 32:850 Ag 4 '17  
Wilt resistant varieties of cotton. E. F. Cauthen. il map Ala Ag Exp B 189:67-88 '16

**Africa**

- Possibilities of cotton production in the Anglo-Egyptian Sudan. J: A. Todd. Econ World (128 Water st, N.Y. 25c) n s 14:765-6 D 1 '17  
Uganda cotton production makes rapid progress. H: P. Starrett. (Commerce Reports no. 83) p 122-6 (Ap 10) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
World's cotton shortage. J: A. Todd. Ag J of India 13:287-97 Ap '18

**Arizona**

- Relation of the Arizona wild cotton weevil to cotton planting in the arid West. B. R. Coad. il U S Ag B 233:1-12 '15

**Australia**

- Cotton growing in Australia. Ag Gaz of New South Wales 28:107-10 F '17; Same. J Dept Ag Victoria 15:178-80 Mr '17  
Cotton in Australia; some historical notes. J. H. Maiden. Ag Gaz of New South Wales 28:743-6 O '17

**Brazil**

- Encouraging the cotton industry of Brazil. Pan-Am Magazine (70th 5th av, N.Y. 25c) 27:197-8 Ag '18

**California**

- Community production of Durango cotton in the Imperial valley. A. McLachlan. U S Ag B 324:1-16 '15  
Cotton culture. W. E. Packard. Cal State Comm Hort B v 7:181-7 Ap '18  
Cotton in Imperial county. F. W. Waite. il Cal State Comm Hort B v 6:427-9 N '17  
Cotton in the San Joaquin valley. J: W. Gilmore. Cal Ag Exp C 192:1-8 '18  
Extension of cotton production in California. O. F. Cook. U S Ag B 535:1-15 '17  
Handling and marketing Durango cotton in the Imperial valley. J. G. Martin and G. C. White. il map U S Ag B 458:1-22 '17  
Way down upon de Alamo river. W. Hall. Sunset (San Francisco 15c) 38:17-19+ Je '17  
Work of the Yuma experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) p 14-17 il '18 U S Ag

**China**

- Cotton industry in China. Ag J of India 12: 658-61 O '17; Same cond. Int R Sci & Prac Ag 9,no 2:243-4 F '18  
Production, exports, prices and freights. Doc Leaflets 1,no 5:71-80 N '17

**Egypt**

- Buying and selling prices of Egyptian cotton. A. Garrels. (Commerce Reports no. 231) p 26-7 (O 2) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Cotton—Egypt—Continued**

Cotton research. D. T. Chadwick. *Ag J of India* 13:721-3 O '18

Egyptian cotton: conditions of sale through the control commission of Egypt. *Textile World* (334 4th av, N.Y. \$3 per yr.) 54:1680 O 5 '18

*Gossypium* spp. (qotn in Egypt): history, development, and botanical relationship of Egyptian cottons, with tables showing areas, yields, prices, and distribution of the varieties. G. C. Dudgeon. (Egyptian ag. products no. 3a) 84p il 25c '17 *Egypt Ministry of ag., Cairo*

Some observations on agricultural work in Egypt, America, and Japan. W. Roberts. *Ag J of India* 12:583-7 O '17

**Georgia**

Cotton variety tests for boll-weevil and wilt conditions in Georgia. A. C. Lewis and C. A. McLendon. *il Ga Entom Bd B* 46:1-34 '17

Economic study of farming in Sumter county, Ga. H. M. Dixon and H. W. Hawthorne. *U S Ag B* 492:1-64 '17

Georgia cotton crop. *il Rural N Y* 75:1025 JI 29 '16

How to grow cotton in spite of the boll weevil. I. W. Williams. *il Ga Entom Bd B* 47:1-48 '17

**India**

American cotton and American cotton sales in the Punjab. W. Roberts. *Ag J of India* 11:238-42 JI '16

Early history of cotton in Bombay. J. Mackenna. *Ag J of India* 13:389-404 JI '18

Improvement of cotton by selection, in India. *Int R Sci & Prac Ag* 9,no 4:443-4 Ap '18

Improvement of cotton cultivation in Madras. *Ag J of India* 12:311-15 Ap '17

Improvement of cotton cultivation in the Central Provinces studied from an economic point of view. D. Clouston. *Ag J of India Sci Congress No* 1917:29-37

Indian cotton committee. *Ag J of India* 13:164-7 Ja '18

\* War prosperity of the jute and cotton mills of India. *Econ World* (128 Water st, N.Y. 25c) n s 16:626 N 2 '18

**Japan**

How to supply raw cotton to Japanese cotton spinners, whose position in Japan's industrial system is extremely important, is now one of the most serious questions which confronts Japan. Mr Ito, head of the Agricultural affairs section, Chosen government, said that the success of Chosen in the growing of upland cotton had been very striking. The cotton acreage this year is 70,000 chobu, an increase of 63,500 chobu over 1912. All this has been brought about by the careful supervision and encouragement of the Government-General.—*Business Digest* \$5 per yr.

**Louisiana**

Cotton growing in Louisiana. M. Snowden. *La Ag Ext C* 18:1-23 '16

**Mississippi**

Cotton experiments, 1917. H. B. Brown and C. T. Ames. *Miss Ag Exp B* 184:1-28 '18

Study of certain environmental factors and varietal differences influencing the fruiting of cotton. E. C. Ewing. *bibliog Miss Ag Exp Tech B* 8:1-93 '18

**New Hebrides**

Cotton-growing in the New Hebrides. E. Corlette. *Ag Gaz of New South Wales* 28:438-9 Je '17

**North Carolina**

Improving cotton in the Scotland Neck community. R. Y. Winters and P. H. Kime. *il N C Ag Ext C* 37:1-7 '17

**Oklahoma**

Cotton in Oklahoma. W. D. Bentley. *il Okla Ag Ext C* 32 8p '16

Studies of primary cotton market conditions in Oklahoma. W. A. Sherman and others. *U S Ag B* 36:1-36 '13

**Paraguay**

Cultivation of cotton in Paraguay. *Econ World* (128 Water st, N.Y. 25c) n s 16:607 O 26 '18

**Russia**

Cotton plant in the Russian empire. V. I. Iuferev. *Int R Sci & Prac Ag* 7,no 6:829-30 Je '16

**Sicily**

Cotton-growing trials at the Palermo royal colonial garden, Sicily, in 1915. *Int R Sci & Prac Ag* 8,no 6:871-3 Je '17

**South Africa**

\* Cotton growing in South Africa. C. J. Pisar. (Commerce Reports no. 257) p 445-7 (N 1) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**South Carolina**

Economic conditions in the Sea Island cotton industry. W. R. Meadows. *U S Ag B* 146:1-18 '14

Results of fertilizing experiments with cotton at the Clemson college station. T. E. Keitt. *S C Ag Exp B* 191:1-11 '17

**South Pacific islands**

Cotton cultivation in South Pacific islands. (Commerce Reports no. 224) p 1126-7 (S 24) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Southern states**

Experiments with single-stalk cotton culture in Louisiana, Arkansas and North Carolina. P. V. Cardon. *U S Ag B* 526:1-31 '18

Voice of the banker in ten southern states. *Country Gent* 81:688 Mr 25 '16

**Southwestern states**

American-Egyptian cotton successful in Southwest; permanence is indicated. *Weekly N L* 6:2 S 18 '18

Cotton growing under irrigation in the Southwest. P. L. Edwards. *Overland* (259 Minna st, San Francisco 10c) n s 69:501-4 Je '17

New cotton fields of the Southwest. W. E. Packard. *il Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 52:24581+ Ap 28 '17

**Texas**

Form of agreement between state department of agriculture of Texas and planters of outlaw cotton. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 89-90 '18 U S Ag

Progress report, Lubbock, 1909-1914; cotton. *il Tex Ag Exp B* 219:23-7 '17

Progress report, Spur, 1909-1914; variety test. *Tex Ag Exp B* 218:21-3 '17

Single-stalk cotton culture at San Antonio. R. M. Meade. *il U S Ag B* 279:1-20 '15

Work of the San Antonio experiment farm in 1916. C. R. Letteer. (W. I. A.—16) 22p il '17 U S Ag

**United States**

Agricultural situation for 1918: cotton; maintaining the supply of cotton. *U S Ag C* 88:1-34 '18

Committees appointed at Washington conference will co-operate with government agencies in aiding raw cotton improvement movement. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:1462-3 O 13 '17

Community production of Egyptian cotton in the United States. C. S. Scofield and others. *bibliog U S Ag B* 332:1-30 '16

Cotton production and distribution; season of 1915-16. (B 134) 99p maps '16 U.S. Bur. of the census, Washington, D.C.

Cotton production and distribution; season of 1916-17. (B. 135) 144p maps '18 U.S. Bur. of the census, Washington, D.C.

Cotton production in the United States; crop of 1915. 28p '16 U.S. Bur. of the census, Washington, D.C.

Cotton production in the United States; crop of 1916. 43p '17 U.S. Bur. of the census, Washington, D.C.

Cotton report for July. *Monthly Crop Rep* 4:77 JI '18



**Cotton—United States—Continued**

- Cotton report of August 25. Monthly Crop Rep 3:83 S '17
- Cotton's magical rise enriching the nation. Literary Digest (354 4th ave., N.Y. 10c) 53: 1517-22+ D 9 '16
- Long cotton belt broadens. J. R. McMahon. il Country Gent 83:6-7 F 2 '18
- Plea to the southern cotton-grower to modify his ideas about the relation of acreage to production. J. E. Latham. Econ World (128 Water st, N.Y. 25c) n s 13:443 Mr 31 '17
- Preparedness and the South. J. T. Ashcraft. Prog F 32:529 Ap 28 '17
- Review of the present cotton market situation. N. T. Blackwell, Prog F 33:675 Je 1 '18
- Rules and regulations of the secretary of agriculture under the United States futures act of August 11, 1916. U S Ag C 64:1-27 '16
- September 25 cotton report. Monthly Crop Rep 3:101 O '17
- Short selling prohibited as cotton demand grows. Weekly N L 6:1 N 20 '18
- Sky-high cotton. B. W. Currie, il map Country Gent 82:91-2, 138-9, 182-3, 242-3, 310-11, 364-5 Ja 20-F 24 '17
- Some observations on agricultural work in Egypt, America, and Japan. W. Roberts. Ag J of India 13:272-80 Ap '18

**Cotton, Substitutes for**

- Cat tail plant in industry. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:155 Mr 9 '18
- Typha fiber, a suggested cotton substitute; attempts have been made in France to use typha or cat tail for papermaking. Paper (117 E. 24th st., N.Y. 25c) 22:13 Mr 20 '18
- Typha plant a substitute for cotton. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:52 Ja 27 '17

**Cotton anthracnose**

- Cotton anthracnose. F. M. Rolfs. Okla Ag Exp C 40:1-7 '16
- Cotton anthracnose. H. E. Stevens. Fla Ag Ext C 4:1-4 '18
- Experiments on varietal resistance to the bean and cotton anthracnose diseases. C. W. Edgerton and C. C. Moreland. il La Ag Exp B 155:1-24 '16

**Cotton as food**

- Cotton as a food plant. L. Johnson. Scientific Am (233 Broadway, N.Y. 10c) 118:55, 167 Ja 12, F 23 '18

**Cotton boll weevil. See Boll weevils**

**Cotton bollworm. See Bollworms, Pink; Corn earworms**

**Cotton caterpillars**

- Cotton caterpillar. Weekly N L 5:8 Ag 8 '17; Same. Prog F 32:874 Ag 11 '17

**Cotton clubs**

- Boys' and girls' corn and cotton clubs. il La Ag Ext B 25:1-28 '17

**Cotton disinfection**

- Cotton fumigation. il Travelers Standard (Hartford, Conn.) 5:193-202 O '17
- Fumigating baled cotton by the hydrocyanic acid process. il Metallurgical and Chemical Eng (239 W. 39th st., N.Y. 25c) 16:346 Mr 15 '17
- Fumigating foreign cotton to kill our imported pests. il Scientific Am (233 Broadway, N.Y. 10c) 116:255 Mr 10 '17
- Fumigation of imported baled cotton. Textile World J (461 8th av. at 34th st, N.Y. \$3 per yr.) 52:628+ Ja 13 '17

**Cotton exchanges**

- Good and evil of the cotton exchanges. N. T. Blackwell. Prog F 33:881 Ag 10 '18

**Cotton fabrics**

- Buying cotton materials. M. L. Matthews. Purdue Ag 11:49 Ap '17
- Manufacturing tests of the official cotton standards for grade. W. S. Dean and F. Taylor. U S Ag B 59:1-27 '17

**Cotton growers' associations**

- See also Imperial valley long-staple cotton growers' association

**Cotton growing machinery**

- Cotton machinery. E. C. Gee. il Am Soc Ag Eng Trans 10,no 2:94-8 '17

**Cotton handling**

- Handling and marketing Durango cotton in the Imperial valley. J. G. Martin and G. C. White. il map U S Ag B 458:1-22 '17

**Cotton leaf perforators**

- Bucculatrix thurberiella, a pest of cotton in the Imperial valley. E. A. McGregor. il J Econ Entom 9:505-10 O '16

**Cotton picking machines**

- Cotton-picking machine. H: M. Wise. Rural N Y 76:619 Ap 28 '17
- Machine for gathering cotton fruits without injury to the plant. il Int R Sci & Prac Ag 7,no 8:1160-1 Ag '16

- \* Successful (?) cotton picker. G: W. Colles. Sci Am (233 Broadway, N.Y. 10c) 119:411 N 23 '18

- Successful cotton picker. E: C. Crossman. il Sci Am (233 Broadway, N.Y. 10c) 119:315 O 19 '18

**Cotton plantations**

- Cotton hands that stay. J: Roland. il Country Gent 82:2004-5 D 22 '17
- Largest plantation; all cotton and twenty miles long. G: H. Dacy. il Farm Eng 5:9 N '17

**Cotton products**

See also Cottonseed products

**Laws**

- Loi autorisant le directeur du Bureau de recensement à recueillir et à publier des statistiques portant sur les graines de coton et les produits dérivés, et visant aussi d'autres fins aux États-Unis d'Amérique. Int Yearbook Ag Leg 1916:1-2 '17

**Cotton root-knot**

- Cotton wilt and root-knot. W: W. Gilbert. il map Farmers' B 625:1-23 '17 (rev.)

**Cotton seed**

- Biochemical changes in cottonseed in storage. J. B. Rather. Ark Ag Exp B 125:1-18 '16
- Composition of cottonseed. T: C. Law. (In Am. fertilizer hdbk., 1918, p. H6-H8) \$1.50 '18
- Ware bros. co., 1010 Arch st, Philadelphia
- Composition of cotton seed meal and cotton seed. G. S. Fraps. Tex Ag Exp B 189:1-79 '16

- Contribution to the chemistry of gossypol, the toxic principle of cottonseed. F. E. Caruth. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D. C. \$6 per yr.) 40:647-62 Ap '18

- Cotton growers' association which has solved the pure seed problem. T. H. Kearney. U S Seed Rep 1:8 Ja '18

- Cotton seed for planting purposes. W. E. Ayres. il Ark Ag Exp C 37 4p '18

- Custom ginning as a factor in cottonseed deterioration. D. A. Saunders and P. V. Cardon. il U S Ag B 288:1-8 '15

- Economy in using cotton seed. J. F. Duggar. Prog F 33:521 Ap 20 '18

- Effect of germination of cotton seed of passing the kapas through the opener. Bhai Kharak Singh. Ag J of India 13:719-21 O '18

- Intrinsic values of grain, cottonseed, flour, and similar products, based on the dry-matter content. E. G. Boerner. U S Ag B 374:1-32 '16

- Losses from selling cotton in the seed. C: F. Creswell. Farmers' B 775:1-11 '18

- Maintaining the purity of cotton seed. C. A. McLendon. il Ga Entom Bd C 26:1-8 '18

- Nurse planting select cotton seed. P. V. Cardon. il U S Ag B 668:1-12 '18

- Products obtained from cotton seed and soy beans. Prog F 31:1443 D 16 '16

- Reserve a supply of cotton seed for planting next year. U S Seed Rep 1:7 D '17

- Seed selection of Egyptian cotton. T: H. Kearney. bibliog U S Ag B 38:1-8 '13

- Test cotton seed. Weekly N L 5:8 D 26 '17

- What is a ton of cotton seed worth? Prog F 32:844 Ag 4 '17

- Wilt resistant cotton seed now available. il Va Ag Dept B 109:153-4 '16

**Cotton seed—Continued****Oil content**

Oil content of cotton seed an accurate basis for commercial standardization. L. E. Rast. Science (Science Press, Garrison, N.Y. 15c) n s 45:507-8 My 25 '17

Oil content of cotton seed as influenced by variety and selection. L. E. Rast. Ga Ag Coll C 70:1-4 '18

**Prices**

Cotton and cottonseed prices to producers. Monthly Crop Rep 3:60 Jl '17

**Cotton stalks**

Cotton stalks in the silo. Rural N Y 76:811 Je 23 '17

New use for the cotton plant. E. L. May. il Country Life 30:12j O '16

**Cotton states bankers and cotton growers conference**

Important meeting on July 5. Prog F 33:801 Jl 13 '18

**Cotton tax fund**

Texas—Resolution asking for refund of cotton tax fund by the United States government to Confederate soldiers and sailors and their widows. (H. C. R. 1, P. L. 1917 3d called session)

**Cotton trade**

\* Applied science in the cotton industry. Nature (St Martin's st, London, W.C. 6d) 101:294 Je 13 '18

Available cotton supply in the United States. R. K. MacLea. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:315+ D 23 '16

Commercial and economic aspects of the cotton markets in 1917. A. R. Marsh. Econ World (128 Water st, N.Y. 25c) n s 15:184-7 F 9 '18

Republished from the Annual financial and commercial review of the Times, London, England, issued on Jan. 22, 1918

Committees to control distribution of cotton, buy for U.S., and consider prices. Weekly N L 6:8 O 9 '18

Cotton and the war. T. H. Price. il Country Gent 82:1251 Ag 11 '17

Cotton distribution committee obtains removal of restrictions on exports. Weekly N L 6:17 D 4 '18

Cotton embargo. Weekly N L 5:3-4 S 19 '17

Cotton goods and textile machinery. Sci Am (233 Broadway, N. Y. 10c) 118:482 My 25 '18

Cotton-growing resources of the British empire. J. A. Hutton. Ag J of India 13:105-9 Ja '18

Cotton-growing statistics. Nature (St Martin's st, London, W. C. 6d) 101:104 Ap 11 '18

Cotton industry in China. Ag J of India 12: 658-61 O '17; Same cond. Int R Sci & Prac Ag 9,no 2:243-4 F '18

Cotton—its present supply and 1916 production. W: P. Redd. Am Fert 44:26 Ja 8 '16

\* Cotton requirements of Portugal. W. L. Lowrie. (Commerce Reports no. 267) p 606 (N 13) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

\* Cultivation of cotton in Paraguay. Econ World (128 Water st, N.Y. 25c) n s 16:607 O 26 '18

Don't sacrifice your cotton. E. A. Calvin. Prog F 33:730 Je 22 '18

Early history of cotton in Bombay. J. MacKenna. Ag J of India 13:389-404 Jl '18

Economic conditions in the Sea Island cotton industry. W: R. Meadows. U S Ag B 146:1-18 '14

Egyptian cotton; conditions of sale through the control commission of Egypt. Textile World (334 4th av, N.Y. \$3 per yr.) 54:1680 O 5 '18

Encouraging the cotton industry of Brazil. Pan-Am Magazine (70 5th av. N.Y. 25c) 27:197-8 Ag '18

Exports of raw cotton from the United States to leading European neutrals, 1900-1917. 13p '17 Nat. bank of commerce in N.Y., 31 Nassau st., N.Y.

Fertilizers and their relation to the cotton industry. D. B. Osborne. Am Fert 44:36-9 F 19 '16

Foreign markets for cotton linters, batting, and waste. (Special consular reports no. 80) 84p 10c '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

General prosperity in cotton market. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2981+ Ja 12 '18

Havre cotton market and the Liverpool cotton market. Doc Leaflets 1,no 1:6-8 Jl '17

Hold cotton for higher prices. N. T. Blackwell. Prog F 33:885 Ag 10 '18

Honest bale of cotton. C. T. Crowell. il Country Gent 81:1959-60 N 11 '16

\* King cotton has come into his kingdom. il Sci Am Sup (233 Broadway, N.Y. 10c) 86: 292-3 N 9 '18

Lancashire cotton industry in 1917. F: W. Tattersall. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2979+ Ja 12 '18

Losses from selling cotton in the seed. C: F Creswell. Farmers' B 775:1-8 '16

Low grade cotton; some details of distributing committee's plans made public. Textile World (334 4th av, N.Y. \$3 per yr.) 54:1724 O 12 '18

No calamity in cotton if we do not lose our heads. Weekly N L 5:1-2 Jl 31 '18

Relation of cotton buying to cotton growing. O. F. Cook. U S Ag B 60:1-21 '14

Romance of long-staple cotton. G: F: Stratton. il Country Gent 83:8-9 Ap 6 '18

Studies of primary cotton market conditions in Oklahoma. W. A. Sherman and others. U S Ag B 36:1-36 '13

Voice of the banker in ten southern states. Country Gent 81:688 Mr 25 '16

\* War prosperity of the jute and cotton mills of India. Econ World (128 Water st, N.Y. 25c) n s 16:626 N 2 '18

Why a big cotton acreage means low prices. C: Poe. Prog F 31:189 F 5 '16

Why every farmer should hold his cotton. Prog F 33:1204 N 2 '18

World's cotton shortage. J: A. Todd. Ag J of India 13:110-20 Ja '18

\* World's cotton trade. Americas (55 Wall st, N.Y.) 4:29-34 S '18

See also American cotton manufacturers' association

**Regulation**

Changes made in the United States cotton futures act by its reenactment on August 11, 1916. (Service and regulatory announcements—Markets 10) 119-34p '16 U S Ag

Determination of disputes under the United States cotton futures act. (Service and regulatory announcements—Markets 8) 51-95p '16 U S Ag

Form of agreement between State department of agriculture of Texas and planters of outlaw cotton. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 89-90 '18 U S Ag

Rules and regulations of the secretary of agriculture under the United States cotton futures act of August 11, 1916. U S Ag C 64:1-27 '16

Short selling prohibited as cotton demand grows. Weekly N L 6:1 N 20 '18

**Statistics**

British cotton-census returns. R. E. Holaday. (Commerce Reports no. 218) p 1027 (S 17) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

British cotton trade in 1917. Econ World (128 Water st, N.Y. 25c) n s 15:643 My 4 '18

Cotton condition September 25. Monthly Crop Rep 4:126 O '18

Cotton in the United States and other countries, including imports and exports. See United States Department of Agriculture Yearbooks



**Cotton trade—Statistics—Continued**

Cotton production and distribution; season of 1915-16. (B. 134) 99p maps '16 U.S. Bur. of the census, Washington, D.C.  
Cotton production and distribution; season of 1916-17. (B. 135) 144p maps '18 U.S. Bur. of the census, Washington, D.C.  
Cotton production in the United States; crop of 1915. 28p '16 U.S. Bur. of the census, Washington, D.C.  
Cotton production in the United States; crop of 1916. 43p '17 U.S. Bur. of the census, Washington, D.C.  
Cotton report for July. Monthly Crop Rep 4: 77 J1 '18  
Cotton report of August 25. Monthly Crop Rep 3:83 S '17  
Cotton statistics. Am Fert 48:31 F 2 '18  
Fifty years of Indian cotton crops—1863-64 to 1912-13. Ag J of India 12:654-7 O '17  
July 1 cotton report. Monthly Crop Rep 3:64 J1 '17  
Semi-monthly scientific reports on condition and acreage of the cotton crop. 4p '18 H. F. Bachman & Co., Bankers, 61 B'way, N.Y.  
September 25 cotton report. Monthly Crop Rep 3:101 O '17

**Cotton wilt**

Cotton variety tests for boll-weevil and wilt conditions in Georgia. A. C. Lewis and C. A. McLendon. il Ga Entom Bd B 46:1-34 '17  
Cotton wilt and root-knot. W: W. Gilbert. il map Farmers' B 625:1-23 '17 (rev.)  
Wilt resistant varieties of cotton. E. F. Caughen. il map Ala Ag Exp B 189:67-88 '16

**Cotton worms.** See Cotton caterpillars

**Cottonseed cake**

**Transportation**

Cottonseed cake rates. Nat Wool Grower 7: 57 S '17

**Cottonseed flour**

Allison flour—a cottonseed product. Wallaces' F 43:119 Ja 25 '18  
Cotton seed flour as a human food. A. E. Richardson. Texas Univ (Austin) B 1727:1-13 '17

**Cottonseed hulls.** See Feeding and feeding stuffs—Cottonseed products

**Cottonseed meal**

Be careful in buying cottonseed meal. T. Butler. Prog F 31:1279 N 4 '16  
Composition of cotton seed meal and cotton seed. G. S. Fraps. Tex Ag Exp B 189:1-79 '16  
Cottonseed meal. Weekly N L 4:3 Mr 21 '17  
Cottonseed meal situation. C: A. Whittle. Hoard's D 54:490 N 2 '17  
Cottonseed meal swindles. Wallaces' F 41:698 My 5 '16  
Low-grade cottonseed meal. A. E. Perkins and R. I. Grady. Ohio Ag Exp B v 2:41-5 F '17  
Production and sale of organic ammoniates; cottonseed meal. (In Report on the fertilizer industry, p 55-66) '16 U.S. Federal trade comm., Washington, D.C.  
South's big opportunity. H. S. Stabler. il Country Gent 82:1633 O 27 '17  
Standardizing cotton seed products. C: A. Whittle. Hoard's D 53:862 Je 15 '17  
Study the analysis in buying cottonseed meal. T. Butler. Prog F 31:107 Ja 22 '16  
Two brands of cottonseed meal compared. T. Butler. Prog F 33:555 My 4 '18

See also Cottonseed products; Feeding and feeding stuffs—Cottonseed products

**Analysis**

Inosite-phosphoric acids of cottonseed meal. J. B. Rather. Ark Ag Exp B 131:1-20 '17  
Report on crude fiber in cottonseed meal. C: K. Francis. Assn Offic Ag Chem J 2, no 1, pt 1:30-2 My '16  
Table of analyses of miscellaneous fertilizer mixtures. Ga Ag Dept B 73:152-63 O '17  
Uniform nitrogen determination in cottonseed meal. J. S. McHargue. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:533-5 J1 '18

**Prices**

Cottonseed meal prices fixed. C: A. Whittle. Hoard's D 54:834 Ja 4 '18  
Cottonseed meal prices next fall. Wallaces' F 42:1085 Ag 3 '17  
New crop cottonseed meal prices. Am Fert 49:27 S 28 '18

**Cottonseed meal as fertilizer**

Cottonseed meal as a fertilizer. Market Growers J 18:297 Ap 15 '16; Same. Hoard's D 51: 823 Je 9 '16  
Mixing cottonseed meal and acid phosphate. Prog F 31:355 Mr 11 '16  
Potash in cottonseed meal. J. G. Lipman. Country Gent 81:805 Ap 8 '16  
Value of cottonseed meal as a fertilizer. Va Ag Dept B 112:3-5 My '16  
Value of cotton seed meal as a fertilizer. Va Ag Dept B 128:7-8 My '18

**Cottonseed oil**

Butter and cottonseed oil. Hoard's D 55:333 Mr 15 '18  
\* Cotton oil industry in the war. D: Wesson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:930-1 N '18  
Incomplete hydrogenation of cottonseed oil. H. K. Moore and others. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:451-62 My '17  
Production and industrial employment of vegetable oils. il Engineer (33 Norfolk st., Strand, Lond, W. C. 2) 123:213-14 Mr 9 '17  
Solidified sunshine; the utilization of cottonseed and other vegetable oils. E. E. Slosson. il Independent (119 W. 40th st, N.Y. 10c) 93:70-1+ Ja 12 '18  
Some American vegetable food oils, their sources and methods of production; cottonseed oil. H. S. Bailey. il U S Ag Yearbook 1916:163-70; Same. Separate 691:5-12

See also Cotton seed—Oil content; Cottonseed products

**Statistics**

Commercial stocks of cottonseed oil. Jan. 1. U S Food Surveys 1:12-14 My 31 '18  
Commercial stocks of cottonseed oil, July 1. U S Food Surveys 2:12-14 S 16 '18  
International trade. See United States Department of agriculture Yearbooks

**Cottonseed oil as feeding stuff.** See Feeding and feeding stuffs—Cottonseed products

**Cottonseed products**

\* Concerning cotton seed. il Scientific Am (233 Broadway, N.Y. 10c) 119:498 D 21 '18  
Cottonseed oil and meal. (In Am. fertilizer hdbk., 1918, p. H2-H5) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia  
Cottonseed products and the chemical industries. E. W. Thompson. Sci Am Sup (233 Broadway, N.Y. 10c) 86:153 S 7 '18  
Cottonseed products from a to izzard. J. M. Jones. Am Sheep B & W 37:167-8 Mr '17  
Cottonseed products; rules and regulations governing their importation. Weekly N L 4:8 Ag 1 '17  
Cotton seed products, with especial reference to Egyptian and Indian seeds. K. H. Vakil. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 17:495-6 O 15 '17  
Cottonseed, soy bean and velvet bean products compared. Prog F 33:1303 N 30 '18  
Methods for approximating the relative toxicity of cottonseed products. F. E. Carruth (J. Biol. Chem., 32, no. 1 87-90p. '17). Exp Sta Record 38:113-14 F '18  
\* Some cotton seed products. E. C. de Segundo. Sci Am Sup (233 Broadway, N.Y. 10c) 86:382-3 D 14 '18  
To check analysis of cottonseed products. Am Fert 49:35 J1 20 '18

See also Cottonseed cake; Cottonseed flour; Cottonseed meal; Cottonseed oil; Feeding and feeding stuffs—Cottonseed products

**Prices**

\* Cottonseed price agreement and regulations. (In Official statement no. 5, p. 15-16) '18 U.S. Food administration, Washington, D.C.

**Cottonseed products—Continued****Statistics**

- \* Report on cotton seed and cottonseed products. (Commerce Reports no. 254) p 386 (O 29) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Cottonwood**

Cottonwood in the Mississippi Valley. A. W. Williamson. il U S Ag B 24:1-62 '13

**Diseases and pests**

See also Cottonwood borers

**Cottonwood borers**

Cottonwood borer [plectrodera scalator Fab.] F. B. Milliken. il U S Ag B 42:1-7 '16

**Cottony cushion scales**

Observations on the lestoponous, a dipterous parasite of the cottony cushion scale. H. S. Smith and H. Compere. il Cal State Comm Hort B v 5:384-90 O '16

**Cottony maple scale**

Cottony maple scale. Purdue Ag 11:38 Ja '17  
Cottony maple-scale (pulinaria innumabilis). T. Wilson. (In Pro., Entom. Soc. of British Columbia, 1916, p. 57-60) '16  
How to control the cottony maple scale. J. G. Sanders. il Wis Ag Dept C 2 4p '16

**Couch grass. See Quack grass****Couches**

How to make a box couch. R. S. Wheeler. il Country Gent 81:486 F 26 '16

**Council for scientific and industrial research**

Honorary advisory council for scientific and industrial research in Canada. Ag Gaz of Canada 4:514-15 Je '17

**Council of grain exchanges**

Mid-summer meeting, Chicago, June 17. Coop Manager & F 7:44-5 J1 '18  
7th annual meeting, Chicago, Jan. 20-21, 1916. Am Coop J 11:597 F '16

**Council of science and industry, Commonwealth advisory**

Abstract of report by executive committee. J Dept Ag Victoria 15:625-7 O '17

**Counterpanes**

Hand-woven coverlets. il Country Life 30:54 S '16

**Country and city. See City and country****Country church**

Agencies of socializing the rural mind. E. R. Groves. (Reprint 110 Pro. 1917) 6p 8c '17  
Nat. conf. of social work, 315 Plymouth court, Chicago  
Another church takes hold. D. H. Steffins. Cornell Countryman 14:731 Je '17  
Church and country life conference. V. C. Meredith. Breeder's Gaz 69:24 Ja 6 '16  
Church leads the way; Harmony (Mo.) co-operates in religion, business and pleasure. J. E. Pickett. il Country Gent 83:6 Ag 3 '18  
Church of the small community. E. R. Groves. Rural Manhood 8:95-8 Mr '17  
Church of the small community and the conservation of community spirit. E. R. Groves. Rural Manhood 7:94-6 J1 '16  
Church of the small community and the conservation of recreation. E. R. Groves. Rural Manhood 7:6-8 Ja '16  
Church that lives. S. R. Winters. il Country Gent 81:2041 N 25 '16  
Church that went bankrupt. T. L. Masson. il Country Gent 82:125 Ja 20 '17  
Church's hold upon the community. E. W. Burgess. Rural Manhood 7:9-11 Ja '16  
Commission government in religious work. W. Burr. il Rural Manhood 7:11-16 Ja '16  
Community church. A. W. Taylor. Mo Ag Bd B v 14:77-86 Ap '16  
Community institute and community revival. J. Wilson. Wallaces' F 41:164 F 4 '16  
Community life at New Era, Iowa. il Wallaces' F 41:1063 Ag 11 '16  
Community-serving church. Rural Manhood 9:61-2 F '18  
Country church an economic and social force. C. J. Galpin. il Wis Ag Exp B 278:1-48 '17; Excerpts. Ag Digest 2:483 Je '17

Country church and modern culture. G. Mahr. Rural Manhood 8:47-53, 106-9, 143-6, 197-201, 292-6, 341-5, 451-3 F-My, S-O, D '17  
Country church and the country boy. B. R. Ryall. (Pamph. 14) 5p 2c '16 Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
Country church and the rural worker. E. R. Groves. Rural Manhood 8:427-30 D '17  
Country church as a social center. plan Miss Ag Coll B v 1, no 3 6p '18  
Country church on efficiency basis. M. B. Barnard. O Judd Farmer 60:24 My 6 '16  
Country church which has created a country community. Community Center (70 5th av., N.Y. 10c) no 3 p 23 Mr 17 '17  
Crossroads church; with a little prodding it will waken from its long nap. N. K. Jones. il Country Gent 82:749 Ap 14 '17  
Decorating the church. M. K. Cox. Country Gent 81:913 Ap 22 '16  
\* Demands of the rural church upon the theological curriculum. F. A. Starratt. Am J Theology (Univ. of Chicago Press, Chicago \$1) 22:479-96 O '18  
Discoveries in country life conferences. F. C. Sternat. Rural Manhood 9:160-2 Ap '18  
Farm-tenantry problem of the country church. Current Opinion (63 W. 36th st., N.Y. 25c) 61:406-7 D '16  
Farmer and the church. H. Wallace. Va Ag Dept B 109:151-2 '16  
Farmers and the rural church. C. Davies. Wallaces' F 43:1472 O 11 '18  
Floral Sundays at church. F. R. Arnold. Ohio F 137:748 My 27 '16  
Get country-minded pastors and pay better salaries. C. Poe. Prog F 31:885 J1 15 '16  
Great need of the country church. W. H. Main. il Rural N Y 75:1443 N 18 '16  
Homelike church; community center seven days in the week. E. M. Jones. il Country Gent 81:427 F 19 '16  
Increasing church attendance. Wallaces' F 41:1114 Ag 25 '16  
Land tenure and the rural church. H. Wallace. Wallaces' F 41:82 Ja 21 '16  
Little corner lost in world tasks. H. W. Anderson. Rural Manhood 8:348-50 O '17  
Man from the country. H. R. McKeen. Mo Ag Bd B v 14:44-69 Ap '16  
Model rural church. M. Clelland. il plan Wallaces' F 41:1532 N 24 '16  
Modern methods in the country church. M. B. McNut. il Va Ag Dept B 109:147-50 '16  
Moral education in the country. E. R. Groves. Rural Manhood 9:149-50, 214-16 Ap-My '18  
New task of the rural church. W. W. Diehl. (In Agricultural extension, p 109-15) '16  
National implement & vehicle assn., 76 W. Monroe st., Chicago  
Oak Mound community. E. C. Ford. il Rural Manhood 8:152-3 Ap '17  
One church and the rural problem. C. H. Hodge. J Ag (Quebec) 21:180 Je '18  
Organ music for the rural community. P. P. Claxton. Rural Manhood 8:214-15 My '17  
Our church. A. B. Genung. Cornell Countryman 14:557-60 Ap '17  
Plow and the pulpit. W. H. Wilson. Breeder's Gaz 71:721 Ap 5 '17  
Regenerating the community. W. E. Lougee. Rural Manhood 7:19-21 Ja '16  
\* Rural church and community. W. H. Wilson. Religious Educ (1440 E. 57th st, Chicago 65c) 13:37-40 F '18  
Rural church and the young man. S. Coulter. Rural Manhood 8:56-9 F '17; Same cond. Purdue Ag 10:14-15 My '16  
Rural church of tomorrow. O. F. Hall. Purdue Ag 10:11-13 My '16  
Rural churches must unite or die. C. W. Whitney. Cornell Countryman 15:135-7+ D '17  
Rural religious problems. G. Pinchot. Rural Manhood 7:3-5 Ja '16  
Rural survey of Alice, Cass county, North Dakota. C. J. Bornman. (Pamph 16) 8p 5c n. d. Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.



**Country church—Continued**

- Rural survey of Sharon parish, Tuscarawas, Ohio. E. De S. Brunner and M. F. Oeter. 7p 3c '16 Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
Sick country churches. Wallaces' F 41:45 Ja 14 '16  
Social control; rural religion. C. O. Gill. (*In* Am. sociological soc., Pub. v. 11, p. 106-12)  
Study of rural church problems. C. Haupt. *il* Wallaces' F 42:650+ Ap 13 '17  
Survey of Fry's valley, Ohio. E. De S. Brunner. (Pamph no 13) 7p 3c '16 Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
Survey of Graceham, Frederic county, Maryland. H. E. Stocker and E. De S. Brunner. (Pamph no 11) 9p 3c '16 Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
Walnut community council. A. W. Otis. *Rural Manhood* 7:17-19 Ja '16  
What about the country church in your community? *il* Banker-F 3:5 Ja '16  
What is your Sunday school and church doing to help the community? *Prog F* 32:673 Je 9 '17  
Where country churches grow big and tall. C: J. Galpin. *il* Breeder's Gaz 70:1184 D 21 '16  
Work of Harmony church. *il* Wallaces' F 43:567 Mr 29 '18  
Your rural church; is it doing its part? O. F. Hall. *Banker-F* 5:11 S '18  
*See also* Church unity

**Country clubs**

*See also* Hunting clubs

**Country estates.** *See* Farms, Model

**Country homes**

- Animals on the suburban place. J: R. McMahon. *il* Country Gent 81:1293-4 Jl 1 '16  
Bachelor's country home. J. W. O'Connor. *il* plan Country Life 33:49-51 N '17  
Bellefontaine gardens. Lenox, Mass. *il* Gard Chron Am 20:124-6 Mr '16  
Country life community, Dosóris Park, L.I. B: Goodrich. *il* Country Life 29:19-23 Ja '16  
Developing a country estate. *il* Field 11 27:186-7 Mr '17  
Englishman and his country home. A. W. Jackson. *il* Country Life 34:26-39 O '18  
Financing the suburban home. J: R. McMahon. *il* Country Gent 81:1073-4 My 20 '16  
Inexpensive house for farmer or tenant. E. L. D. Seymour. *il* plan Country Life 30:76 O '16  
Man and his mountains; Ossipee park, the country home of Mr Thomas G. Plant. E. L. D. Seymour. *il* map Country Life 31:45-9 F '17  
Noteworthy Massachusetts estate. W: N. Craig. *il* Gard Chron Am 21:361-4 O '17  
Scaleby—a new mansion of the South. P. M. Riley. *il* plans Country Life 30:23-5 Jl '16  
Southern clime country estate. *il* Gard Chron Am 20:194-5 Ap '16  
Suburbanite his own architect. J: R. McMahon. *il* Country Gent 81:1367-8 Jl 15 '16  
Summer home of Mr Robert W. Chambers, Broadalbin, N.Y.; photographs. Country Life 29:38-9 Ap '16  
War measures on the Colgate estate. E. M. Woolley. *il* Country Life 34:60-1 O '18

**Country houses**

- \* American country house, with particular reference to types developed or improved during the war. A. D. F. Hamlin. *il* plans Architectural Record (115 W. 40th st, N.Y. 35c) 44:274-379 O '18  
Best twelve country houses in America. H: H. Saylor. *il* plans Country Life 29:26-9 Ja; 25-8 F; 38-41 Mr '16  
Cedar Hill, the country estate of T. A. Have-meyer. *il* Gard Chron Am 21:231-3 Je '17  
Color in country houses. A. Embury. *il* Country Life 32:27-40 O '17  
Froh-Helm farm, an American country estate. *il* Field 11 27:185 Mr '17  
Furnishing and decorating the summer home. A. R. Fairman. *il* Country Life 32:35-46 My '17

- Group of low-cost country houses. R. W. Haddon. *il* Am For 23:307 My '17  
Heirloom of American country life. A. G. Morrell. *il* Country Life 30:58 O '16  
Hillside site. M. E. Nichols. *il* Country Life 32:92 My '17  
How a successful suburban house is built. R. W. Haddon. *il* Am For 23:693-5 N '17  
Pneumatic water systems for country houses and estates. J. A. Deyo. *il* Am Architect (243 W. 39th st, N.Y. 25c) 112:480-5 D 26 '17  
*See also* Driveways

**Country life**

- About doing the heavy, dirty work on the farm. C. Poe. *Prog F* 33:841 Jl 27 '18  
Address at meeting of dairymen's association of eastern Ontario. G. C. Creelman. (*In* Reports, Dairymen's assns., 1916, p. 70-6) '17 Ontario ag. dept., Toronto  
Agencies of socializing the rural mind. E. R. Groves. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:629-34  
Balanced ration for a community. J. C. Ketcham. *Am Assn Farmers' Inst Workers Pro* 1916:72-9 '17  
By 1927 what in country life? *Rural Manhood* 8:10-16 Ja '17  
Cooperation in a Massachusetts county. E. R. Walton. *Rural Manhood* 8:150-1 Ap '17  
Country church and modern culture. G. Mahr. *Rural Manhood* 8:47-53, 106-9, 143-6, 197-201, 292-6, 341-5, 451-3 F-My, S-O, D '17  
Country life and agriculture in Russia. J: P. Andreanoff. *Rural Manhood* 8:437-9 D '17  
Country-life defenses. (Farm life conditions in the South, ch. 6) 16p n.d. Georgia State normal school, Athens  
Country versus city. W. H. Wilson. (*In* Am. sociological soc., Pub. v. 11, p. 12-20)  
Development of rural leadership; with discussion. G. W. Fiske. (*In* Am. sociological soc., Pub. v. 11, p. 54-81)  
Discoveries in country life conferences. F: C. Sternat. *Rural Manhood* 9:160-2 Ap '18  
Drawbacks in country life. W. W. Reynolds. *Nat Stock & F* 41:1317 Mr 16 '18  
Dream of country life to be. *Breeder's Gaz* 71:1118 My 31 '17  
Educational agriculture—a community enterprise. E. R. Powers. *Social Service R* (Woodward bldg., Washington, D. C. 10c) 4:7-9 D '16  
English country life and the war. A. Marshall. *Bookman* (4th av. and 30th st., N.Y. 25c) 45:44-7 Mr '17  
Essential factors of rural sociology. H. W. Fleisher. *il* Purdue Ag 11:14-16 Ja '17  
Farmer has a right to a joyous existence. *Prog F* 32:1335 D 22 '17  
Folk depletion as a cause of rural decline. E: A. Ross. (*In* Am. sociological soc., Pub. v. 11, p. 21-30)  
Gave her home for resident doctor. H. H. White. *Rural Manhood* 8:101-3 Mr '17  
Getting the most out of country living. Mrs C. Frederick. *il* Ill Farmers Inst Rep 1917: 71-83 '17; Same. *Ill Farmers Inst Household Sci* 1917:56-67 '18  
Good apple. D: Grayson. *il* Am Magazine (381 4th av., N.Y. 15c) 83:30-2 Mr '17  
Great possessions. D: Grayson. *il* Am Magazine (381 4th av., N.Y. 15c) 82:7-10 D '16; 83:30-3 Ja; 39-41 F '17  
Hill, a brook and a weeping-willow tree. J. H. Burdett. *il* Country Gent 81:832-3 Ap 15 '16  
Hope farm notes. H. W. Collingwood. *See* weekly numbers of *Rural New-Yorker*  
\* House in the country. E: Shanks. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 11:452-3 S 7 '18  
How southern community clubs have changed country life. E. Lloyd. *il* Banker-F 4:5 O '17  
Increased food production and music. M. Schoen. *J of Educ* (6 Beacon st, Boston 6c) 86:540-1 N 29 '17  
International country life outlook. J: R. Mott. *Rural Manhood* 8:21-2 Ja '17  
Leisure of a country life. Z. Humphrey. *il* Country Life 33:41-3 Ja '18

**Country life—Continued**

- Life in an old New England homestead. F. T. Eaton. *il House Beautiful* (3 Park st, Boston 25c) 43:30-3, 87-9 D '17-Ja '18
- Lights and shadows of country life. G. B. Gilbert. *Rural N Y* 75:1102 Ag 19 '16
- Looking ahead. W. H. Wilson. *Rural Manhood* 8:3-8 Ja '17
- Man from the country. H. R. McKeen. *Mo Ag Bd B v* 14:44-69 Ap '16
- Mr Typical Suburbanite's case. J. R. McMahon. *il Country Gent* 81:1655 S 9 '16
- Mitigating rural isolation. J. M. Gillette. *Quarterly Journal* (University, N. D.) 7: 107-20 Ja '17
- Mobilizing the rural forces. F. B. Freeman. *map Rural Manhood* 8:8-9 Ja '17
- National menace of rural bad health; a remedy. G. MacAdam. *Outlook* (381 4th av, N.Y. 10c) 115:321-2+ F 21 '17
- Old fashioned community spirit; barn raising in Lancaster county, Pa. J. G. Zook. *il Rural N Y* 76:849 Jl 7 '17
- Opportunity of the association in rural health and recreation. J. B. Modisett. *Rural Manhood* 8:147-9 Ap '17
- \* Organization and purpose of the several committees on rural life and education now at work in the United States. School Life (U.S. Bur. of educ., Washington, D.C.) 1: 5-7 N 1 '18
- Our opportunity in rural South America. C. J. Ewald. *Rural Manhood* 8:60-4 F '17
- Pastoral parson and his country folks. G. B. Gilbert. *il Rural N Y* 76:440, 594, 710, 791, 904, 992, 1088, 1214, 1328, 1449; 7787, 248, 584, 711, 818, 902, 1006 Mr 17, Ap 21, My 19, Je 16, Jl 21, Ag 18, S 15, O 20, N 17, D 22 '17, Ja 19, F 16, Ap 20, My 18, Je 22, Jl 20, Ag 24 '18
- Providing new agencies for rural community building. C. C. North. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:637-9
- Reconstruction of existing rural agencies. A. J. Todd. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917: 621-9
- Recreation in the rural community. W. W. Diehl. *il Farmers Inst Household Sci* 1917: 107-11 '18
- \* Rejuvenation of rural life. B. Greenall. *Contemporary R* (249 W. 13th st, N.Y. 50c) 114: 453-6 O '18
- Remarks at country life conference. E. W. Major. *Mo Ag Bd B v* 14:38-43 Ap '16
- Return to childhood's home. W. L. Nelson. *il Breeder's Gaz* 70:1101 D 14 '16
- Rural America by 1927; symposium. Cornell Countryman 14:644-5 My '17
- \* Rural America in war-time. T. Dreiser. *il Scribner's M* (597 5th av, N.Y. 35c) 64:734-46 D '18
- Rural health and national well-being. I. Fisher. 4p n.d. Irving Fisher, Yale univ., New Haven, Conn.
- Rural life. W. I. Lower. *Purdue Ag* 10:15-16 Je '16
- Rural life conferences. *Ag Gaz of Canada* 3: 834-8 S '16
- Rural problems requiring an efficient leadership. R. L. Watts. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:619-21
- Rural recreation. L. W. Rapeer. *School and Soc* (Science Press, Garrison, N.Y. 10c) 6: 331-9 S 22 '17
- Rural survey and the rural crisis. W. H. Wilson. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:611-19
- Rural uplift. W. W. Reynolds. *Ohio F* 141: 518 Ap 6 '18
- Scouting for a suburban home. J. R. McMahon. *il Country Gent* 81:969-70 My 6 '16
- Social life of the rural community. G. Dawson. *il Purdue Ag* 11:54-5 F '17
- Social side of farm life. A. Strahan. *J Dept Ag Victoria* 14:236-7 Ap '16
- Suggestion and city-drift. E. R. Groves. *Rural Manhood* 7:47-52 Ap '16
- Surveying the health of Hoosier farmers. Survey (112 E. 19th st., N.Y. 10c) 37:436 Ja 13 '17
- Talk with farm boys and girls; the new grand army of the republic. O. J. Kern. *il Breeder's Gaz* 70:1178-9 D 21 '16
- Test of a community. H. B. Potter. *il Purdue Ag* 11:9-10 Ja '17
- This wonderful beautiful, and incalculably interesting earth! D. Grayson. *il Am Magazine* (Springfield, O. 20c) 84:42-4 N '17
- Thrift in its relation to country life. R. H. Wilson. (*In* Pro. Nat. educ. assn., 1916, p. 201-5) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Vital issues in rural organization. K. L. Butterfield. *N Y Ag Dept B* 81:1749-61 Mr '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1749-61 '17
- \* War and the country lover. New Statesman (10 Great Queen st, Kingsway, London, W. C. 6d) 10:446-7 F 9 '18
- What good roads mean to the farm women—told by one. Mrs N. K. Jones. *il Banker-F* 3:6 F '16
- Why the strongest men are needed in the country. K. L. Butterfield. *Rural Manhood* 7:98-100 Jl '16
- See also* Agricultural centers; Agricultural clubs; City and country; Community clubs; Community life; Country church; Farm life; Hunting; Social centers; Social surveys; also Missouri country life conference; Young women's Christian association

**Bibliography**

Country life and rural problems; a study outline. M. K. Reely. 39p 25c '18 The H. W. Wilson Co., 958 University av, N.Y.

**Country life clubs**

Collegiate country life club. *Rural Manhood* 8:357-9 O '17

*See also* Community clubs

**Country planning**

Country planning. A. W. Cowell. *Penn State F* 11:270+ F '18

Country planning. F. A. Waugh. (ser. 2, no. 8) 13p '16 25c American civic assn., Washington, D.C.

Report of planning and development branch; with discussion. T. Adams. (*In* Report, 1917, p. 92-105) *il* maps '17 Canada Comm. of conservation, Ottawa

Rural planning and development; a study of rural conditions and problems in Canada. T. Adams. 281p *il* '17 Canada Comm. of conservation, Ottawa

**Country schools. See Rural schools****County agents**

Advisers' and commissioners' united action for county and state. H. M. Armitage. *Cal State Comm Hort B v* 6:539-41 Ag '17

Agent in every county! Banker-F 5:13 F '18

Agents in farm demonstration work in South. *Prog F* 33:220 F 16 '18

Among the county agents. *Purdue Ag* 12:147 D '17

Another bank engages an agriculturist—this is what he hopes to do. Banker-F 4:12 D '16

Are we making progress; what the county agent work is doing. *Nat Stock & F* 40:219 My 20 '16

Automobile and the agricultural representative. F. N. Savoie. *Ag Gaz of Canada* 5:796-8 Ag '18

Backing up the county agent. J. F. Wojta. *il Banker-F* 5:11 My '18

Captains of our farm army. W. H. Dean. *map Country Gent* 82:953 Je 2 '17

Confessions of a county agent. H. G. Davis. *il Country Gent* 81:675-6 Mr 25 '16

Correlation of home demonstration with county agent work. C. A. Keffer. *Assn Am Ag Coll & Exp Pro* 1917:282-6 '18

County agent. J. Bower. *Hoards D* 55:230 Mr 1 '18

County agent and banker. R. A. Ward. *il Banker-F* 5:10 N '18

County agent and his work. A. C. True. *il Ag Digest* 1:176-7 N '16

County agent as mortgage broker. E. L. D. Seymour. *Country Life* 30:12 O '16



**County agents—Continued**

County agent fooled 'em. C. G. Creighton. Hoard's D 53:753 My 25 '17; Same. Nat Stock & F 41:341 Je 30 '17

County agent ideas. Country Gent 82:1085 Je 30 '17

County agent in every agricultural county. il Banker-F 4:6-7 Je '17

County agent in the South. (In Cooperative extension work, 1916, pt. 2, p. 19-24) il '17 U S Ag

County agent is bringing safe farming and bigger yields to the South. Banker-F 4:6 F '17

County agent movement. C. R. Hoffer. Purdue Ag 12:74 N '17

County agent movement in Indiana. il Purdue Ag 11:16-18 N '16

County agent movement in Indiana. T. A. Coleman. Purdue Ag 10:15-17 My '16

County agent movement in Indiana. T. R. Johnston. map Purdue Ag 12:469-70 My '18

County agent; the field agent of the agricultural forces of the nation. P. V. Maris. Ore Ag Ext B ser 1, no 14:1-15 '16

County agent work in Ohio. Ohio F 137:290 F 26 '16

County-agent work in the northern and western states. (In Cooperative extension work, 1916, pt. 2, p. 153-7) il '17 U S Ag

County agents. Fruit-Grower 27:236 Ap 1 '16

County agents in South. Weekly N L 5:7 D 26 '17

County agents overcome many trying difficulties. Weekly N L 6:10 S 11 '18

County agents to be increased. Hoard's D 54:314 S 28 '17

County agents vs. the kaiser. C. DuBose. il Banker-F 5:7 Mr '18; Excerpts. Ag Digest 2:915 Ap '18

County agricultural agent work in the northern and western states. W. A. Lloyd. (Doc. 60) 26p il map '17 U.S. States relations service. Washington, D.C.

Demobilizing our farm experts. il Ag Digest 1:175 N '16

Demonstration agent: how he has helped; how he might help more. Prog F 33:474 Ap 13 '18

Emergency agricultural agent. P. H. Ross. Mo Ag Ext C 40:1-4 '17

Farm advisory work in Illinois. map Ill Ag Ext C 2:1-16 '16; Excerpts. Banker-F 3:10-11 O '16

Focusing on the country community. N. T. Frame. il map W Va Ag Ext C 211:1-31 '18

Generalship in county agent work. V. A. Place. Breeder's Gaz 71:872 Ap 26 '17

Handbook on farm-bureau organization for county agricultural agents. L. R. Simons. (Doc. 65) 53p il '17 U.S. States relations service. Washington, D.C.

Hope farm notes; farm bureaus. Rural N Y 77:1356 D 7 '18

How an agricultural adviser can help the farmers of a county. H. L. Russell. il Banker-F 3:2-3 N '16

How better livestock followed the county agent. K. Griggs. il Banker-F 4:14 My '17

How 469 county agents in the North and West are helping the farmer. A. C. True. il Banker-F 4:4-5 F '17

How McClean county (Ill.) organized. E. L. Bill. O Judd Farmer 60:11 F 5 '16

How much is a county agent worth? Ag Digest 2:783 Ja '18

How one agent made nearly a million dollars and a half for the farmers. A. F. Dawson. Banker-F 4:7 F '17

How Uncle Sam's farmers are cashing in millions on their county agents. L. M. Tobin. il Banker-F 4:2-3 F '17

I want a county agent in every county for 1918—Uncle Sam. W. A. Lloyd. il Banker-F 4:4-5 S '17

In York state. R. A. Hayne. Nat Stock & F 42:827 D 14 '18

Knocking out the knocker. J. E. Pickett. Country Gent 82:1775+ N 17 '17

Logical duties of the county agent. il Ohio F 137:589 Ap 22 '16

Mass instruction thru group training. O. B. Martin. (In Pro., Nat. educ. assn., 1916, p. 97-101) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.

Mississippi demonstration agents reach many farmers. Prog F 31:380 Mr 11 '16

Motor car in district representative work. il Ag Gaz of Canada 3:986-92 N '16

Movement for county agent. Hoard's D 51:196 F 25 '16

Negro farmers of Virginia. W. A. Avery. il Southern Workman (Hampton normal and industrial institute, Hampton, Va. 10c) 46:395-400 Jl '17

New agricultural representative services. Ag Gaz of Canada 5:1149-64 D '18

Number of counties with county and home demonstration agents, 1914 to 1918. Weekly N L 5:15 Jl 31 '18

Office filing system for county agricultural agents in the northern and western states. H. B. Fuller. (Doc. 34) 15p il '17 U.S. States relations service. Washington, D.C.

Opportunity of the farm bureau agent. F. H. Lacy. N Y Ag Dept B 81:1822-7 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1822-7 '17

Papers in county agent's office. W. M. Brown. Breeder's Gaz 69:101 Ja 13 '16

Post war era needs united farmers. E. B. Heaton. O Judd Farmer 65:548 D 14 '18

Relation of the county agricultural agent to the fertilizer industry. B. Knapp. Am Fert 46:21-3 F 17 '17

Review of activities and suggestions from the office of extension in the North and West. Weekly N L 4:1 Jl 11 '17

Sample work of a county agent. Breeder's Gaz 69:432 F 24 '16

Selection and equipment of district representatives' offices. il Ag Gaz of Canada 3:236-44 Mr '16

Serving Wisconsin farmers in war time. H. L. Russell and K. L. Hatch. il Wis Ag Exp B 294:1-32 '18

Seventeen agents in Ohio. C. S. Wheeler. Banker-F 4:13 Ap '17

Speaking of county agents. O. A. Clement. Hoard's D 54:321 O 5 '17

Status and results of county agricultural agent work in the northern and western states. 1915. W. A. Lloyd. (Doc. 32) 19p il map '17 U.S. States relations service. Washington, D.C.

Successful county agent. H. H. Wilcoxon. Wallaces' F 41:221 F 11 '16

Things county agents are doing in Wisconsin. A. W. Hopkins. Hoard's D 56:618 N 29 '18

Thirty-four agents in Indiana. T. W. Harvey. Country Gent 81:2038 N 25 '16

This banker talked county agent till he was hoarse—but got one. L. M. Tobin. Banker-F 3:6 Je '16

Training of the county agent. K. A. Pritchett. J Home Econ 8:368-70 Jl '16

What the county agents did. il Banker-F 6:6 D '18

Work of county agents. Weekly N L 5:3 Ja 2 '18

Work of the county agent. H. P. Miller. Ohio F 138:169 Ag 26 '16

Work of the county demonstration agents; boys' corn clubs and girls' canning clubs. W. D. Bentley. (In Agricultural extension, p 67-72) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

See also County organization; Farm bureaus; also National association of county agricultural agents

**Statistics**

Number of counties with county agents and expenditures for county-agent work for the fiscal year ended June 30, 1916; tabulation. (In Cooperative extension work, 1916, pt. 2, p. 397) '17 U S Ag

**County agricultural schools.** See Agricultural schools, County

**County fairs.** See Fairs

**County libraries.** See Libraries, County

**County organization**

- County unit plan. F. H. Demaree. *il Farm Eng* 3:133 Ja '16  
 Organizing the county. W. A. Dyer. *Country Life* 29:98+ Mr '16  
 Prepared and stable rural organization. M. C. Burritt. *Cornell Countryman* 14:715-16 Je '17  
 Preparing a county for home defense. F. E. Stripe. *Cornell Countryman* 14:732 Je '17  
 Pulling a county together. J. Hill. *Country Gent* 82:974 Je 2 '17

**Cover crops**

- Always have a cover crop on the land in winter. W. F. Massey. *Prog F* 31:976 Ag 12 '16  
 Benefits of cover crops in the orchards of California; with discussion. W. M. Mertz. *Cal State Comm Hort B v* 7:26-37 Ja '18  
 Can't buy fertilizer? then grow it. Gard M 26:58 S '17  
 Comparison of annual cropping, biennial cropping, and green manures on the yield of wheat. B. A. Madson. *Cal Ag Exp B* 270: 1-14 '16  
 Cover crop. *Rural N Y* 77:856, 873 Jl 6-13 '18  
 Cover crops. *Rural N Y* 76:984 Ag 18 '17  
 Cover crops—a winter blanket for the orchard. C. A. McCue. *Prac F* 114:241 Jl 15 '18  
 Cover crops for cotton land. B. Howard. *il Country Gent* 83:31 Jl 27 '18  
 Cover crops for Porto Rico. C. F. Kinman. *il Porto Rico Ag Exp B* 19:1-32 '16  
 Cover crops for summer and fall. *Country Gent* 82:1228 Ag 4 '17  
 Cover crops for the Hudson valley. W. S. Teator. *Rural N Y* 76:270 F 24 '17  
 Cover crops for the orchard. *il Purdue Ag* 11: 46-8 My '17  
 Cover crops in the orchard. *Prac F* 112:279 Jl 15 '16  
 Cover crops in the orchard. R. D. Anthony. *il N Y Ag Dept B* 79:pt 1:785-93 Ja '16; Same. *N Y Ag Dept Rep* 1916:pt 2:785-93 '17  
 Cover crops on asparagus. A. E. Wilkinson. *Country Gent* 81:975 My 6 '16  
 Cover crops—their use and value. H. F. Lemmermann. *Country Gent* 81:1592 Ag 26 '16  
 Cover crops: their use in southern agriculture. T. Butler. *Prog F* 31:878 Jl 15 '16  
 Cultivation and cover crops. W. M. Mertz. *Cal State Comm Hort B v* 5:178-83 My '16  
 Experiences with cover crops; symposium. *Market Growers J* 21:125+ S 15 '17  
 Experiences with winter cover crops. *il Prog F* 33:835-6 Jl 27 '18  
 Feed from summer cover crops. G. H. Dacy. *Country Gent* 82:1141 Jl 14 '17  
 Five good winter cover crops. B. L. Moss. *map Prog F* 33:834 Jl 27 '18  
 Great value of cover crops. J. S. Wingo. *il Rural N Y* 75:951 Ji 8 '16  
 Grow cover crops. E. W. Gage. *il Green's Fruit Grower* 36:1 Jl '16  
 Grow your own nitrates. J. C. Marquis. *il Country Gent* 83:7 Ag 31 '18  
 Growing cover crops in young orchards. J. A. Hughes. *Better Fruit* 11:11 N; 20 D '16  
 Have a winter cover crop to plow under for the corn crop. W. F. Massey. *Prog F* 31: 944 Ag 5 '16  
 Hope farm notes; cover crops. *Rural N Y* 76: 964 Ag 11 '17  
 How to get rich lands; cover crops. T. Butler. *Prog F* 32:835 Jl 28 '17  
 How to get rich lands; emphasizing the importance of cover crops and legumes. T. Butler. *Prog F* 32:923 S 1 '17  
 How to get rich lands; summer cover crops. T. Butler. *Prog F* 32:858 Ag 11 '17  
 How to get rich lands; winter cover crops. T. Butler. *Prog F* 32:841 Ag 4 '17  
 Increasing yields in the home garden by cover crops. *Country Gent* 81:1482 Ag 5 '16  
 Making young trees hardy. E. W. Gage. *Green's Fruit Grower* 36:3 Ag '16  
 Manure, nitrogen, cover crops. *Rural N Y* 77:549 Ap 13 '18  
 Orchard cover-crop experiments for Moutere Hills. *J Ag New Zealand* 15:341 D '17

- Orchard cover-crops for the Moutere Hills. W. C. Hyde. *il J Ag New Zealand* 13:472-7 D '16  
 Relation of certain cover crops to the formation of nitrates in soil. T. L. Lyon. *Green's Fruit Grower* 37:9 Je '17  
 Resting land. M. Rosby. *Country Gent* 81: 1931 N 4 '16  
 Results by use of cover crops. C. W. Young. *Rural N Y* 75:361+, 452 Mr 4-11 '16  
 Seeding of green manure crops. *Prac F* 112: 266 Jl 1 '16  
 Selecting cover crops for fall planting. F. A. Welton. *il Ohio Ag Exp B v* 3:208-12 Jl '18  
 Soil savers in South. *Weekly N L* 5:6 S 12 '17  
 Some phases of alfalfa as a crop in the orchard. P. S. Darlington. *Better Fruit* 12: 10-11+ My '18  
 Value of cover crops. J. B. R. Dickey. *N J Ag Exp C* 85:1-4 '17  
*See also* Alfalfa; Clover; Green manuring; Timothy  
**Coverlets.** See Counterpanes  
**Cow.** See Cows  
**Cow contests**  
 Announcement of the California state dairy cow competition. 1916-18. F. W. Woll. *Cal Ag Exp C* 153:1-8 '16  
 California dairy cow competition. 1916. F. W. Woll. *Hoards' D* 52:472 O 27 '16  
 California dairy cow competition. 1917. F. W. Woll. *Hoards' D* 53:376, 1008; 54:498 Mr 23, Jl 20, N 2 '17  
 California state dairy cow competition. R. E. Jones. *il Kimball's D F* 16:250-1+ Ap 1 '18  
 Dairy test at Guelph. *J Ag (Quebec)* 21:107 Ja '18  
 Jerseys win six out of seven months in the California dairy cow competition. J. P. Hertel. *Jersey B* 37:43 Ja 9 '18  
 Type and production contest of dairy cattle. L. L. Rummell. *Ohio F* 140:216 S 15 '17  
*See also* Dairy clubs  
**Cow houses.** See Barns and stables—Dairy barns  
**Cow peas.** See Cowpeas  
**Cow testers**  
 Milk testers are prosecuted. *O Judd Farmer* 64:671 Je 29 '18  
*See also* Women as cow testers  
**Cow testing**  
 Advance registry testing of dairy cows. G. S. Bulkley. *il Penn State F* 10:96-7+ My '17  
 Advantages of register of merit work. E. A. Grombacher. *Jersey B* 36:1600 O 17 '17  
 Aim of cow testing. N. Neglev. *Kimball's D F* 14:209 Mr 15 '16  
 A. J. C. C. register of merit work. E. A. Grombacher. *Jersey B* 35:342 Mr 8 '16  
 A. R. O. work and its value. H. H. Wing. *Maine Ag Dept B v* 18:42-51 Je '18  
 Average cow on the farm. E. W. Gage. *Breeder's Gaz* 69:1325 Je 29 '16  
 Ayreshires and the official test. J. G. Watson. *il Kimball's D F* 15:624 S 15 '17  
 Babcock tester on the farm. R. T. Archer. *il J Dept Ag Victoria* 16:396-409 Jl '18  
 Barnesville annual report shows progress. C. E. Bundy. *Jersey B* 37:1499 S 18 '18  
 Believes in private tests. G. E. Nichols. *Jersey B* 35:88 Ja 19 '16  
 Benefits of cow-testing in New York. E. Van Alstyne. *Ohio F* 137:37 Ja 8 '16  
 Best test of the dairy cow. L. L. Rummell. *il Ohio F* 142:552-3 D 7 '18  
 Blackeye. C. R. George. *il Country Gent* 81: 1158 Je 3 '16  
 Breeding for business. *Wallaces' F* 43:807 My 17 '18  
 Brown Swiss and official test. H. E. Goode. *il Kimball's D F* 15:633 S 15 '17  
 Butterfat and income. J. C. McDowell. *Creamery* 7:23-4 Jl '18  
 Calling the roll of the best cows. *il O Judd Farmer* 65:255 S 28 '18  
 Camouflage and a 16-cent cow. *Hoards' D* 56: 253 S 20 '18  
 Camouflaging in Wisconsin. N. Neglev. *Kimball's D F* 15:889 D 15 '17; Same abr. *Hoards' D* 54:796 D 28 '17



**Cow testing—Continued**

- Campaign for better cows. T: M. Olson. Hoard's D 55:1012 JI 12 '18
- Certificate-of-record testing. W. M. Singleton. il J Ag New Zealand 12:45-6, 89-99, 132-3, 356-60, 451-5; 13:17-50, 126-8, 293-4, 360-4; 14:135-7; 15:129-33, 263-6, 332-6; 16:15-20; 17:23-4, 87-9 Ja-F, My-Ag, O-N '16, F, S, N '17-Ja, JI-Ag '18
- Champion butter-fat test at the Royal show. R. T. Archer. J Dept Ag Victoria 14:752-3 D '16
- Champion cows of each breed; list. Hoard's D 51:143 F '18 '16
- Composite versus one-day sampling of milk for the Babcock test. W. H. Eaton. il N C Ag Exp B 240:1-8 '18
- Consistent production. J. E. Dodge. Jersey B 35:314 Mr 1 '16
- Cow accounting. G: R. Harrison. Hoard's D 51:325 Mr 17 '16
- Cow copartnership. C: F. Whitley. J Ag (Quebec) 20:xiii Ap '17; Excerpts. (*In Reports, Dairymen's assns.*, 1916, p. 84-6) '17 Ontario ag. dept., Toronto
- Cow on test. C. W. Morgan. Country Gent 81: 658 Mr 18 '16
- Cow test register. Hoard's D 53:678 My 11 '17
- Cow test work in Ohio. Jersey B 35:1718 N 1 '16
- Cow testers report gains. O Judd Farmer 64:570 Je 1 '18
- Cow testers' short course. Hoard's D 51:196 F 25 '16
- Cow-testing a success. il Va Ag Dept B 109: 75-8 '16
- Cow testing and dairy advancement. R. T. Harris. il Kimball's D F 16:201 Mr 15 '18
- Cow testing and dairy profits. W. H. Main. il Rural N Y 75:724 My 6 '16
- Cow testing and feeding project. B. R. Eldredge and others. il Utah Ag Ext C v 6, no 13:1-11 '18
- Cow testing and its advantages (Ireland). R. D. Cole. Int R Sci & Prac Ag 7, no 3: 400-1 Mr '16
- Cow testing association records show that productive cows are profitable. H. Rabild. il Purdue Ag 12:358-9 Mr '18
- Cow testing in Alabama. F. R. Curtis. Kimball's D F 16:98 F 1 '18
- Cow testing in Canada. E. W. Gage. il Kimball's D F 16:435 Je 1 '18
- Cow testing in the Coquille valley. K. Nelson. Hoard's D 54:617 N 23 '17
- Cow testing in Washington. C. F. Monroe. Kimball's D F 14:39 Ja 15 '16
- Cow testing nets \$50,000,000. E. W. Gage. il Ohio F 142:140 Ag 17 '18
- Cow testing proves its worth. Ohio F 142:196 Ag 31 '18
- Cow testing work. E. Brown. Ohio F 137:841 Je 24 '16
- Cow-testing work. T. A. F. Wiancko. Ag Gaz of Canada 3:913-15 O '16
- Cows talk at Indiana state fair. C. R. George. il Hoard's D 52:503 N 3 '16
- Dairy breed comparisons. H. McAlister. Kimball's D F 14:17-18 Ja 15 '16
- \* Dairy herd record work. G: H. Barr. (*In Report, Dairymen's assns.*, 1917, p. 18-20) '18 Ontario ag. dept., Toronto
- Dairy-herd testing. S. McKenzie. il J Ag New Zealand 13:132-6 Ag '16
- Dairy progress. Kimball's D F 16:183 Mr 1 '18
- Dairy side of the Ayrshire. C. M. Winslow. il Field II 26:588 JI '16
- Dairying a business proposition. R. I. Grady. Hoard's D 54:873 Ja 11 '18
- Disapproves of recent club change. H. Jenkins. Jersey B 36:1303 Ag 22 '17
- Drafted for selective service. N. Negley. Hoard's D 54:491 N 2 '17; Same cond. Jersey B 36:1663 O 24 '17
- Early and long-continued dairy records. H. McAlister. Breeder's Gaz 69:18+ Ja 6 '16
- Early maturity and longevity well exemplified. il Jersey B 35:690 My 3 '16
- Effects of testing on Jerseys. il Field II 26: 518 Je '16
- Every cow on her own merit. Neb Ag Ext B 44:1-8 '17
- Exhibit—cows and cows. il Hoard's D 54:287 S 28 '17
- Experiences of an ordinary farmer. C: F. Kreidler. Jersey B 35:681 My 3 '16
- Factors to consider in testing. T. C. Reed. Jersey B 35:693 My 3 '16
- Feed test. A. M. Loomis. Nat Stock & F 40: 208 My 20 '16
- Feeding Alberta boarders. W. M. Tait. Hoard's D 52:871 Ja 12 '17
- Feeding for advanced registry. A. I. Maxwell. il Field II 27:21-2, 108-9 Ja-F '17
- Ferndale (Cal.) cow test work. Jersey B 35: 858 My 31 '16
- Fifteen years of record keeping. il Hoard's D 56:35 Ag 2 '18
- Fifty million farm system. E. W. Gage. il Field II 28:825 N '18
- Figuring butter production from tests. Wallace's F 41:1543 N 24 '16
- Further detail of the Ohio test. R. I. Grady. Jersey B 37:7 Ja 2 '18
- Get ready for the tester. E. Rogers. Hoard's D 56:625 N 29 '18
- Good analysis of records. Hoard's D 51:455 Ap 7 '16
- Guernseys and the official test. W. H. Caldwell. il Kimball's D F 15:626 S 15 '17
- Guernseys in public tests. C: L. Hill. il Kimball's D F 14:526-7+, 588 S 1-15 '16
- Guernseys increase in fat production. Kimball's D F 14:38 Ja 15 '16
- Herd testing; 4th annual report on the testing of pedigree herds conducted by the Department of agriculture, Victoria, for year ended 30th June, 1916. W. A. N. Robertson and R. T. Archer. il J Dept Ag Victoria 14:533-64 S '16
- Herd-testing on the north-coast. L. T. MacInnes. il Ag Gaz of New South Wales 29: 509-16 JI '18
- High cost of feed should eliminate poor cows. C. H. Staples. Jersey B 36:57 Ja 10 '17
- History of the Guernsey breed; Island records. C: L. Hill. il Kimball's D F 14:506-7 Ag 15 '16
- History of the Guernsey breed; the first private and official tests. C: L. Hill. il Kimball's D F 14:419-20+, 451-2+ JI 1-15 '16
- Holstein-Friesians and the official test. M. H. Gardner. Kimball's D F 15:625 S 15 '17
- Holstein notes and summaries. M. H. Gardner. Kimball's D F 14:36 Ja 15 '16
- Home or association testing. J. E. Ryan. Kimball's D F 16:307 Ap 15 '18
- How to keep a record of the dairy herd. C. H. Staples and C. W. Radway. il La Ag Ext C 19:1-12 '17
- In favor of a 300-day test. I. R. Blackburn. Jersey B 36:624 Ap 25 '17
- Is register of merit testing worth while? R. E. Hutchison. il Jersey B 37:465-6 Mr 27 '18
- Jersey cows with records of 700 lbs. fat and over. J: R. Sibley. il Jersey B 37:387 Mr 13 '18
- Jerseys and the official test. R. M. Gow. il Kimball's D F 15:627 S 15 '17
- Jerseys lead in Langlade co. (Wis.) cow test work. F. G. Swoboda. Jersey B 36:7 Ja 3 '17
- Judging dairy cattle. J. A. McLean. il Field II 28:568-9 Ag '18
- Lesson in keeping records. il Hoard's D 52: 868 Ja 12 '17
- Life of a cow tester. F. A. Carroll. Cornell Countryman 15:471-3 My '18
- Low test resulting from milking three times daily. L. A. Henke. Hoard's D 54:834 Ja 4 '18
- Milk or fat? Country Gent 81:262 F 5 '16
- Milk-record cards. O. W. Weaver. Country Gent 82:870 My 12 '17
- Milk records on the Island of Jersey. Jersey B 35:468 Mr 29 '16
- \* Modern cow testing. C. F. Whitley. (*In Report, Dairymen's assns.*, 1917, p. 84-6) '18 Ontario ag. dept., Toronto; Same cond. J Ag (Quebec) 21:172 My '18
- More and better cows; with discussion. S. A. Baird. Wis Dairymen's Assn Rep 1913-1916: 20-6 '17
- More winners coming to the front each year. W. O. Mills. Hoard's D 55:468 Ap 5 '18

**Cow testing—Continued**

- Nebraska breeders realize value of official testing. J. H. Frandsen. *il* Kimball's D F 14:21 Ja 15 '16; Same. Hoard's D 51:189 F 25 '16
- New plan for cow testing. (D. & C. S. Circ. 24) 7p *il* '17 Canada Ag
- New plan for cow testing and a resumé of past work. C. F. Whitley. Ag Gaz of Canada 5:340-3 Ap '18
- New record fifty-pound list. E. A. Grombacher. Jersey B 35:1156 Jl 26 '16
- 1915 tests on Jersey island. P. L. S. Mourant. Jersey B 35:382 Mr 15 '16
- Official milk and butter records. L. T. MacInnes. Ag Gaz of New South Wales 29:53-5, 207-9, 517-18 Ja, Mr, Jl '18
- Official milk and butter records. M. A. O'Callaghan. Ag Gaz of New South Wales 27:789-92; 28:365-7, 477-82, 660-2 N '16, My, Jl, S '17
- Official tester's view. E. Rogers. Nat Stock & F 41:1320 Mr 16 '18
- Outlook for cow-testing. C. F. Whitley. Ag Gaz of Canada 3:406 My '16
- Practical application of herd-testing. L. T. MacInnes. Ag Gaz of New South Wales 29:653-5 S '18
- Practical value of register of merit work. R. E. Hutchison. Jersey B 36:267 F 21 '17
- Production and red polled ancestors. W. Blair. Breeder's Gaz 69:128 Ja 20 '16
- Production of profitable vs. unprofitable cows. Hoard's D 55:194 Jl 5 '18
- Profitable milk production. A. J. Nicoll. Hoard's D 51:42 F 4 '16
- Profits possible in dairying. *il* Kimball's D F 14:422 Jl 1 '16
- Proof of the pudding. G. H. Campbell. Hoard's D 52:518 N 3 '16
- Proposed three-hundred-day test. E. A. Grombacher. Jersey B 36:473 Mr 28 '17
- Raising of dairy heifers. R. R. Kerr. *il* J Dept Ag Victoria 14:385-97 Jl '16
- Record of performance. *il* Ag Gaz of Canada 3:513-15 Je '16
- Record of performance test for pure-bred dairy cattle. C. S. Wood. *il* Ag Gaz of Canada 5:662-4 Jl '18
- Records that reflect credit to the breed. Jersey B 35:1278 Ag 16 '16
- Regarding the 300-day test. W. R. Proctor. Jersey B 36:668 My 2 '17
- Register of merit cows at Ewell farm. P. Brown. Jersey B 35:346 Mr 8 '16
- Register of merit progress; progress of r. of m. testing. J. R. Sibley. Jersey B 37:595 Ap 17 '18
- Regulations adopted by the Argentine rural society for registering milk records of dairy cows. *Int R Sci & Prac Ag* 7,no 6:856-8 Je '16
- Report of committee on relations to breed associations. *J Dairy Sci* 1:35-7 My '17
- Report of Jersey sires' futurity test of the Aroostook Jersey breeders' association. R. Pearl. Maine Ag Exp B 247:37-52 '16
- Reports on cow testing. Ohio F 141:11 Ja 5 '18
- Results from five years of testing. P. A. Downs. Hoard's D 55:464 Ap 5 '18
- Resumé of Jersey work in Canada. B. A. Bull. Jersey B 37:675 My 1 '18
- Second highest Ohio record. I. R. Blackburn. Jersey B 35:1170 Jl 26 '16
- Seven-day vs. yearly records. Hoard's D 52:868 Ja 12 '17
- Short time and yearly tests compared. H. H. Hill. Jersey B 36:671 My 2 '17
- Should all heifers be raised. W. J. Fraser. Jersey B 36:1327, 1363, 1399 Ag 29-S 12 '17; Same. N Y Prod R 44:688, 726, 798 Ag 29-S 5, 19 '17; Same. Hoard's D 54:301, 322, 371 S 28-O 12 '17; Same. Creamery 6:65-7 O '17; Same. Wallaces' F 42:1435, 1535, 1593 O 19, N 9, 23 '17; Same cond. O Judd Farmer 63:3 S 15 '17; Excerpt. Ag Digest 2:659 O '17; Excerpt. J Ag (Quebec) 21:122 F '18
- Showing up the loafers. Country Gent 81:2036 N 25 '16
- Simple system of keeping dairy records. A. H. deGraff. Hoard's D 53:867 Je 15 '17
- Some cow testing possibilities. C. F. Whitley. J Ag (Quebec) 19:195 Mr '16
- Some mistakes made by breeders. *il* Kimball's D F 16:394 My 15 '18
- Standard cows; 5th annual report on the testing of pedigree herds. W. A. N. Robertson. *il* J Dept Ag Victoria 15:513-41 S '17
- Standard cows; report for quarter ending 31st March, 1918. J Dept Ag Victoria 16:376-80 Je '18
- Standard herd test; sixth annual report on the testing of pedigree herds. R. T. Archer. *il* J Dept Ag Victoria 16:513-54 S '18
- Standard test cows; quarterly report for period ended 30th September, 1916. J Dept Ag Victoria 14:754-8 D '16
- Standard test cows; quarterly report for the period ended 30th September 1917. J Dept Ag Victoria 15:729-33 D '17
- Study in dairy production. D. B. Hogan. *il* Jersey B 36:1608 O 17 '17
- Summary of advanced registry yearly records. Hoard's D 51:173 F 18 '16
- Survey and a report. A. M. Loomis. Nat Stock & F 40:136 Ap 29 '16
- Test for economic production at National. R. M. Gow. Jersey B 37:14 Ja 2 '18
- Testing dairy cows. G. H. Benkenndorf. (*In* De Laval dairy hand book, p 49-53) *il* '16 De Laval separator co., New York
- Testing of pure-bred cows in New South Wales. L. T. MacInnes. Ag Gaz of New South Wales 29:311-18 My '18
- Testing of purebred dairy cows; the certificate-of-record system for 1916. W. M. Singleton. *il* J Ag New Zealand 14:89-100 F '17
- Testing of purebred dairy cows; the certificate-of-record system in 1917. W. M. Singleton. *il* J Ag New Zealand 16:63-75 F '18
- Testing on the Island. Jersey B 35:520 Ap 5 '16
- Testing vs. guessing. Hoard's D 52:515 N 3 '16
- Tests accepted for publication by A. J. C. C.; list. See weekly numbers of Jersey bulletin Tests for 1917. Jersey B 36:2019 D 26 '17
- Thoughts for the dairymen. W. F. McSparan. Prac F 114:183 My 1 '18
- Thousand-lb. cows. L. T. MacInnes. *il* Ag Gaz of New South Wales 28:881-90; 29:47-52 D '17, Ja '18
- 300-pound cow club. C. R. George. Hoard's D 51:673 My 12 '16
- To get most milk from the feed available. N. Negley. Hoard's D 55:226-7 Mr 1 '18
- Trouble with dairy business. Ohio F 141:46 Ja 12 '18
- Two points for Illinois dairymen. E. B. Heaton. *il* O Judd Farmer 60:5 My 20 '16
- Value of official testing. Hoard's D 51:899 Je 30 '16
- Value of official testing. J. H. Frandsen. Wallaces' F 41:95 Ja 21 '16
- Value of scales and Babcock test in the dairy. H. H. Dean. Prac F 112:255 Je 15 '16
- Value of short-time records. W. S. Tomlinson. Ohio F 142:244 S 14 '18
- Value of the one-year test. W. H. Jenkins. Kimball's D F 14:542 S 1 '16
- Value of the seven-day test. T. E. Woodward. Hoard's D 51:960 Jl 14 '16
- Variation in butterfat tests. H. P. Miller. Ohio F 141:724 Je 1 '18
- Wanted, good cows. C. F. Whitley. J Ag (Quebec) 20:224 My '17
- When the cow is on test. J. H. McHenry. Hoard's D 55:898 Ja 11 '18
- Why keep record of the individual cow. O. I. Oshel. *il* Hoard's D 51:691 My 19 '16
- Why register of merit testing pays. Jersey B 35:1310-11 Ag 23 '16
- Wisconsin register of production. N. Negley. *il* Hoard's D 55:655 My 3 '18; Same. Jersey B 37:677 My 1 '18
- World's highest butterfat yield broken four times. *il* Ohio F 137:133 Ja 29 '16
- See also Cow contests; Cow testing associations; Cow testing exhibits

**Cow testing associations**

- Advertising cow testing association work. M. C. Smith. Hoard's D 54:881 Ja 11 '18
- Allegan's fourth year. L. C. Atkins. Hoard's D 55:843 Je 7 '18



**Cow testing associations—Continued**

Annual convention Michigan dairymen's association. H. Cowles. Kimball's D F 14:165 Mr 1 '16

Annual report of Chartiers cow-testing association, 1916-1917. G. Chelquist. Nat Stock & F 41:609 S 22 '17

Benefits from cow-testing associations. O. E. Gibson. Western Wash Ag Exp B v 5:3-5 Ap '17

Bookkeeper for the dairy. il Wallaces' F 41: 1167 S 8 '16

Bright spots in Wisconsin's milky way. N. Negley. map Hoard's D 54:92 Ag 17 '17

Buhl, Idaho, testing association. O. T. Koster. Kimball's D F 14:58 F 1 '16

Butterfat and income. J. C. McDowell. U S Ag Yearbook 1917:357-62

Contest and demonstration: Wisconsin state fair offers liberal premiums. Hoard's D 52:8 Jl 28 '16

Cooperative cow-testing association. N. Negley. il Prog F 31:506 Ap 8 '16

Cow test associations in Arizona. W. Pickrell. il Hoard's D 54:120 Ag 24 '17

Cow-test experience. E. Brown. Nat Stock & F 40:281 Je 10 '16

Cow testing activities, Ohio. Ohio F 138:9 Jl 1 '16

Cow testing association progress in Wisconsin. N. Negley. Hoard's D 53:478 Ap 6 '17

Cow testing associations. E. M. Clark. il Ill Ag Ext C 196:1-10 '17

Cow testing associations. T. Sexauer. Wis Dairymen's Assn Rep 1913-1916:33-50 '17

Cow-testing associations and demonstrations. H. C. Barker. Ia Ag Bd Yearbook 1916:88-96

Cow testing associations; how to stir up interest and proceed to their organization. N Y Prod R 43:664 F 21 '17

Cow testing associations in New Jersey. N J Ag Exp Rep 1916:206-8 '17

Cow-testing associations in New York state. E. van Alstyne. N Y Ag Dept B 80:1598-1608 F '16; Same. N Y Ag Dept Rep 1916. pt 3:1598-1608 '17

Cow testing associations in Wisconsin; with discussion. N. Negley. Wis Dairymen's Assn Rep 1913-1916:168-75 '17; Same. map Hoard's D 53:43 F 2 '17

Cow testing associations; their use and value. D. K. Sloan. Penn State F 9:297-8 Ja '16

Cow testing in Illinois. E. M. Clark. O Judd Farmer 62:14 F 24 '17

Cow testing in Wisconsin. Hoard's D 51:935 Jl 7 '16

Cow testing pays. N. Negley and R. T. Harris. il map Wis Ag Ext C 67:1-16 '17

Cows talk shop. M. Dekol and others. Hoard's D 53:952 Jl 6 '17

Creamery and cow testing associations. T. B. Clausen. Hoard's D 52:508 N 3 '16

Dairy farmer's best investment. M. R. Tolstrup. Am Coop J 11:860 Ap '16

Dairy improvement association is name used to designate the cow-testing associations. N Y Ag Dept B 85:2206-17 Jl '16

Dairy improvement associations in New York state. il map N Y Farms & Markets Dept Ag B 97:185-91 Jl '17

Dairymen are feeling optimistic; reports from several cow testing associations. O Judd Farmer 65:396 N 2 '18

Dairymen Hooverizing. N. A. Negley. Hoard's D 54:573 N 16 '17

Doing advanced registry work. C. R. George. Hoard's D 50:780 Ja 7 '16

Early history of the cow-testing association. A. J. Nicoll. il N Y Ag Dept B 85:2173-84 Jl '16

East Anglian milk recording society. J Bd Ag 23:431-6 Ag '16

Efficiency of cow testing associations. J. R. Ziesenheim. Hoard's D 52:507 N 3 '16

Enumclaw cow testing association. A. J. Lashbrook. Hoard's D 51:175 F 18 '16

1st annual report of the Germantown-Gaithersburg (Md.) cow-testing association. Weekly N L 5:3 O 3 '17

Hillshoro cow testing association. L. Bober. Hoard's D 50:777+ Ja 7 '16

How the creamerymen can boost the cow testing association. C. R. George. Hoard's D 51:285 Mr 10 '16

How to use a cow testing association. N. Negley. Hoard's D 56:618 N 29 '18

Humboldt cows make great showing; report of Ferndale testing association in California. Jersey B 36:1268 Ag 15 '17

Important things learned. S. Sabel. Rural N Y 76:1428 D 15 '17

Increased returns received from cows in associations. Weekly N L 6:19 D 4 '18

Increasing dairy production in Iowa. G. W. Marquardt. il Breeder's Gaz 70:89 Jl 20 '16

Increasing production through cow testing associations. N. A. Negley. il Field II 27: 275 Ap '17

Instructions concerning the dairy improvement association. A. J. Nicoll. N Y Ag Dept C 136:1-11 '16

Iowa cow testing association demonstration. il Hoard's D 52:506 N 3 '16

Iowa leads in cow testing. C. A. Goss. O Judd Farmer 60:13 Je 3 '16

Jersey wins distinction in Langlade county, Wisconsin. F. G. Swoboda. Jersey B 35:421 Mr 22 '16

Junior cow testing association. E. Liddle. Hoard's D 54:194 S 7 '17

Know your cows as individuals. Hoard's D 52: 505 N 3 '16

Lessons from test associations. Kimball's D F 16:619 Ag 15 '18

Making cow testing association work more effective. C. R. George. Hoard's D 51:422 Mr 31 '16

Misleading computations in dairy bulletins and cow-testing association reports. H. Mertz. Purdue Ag 11:37-9 F '17

Need of dairy improvement association work in New York state. A. J. Nicoll. il N Y Ag Dept B 85:2185-2201 Jl '16

Number of cow testing associations. Wallaces' F 41:291 F 18 '16

Ohio cow-testing work. C. M. Baker. Ohio F 138:205 S 2 '16

Portage county, O., cow testing-association. P. W. Damon. Nat Stock & F 41:536 S 1 '17

Profitable dairy herds thru cow testing. A. C. Ragsdale. il Mo Ag Ext C 43:1-20 '18

Progress of Illinois testing. O Judd Farmer 62: 6 My 19 '17

Report of Iowa cow test associations. H. C. Barker. il Kimball's D F 14:551 S 1 '16

Report of the Tuscarawas-Flushing association. C. F. Christian. Nat Stock & F 41:944 D 29 '17

Some benefits of our cow testing association. C. Straight. Ohio F 140:27 Jl 14 '17

Some phases of work of the dairy division. H. Rabild. Creamery 7:20-3 D '18 (to be cont)

Suggestions for broadening and making more effective the work of cow testing associations. E. Van Alstyne. N Y Ag Dept B 86: 2345-51 Ag '16

Test association news. Wallaces' F 42:1660 D 7 '17

Test association testimony. J. M. McKee. Kimball's D F 15:136 Mr 1 '17

Testing association news. Kimball's D F 14: 469 Jl 15 '16

Testing dairy cows. Weekly N L 4:1 Ja 24 '17

Testing your cows? D. F. Mattson. Ohio F 138:325 O 7 '16

Third year's work; report of the Barnesville (Ohio) cooperative cow-testing association. W. J. Bichsel. Nat Stock & F 41:384 Jl 14 '17; Same. Jersey B 36:1141 Jl 25 '17

Three thousand cows on trial. E. R. Eastman. Hoard's D 53:520 Ap 13 '17

Three years of testing. W. J. Bichsel. Nat Stock & F 40:1114 Ja 27 '17

Tuscarawas-Flushing association. Ohio F 141: 263 F 23 '18

Two years' work of a New Jersey cow testing association. Hoard's D 50:799 Ja 7 '16

Valuable work by a Minnesota association. N Y Prod R 42:928 O 4 '16

Value of cow-testing association. E. Brown. Ohio F 137:655 My 6 '16

**Cow testing associations—Continued**

- Value of cow-testing associations. O. E. Gibson. *il Western Wash Ag Exp B v 4:4-6 O '16*  
 Value of cow testing associations. N. Negley. *Jersey B 35:1875 N 29 '16*  
 Why a test association. *il Wallaces' F 43:3 Ja 4 '18; Abstract. Ag Digest 2:836 F '18*  
 Wisconsin cow testing association. *Hoard's D 51:209 F 25 '16*  
 Wisconsin testing association. *Kimball's D F 14:180 Mr 15 '16; Same. Hoard's D 52:132 Ag 25 '16*  
 Wisconsin's associations show profits. *O Judd Farmer 61:9 N 18 '16*  
 Work at Purdue: cow testing associations. *N Y Prod R 42:56 My 3 '16*  
 Wyoming county's dairy improvement associations. H. M. Bowen. *N Y Ag Dept B 85:2218-19 Jl '16*  
 Year's results Idaho's pioneer cow test association. W. E. Meyer. *il Hoard's D 53:371 Mr 23 '17*

**Statistics**

- Statistics on cow testing work. *Jersey B 37:2068 D 11 '18*

**Cow testing exhibits**

- Cow testing exhibit at the National. *il Hoard's D 54:538 N 9 '17*  
 Patriots and slackers at Wisconsin state fair. N. Negley. *il Hoard's D 54:359 O 12 '17*  
 Tennessee lessons in cow testing. *il Hoard's D 55:603 Ap 26 '18*  
 Wisconsin cows trot in all shapes and forms. *il Hoard's D 52:501 N 3 '16*  
 Wisconsin exhibit. *il Kimball's D F 14:737 N 15 '16*

**Cowan, B. O.**

- Portrait. *Breeder's Gaz 70:159 Ag 3 '16*

**Cowbane.** See Water hemlock**Cowbirds**

- Cow-bird. E. S. Jones. *Ohio F 139:676 My 12 '17*  
 Stories of the parasitic cowbird. H. E. Bishop. *il Country Life 30:68 Je '16*

**Cowboys**

- All in a cowboy's day. J. E. Wing. *Breeder's Gaz 69:79 Ja 13 '16*

**Cowpea hay**

- Curing cowpea hay. C. K. McClelland. *il Country Gent 83:8 Ag 17 '18*  
 Curing pea-vine hay: stacked on tripods. L. B. Veeder. *il Country Gent 81:654 Mr 18 '16*  
 Making cowpea hay. W. F. Massey. *Prog F 32:900 Ag 25 '17*

**Cowpeas**

- Black-eye cowpea, a neglected crop. J. F. Duggar. *Prog F 33:481 Ap 13 '18*  
 Cowpea and its use. *il Va Ag Dept B 112:11-13 My '16*  
 Cowpeas. E. R. Minns. *N Y Ag Dept B 87:2945-8 S '16*  
 Cowpeas and clover. *Country Gent 81:904 Ap 22 '16*  
 Cowpeas and soy beans: their place in southern farming. B. L. Moss. *Prog F 31:927 Jl 29 '16*  
 Cowpeas as an emergency crop. *Prac F 112:247 Je 15 '16*  
 Cowpeas as food. *Weekly N L 4:10 My 16 '17; Same. Jersey B 36:811 My 23 '17*  
 Cowpeas becoming a more important crop each year. *Va Ag Dept B 126:190-1 '18*  
 Cowpeas for green manure. A. E. Grantham. *Country Gent 82:1252 Ag 11 '17*  
 Cowpeas for New England. A. Field. *Country Life 31:14 Ja '17*  
 Cowpeas in corn for fertilizer. *Wallaces' F 41:237 F 11 '16*  
 Cowpeas vs soy beans. A. M. Ten Eyck. *O Judd Farmer 60:6 My 27 '16*  
 Farming the air with the cowpea. *il S C Ag Dept B 57:1-50 '16*  
 How to cook soybeans and cowpeas. W. Windsor. *Mo Ag Ext C 45:1-4 '18*  
 How to feed the dairy cow. H. G. Van Pelt. *Kimball's D F 14:586 S 15 '16*  
 How to grow the cow pea and 40 ways of preparing it as a table delicacy. G. W. Carver. *il Tuskegee Exp B 35:1-24 '17*

- Immense bean and pea acreages for feed and food. *Monthly Crop Rep 3:100 O '17*  
 Influence of growth of cowpeas upon some physical, chemical, and biological properties of soil. C. A. LeClair. *il J Ag Research 5:439-48 D 6 '15*  
 Management of sandy-land farms. J. A. Drake. *il Farmers' B 716:6-11 '16*  
 Picking cowpeas. J. F. Duggar. *Prog F 31:1212 O 14 '16*  
 Plant cowpeas for hay. E. F. Cauthen. *Prog F 31:766 Je 10 '16*  
 Progress report, Lubbock, 1909-1914; cowpeas. *Tex Ag Exp B 219:27-31 '17*  
 Soybean and cowpea (C. 45). F. H. Hall. *N Y State Ag Exp Rep 1915:116-21 '16*  
 Soy bean and cow pea varieties. *O Judd Farmer 63:6 Ap 28 '17*  
 Soy beans and cowpeas. J. R. Fain and P. O. Vanatter. *Ga Ag Coll (Ext) C 46:1-8 '17*  
 Soybeans and cowpeas in Illinois. W. L. Burlinson and O. M. Allyn. *Ill Ag Exp B 198:1-20 '17*  
 Use the grain drill for sowing cowpeas. K. Perkins. *Prog F 31:663 My 13 '16*  
 Wide-row corn and cowpeas. I. O. Schaub. *Country Gent 81:392 F 19 '16*

See also Cowpea hay; Feeding and feeding stuffs—Cowpeas

**Diseases and pests**

- Influence of cerotoma trifurcata on the nitrogen-gathering functions of the cowpea. L. T. Leonard and C. F. Turner. *il Am Soc Agron J 10:255-61 S '18*

**Seed**

- Coloration of the seed coat of cowpeas. A. Mann. *il J Ag Research 2:33-56 Ap '14*  
 Tabulation of reports from shippers of cowpeas, soy beans, and lespedeza, under date of December 31, 1917. *U S Seed Rep 1:2 F '18*

**Statistics**

- Commercial stocks of cowpeas. *U S Food Surveys 1:4-5 Jl 20 '18*  
 Special southern grain and forage crops: acreage 1916 and 1917. map *Monthly Crop Rep 4:48 My '18*

**Cows**

- Alfalfa and cows in Arizona. M. E. Bemis. *il Kimball's D F 15:36 F 15 '17*  
 Another's discarded cows. W. C. Jeffries. *Ohio F 142:274 S 21 '18*  
 Beauty and butterfat. A. C. McCadlish. *il Country Gent 83:1+ O 19 '18*  
 Best time for cows to freshen. L. S. Brumm. *Hoard's D 51:634 My 5 '16*  
 Buying a cow. *Country Gent 81:324 F 12 '16*  
 Buying a dairy cow. W. A. Freehoff. *Country Gent 83:32 F 2 '18*  
 Buying cows. *Wallaces' F 41:1379 O 20 '16*  
 Buying livestock. C. W. Adams. *Country Gent 81:206 Ja 29 '16*  
 Buying milk cows. *Wallaces' F 43:360 F 22 '18*  
 Buying the family cow. D. Cunningham. *Country Life 29:92 F '16*  
 Capitalizing the has-been cow. H. Sage. *Country Life 32:120 Je '17*  
 Cattle breeding with special reference to the milk cow. E. W. Oliver. *Ag J of India 11:168-73 Ap '16*  
 Certificate-of-record cows; highest New Zealand milk-record. W. M. Singleton. *il J Ag New Zealand 14:274-7 Ap '17*  
 Chemical composition of the placenta of the cow. F. Fenger. *Int R Sci & Prac Ag 9,no 4:470-1 Ap '18*  
 Conservation of breeding cows. *Ag Gaz of Canada 3:206-7 Mr '16*  
 Conservation of the cow. J. F. Bruins. *Hoard's D 55:846 Je 7 '18*  
 Conservation of the dairy cow. *Ag Digest 2:531 Jl '17*  
 Conserve the dairy cow. M. D. Munn. *N Y Prod R 44:106 My 16 '17; Same. Creamery 5:34 Je '17*  
 Cooperative family cow. E. G. Ellis. *il Country Life 30:104 Je '16*  
 Cow and machine milking. C. Larsen. *il Hoard's D 56:317+ O 4 '18*



**Cows—Continued**

Cow and sow mean a rich country. E. M. Frazee. *Prog F* 31:499 Ap 8 '16

Cow in calf deserves more honor. J. J. Hooper. *il J Heredity* 9:250-2, 287 O '18

Cow makes farming more profitable. 125p *il maps '17 International harvester co., Agricultural extension dept., Harvester bldg., Chicago*

Cows that will be profitable. C. A. Spencer. *Nat Stock & F* 40:1086 Ja 20 '17

Dairy conformation and temperament thirty years ago. J. Gould. *Hoard's D* 51:378 Mr 24 '16

Dairy cow for preparedness. *Jersey B* 36:587 Ap 18 '17

Dairy cow proclamation. *Ohio F* 139:692 My 19 '17

Dairy cow slaughter. *Ag Digest* 2:572 Ag '17

Dairy cow vs. steer. *Hoard's D* 55:955 Je 28 '18

Dairy cows and food products. M. I. Requa. *Kimball's D F* 16:71 F 1 '18

Dairy cow's field and functions; an interpretation based on the record of the Holstein-Friesian, Jersey, Guernsey, Ayrshire and milking shorthorn breeds. A. H. Tryon. *il Breeder's Gaz* 70:1210-14 D 21 '16

Dairy cows must be conserved. M. D. Munn. *il Country Gent* 82:1259 Ag 11 '17

Dairy cow's war burden. *Ag Digest* 2:480 Je '17

Dairy dream come true. *il Kimball's D F* 16:72 F 1 '18

Dairy farming, past and present. C. T. Graves. *Jersey B* 35:272+ F 23 '16

Dairy stock for Indiana farmers. *Purdue Ag* 12:430 Ap '18

Dairy temperament of cows. W. D. Hoard. *il Hoard's D* 51:375 Mr 24 '16

Dairying project; four months' practical course in use of Babcock tester and herd record work. C. A. Norcross and V. E. Scott. *il Nev Ag Ext B* 2:1-20 '16

Economy in milk production—large vs. small cows. J. G. Good. *Penn State F* 11:166 My '18

Economy of production by dairy cows. R. I. Grady. *Ohio Ag Exp B v* 2:334-8 O '17

Economy of the dairy cow. *Hoard's D* 53:790 Je 1 '17

Effect of varying conditions on type. J. M. W. Kitchen. *Jersey B* 36:504 Ap 4 '17

Efficient dairy cow. W. J. Fraser. *Ohio F* 141:306 Mr 2 '18

Essential points for productivity. H. G. Van Pelt. *Jersey B* 35:1058 J1 5 '16

Extension circulars. *Mass Ag Ext C* 28, 33, 36 '17

Titles are: Importance of the dairy cow; Dairy problem; Importance of raising heifer calves

Fall vs. spring freshening. *Wallaces' F* 41:744 My 12 '16

Family cow. H. F. Judkins. *Rural N Y* 77:1410 D 21 '18

Gestation table calculated at the average period of 282 days. *Jersey B* 35:18 Ja 5 '16

Getting a good cow. W. F. McSparran. *Kimball's D F* 15:861 D 1 '17

Giving the cow her due. W. F. McSparran. *Prac F* 114:105 Mr 1 '18

Heart of a cow. E. L. Vincent. *Hoard's D* 51:3 Ja 28 '16

How the dairymen must help win the war. R. M. Cleveland. *il Country Life* 33:66-7 Mr '18

How to feed and care for the dry dairy cow. T. Butler. *Prog F* 32:667 Je 1 '18

How to feed the dairy cow. H. G. Van Pelt. *Kimball's D F* 15:428 Je 15 '17

How to select a dairy cow. T. Butler. *Prog F* 33:592 My 11 '18

Hunt for milk cows. J. C. Courter. *Hoard's D* 52:192 S 1 '16

Importance of dairy farming; conformation and production. M. M. Sweetman. *Jersey B* 35:1501 S 27 '16

Importance of persistency. *Jersey B* 35:1384 S 6 '16

Improving dairy cows. J. Michels. *il Jersey B* 37:1941 N 20 '18

Individuality of cows. W. J. Hagar. *Rural N Y* 75:90 Ja 15 '16

Jersey in summer. W. F. McSparran. *Jersey B* 36:1103 J1 18 '17

Keep the cows on the farms. *Purdue Ag* 11:33 Je '17

Live item about some dead stock. A. H. de-Graff. *Hoard's D* 55:88 F 8 '18

Milk veins and dairy capacity. R. R. Graves. *il Country Gent* 81:1831 O 14 '16

More dairy cows needed. J. Foust. *Prac F* 112:257 Je 15 '16

New York dairymen not selling cows. *Hoard's D* 53:955 J1 6 '17

New Zealand dairy cows. W. M. Singleton. *J Ag New Zealand* 16:132-5 Mr '18

Obtaining a good dairy cow. C. Larsen. *il Kimball's D F* 16:232-3 Mr 15 '18

Open-shed housing of milk cows. G. S. Bulkley. *il Ohio F* 141:184 F 9 '18

Our future dairy-cow supply. *Country Gent* 83:40 Mr 2 '18

Picking big producers. *Country Gent* 81:206 Ja 29 '16

Points from my experiences with cows and horses. E. A. Wendt. *il Prac F* 112:319 Ag 15 '16

Poor cow, medium cow, good cow. *Wallaces' F* 41:1574 D 1 '16

Pressing needs for dairy cows. *Jersey B* 36:1593-4 O 17 '17

Principles in breeding pure-breds. L. M. Merryman. *il Hoard's D* 56:583+ N 22 '18

Proclamation for the conservation of the dairy cow. J. M. Cox. *Kimball's D F* 15:348 My 15 '17

Prolificacy and the dairy cow. J. R. Dice. *Hoard's D* 51:154 F 18 '16

Purebred cows for plain farmers? *Rural N Y* 75:1394, 1432 N 4-11 '16

Purebred or grade dairy cow. R. E. Hutchison. *Rural N Y* 75:1376 D 23 '16

Relation of conformation to production; with table of measurements. *Hoard's D* 51:238 Mr 3 '16

Save the dairy cow. O. Erf. *Hoard's D* 53:718 My 18 '17

Selecting a dairy herd. C. H. Eckles. *il Country Gent* 83:8-9 N 16 '18

Selecting and developing the dairy heifer. F. Williams. *Prog F* 33:44 Ja 12 '18

Selection of the dairy cow. F. C. Minkler. *Md Ag Soc Rep* 1916, v 1:280-92 '17

Selling and buying dairy cows. H. F. Thurston. *il Am Coop J* 13:413-14 J1 '18

Shall the dairy cow be marketed? *Ohio F* 140:137 Ag 25 '17

Shall we conserve female breeding stock by legislative enactment? *Prog F* 32:1119 N 17 '17

Should all heifers be raised. W. J. Fraser. *Jersey B* 36:1327, 1363, 1399 Ag 29-S 12 '17; Same. *N Y Prod R* 44:688, 726, 798 Ag 29-S 5, 19 '17; Same. *Hoard's D* 54:301, 322, 371 S 28-O 12 '17; Same. *Creamery* 6:65-7 O '17; Same. *Wallaces' F* 42:1435, 1535, 1593 O 19, N 9, 23 '17; Same cond. O Judd Farmer 63:3 S 15 '17; Excerpt. *Ag Digest* 2:659 O '17; Excerpt. *J Ag (Quebec)* 21:122 F '18

Slaughter of cows. J. Gould. *Nat Stock & F* 41:404 J1 21 '17

Stage of lactation affects milk yield. R. I. Grady. *Ohio Ag Exp B v* 2:401-6 D '17

Starting with pure-breds. T. W. Barnard. *il Hoard's D* 56:617 N 29 '18

Steers from dual-purpose cows. T. Shaw. *Breeder's Gaz* 70:310 Ag 31 '16

Sterling worth of the good dairy cow. W. J. Fraser. *Jersey B* 36:1611 O 17 '17; Same. *N Y Prod R* 44:954 O 10 '17; Same. *Wallaces' F* 42:1660 D 7 '17; Same. *Hoard's D* 54:829 Ja 4 '18; Same. *J Ag (Quebec)* 21: xiii Ap '18

Successful management of a dairy herd. W. E. Bishop. *il Hoard's D* 52:666 D 1 '16

Suggests a gold medal class at the National. H. E. Van Norman. *Jersey B* 36:198 F 7 '17

Three pertinent dairy suggestions. A. G. Morrell. *Prac F* 112:430 N 15 '16

Trouble with the milk business. C. E. Gapen. *il Country Gent* 82:726 Ap 14 '17

Two kinds of farm cows. *Ohio F* 140:585 D 22 '17

**Cows—Continued**

- Value of a breeding cow. G. E. Martin. Breeder's Gaz 69:912 Ap 27 '16  
 Wanted, a cow. Hoard's D 51:362 Mr 17 '16  
 Water needed by dairy cows. Wallaces' F 42: 926 Je 15 '17  
 When you buy a good cow. A. S. Alexander. Rural N Y 75:1149-50 S 2 '16  
 Why a dairy show? R. M. Gow. Jersey B 36: 1606 O 17 '17

See also Calves; Cattle; Dairying; Horns; Lactation; Mammary glands; Mammary veins; Milk; Udder; also names of breeds, e.g. Holstein-Friesian cattle, Jerseys

**Breeds**

See Cattle—Breeds

**Costs**

- Cost of keeping cows. R. D. Cannan. Jersey B 37:2069 D 11 '18  
 Cost of raising a dairy cow. C. M. Bennett and M. O. Cooper. il U S Ag B 49:1-23 '14  
 Food from grain by-products. G. C. White. Field II 28:324 My '18  
 What is a good dairy cow? A. C. Palmer. Hoard's D 55:556 Ap 19 '18

**Diseases and pests**

- Accidental abortion in dairy cattle. W. F. Beacom. J Dept Ag Victoria 16:308-10 My '18  
 Avoiding diseases of dairy cows. il Field II 27:688 S '17  
 Bloat in cows. F. E. Place. J Dept Ag S Australia 20:693-4 Ap '17  
 Calving troubles. Wallaces' F 41:713 My 5 '16  
 Case reports of lymphangitis in cattle. J. Traum. il Am Vet M Assn J 49:254-7 My '16  
 Cattle tick and milk yield. C. A. Whittle. Hoard's D 51:245 Mr 3 '16  
 Clover bloat. D. J. Healy and J. W. Nutter. Am Vet M Assn J 51:414-16 Je '17  
 Cow and her health. L. R. Himmelberger. Hoard's D 52:129+ Ag 25 '16  
 Cow with milk fever. T. Butler. Prog F 33:159 F 9 '18  
 Diseases of cows. G. H. Conn. Kimball's D F 16:257 Ap 1 '18  
 Economic burden of sterility and abortion in cattle. W. L. Williams. il Cornell Countryman 15:393-4+ Ap '18  
 Effect of stable and horn fly attacks on milk production. A. W. Baker. (In Report. Entom. Soc. of Ontario, 1917, p. 91-3) '18 Ontario ag. dept., Toronto  
 Foot and mouth disease, mastitis and tuberculosis and the milk consumer. H. Young and others. Creamery 4:27-8 Ja '16  
 Foreign bodies in the digestive tract of bovines. J. M. Currie. Am Vet M Assn J 49: 838-9 S '16  
 Formalin in the treatment of mastitis. J. N. Frost. Am Vet M Assn J 51:85-8 Ap '17  
 Health, profits and cows. W. A. Martin. Ohio F 138:284 O 21 '16  
 How to feed the dairy cow; milk fever symptoms. H. G. Van Pelt. Kimball's D F 15:151 Mr 1 '17  
 Lumpy jaw. G. H. Conn. Kimball's D F 16:553 Jl 1 '18  
 Milk fever. il Hoard's D 54:704 D 7 '17  
 Milk fever. Wallaces' F 41:459 Mr 17 '16  
 Milk fever. G. H. Conn. Kimball's D F 16: 209 Mr 15 '18  
 Milk-fever (parturient apoplexy). A. R. Young. J Ag New Zealand 13:466-70 D '16  
 Milk fever (parturient paresis or parturient apoplexy). Prog F 33:767 Jl 6 '18  
 Milk fever in cows. Prog F 31:474 Ap 1 '16  
 Milk fever; its simple and successful treatment. J. R. Mohler. il Farmers' B 206:1-12 '18 (rev.)  
 Milk flow increased; dipping does not reduce yield. Weekly N L 4:4 Jl 11 '17; Same. Prog F 32:736 Je 30 '17; Same. Jersey B 36:1144 Jl 25 '17  
 Milk sickness to be investigated. Creamery 7:57-8 O '18  
 Mortality of dairy cows in the Hamilton district. E. W. Murphy. J Dept Ag Victoria 14:728-30 D '16

- Observation on trembles (milk sick) in cows, transmitted to man by milk and milk products. H. R. Schwarze. Am Vet M Assn J 53: 236-9 My '18  
 Retained afterbirth. G. H. Conn. Kimball's D F 14:433 Jl 1 '16  
 Retention of the placenta. G. H. Conn. Hoard's D 52:940 Ja 19 '17  
 Significance of the fever complex in the cow. R. A. Greenwood. Am Vet M Assn J 48: 709-18 Mr '16  
 Some common troubles of the cow. F. E. Place. J Dept Ag S Australia 20:725-33 Ap '17  
 Sterility in cows. H. E. Bemis. Ia Ag Coll Offic Pub v 14, no 36:218-26 '16  
 Sterility of cows. F. W. Caldwell. Hoard's D 55:878 Je 14 '18  
 Traumatic pericarditis and surgical removal of the causative agent. W. F. Burleigh. Am Vet M Assn J 48:739-41 Mr '16  
 Treating diseases of cows. G. H. Conn. Kimball's D F 15:450 Jl 1 '17  
 Treating diseases of cows; diseases of the respiratory system. G. H. Conn. Kimball's D F 16:297, 343 Ap 15-My 1 '18  
 Treatment for caked udders. J Ag (Quebec) 22:43 S '18  
 Use of a purgative with cows. H. Schreck. Jersey B 35:277 F 23 '16  
 Veterinary problems in a certified dairy. Ohio F 142:8 Jl 6 '18  
 When a cow bloats. A. S. Alexander. Field II 27:688 O '17

See also Abortion, Infectious; Tuberculosis in cattle; Udder—Diseases

**Examinations**

- Physical examination of dairy cows. J. L. Wilder. Am Vet M Assn J 50:705-7 F '17  
 Requirements of the physical examination of dairy cattle in accordance with the regulations of the state and city codes. A. Silkman. Am Vet M Assn J 49:836-7 S '16

**Feeding**

- Alfalfa for the dairy cow. J. C. Beavers. il Kimball's D F 16:105 F 15 '18  
 Alfalfa hay situation. Wallaces' F 43:1790 D 6 '18  
 Alfalfa hay versus timothy hay for dairy cows. J. H. Weghorst. Purdue Ag 11:40-1 F '17  
 Alfalfa not a balanced ration. Hoard's D 51: 776 Je 2 '16  
 Apple pomace for milch cows. E. I. Farrington. Country Life 32:104 O '17  
 Balanced ration from alfalfa and silage. Rural N Y 75:1514 D 9 '16  
 Balanced rations for the dairy cow. Am Coop J 11:1241 Ag '16  
 Balancing a ration for dairy cows. T. Butler. Prog F 32:275 Mr 3 '17  
 Balancing the rations of a dairy cow. T. Butler. Prog F 33:791 Jl 13 '18  
 Beet pulp vs. corn silage. R. E. Hundertmark. Hoard's D 51:805 Je 9 '16  
 Beets and mangels compared with silage for milk production. C. C. Hayden. Ohio Ag Exp B v 1:49-53 F '16  
 Better feeding paid sixty per cent. A. M. Loomis. Hoard's D 52:241 S 15 '16  
 Blackie—a cow that made good. il Wallaces' F 41:1673 D 22 '16  
 Bone-building material for milk cows. Wallaces' F 43:312 F 15 '18  
 By-product feeds will save our good cows until another crop of grain and grass is grown. Coop Manager & F 7:84 My '18  
 By-products of the decortication of rice in the feeding of milking cows. R. Giuliani. Int R Sci & Prac Ag 8,no 1:102-4 Ja '17  
 Can I feed high priced hay to my cow? F. R. Cammack. Jersey B 37:1499 S 18 '18  
 Challenge to the dairyman. W. J. Fraser. il Hoard's D 55:683 My 10 '18  
 Changes in composition of butter fat produced by feeding cottonseed oil. F. H. Smith and others. bibliog Ga Ag Exp B 122: 95-111 '16  
 Cheap ration. W. F. McSparran. Kimball's D F 14:756 D 1 '16



**Cows—Feeding—Continued**

Chopped alfalfa vs. bran in grain ration for dairy cows. W. P. Snyder and E. A. Burnett. *il Neb Ag Exp B* 164:1-11 '18; Abstract. Wallaces' *F* 43:1648 N 8 '18; Abstract. Breeder's *Gaz* 71:572 Mr 15 '17; *Excerpt. Hoard's D* 56:485 N 1 '18

Clover vs. alfalfa for milk production. C. C. Hayden. *Ohio Ag Exp B* 327:1-36 '18; Abstract. *Ohio Ag Exp B v* 3:184-6 Je '18

Composition and market qualities of butter when corn silage is fed with cottonseed meal. L. S. Palmer and D. P. Crockett. *J Dairy Sci* 1:235-45 S '17

Compounding a grain mixture. *Jersey B* 35:1434 S 13 '16

Compounding rations for dairy cows. R. E. Lesley. *il Purdue Ag* 11:16-23 My '17

Computation of dairy rations. F. S. Putney and H. P. Armsby. *Pa Ag Exp B* 143:1-24 '16; Same cond. Kimball's *D F* 14:799 D 15 '16

Condition of the dairy cow. L. S. Brumm. *Hoard's D* 51:397 Mr 24 '16

Corn and alfalfa. L. S. Riford. *Hoard's D* 51:216 F 25 '16

Corn and alfalfa feeding trial. *Hoard's D* 56:428 O 18 '18

Cost of feed. Kimball's *D F* 15:863 D 1 '17

Cost of summer feeding in milk production. G. H. Garrad. *J Bd Ag* 23:321-32 Ji '16

Cottonseed meal and silage. *Hoard's D* 54:38 Ag 3 '17

Cow testing and feeding project. B. R. Eldredge and others. *il Utah Ag Ext C v* 6,no 13:1-11 '18

Cow welfare dependent on feeding. W. F. McSparan. *Jersey B* 37:1277 Ag 14 '18

Cows need legumes. *O Judd Farmer* 64:13 F 9 '18

Dairy cattle feeding. J. A. Waldron. *Mich Ag Ext Course Notes* no 10:1-14 '18 (reprint)

Dairy cow and her home farm. C. C. Hayden. *il Ohio F* 137:557 Ap 15 '16

Dairy cow as a machine. B. A. Barr. *J Dept Ag Victoria* 14:34-6 Ja '16

Dairy cow feeding: the need for economy in milk production. *J Bd Ag* 24:743-4 O '17

Dairy cow must have protein. *Jersey B* 36:1857 N 21 '17

Dairy feeding and the calculation of rations. L. S. Riford. *N J Ag Exp C* 73:1-15 '17

Dairy feeding chart. E. G. Woodward and K. B. Musser. *Wash Ag Ext Ser* 1,no 45 3p '18

Dairy feeding to meet present conditions. B. G. Southwick. *Hoard's D* 56:96 Ag 16 '18

Dairy investigation in Iowa. *Jersey B* 35:1120 Ji 19 '16

Dairy ration without silage. H. P. Miller. *Ohio F* 137:168 F 5 '16

Dairy rations. Wallaces' *F* 41:279 F 18 '16

Dairying in the cactus country. H. W. Collingwood. *il Country Life* 29:36-7 Ja '16

Dairyman's feed problem. E. Brown. *Nat Stock & F* 42:267 Je 8 '18

Deserving new dairy feed; feterita. M. Coverdell. *Jersey B* 35:806 My 24 '16

Developing efficient cows. W. M. Kelly. *il Ohio F* 139:362 Mr 10 '17

Economical feeding. Kimball's *D F* 16:659 S 1 '18

Economical winter feeding of beef cows in the corn belt. J. S. Cotton and E. H. Thompson. *il U S Ag B* 615:1-16 '17; Same. *Neb Ag Bd B* 245:358-70 '18

Economy in feeding. L. W. Lighty. *Nat Stock & F* 41:943 D 29 '17

Economy in feeding dairy cows. D. H. Propps. Wallaces' *F* 42:1471 O 26 '17

Economy in milk production. *J Bd Ag* 24:871-6 N '17

Economy in the feeding of dairy cows. *J Bd Ag* 24:955-63 D '17

Effect of rolled barley on alfalfa-beet pulp ration for milk production. *Ariz Ag Exp Rep* 1916:288-9 '16

Effect of water in the ration on the composition of milk. W. F. Turner and others. *bibliog J Ag Research* 6:167-78 Ap 24 '16

Effects of alfalfa hay. H. M. Wilson. *Hoard's D* 52:75 Ag 11 '16

Effects of feeding cottonseed products on the composition and properties of butter. C. H. Eckles and L. S. Palmer. *bibliog Mo Ag Exp Research B* 27:1-44 '16

Effects of high protein and high energy rations in feeding dairy cows. W. B. Ellett and C. E. Holdaway. *bibliog Va Ag Exp Tech B* 12:29-45 '17; Same. *Va Ag Exp Rep* 1915-1916:29-45 '17

Experiments conducted with herd. J. M. Scott. *Fla Ag Exp Rep* 1917:21R-27R '18

Experiments in feeding milch cows with potatoes from silo. *Int R Sci & Prac Ag* 7, no 1:104-5 Ja '16

Extra care and feeding of cows. J. Marsh. *Hoard's D* 52:723 D 15 '16

Factors influencing the development of dairy heifers. *Hoard's D* 52:323 S 29 '16

Feed after calving. C. W. Adams. *Country Gent* 81:2075 D 2 '16

Feed and care of the dairy cow. Wallaces' *F* 41:1415 O 27 '16

Feed and good bulls work wonders. A. C. McCandlish. *il Kimball's D F* 16:107 F 15 '18

Feed and milk prices. J. G. Morse. *Rural N Y* 77:22 Ja 5 '18

Feed for milk cows. T. Butler. *Prog F* 31:171 F 5 '16

Feed for the cow. *Country Gent* 81:686 Mr 25 '16

Feed production in Tennessee. A. P. Gaut. *Hoard's D* 53:740 My 18 '17

Feed question in dairy farming. J. C. Fulde. *Cornell Countryman* 15:533-4 Je '18

Feed the dry cow. H. Fergus. *Country Gent* 81:262 F 5 '16

Feed your Jerseys liberally. W. F. McSparan. *Jersey B* 36:1553 O 10 '17

Feeding a world record Holstein. A. Hansen. *il Field* 11 27:447 Je '17

Feeding alfalfa in the West. F. F. Dean. *Hoard's D* 51:958 Ji 14 '16

Feeding and the making of balanced rations. H. H. Dean. *Prac F* 112:220, 238 My 15-Je 1 '16

Feeding beet pulp to dairy cows. T. Butler. *Prog F* 32:311 Mr 10 '17

Feeding cows for official tests. H. G. Van Pelt. Kimball's *D F* 14:462 Ji 15 '16

Feeding cows in Honduras. Kimball's *D F* 14:274 Ap 15 '16

Feeding dairy cattle. D. T. Hendrickson. *Prac F* 112:367 O 1 '16

Feeding dairy cattle. A. C. McCandlish. *Ia Ag Exp C* 34:1-32 '17

Feeding dairy cows. Wallaces' *F* 42:1696 D 14 '17

Feeding dairy cows. W. J. Gillett. *Wis Dairy-men's Assn Rep* 1913-1916:82-9 '17; Same. *Hoard's D* 53:677+ My 11 '17

Feeding dairy cows. J. J. Hooper. *Jersey B* 37:682 My 1 '18

Feeding dairy cows. D. H. Propps and E. G. Woodward. *Neb Ag Ext B* 46:1-20 '17

Feeding dairy cows according to production. F. C. McDowell. *Nat Stock & F* 42:575 S 21 '18

Feeding dairy cows and calves. R. L. Pou. *Tex Ag Ext B C* 7:1-8 '18

Feeding dairy cows for profit. L. S. Corbett. *Jersey B* 36:518 Ap 4 '17

Feeding dairy cows in Kentucky. J. J. Hooper. *il Ky Ag Ext C* 65:1-15 '18

Feeding dairy cows this winter. *Farm Eng* 5:11 D '17

Feeding for advanced registry. A. I. Maxwell. *il Field* 11 27:21-2, 108-9 Ja-F '17

Feeding for advanced registry. C. W. Turner, jr. *il Field* 11 28:718-19 O '18

Feeding for economical milk production. W. A. Rhea. *W Va Ag Dept B* 30:40-3 '17

Feeding for greater milk production. J. Underwood. *Prac F* 113:377 N 1 '17

Feeding for milk production. *Prac F* 113:278 Ag 1 '17

Feeding for milk production. *il Purdue Ag* 10:28-9 Ja '16

Feeding for milk production. L. C. Reynolds. *Ohio F* 138:438 N 4 '16

**Cows—Feeding—Continued**

- Feeding for milk production. J. M. Scott. Fla Ag Exp B 143:79-88 '18; Same cond. Kimball's D F 16:301 Ap 15 '18
- Feeding for records. Purdue Ag 12:535-6 Je '18
- Feeding grain to cows on pasture. Wallaces' F 43:791 My 10 '18
- Feeding milch cows with potatoes from silos. Creamery 5:36 Je '17
- Feeding of concentrated food to dairy cows on pasture. J Bd Ag 25:11-17 Ap '18
- Feeding of cottonseed meal to dairy cows. Prog F 33:235 F 23 '18
- Feeding of dairy cattle. Ag Gaz of Canada 4:30-4 Ja '17; Same (pt. 1). J Ag (Quebec) 20:173 F '17
- Feeding of dairy cattle. S. M. Salisbury. il Ohio Ag Ext B v 11, no 15 15p '15-'16
- Feeding of dairy cows. H. Rabild, H. P. Davis and W. K. Brainerd. Farmers' B 743:1-23 '16; Same cond. Jersey B 35:1433 S 13 '16; Excerpt. Power F 25:44 S '16
- Feeding situation; suggestions for computing winter rations for dairy cows. C. C. Hayden. Ohio Ag Exp B v 2:19-22 Ja '17
- Feeding stalls for cows. C. Pedersen. plan Ag Gaz of New South Wales 29:805-8 N '18
- Feeding the dairy cow. Hoard's D 51:478 Ap 7 '16
- Feeding the dairy cow. A. A. Borland. Pa Ag Dept B 283:127-44 '16
- Feeding the dairy cow. E. W. Gage. Ohio F 138:230 S 9 '16
- Feeding the dairy cow. W. E. Morton. Hoard's D 55:92 F 8 '18
- Feeding the dairy cow according to production. T. Butler. Prog F 33:816 Jl 20 '18
- Feeding the dairy cow in winter. C. H. Eckles. Jersey B 35:1986 D 20 '16
- Feeding the herd. O. E. Reed. Jersey B 36:1395 S 12 '17
- Feeding the milk cow in winter. C. H. Eckles. Jersey B 35:1689 O 25 '16
- Feeding trials of dairy cows in Denmark. A. V. Lund. Int R Sci & Prac Ag 7, no 10: 1478-81 O '16
- Feeding trials with cattle at the model farm of Dikopshof, Germany. A. Richardsen. Int R Sci & Prac Ag 8, no 8:1140-3 Ag '17
- Feeding turnips to cows. Rural N Y 75:134 Ja 22 '16
- Feeds and feeding for dairy stock. A. McTaggart. J Ag New Zealand 13:184-92 S '16
- Feeds for dairy cows. S. G. Carlyle. Coop Manager & F 7:83 Ja '18
- Feeds for dairy cows. M. P. Jarnagin and O. T. Goodwin. il Ga Ag Coll (Ext) C 45:1-8 '17
- Feeds for dairy cows; cottonseed meal, velvet beans and peanut meal. M. P. Jarnagin and O. T. Goodwin. il Ga Ag Coll (Ext) B 159:1-16 '18
- Food from grain by-products. G. C. White. Field Il 28:324 My '18
- Food of maintenance. J. Bower. il Hoard's D 55:279 Mr 8 '18
- Garlic flavor in milk. Prog F 32:476 Ap 14 '17
- Grains or concentrates for feeding dairy cows. T. Butler. Prog F 33:770 Jl 6 '18
- Green forage for dairy cows. Jersey B 37: 2072 D 11 '18
- Grow turnips for the dairy herd. L. A. Higgins. Prog F 33:868 Ag 3 '18
- Growing feed for cows; lessons of the drought. J. Grant. J Dept Ag Victoria 14: 505-7 Ag '16
- Hand feeding dairy cows; an experiment. B. A. Barr. J Dept Ag Victoria 14:193-6 Ap '16
- Heavy silage vs. heavy grain feeding for dairy cows. C. C. Hayden. Ohio Ag Exp B v 1:141-2 My '16
- High cost of living for the cow. Rural N Y 75:1558 D 23 '16
- History of the Guernsey breed. C. L. Hill. il Kimball's D F 14:770 D 1 '16
- Home grown protein. C. A. Brown. Purdue Ag 11:29-32 Je '17
- Home mixing of dairy feeds. E. W. Gage. Ohio F 142:8 Jl 6 '18
- Home-raised feed necessary in dairying. J. P. Quinley. Prog F 32:610 My 19 '17
- Hot weather dairying. H. G. Van Pelt. il Kimball's D F 14:490 Ag 1 '16
- How much milk per acre? J. H. McKenny. Hoard's D 54:50 Ag 3 '17
- How to feed the dairy cow. H. G. Van Pelt. Kimball's D F 13:816-17; 14:12-13, 54, 102, 144, 188, 233, 278, 314, 344, 382, 402, 432, 461, 485, 510-11, 541, 586, 639, 670, 712, 740, 772, 804, 835; 15:21, 62, 102, 151, 208, 252, 263, 326, 358, 398, 428, 464, 496-7, 526, 565, 590, 652, 722, 760, 796, 837, 898-90; 16:13 Ja 1 '16-N 15, D 15 '17-Ja 1 '18
- Improved feed—increased profit. A. M. Loomis. Prac F 112:270 Jl 1 '16
- Indiana cows will get grain. O Judd Farmer 61:9 D 9 '16
- Influence of environment and breeding in increasing dairy production. H. H. Kildee and A. C. McCandlish. il Ia Ag Exp B 165:383-402 '16; Same cond. Kimball's D F 14:365+, 406-7+ Je 1-15 '16; Same cond. Wallaces' F 41:866 Je 16 '16; Same cond. Creamery 4:22 Jl '16; Same cond. Jersey B 35:1120 Jl 19 '16; Same cond. Ohio F 138:173 Ag 26 '16; Same cond. Hoard's D 51:901+ Je 30 '16
- Influence of palm kernel cake upon the composition of milk-fat. C. Crowther and H. Woodhouse. J Ag Sci 8:451-4 D '17
- Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of overfeeding. C. H. Eckles and L. S. Palmer. Mo Ag Exp Research B 24:1-35 '16
- Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of underfeeding. C. H. Eckles and L. S. Palmer. il Mo Ag Exp Research B 25:1-107 '16
- Influence of prickly pear upon percentage of butterfat. T. E. Woodward. Hoard's D 52: 579 N '16
- Is a prescription all we need? E. H. Porter. Jersey B 35:345 Mr 8 '16
- It pays to feed well. A. M. Loomis. Kimball's D F 14:487 Ag 1 '16
- Jones' high-testing cows. O. C. Cunningham. Ohio F 138:104 Ag 5 '16
- Keeping down cost of production. A. D. Deering. Jersey B 36:558 Ap 11 '17
- Legumes for dairy cows. Weekly N L 4:7 Je 27 '17
- Legumes for protein food. Rural N Y 76:870 Jl 14 '17
- Legumes for the dairy. C. W. Burkett. (In De Laval dairy hand book, p. 21-4) il '16 De Laval separator co., New York
- Legumes increase yield. Kimball's D F 16: 135 F 15 '18
- Legumes will increase dairy profits. J. M. Fuller. N H Ag Ext Press B 66 1p '17
- Making up the dairy ration. C. R. George. Purdue Ag Ext B 63:1-8 '18; Same abr. Jersey B 37:1197-8 Jl 31 '18
- Mangel wurzel. A. H. De Graff. Hoard's D 53:582 Ap 20 '17
- Manurial values of concentrated foods in relation to cost of food in the production of milk. J. Mackintosh. J Bd Ag 23:209-24 Je '16
- Manurial values of dairy feeds. R. I. Grady. Ohio Ag Exp B v 3:317-18 O '18
- Meeting present dairy conditions. F. J. Iles. Ohio F 139:43 Ja 13 '17
- Milk-making machine. E. S. Savage. il Country Gent 83:12-13 Ap 6 '18
- Mineral metabolism of the milch cow. E. B. Forbes and others. Ohio Ag Exp B 295:323-48 '16; 308:451-81 '17; Same cond. Am Soc Animal Production Pro 1915-1916:1-8, 117-25 '17; Same cond. (pt. 1). Ohio Ag Exp B v 1:186-8 Je '16; Same cond. (pt. 1). Ohio F 138:48 Jl 15 '16; Abstract (pt. 2). Ohio Ag Exp B v 2:58-60 F '17
- Mineral metabolism of the milch cow; legumes highly essential in feeding for heavy milk production. E. B. Forbes. Ohio Ag Exp B v 3:8-10 Ja '18
- Mineral requirements of milk cows. J. Marsh. Ohio F 139:515 Ap 7 '17
- Minerals in the dairy cow's ration. L. L. Rummell. Hoard's D 54:6 Jl 27 '17
- Mixed feeds for dairymen. E. S. Savage. Rural N Y 77:1224 O 26 '18



**Cows—Feeding—Continued**

- Mixing feeds. R. W. Chapin. Jersey B 35:1850 N 22 '16
- More about bone meal for abortion. Hoard's D 51:18 Ja 23 '16
- Most economical ration for cows. Ohio F 141: 224 F 16 '18
- New facts on feeding cattle for successful growth and reproduction. E. B. Hart and others. *il* Wis Ag Exp B 287:1-24 '18; Same. Kimball's D F 16:292+, 340-1 Ap 15-My 1 '18; Same cond. Jersey B 36:1245-7 Ag 15 '17; Abstract. Hoard's D 55:684-5 My 10 '18
- Nugget's Primrose and Oaks farms. *il* Field 11 26:419 My '16
- Nutrients required to develop the bovine fetus. C. H. Eckles. Mo Ag Exp Research B 26:1-36 '16; Excerpts and summary. *Int R Sci & Prac Ag* 8,no 6:890-2 Je '17
- Nutrients returned by dairy cows; stage of lactation and individuality affect cost of milk production. R. I. Grady. *il* Ohio Ag Exp B v 2:365-9 N '17
- Officially testing dairy cows. J. R. Dice. Hoard's D 56:660 D 6 '18
- Pasture costs. Kimball's D F 16:274 Ap 1 '18
- Pastures for dairy cows. T. Butler. Prog F 33:712 Je 15 '18
- Physiological effect on growth and reproduction of rations balanced from restricted sources. E. B. Hart and others. *bibliog il* J Ag Research 10:175-98 J1 23 '17
- Points on feeding dairy cows. Prac F 113: 397 N 15 '17
- Practical dairy cow feeding. F. H. Scribner. Kimball's D F 14:136 Mr 1 '16
- Present-day dairy ration. W. C. Jeffries. Ohio F 142:528 N 30 '18
- Prices and production. C. H. Sapp. Nat Stock & F 41:138 Ap 28 '17
- Prickly-pears as a food for dairy cows. T. E. Woodward and others. *il* J Ag Research 4: 405-50 Ag '15
- Problem of feeding. W. F. McSparran. Kimball's D F 15:56 F 1 '17
- Profitable dairy feeding. W. A. Freehoff. *il* Country Gent 83:30 Mr 9 '18
- Profitable dairy ration. H. H. Dean. Prac F 113:341 O 1 '17
- Ration and age of calving; abstracts. C. H. Eckles. *il* Field 11 26:37-9 Ja '16; *Int R Sci & Prac Ag* 7,no 10:1473-5 O '16
- Ration for dairy cows. Prog F 32:1119 O 27 '17
- Record cows and what they were fed. *il* Field 11 26:222-3, 414 Ap-My '16
- Reducing the cost and increasing the profit. W. Rider. Hoard's D 55:181 F 22 '18
- Reducing the cost of milk production. H. L. Blanchard. Western Wash Ag Exp B v 4:3-6 Ja '17
- Reducing the dairy feed bill. H. H. Kildee. Jersey B 37:589 Ap 17 '18; Same. Kimball's D F 16:332 Ap 15 '18
- Refinement of feeding experiments for milk production by the application of statistical methods. L. A. Maynard and W. I. Myers. *bibliog* Cornell Ag Exp B 397:213-49 '18
- Right feeding increases average 200 lbs. Jersey B 37:745 My 8 '18
- Role of water in a dairy cow's ration; with tables. C. Larsen and others. S D Ag Exp B 175:649-80+ '17
- Roughages for milk production; legume hays may replace much high-priced grain. C. C. Hayden. Ohio Ag Exp B v 2:387-90 D '17
- Selecting concentrates for the dairy ration. C. R. George. Purdue Ag Ext B 68:1-8 '18
- Selecting feeds for dairy herd in winter. C. C. Hayden. *il* Ohio F 138:405 O 28 '16
- Selecting rations for dairy cows. G. C. White and K. B. Musser. Conn Storrs Ag Exp B 90:1-38 '17
- Sesame cake as a feed for milch cows. *Int R Sci & Prac Ag* 7, no 1:105 Ja '16
- Shall the farmer buy feed or sell his cows. M. Michels. Wallaces' F 43:456 Mr 8 '18; Same. Hoard's D 55:320 Mr 15 '18
- Shall we feed all cows alike. O. W. Mapes. Rural N Y 75:166 Ja 29 '16
- Silage and alfalfa for cows. Hoard's D 53: 971 J1 13 '17
- Silage made from oats and tares as a food for milking-cows. A. W. Oldershaw. J Ed Ag 23:224-9 Je '16

- Simple methods of balancing rations. E. G. Woodward. Hoard's D 53:286 Mr 9 '17
- Soil management from standpoint of dairy farmers. C. E. Thorne. J Ag (Quebec) 21: vii S '17
- Special need of liberal feeding. W. J. Fraser. Hoard's D 56:362 O 11 '18
- Spineless cactus for dairy cows. F. W. Woll. Hoard's D 52:914 Ja 19 '17
- Summer feeding of dairy cows. Prog F 31:1008 Ag 19 '16
- Sunflower silage for dairy cows; a preliminary report. C. N. Arnett and O. Tretsven. Mont Ag Exp B 118:75-80 '17
- Tact in feeding dairy cows. Jersey B 37:2034 D 4 '18
- Test of three protein concentrates and two leguminous roughages in milk production. O. F. Hunziker and R. E. Caldwell. Ind Ag Exp B 203:1-20 '17
- To get most milk from the feed available. N. Negley. Hoard's D 55:226-7 Mr 1 '18
- Trials with California silage crops for dairy cows. F. W. Woll and E. C. Voorhies. Cal Ag Exp B 282:19-40 '17
- Value of barley for cows fed alfalfa; experiments in California. G. H. True and others. *Int R Sci & Prac Ag* 7,no 3:402-3 Mr '16
- Value of silage for dairy cows; results at Glen Innes experiment farm. R. H. Genyns. Ag Gaz of New South Wales 29:809-11 N '18
- Varying tastes of cows. Rural N Y 75:205 F 5 '16
- War prices and dairy feeding. L. S. Riford and J. W. Bartlett. N J Ag Dept C 9 4p '17
- War rations for cows. E. B. Heaton. O Judd Farmer 64:3 Mr 30 '18
- War-time rations for dairy cows. C. W. Turner, jr. Hoard's D 54:689 D 7 '17
- Wartime rations for dairy cows. A. N. Wilcox. Country Gent 82:2030 D 22 '17
- War-time rations lower feed bills. G. C. Humphrey. Hoard's D 55:509 Ap 10 '18; Same. Jersey B 37:857+ My 29 '18
- War time savings in the herd. M. O. Maughan. Jersey B 37:545-6+ Ap 10 '18
- Wet beet pulp as a dairy feed. L. W. Hillam. Hoard's D 55:344 Mr 15 '18; Same cond. Kimball's D F 16:893 N 15 '18
- What are the dairyman's feed bills? Prac F 113:358 O 15 '17
- What can dairymen afford to feed? O Judd Farmer 61:3+ D 2 '16
- What for future feeding? E. Brown. Nat Stock & F 40:1271 F 24 '17
- What keeps profits low? W. C. Jeffries. *il* Ohio F 142:351 O 12 '18
- What to feed next winter? E. B. Heaton. O Judd Farmer 63:8 S 8 '17
- Why feed a balanced ration to dairy cows? E. J. Perry. *il* Penn State F 9:364-5 Ap '16
- Why have a balanced ration? C. H. Staples. Jersey B 37:2069 D 11 '18
- Year-round feeding of dairy cows. H. H. Dean. J Ag (Quebec) 20:180+ F '17
- Year-round feeding of dairy cows. C. H. Eckles. (*In* De Laval dairy hand book, p 15-18) '16 De Laval separator co., New York
- See also* Calves—Feeding; Feeding and feeding stuffs; Silage

**Fitting for show**

*See* Cattle—Fitting for show

**Judging**

- Beauty and utility. L. L. Rummell. *il* Country Gent 83:5 My 11 '18
- How to judge a dairy cow. H. G. Van Pelt. *il* (*In* De Laval dairy hand book, p 54-8) *il* '16 De Laval separator co., New York
- How to judge dairy cows. H. H. Dean. Prac F 112:179 Ap 15 '16
- Judging dairy cattle. J. A. McLean. *il* Field 11 28:150-1+, 234 Mr-Apr '18
- Judging dairy cows. G. C. Humphrey. *il* Wis Ag Exp B 274:1-41 '16; Excerpt. Jersey B 36:462-3 Mr 28 '17
- Judging the dairy cow. G. McKerron. Wis Dairymen's Assn Rep 1913-1916:202-7 '17
- Judging the dairy cow as a subject of instruction in secondary schools. H. P. Barrows and H. P. Davis. *il* U S Ag B 434:1-20 '16

**Cows—Judging—Continued**

Judging the Jersey cow—and the judges. O. S. Day. Jersey B 36:276 F 21 '17  
 More about the show ring. F. H. Scribner. Kimball's D F 14:455 JI 15 '16  
 Scorecard for dairy cows. E. G. Woodward. Breeder's Gaz 71:210 F 1 '17  
 Show ring and production. J. G. Watson. il Kimball's D F 15:89 F 15 '17

**Prices**

See Cattle—Prices

**Statistics**

Estimated number and value on farms, January 1, 1914-1917, by states. Monthly Crop Rep 3:4 Ja '17  
 Milch cows: estimated number and value on farms January 1, 1915-1918, by states. Monthly Crop Rep 4:12 F '18  
 Statistics of milk cows and prices of milk and butter. Creamery 7:30-1 Mr '18

**Transportation**

Crates for shipping cows. J. G. Morse. il Rural N Y 75:672 Ap 22 '16  
 Good care for traveling cows pays; rough handling reduces milk flow. Weekly N L 6:2 O 16 '18; Same. Jersey B 37:2076 D 11 '18  
 Shipping cows. Weekly N L 5:3 Ja 16 '18; Same. Jersey B 37:2339 F 13 '18; Same. Kimball's D F 16:135 F 15 '18; Same. Hoard's D 55:1066 JI 19 '18

**Cows, Age of**

Age at first calving. G. C. White. il J Dairy Sci 1:139-47 JI '17; Same cond. Wallaces' F 42:879 Je 1 '17  
 Age of dairy cows; Jersey breed. H. Jenkins. il Country Gent 81:1667 S 9 '16  
 Change of milk flow with age, as determined from the seven day records of Jersey cows. R. P. Pearl and S. W. Patterson. Maine Ag Exp B 262:145-52 '17; Same. Maine Ag Exp Rep 1917:145-52  
 Comparative table of milk production in dairy herds in relation to age and duration of lactation, in the United States. K. Pearl. Int R Sci & Prac Ag 8:no 2:269-72 F '17  
 Influence of age on the value of dairy cows and farm work horses. J. C. McDowell. U S Ag B 413:1-12 '16  
 Influence of the age of the cow on the composition and properties of milk and milk fat. C. H. Eckles and L. S. Palmer. bibliog J Ag Research 11:645-58 D 17 '17  
 Ration and age of calving; abstracts. C. H. Eckles. il Field II 26:37-9 Ja '16; Int R Sci & Prac Ag 7:no 10:1473-5 O '16  
 Relation of milk yield to age at first calf. R. C. Towles. Md Ag Exp B 217:227-38 '18  
 Value of dairy cows at various ages. Fla Ag Dept Quar B v 28:21-3 JI '18

**Cows, Care of**

Be kind to the cow. W. Johnson. Kimball's D F 16:598 Ag 1 '18  
 Care of milch cows. R. J. Dayton. il Prac F 112:10 Ja 1 '16  
 Conditions affecting milk flow. N. A. Newell. O Judd Farmer 60:20 F 19 '16  
 Cow, 4p il n.d. B. D. Butler, dir., U. S. Boys' working reserve, Room 47, 120 W. Adams st, Chicago  
 Cow and her health. L. R. Himmelberger. il Hoard's D 51:957 JI 14 '16  
 Dairy cow at freshening time. Hoard's D 54:514 N 2 '17  
 Details of winter dairy work. H. J. Season. Ohio F 139:74 Ja 20 '17  
 Developing the dairy heifer. Ohio F 138:437 N 4 '16  
 Does it pay to take extra care of cows? C. C. Hayden. il Ohio Ag Exp B v 1:245-8 Ag '16  
 Effect of ration and age of calving on dairy cows. C. H. Eckles. Jersey B 35:1807 N 15 '16  
 Fly spray for dairies. L. S. Gillette. Jersey B 37:1123 JI 17 '18  
 Good care for traveling cows pays; rough handling reduces milk flow. Weekly N L 6:2 O 16 '18; Same. Jersey B 37:2076 D 11 '18

Hints on dairy cow keeping. Jersey B 37:1429 S 4 '18  
 How to care for the milk cow. T. Butler. Prog F 33:688 Je 8 '18  
 In the background of the dairy show. A. Barber. Breeder's Gaz 70:1284 D 28 '16  
 Keeping cows out of corn. M. Coverdell. Jersey B 35:1393 S 6 '16  
 Making advanced registry records. E. B. Fitts. Hoard's D 54:698 D 7 '17  
 Milk flow increased; dipping does not reduce yield. Weekly N L 4:4 JI 11 '17; Same. Prog F 32:736 Je 30 '17; Same. Jersey B 36:1144 JI 25 '17  
 Milk production in the lean months. C. C. Hayden. il Ohio F 140:93-4 Ag 11 '17  
 Penalty of pampering. A. S. Alexander. Kimball's D F 15:524 Ag 1 '17  
 Preparing the young cow. J. G. Morse. Rural N Y 77:299 F 23 '18  
 Protect cows' teats and udder. Jersey B 36:2035 D 26 '17  
 Purebred cows and good care. Ohio F 141:308 Mr 2 '18  
 Raising of dairy heifers. R. R. Kerr. il J Dept Ag Victoria 14:385-97 JI '16  
 Sell the dairy cow? Nat Stock & F 41:913 D 22 '17  
 Summer dairy problems. W. M. Kelly. Ohio F 141:773 Je 15 '18  
 When dairy cows fight flies their milk flow decreases. Weekly N L 5:16 JI 31 '18; Same. Jersey B 37:1239 Ag 7 '18; Same. Hoard's D 56:235 S 13 '18  
 Winter care the dairy herd. W. M. Kelly. Ohio F 140:480 N 24 '17

**Cox, James M., 1870-**

Interview with Ohio's governor. F. A. Koenig. por Kimball's D F 16:291 Ap 15 '18  
 Portrait. Breeder's Gaz 71:325 F 15 '17

**Coyotes**

Committee urges systematic poisoning of coyotes. Nat Wool Grower 7:24 Ja '17; Same. Nat Wool Grower 7:11 F '17  
 Coyote destruction with hounds. il Am Sheep B & W 36:277 My '16  
 Coyotes killed in Colorado. J. G. Brown. Nat Wool Grower 8:54 Ap '18  
 Diplomat of the open range. G. F. Stratton. il Country Gent 82:2048-9+ D 29 '17  
 Fight against the coyote. C. Hayne. il Am Sheep B & W 38:503 Ag '18  
 Fighting the thieving coyote. il Am Sheep B & W 37:530 S '17  
 Making it hot for Mr Coyote. il Am Sheep B & W 37:207-8 Ap '17  
 Raising sheep on shares with Mr & Mrs Coyote. il Am Sheep B & W 36:137 Mr '16  
 Systematic poisoning of coyotes urged. T. M. Alexander and others. Nat Wool Grower 7:38 N '17  
 West stirred by rabies scourge. Am Sheep B & W 36:323 Je '16

**Crabapples**

Asiatic crabapples. Am Flor 46:42 Ja 22 '16  
 Crab-apples at the Arnold arboretum. Am Flor 48:1348 JI 7 '17  
 Flowering crabs. il Country Gent 82:600 Mr 24 '17  
 Japanese cherries and Asiatic crabapples. E. H. Wilson. il Gard M 23:75-8 Mr '16

**Crabs, Purse. See Purse crabs**

**Crabtree** venture in oil; story. F. Tilden. il Country Gent 82:1776-7+ N 17 '17

**Crabtree's** tractor joy-ride; story. F. Tilden. il Country Gent 83:6-7+ N 16 '18

**Craig, Robert Alexander**

Sketch. M. L. Fisher. Purdue Ag 10:17 Ap '16

**Crambidae. See Grass moths**

**Crambus hortuellus.** See Cranberry girdlers

**Cranberries**

Candied cranberries. Kimball's D F 14:30 Ja 15 '16; Same. Rural N Y 75:162 Ja 29 '16; J Home Econ 8:91-2 F '16; Same. O Judd Farmer 61:22 N 25 '16; Gard M 24:177 D '16  
 Cooking cranberries. Mrs S. N. Whittlesey. Wis Hort Soc Rep 1917:34-7  
 Cranberries in western Washington. J. L. Stahl. il Western Wash Ag Exp B v 6:79-82 S '18



**Cranberries—Continued**

- Cranberry culture. M. L. Urann. Mass Hort Soc Trans 1917, pt 1:103-7 '17  
Cranberry fertilization. H. J. Wheeler. (B. 5) 4p il n.d. Am. agricultural chemical co., 92 State st., Boston  
Cranberry industry; its possibilities in Canada. M. B. Davis. 30p il '16 Canada Ag  
Cranberry jelly made with honey. il Country Gent 83:35 N 16 '18  
Cranberry juice. Country Gent 81:1421 JI 22 '16  
Experiments with fertilizers on cranberries. F. P. Schlatter. N J Ag Exp Rep 1916:329-41 '17  
Report of cranberry substation for 1915. H. J. Franklin. Mass Ag Exp B 168:1-48 '16  
Report of the cranberry substation for 1916, by H. J. Franklin; and Observations on the spoilage of cranberries due to lack of proper ventilation, by C. L. Shear and others. Mass Ag Exp B 180:183-239 '17  
Report on the water supply in the cranberry bogs of New Jersey. F. O. Church. il N J Ag Exp Rep 1916:343-66 '17  
Spoilage of cranberries after harvest. C. L. Shear and others. bibliog U S Ag B 714:1-20 '18  
Sweetening the cranberries. Ohio F 142:514 N 23 '18; Same cond. Nat Stock & F 42:790 N 30 '18; Same cond. Better Fruit 13:19 D '18  
Turkey without. il Ag Digest 2:707 N '17

**Diseases and pests**

- Cranberry insect problems and suggestions for solving them. H. B. Scammell. il Farmers' B 860:1-42 '17  
Endrot of cranberries. C. L. Shear. il J Ag Research 11:35-42 O 8 '17  
False blossom of the cultivated cranberry. C. L. Shear. bibliog il U S Ag B 444:1-7 '16  
Temperatures of the cranberry regions of the United States in relation to the growth of certain fungi. N. E. Stevens. bibliog J Ag Research 11:521-9 D 3 '17

See also Cranberry girdlers; Cranberry rootworms; Cranberry vinehoppers

**Marketing**

See also American cranberry exchange

**Storage**

- Report of the cranberry substation for 1916, by H. J. Franklin; and Observations on the spoilage of cranberries due to lack of proper ventilation, by C. Shear and others. Mass Ag Exp B 180:183-239 '17

**Cranberry false blossom.** See Cranberries—Diseases and pests

**Cranberry girdlers**

- Cranberry girdler. H. B. Scammell. bibliog il U S Ag B 554:1-20 '17

**Cranberry rootworms**

- Cranberry rootworm. H. B. Scammell. bibliog il U S Ag B 263:1-8 '15

**Cranberry vinehoppers**

- Amphiscepa bivittata Say, in its relation to cranberry. H. B. Scammell. il J Econ Entom 10:552-6 D '17

**Cranes, derricks, etc.** See Hay derricks

**Cranesbill**

- Eradication of cranesbill from meadows. T. Milburn. J Bd Ag 23:688-9 O '16

**Crassulaceae.** See Sedum

**Crataegus.** See Hawthorn

**Crater lake national park**

- Crater lake national park. M. Daniels. il Am For 22:586-92 O '16

\* General information regarding Crater Lake national park. 23p bibliog maps '18 U.S. Nat. park service, Washington, D.C.

**Crates**

- Uses of wood. H. Maxwell. il Am For 24:533-41 S '18

See also Egg cases; Fruit crate presses

**Cream**

- Acidity of cream. N Y Prod R 44:686 Ag 29 '17  
Bitter cream. Rural N Y 75:214 F 5 '16

- Care of cream on the farm. G. M. Bock. Prog F 31:660 My 13 '16  
Care of cream on the farm. J. D. Jarvis. (In De Laval dairy hand book, p 43-6) il '16 De Laval separator co., New York  
\* Care of milk and cream. (B. 62) il plan 6p '16 Minn. Dairy and food dept., St Paul  
Care of milk and cream on the farm. W. Dempster. plan J Ag New Zealand 15:248-50 N '17  
Care of milk and cream on the farm. E. H. Farrington. il Wis Ag Ext C 63:1-16 '16  
Care of milk and cream on the farm. G. L. McKay. Breeder's Gaz 69:1329 Je 29 '16  
Caring for cream on the farm. H. A. Ruehe. Ill Ag Exp C 190 2p '17  
Caring for cream; to keep it in proper condition to secure representative sample. N Y Prod R 45:932 Ap 24 '18  
Cooling tanks and milk houses as factors in cream improvement. J. H. Frandsen. il plans Neb Ag Exp C 3:1-19 '17  
Cream ban in England. Jersey B 37:345 Mr 6 '18  
Cream production and grading in Kansas. G. S. Hine. il Kan Ag Exp C 56:1-4 '16  
Cream quality, chief sources of contamination. F. Wigan. Ag Gaz of New South Wales 27:415-20 Je '16  
Delivering cream sweet; under what conditions is it practicable and economical. N Y Prod R 46:288 Je 19 '18  
Effect of ripening cream on keeping quality and effect of freezing cream. E. S. Guthrie. N Y Prod R 41:800 Mr 8 '16  
Essentials in handling cream. L. A. Higgins. Prog F 31:809 Je 24 '16  
Farmer's part in improving our butter. S. L. Anderson. il Purdue Ag 12:148-50 D '17  
First grade cream. Hoard's D 52:609 N 17 '16  
Frothy and bitter cream. Rural N Y 75:206 F 5 '16  
Handling sour cream. N Y Prod R 46:166 My 29 '18  
Handling sweet cream when shipped for city or ice cream trade. N Y Prod R 46:508 JI 31 '18  
Hot-weather cream; handling at creamery. N Y Prod R 42:506 JI 19 '16  
How rich a cream should we skim? J. Bower. Hoard's D 52:372 O 6 '16  
How to produce cream of good quality. H. C. Ferguson. Prog F 32:632 My 26 '17  
Improvement in quality of cream throughout the Byron Bay-Tweed river district. A. M. Brown. Ag Gaz of New South Wales 28:399-400 Je '17  
Improving cream quality. A. M. Brown. N Y Prod R 44:734 S 5 '17  
Information for cream producers. A. C. Baer. Okla Ag Ext C 67 4p '18  
Lactation period. Wallaces' F 41:278 F 18 '16  
Leaks in the cream can. Mrs M. C. Blue. Ohio F 141:772 Je 15 '18  
Measuring the cream line. R. B. Stoltz. il Creamery 4:20 Ag '16  
More money in good cream. M. Blue. Kimball's D F 15:198 Mr 15 '17  
Preventable losses in the separation of milk and cream. M. R. Tolstrup. Am Coop J 11:519 Ja '16  
Production and care of milk and cream. Hoard's D 53:186 F 23 '17  
Production of first grade cream. R. C. Potts. il Okla Ag Exp B 108:1-11 Ja '16  
Short course on quality. H. R. Campbell. Hoard's D 51:462 Ap 7 '16  
Spring conditions affecting the cream producer. H. A. Ruehe. Ill Ag Exp C 195:1-4 '17  
Summer care of cream. Hoard's D 54:75 Ag 10 '17  
Sweet cream trade; suggestions for developing creamery business. N Y Prod R 43:310+ D 20 '16  
Treatment of cream. J. J. Ricketts. J Dept Ag Victoria 16:500-2 Ag '18  
Unfit cream. N Y Prod R 44:1122 O 31 '17  
Uses for sweet and sour cream. M. Palmer. Kimball's D F 15:471 JI 1 '17  
When is cream unfit for use in making creamery butter? N Y Prod R 42:390 Je 28 '16

**Cream—Continued**

Whipping 20% cream. E. H. Farrington. N Y Prod R 47:76 N 20 '18; Same. Hoard's D 56:628 N 29 '18

See also Dairy products

**Bacteriology**

Keeping qualities of butter, pt. 4, Cream ripening and its influence. C. E. Brown and K. Feiser. Mich Ag Exp Tech B 29:1-20 '16; Same. Mich Ag Bd Rep 1917:531-44  
Lactose fermenting yeast producing foamy cream. O. W. Hunter. bibliog il J Bact 3: 293-300 My '18

**Expansion**

Studies in the expansion of milk and cream. H. W. Bearce. J Ag Research 3:251-68 D '14

**Fat content**

Percentage of fat in sour and sweet cream. E. O. Hanson. Wallaces' F 43:1042 Jl 12 '18; Same. Hoard's D 56:29 Jl 26 '18  
Skim a thicker cream. C. W. Schwark. Hoard's D 55:1037 Jl 12 '18

**Grading**

A. T. C. classimeter. A. T. Charron. il J Ag (Quebec) 20:228 My '17  
Cream and butter grading in Saskatchewan. K. G. MacKay. Hoard's D 53:473 Ap 6 '17  
Cream grading. A. C. Baer. N Y Prod R 44: 894 O 3 '17  
Cream grading. J. D. Frandsen. N Y Prod R 43:386+ Ja 3 '17  
Cream grading. G. H. Guthrie. N Y Prod R 43:1064 Ap 25 '17  
Cream grading. H. C. Mills. il Purdue Ag 12: 276-7 F '18  
Cream grading experience. D. A. Wallace. N Y Prod R 43:980 Ap 11 '17  
Cream grading for Kansas. G. S. Hine. Kan Ag Exp C 39 4p n.d.  
Cream grading in Canada. N Y Prod R 43: 428 Ja 10 '17  
Discussion of cream grading. O. C. Cunningham. Ohio F 138:174 Ag 26 '16  
Grading and labeling of milk and cream. 24p il '16 Boston Chamber of commerce; Same cond. Creamery 5:30-3 S '16  
Grading cream. B. E. Bragg. Hoard's D 51: 693 My 19 '16  
Grading cream. L. A. Higgins. Prog F 32:586 My 12 '17  
Missouri cream grading rules. Wallaces' F 41:1607 D 8 '16

**Haulage**

See Creameries—Haulage of cream

**Neutralization**

Acidity and butter. F. W. Bouska. N Y Prod R 45:814-15 Ap 3 '18  
Co-op. creameries and neutralizers. N Y Prod R 46:278 Je 12 '18  
Cream neutralization. G. L. McKay. N Y Prod R 45:781 Mr 27 '18  
Minnesota's brief to joint committee on definitions and standards; urge labeling of neutralized cream butter. N Y Prod R 46: 734-5 S 18 '18  
Neutralising acidity in cream. L. T. MacInnes and A. A. Ramsay. Ag Gaz of New South Wales 29:42-6 Ja '18  
Neutralization of cream for buttermaking; a consideration of the details and chemistry of the process. O. F. Hunziker. N Y Prod R 46:812+ O 2 '18  
Neutralization of sour cream in butter making. G. E. Owen. Purdue Ag 11:29-30 Ja '17  
Neutralizer on trial. E. H. Farrington. N Y Prod R 46:512 Jl 31 '18  
Partial neutralization of acidity in cream. M. A. O'Callaghan and A. A. Ramsay. Ag Gaz of New South Wales 29:115-27 F '18; Same. N Y Prod R 46:408+, 444+ Jl 10-17 '18  
Pasteurisation. O. C. Ballhausen. Ag Gaz of New South Wales 29:585-91 Ag '18  
Relative functions of pasteurization and neutralization of cream in buttermaking. M. Mortensen. N Y Prod R 46:674 S 4 '18

Use of neutralizers; a discussion of their advantages and disadvantages. N Y Prod R 42:266 Je 7 '16

**Pasteurization**

Beginnings of pasteurization for use in the manufacture of creamery butter. N Y Prod R 45:268-9 D 26 '17  
Compulsory pasteurization. N Y Prod R 44:50 My 9 '17  
Cost of pasteurizing milk and cream. J. T. Bowen. U S Ag B 85:1-12 '14  
Cream pasteurization. N Y Prod R 42:621, 654+, 696 Ag 9-23 '16  
Improvement in quality of butter at Wisconsin creameries. T. J. Warner. N Y Prod R 44: 1025 O 17 '17  
Improved pasteurising plant. O. C. Ballhausen. Ag Gaz of New South Wales 29:128-30 F '18  
Pasteurisation. O. C. Ballhausen. Ag Gaz of New South Wales 29:585-91 Ag '18  
Pasteurization; experience in its cost and value when followed in buttermaking. N Y Prod R 45:10 N 7 '17  
Pasteurization for buttermaking. H. B. Osgood. N Y Prod R 41:956 Mr 29 '16  
Pasteurization of cream. C. Larsen and others. il S D Ag Exp B 171:529-48 '16  
\* Pasteurization of cream for buttermaking. (B. 63) 18p '16 Minn. Dairy and food dept., St Paul  
Pasteurization of cream for buttermaking. O. F. Hunziker. N Y Prod R 42:234-5 My 31 '16; Same. Creamery 4:14 Je '16; Same. Hoard's D 51:868 Je 23 '16  
Pasteurization of sour, farm-skimmed cream for buttermaking. O. F. Hunziker and others. Ind Ag Exp B 208:1-76 '17; Excerpts. N Y Prod R 45:372, 438, 548; 46:640; 47:50, 80 Ja 16, 30, F 20, Ag 28, N 13-20 '18; Summary. Ind Ag Exp Rep 1917:33-5 '18  
Pasteurization; treating cream for ice cream making. B. D. White. N Y Prod R 42:516 Jl 19 '16  
Pasteurized butter. E. H. Farrington. N Y Prod R 41:1048+ Ap 12 '16  
Pasteurized-cream butter. N Y Prod R 42: 278 Je 7 '16  
Pasteurizing costs as related to plant operation. J. Sollie. Creamery 4:22 Ag '16; Same. N Y Prod R 42:584 Ag 2 '16  
Relative functions of pasteurization and neutralization of cream in buttermaking. M. Mortensen. N Y Prod R 46:674 S 4 '18  
Urges compulsory pasteurization. W. F. Jensen. N Y Prod R 41:975 Mr 29 '16

**Prices**

Price basis; when butterfat is purchased outright from patrons. N Y Prod R 43:534 Ja 31 '17  
Quality payments. N Y Prod R 42:350 Je 21 '16  
What will be the cost of milk and cream in 1917? J. Gordon. Creamery 5:20-2 D '16

**Sampling**

Cream sampling; when and how often tests are made. N Y Prod R 45:688 Mr 13 '18  
Sampling uneven cream. N Y Prod R 45:852 Ap 10 '18

**Standards**

Report of the committee on legislation and legal limits for the control of milk and cream. Int Assn Dairy & Milk Inspec Rep 1916:60-70  
Standardizing cream. N Y Prod R 42:254 My 31 '16; Same. Creamery 4:20 Je '16; Same. Hoard's D 51:967 Jl 14 '16; Same. Jersey B 35:1512 S 27 '16  
\* Standards for cream are urged. Toledo City J (412 Valentine bldg., Toledo, Ohio, 5c) 3:530 N 16 '18

**Testing**

Butter and butterfat. W. H. Cooper. Country Gent 82:1355 S 1 '17  
Catching cream crooks. Country Gent 81:448 F 26 '16  
Cream separator variations. C. H. Eckles. O Judd Farmer 60:7 Je 24 '16



**Cream—Testing—Continued**

- Cream test scales. N Y Prod R 43:750 Mr 7 '17
- Cream testing balances. O. F. Hunziker and others. *il* Ind Ag Exp B 189:1-19 '16; Same cond. N Y Prod R 42:930+ O 4 '16
- Cream tests by weight instead of measure. O. F. Hunziker. Country Gent 82:124 Ja 20 '17
- Creamery testing rules. N Y Prod R 44:626-7 Ag 15 '17
- Estimating cream tests. R. A. Lamson. Hoard's D 53:827 Je 8 '17
- Handling acid. N Y Prod R 44:582 Ag 8 '17
- Milk and cream contests. E. Kelly and others. U S Ag B 356:1-23 '16
- New testers license law. New York; text. N Y Prod R 44:302 Je 20 '17
- Patrons' contest. N Y Prod R 42:186 My 24 '16
- Specifications and directions for testing milk and cream for butterfat. O. F. Hunziker. J Dairy Sci 1:38-44 My '17
- Standardizing milk and cream. H. F. Judkins. Wallaces' F 41:280 F 18 '16
- Testing cream for fat. N Y Prod R 42:549 Jl 26 '16
- Testing milk and cream. *il* Hoard's D 52:560 N 10 '16
- Testing milk and cream. O. F. Hunziker. N Y Prod R 42:690+ Ag 23 '16
- Testing milk and cream. M. R. Tolstrup and M. Mortensen. *il* Ia Ag Exp C 32:1-8 '16; Same. Kimball's D F 15:230+ Ap 1 '17; Same. N Y Prod R 44:150+ My 23 '17
- Testing milk and cream for butter-fat. R. E. Caldwell and others. *il* Ind Ag Exp C 78:1-15 '18
- Variations in cream tests and common causes. G. M. Bock. Prog F 31:808 Je 21 '16
- Variations in cream tests; differences between butter and butter fat. W. A. Wilson. (Saskatchewan Dept. Ag. B. 43 15p. '16). Exp Sta Record 38,no 3:280 '18
- Variations in milk and cream tests. S. C. Thompson. Maine Ag Dept B v 18:67-81 Je '18
- Variations in the cream test. C. H. Eckles. Wallaces' F 41:827 Je 2 '16; Same. Jersey B 35:1233 Ag 9 '16
- Weighing and measuring cream for testing. I. J. Mathews. Ohio F 137:299 F 26 '16
- Why cream tests vary. Creamery 5:50 Je '17; Same. Wallaces' F 42:951 Je 22 '17
- Why cream tests vary. Ohio F 141:221 F 16 '18
- Why cream tests vary. P. Blackburn. Purdue Ag 12:150-1 D '17
- Why cream tests vary. W. H. Cooper. Country Gent 81:156 Ja 22 '16
- Why cream tests vary. H. A. Ruehe. *il* Ag Exp C 192 2p '17; Same. N Y Prod R 43:706 F 28 '17; Same. Hoard's D 53:754 My 25 '17; Same. Jersey B 36:1179 Ag 1 '17
- Why do cream tests vary? L. M. Dorsey. Jersey B 36:555 Ap 11 '17

**Transportation**

- Protecting cream while en route from farms to creamery. N Y Prod R 44:794 S 19 '17
- Rich cream and transportation. R. A. Lamson. Kimball's D F 16:78 F 1 '18
- Urge reforms to stop cream loss. J. B. Newman. Creamery 7:34 D '18; Same. N Y Prod R 47:148 D 4 '18

**Cream, Clotted**

- Clotted cream. W. Sadler. *il* J Dairy Sci 1: 291-302 N '17
- Devonshire clotted cream. W. H. Cooper. Country Gent 81:1789 O 7 '16
- New possibilities in dairying; the making of clotted cream. W. Sadler. J Ag (Quebec) 19: 198 Mr '16

**Cream, Homogenized**

- Homogenized cream used in cheese making. (In Report. 1917, p. 83-9) '17 Quebec ag. dept., Quebec

**Cream cans**

- Cream cans; styles preferred—how can we prolong normal life? N Y Prod R 46:476 Jl 24 '18

**Cream cooling.** See Milk cooling

**Cream of tartar**

- Crystallization of cream of tartar in the fruit of grapes. W. B. Alwood. J Ag Research 1: 513-14 Mr '14

**Cream separators**

- Care of the cream separator. H. A. Ruehe. *il* Ag Exp C 191 2p '17; Same. N Y Prod R 43: 698 F 28 '17; Same. Hoard's D 54:703 D 7 '17
- Care of the cream separator important. M. Coverdell. Jersey B 35:1280 Ag 16 '16
- Facts about the cream separator. A. J. Reed. *il* Prog F 31:178 F 5 '16
- Getting the most out of a separator. I. E. Bloye. Prac F 113:325 S 15 '17
- Hand separator and the gravity systems of creaming. Creamery 4:18 Ag '16
- Hand separator tests. N Y Prod R 44:946 O 10 '17
- Hints on the separator. J. W. McKenzie. J Dept Ag Victoria 15:119-20 F '17
- Look to the speed of your cream separator. R. Olney. Power F 25:26 N '16
- Necessity of the cream separator. R. A. Lamson. Purdue Ag 12:360 Mr '18
- Operation and care of the separator. Ohio F 141:351 Mr 9 '18
- Relation of the farm cream separator to butter production and the use of neutralizers. T. A. Borman. N Y Prod R 46:1022-3 O 30 '18
- Running a cream separator. Hoard's D 56:144 Ag 23 '18
- Separator care. N Y Prod R 44:506 Jl 25 '17
- Speed of the cream separator. Field *il* 27:634 Ag '17
- Wastes in the separation of cream. E. S. Guthrie. *il* Cornell Countryman 14:737 Je '17
- Why we bought a cream separator. W. O. C. Ellis. Nat Stock & F 41:865 D 8 '17

**Creameries**

- Action in North Dakota; regulations approved by Food administrator applying to cream stations. N Y Prod R 46:518 Jl 31 '18
- Advantages of cheese factory vs. creamery. J. L. Sammis. Hoard's D 54:493 N 2 '17
- Advice to patrons; how can it be carried to them in an economical manner? N Y Prod R 45:812 Ap 3 '18
- Alabama creameries; growth of southern creamery industry indicated by recent meeting. N Y Prod R 45:368 Ja 16 '18
- Alabama creamery. *il* Hoard's D 51:233 Mr 3 '16
- Cheese factory and creamery inspection in Quebec. E. Bourbeau. J Ag (Quebec) 20:130 D '16
- Cheese factory and creamery instruction and inspection in the provinces. *il* Ag Gaz of Canada 3:964-85 N '16
- Clean flavored raw material. Hoard's D 51: 246 Mr 3 '16
- Cream station problem. D. F. Mattson. Ohio F 137:792 Je 10 '16
- Cream stations a detriment to dairy development. T. Butler. Prog F 33:879 Ag 10 '18
- Creamery and cheese factory building. E. H. Farrington. *il* plans Hoard's D 53:944-5 Jl 6 '17
- Creamery and testers' license law. O. F. Hunziker and G. L. Ogle. map plan Ind Ag Exp C 55:1-34 '16
- Creamery insurance. N Y Prod R 44:133 My 23 '17
- Creamery landscaping. *il* Wallaces' F 42:683 Ap 20 '17
- Creamery or condensery? N Y Prod R 44:554 Ag 1 '17
- Creamery surroundings. N Y Prod R 42:226-7 My 31 '16
- Dairy plant construction. *il* plan Creamery 5:19-20 Mr '17
- Factories registered under the dairy industry act. Ag Gaz of New South Wales 28:655-9 S '17
- Facts about creamery refrigeration. J. H. Speed. Creamery 4:34-5 Mr '16
- Field man for creamery work. N Y Prod R 43:794+ Mr 14 '17
- Fire prevention; suggestions for a creamery not fireproof in construction. N Y Prod R 46:868 O 9 '18

**Creameries—Continued**

- 4th annual report of the Creamery license division for the year ending March 31, 1918. R. E. Caldwell and T. H. Broughton. map Ind Ag Exp C 81:1-44 '18
- Help the creamery. Country Gent 81:568 Mr 11 '16
- History of the centralizer movement. D. F. Mattson. Ohio F 137:566 Ap 15 '16; Same. N Y Prod R 42:314 Je 14 '16; Same abr. Purdue Ag 10:27 Ja '16
- How a creamery is building up herds. C. A. Whittle. Hoard's D 56:25 Jl 26 '18
- Licensing testers where milk or cream is bought by Babcock test. N Y Prod R 41:502+ Ja 19 '16
- Limiting cream stations. Hoard's D 56:136 Ag 23 '18; Same. N Y Prod R 46:644 Ag 28 '18
- Marketing of Wisconsin butter; organization, ownership and control of creameries. B. H. Hibbard and A. Hobson. il maps Wis Ag Exp B 270:5-17 '16
- Minnesota creameries; sanitary conditions. J. J. Farrell. N Y Prod R 42:16 Ag 26 '16
- Minnesota state brand. N Y Prod R 41:693 F 23 '16
- Model creamery; Fox river butter co. il Creamery 5:38-40 Ag '17
- New creamery; advice to a buttermaker planning to start one. N Y Prod R 43:422+ Ja 10 '17
- 1916 B. of A. I. report. N Y Prod R 43:318 D 20 '16
- Patrons and buttermakers. C. L. Larsen. Kimball's D F 15:182 Mr 15 '17
- Planning that new milk plant. W. C. Davis. Creamery 5:20-1 Mr '17
- Propose to restrict cream buying; Wisconsin dairy commissioner joins movement started in North Dakota and Minnesota. G. J. Weigle. N Y Prod R 46:578 Ag 14 '18; Same; Hoard's D 56:134 Ag 23 '18; Same. Creamery 7:33 S '18
- Protection from cold. N Y Prod R 45:334 Ja 9 '18
- Purdue creamery. C. A. Brown. il Purdue Ag 11:28-30 N '16
- Remarkable creamery; model plant of the Fox river butter company of Chicago. il N Y Prod R 44:690 Ag 29 '17
- Seasonal differences which may cause a variation in the average monthly overrun. N Y Prod R 45:736+ Mr 20 '18
- Selma creamery of Alabama. Hoard's D 55:646 My 3 '18
- Small plant handicap. N Y Prod R 42:614+ Ag 9 '16
- Starting a creamery. N Y Prod R 44:758 S 12 '17
- Startling proposition; Commissioner Sorenson wants Minnesota cream buying stations closed up when competing with local creameries. N Y Prod R 46:518 Jl 31 '18; Same. Creamery 7:26 Ag '18
- Value of a laboratory. F. W. Robison. N Y Prod R 44:950 O 10 '17
- Where did the butter go? J. N. Muncey. Wal-laces' F 41:330 F 25 '16
- Woman does man's work and wins! M. R. Tolstrup. il Hoard's D 55:89 F 8 '18
- Work at Purdue; creamery license division. N Y Prod R 42:58 My 3 '16

*See also* Churns; Dairying; also California creamery operators; Garden state dairies; Polk sanitary milk company

**Accounting**

- Accounting records for country creameries. J. R. Humphrey and G. A. Nahstoll. U S Ag B 559:1-37 '17
- Accounting systems. M. Tolstrup. Kimball's D F 15:585 S 1 '17
- Creamery accounting; a modern, complete and simple system. N Y Prod R 44:588 Ag 8 '17
- Creamery records. O. W. Holmes. Idaho Ag Exp B 90:1-19 '16
- Marketing business practice in its relation to the dairy industry. F. Robotka. Coop Manager & F 7:66-8 F '18
- Vermont creameries install new accounting system. M. R. Tolstrup. Hoard's D 54:289 S 28 '17

**By-products**

- Creamery by-products; can they be more advantageously utilized as a source of food? N Y Prod R 45:298+ Ja 2 '18

**Cost of operation**

- Marketing Wisconsin butter. B. H. Hibbard and A. Hobson. N Y Prod R 43:302, 314+ D 20 '16
- Price for making butter. N Y Prod R 41:610-11 F 9 '16
- Vital question; what is your operating expense per pound of butter manufactured? N Y Prod R 43:746 Mr 7 '17

**Equipment**

- Boiler room economies. W. A. Lailer. N Y Prod R 44:958+ O 10 '17
- Buttermaker's shoe. N Y Prod R 43:270 D 13 '16
- Can washers; experience of members with this form of equipment. N Y Prod R 46:636 Ag 28 '18
- Cleaning the creamery; equipment and arrangements which will lighten the labor. N Y Prod R 45:640 Mr 6 '18
- Experiences where extreme cold damaged equipment. N Y Prod R 41:426+ Ja 5 '16
- Hot water supply. N Y Prod R 42:138 My 17 '16
- Interior finish for the make room and finish for exterior of churn. N Y Prod R 45:892 Ap 17 '18
- Kerosene engine. L. Dickey. N Y Prod R 44:274 Je 13 '17
- Power efficiency. N Y Prod R 44:96+ My 16 '17
- Power equipment; some general hints on keeping power equipment clean and orderly. N Y Prod R 47:10 N 6 '18
- Refrigerator. N Y Prod R 44:830-1 S 26 '17
- Running belts crosswise; what are the disadvantages and how may the necessity be avoided? N Y Prod R 46:82 My 15 '18
- Sanitary tubing in dairy products plants. C. M. Cuppel. Creamery 4:37 Jl '16; Same. N Y Prod R 42:438 Jl 5 '16
- Second-hand machinery. N Y Prod R 43:890 Mr 28 '17

*See also* Creamery machinery

**Haulage of cream**

- Cost of hauling cream. N Y Prod R 41:1034-5 Ap 12 '16
- Cream hauling. N Y Prod R 41:842+ Mr 15 '16
- Hauling costs; suggestions for reducing them between farm and creamery. N Y Prod R 44:654 Ag 22 '17
- Managing routes. N Y Prod R 41:1078-9 Ap 19 '16
- Team or auto. N Y Prod R 42:10 Ap 26 '16

**Heating**

- Heating the creamery. N Y Prod R 43:346 D 27 '16

**Management**

- Artificial refrigeration. Creamery 4:23-4 Ap '16
- Banishing sour cream. H. E. Forester. N Y Prod R 46:804 O 2 '18
- Buttermaker of tomorrow; with discussion. C. E. Lee. Ia Ag Bd Yearbook 1916:372-9
- Checking cans. N Y Prod R 42:830 S 20 '16
- Checking overrun. N Y Prod R 45:588 F 27 '18
- Checking up. N Y Prod R 42:94 My 10 '16
- Cheddar cheese dept. N Y Prod R 44:266 Je 13 '17
- Cleaning walls and ceilings; how and how often is the work done in a creamery? N Y Prod R 46:1020 O 30 '18
- Controlling the help. N Y Prod R 44:90 My 16 '17
- Creamery efficiency. N Y Prod R 43:1054+ Ap 25 '17
- Creamery labor situation; large city plants said to have most difficulty—the employment of women. N Y Prod R 46:364 Jl 3 '18
- Creamery management. J. L. Jensen. N Y Prod R 44:510 Jl 25 '17
- Creamery management. S. C. Thompson. N Y Prod R 41:698+ F 23 '16



**Creameries—Management—Continued**

- Creamery power. N Y Prod R 43:686+ F 28 '17  
 Creamery sidelines. N Y Prod R 44:306 Je 20 '17  
 Creamery sidelines; locating ice cream making and poultry feeding departments. plan. N Y Prod R 47:210 D 18 '18  
 Cut out the wastes in war measure. W. C. Davis. Creamery 5:28 Jl '17  
 Delivering cream sweet; under what conditions is it practicable and economical. N Y Prod R 46:288 Je 19 '18  
 Economic factors which affect the cost of creamery butter. G. E. Haskell. N Y Prod R 45:270+ D 26 '17  
 Eliminating creamery wastes. N Y Prod R 44:128 My 16 '17  
 Fuel economy in the creamery—suggestions from club members. N Y Prod R 47:106+ N 27 '18  
 Fuel supply; outlook for adequate winter reserve. N Y Prod R 46:796 O 2 '18  
 Handling butter from time it enters tubs till shipped from creamery. N Y Prod R 46:980 O 23 '18  
 Ice cream department for the butter factory. N Y Prod R 46:330 Je 26 '18  
 Management of the creamery patron. O. F. Hunziker. N Y Prod R 43:58+ N 8 '16; Same cond. Hoard's D 52:578+ N 17 '16  
 Marketing practices of Wisconsin and Minnesota creameries. R. C. Potts. il U S Ag B 690:1-15 '18; Same abr. N Y Prod R 46:642-3, 888+ Ag 28, O 9 '18  
 Mechanical losses. N Y Prod R 45:400 Ja 23 '18  
 More economy. N Y Prod R 45:82+ N 21 '17  
 Motor trucks; their adaptability for cream gathering—gasoline vs. the horse. N Y Prod R 46:440 Jl 17 '18  
 Office management in the creamery. N Y Prod R 42:50 My 3 '16  
 Paying for fat. N Y Prod R 43:498 Ja 24 '17  
 Points in butter-factory management under home separation. G. M. Valentine. J Ag New Zealand 13:17-25 Jl '16  
 Poultry sideline; possibilities of an extra profit when poultry is dressed or shipped alive. N Y Prod R 46:764 S 25 '18  
 Power economy; steam, gas and electricity. O. A. Storvick. N Y Prod R 41:1082+ Ap 19 '16  
 Power efficiency. N Y Prod R 44:96+ My 16 '17  
 Securing supplies. N Y Prod R 45:536 F 20 '18  
 Sweet cream delivery. N Y Prod R 47:174 D 11 '18  
 Sweet cream trade; suggestions for developing creamery business. N Y Prod R 43:310+ D 20 '16  
 Tempering wash water. N Y Prod R 43:842 Mr 21 '17  
 Use of electric power in dairy products plants. il Creamery 5:17-19 D '16  
 Use of fuel; suggestions for greater economy in the creamery boiler room. N Y Prod R 45:266-7 D 26 '17  
 Volume of butter production to be noted and reported weekly by U. S. Office of markets. C. J. Brand. N Y Prod R 43:938 Ap 4 '17

**Sanitation**

- Cleanliness in dairy products plants. Creamery 4:26 F '16  
 Creamery sanitation. H. B. Wood. Creamery 4:20-1 Ap '16  
 Milk plant sanitation. Creamery 4:11 Ja '16  
 Sanitary suggestions. G. J. Weigle. N Y Prod R 41:916-17, 950, 996+ Mr 22-Ap 5 '16

**Statistics**

- Butter factories and cheese factories operated in 1916; dairy statistics for 1915 as reported by the operators of butter and cheese factories. 81p '17 Dairy and food commissioner, Madison, Wis.  
 List of butter and cheese factories, milk stations and condensing plants in New York state. N Y Ag Dept B 88:1-72 O '16

Minnesota creameries, cheese, ice cream and canning factories; creamery list for 1917; creamery statistics for 1910 to 1916. 79p il '17 Minn. State dairy and food dept., St Paul

**Ventilation**

- Creamery and milk plant ventilation. L. Klima. Creamery 5:27-8 Ap '17  
 Creamery ventilation. F. G. Kraege. N Y Prod R 43:694 F 28 '17  
 Ventilation. N Y Prod R 45:118 N 28 '17

**Creameries, Cooperative**

- Better butter methods; records and accounting. A. H. Loucks. Kimball's D F 15:215 Mr 15 '17  
 California dairymen can lead world. E. H. Webster. Hoard's D 54:94 Ag 17 '17  
 Community that found itself. Grove City, Pa. L. L. Rummell. il Ohio F 142:320-1 O 5 '18  
 Co-operation in Vermont. N Y Prod R 44:762 S 12 '17  
 Co-operative creameries. Int R Ag Econ 62:14-19 F '16  
 Cooperative creameries. B. H. Hibbard and A. Hobson. map Wis Ag Exp B 282:7-10 '17  
 Cooperative creameries and cheese factories in Minnesota, 1914. E. D. Durand and F. Robotka. maps Minn Ag Exp B 166:1-53 '17  
 Co-operative creameries and the income tax. Hoard's D 52:424 O 20 '16  
 Co-operative creameries in Georgia. Am Coop J 12:155 O '16  
 Cooperative creameries in Ireland. Ag Digest 2:923-4 Ap '18  
 Cooperative creameries in Saskatchewan. P. E. Reed. il Hoard's D 52:688 D 8 '16  
 Co-operative creameries pay well. A. J. McGuire. Jersey B 35:1061 Jl 5 '16  
 Co-operative creamery. J. G. Watson. Kimball's D F 14:182 Mr 15 '16  
 Co-operative creamery in Oklahoma. T. W. Moseley. Hoard's D 54:455 O 26 '17  
 Cooperative plan that resulted in increasing profits a fifth. E. E. Dunn. il System on the Farm 1:299-301 O '17  
 Co-operatives to co-operate. Wallaces' F 41:540 Mr 31 '16  
 Correct payments for milk. J. L. Sammis. il Kimball's D F 15:638 S 15 '17  
 Cream producer's opportunity. R. C. Gano. il Kimball's D F 15:85-6 F 15 '17  
 Creamery laundry. N Y Prod R 43:150 N 22 '16  
 Creamery-laundry. E. H. Farrington. il Kimball's D F 14:755-6 D 1 '16  
 Creamery organization and construction. M. Mortensen. il Kimball's D F 16:65+ F 1 '18  
 Creamery promoters. W. A. Gordon. il Kimball's D F 14:723 N 15 '16  
 Creamery run by Uncle Sam. il Ohio F 139:318 Mr 3 '17  
 Creamery supersedes sawmill. C. J. Emery. Hoard's D 54:492 N 2 '17  
 Eatonton co-operative creamery. C. W. McClelland. il Hoard's D 51:661 My 12 '16  
 Famous co-operative creamery. O Judd Farmer 60:7 F 26 '16  
 Farmers' co-operative creamery company. W. R. Reek. Ag Gaz of Canada 5:274-5 Mr '18  
 Federal creamery at Grove City. Pa. E. Brown. Hoard's D 51:321 Mr 10 '16  
 Fergus Fall's good showing. N Y Prod R 44:586 Ag 8 '17  
 Government creamery at Grove City. Pa. M. Barnes. il Country Gent 81:388 F 19 '16  
 Guthrie Center, Iowa, creamery. il Wallaces' F 43:1691 Jl 26 '18  
 High school creamery at Duluth. Kimball's D F 14:535 S 1 '16; Same cond. Hoard's D 51:698 My 19 '16  
 How I trebled my income. System on the Farm 3:135-6 O '18  
 Largest co-operative creamery in New England holds picnic on top of mountain. il Am Coop J 12:56 S '16  
 Local dairy team-work. Ohio F 139:552 Ap 14 '17  
 Local dairy team-work; experience with a co-operative creamery. A. Hochmeister. Ohio F 139:612 Ap 28 '17

**Creameries, Cooperative—Continued.**

- Local dairy team-work; how a California group of dairymen co-operated. C: H. Durbin. Ohio F 139:514 Ap 7 '17
- Loyalty to the co-operative. Wallaces' F 41: 665 Ap 28 '16
- Michigan association of co-operative creameries. G. E. Watts. Hoard's D 52:585 N 17 '16
- Milk-made community. C: E. Gapen. il Country Gent 83:13 F 9 '18
- New England creamery. M. R. Tolstrup. il Kimball's D F 15:350 My 15 '17
- New move in Minnesota. N Y Prod R 42:804 S 13 '16
- New York co-operative creamery. H. H. Lyon. Hoard's D 52:734 D 15 '16
- Oregon creameries organize for co-operative marketing. N Y Prod R 41:742 Mr 1 '16
- Oregon creamery. Country Gent 81:568 Mr 11 '16
- Organization of a co-operative creamery or cheese factory; with forms of agreement, etc. Hoard's D 51:541+ Ap 21 '16
- Origin and growth of the union of Siberian creamery associations. G. M. Yarkoff. Int R Ag Econ 9,no 1:18-21 Ja '18
- Price of success in co-operative creameries. A. J. McGuire. Kimball's D F 15:887 D 15 '17
- Progress in Vermont. N Y Prod R 42:618 Ag 9 '16
- Real co-operative creamery; Minerva valley creamery, Marshall county, Iowa. il Wallaces' F 43:167 F 1 '18
- Successful co-operative creamery. W. S. Campfield. Prog F 32:608 My 19 '17
- Successful creamery at Petaluma, Cal. W. B. Hopkins. il Kimball's D F 15:142 Mr 1 '17
- Support co-operative creameries and take monthly payments. A. J. McGuire. Prog F 31:962 Ag 5 '16
- Support the co-operative. Wallaces' F 41:618 Ap 14 '16
- True co-operative creamery. Rural N Y 75: 1199 S 16 '16
- Turner Center creamery. il Country Gent 82: 175 S 7 '17
- Turner Center dairy association. E. L. Bradford. Jersey B 36:677 My 2 '17
- Uncle Sam operates co-operative creamery at Grove City, Pennsylvania. il Am Coop J 11:1161+ Jl '16
- Uncle Sam's creamery at Grove City, Pa. il Hoard's D 52:344-5 O 6 '16
- Unique creamery business. M. G. Feint. Ohio F 139:515 Ap 7 '17
- Vermont co-operative creamery association. M. R. Tolstrup. Hoard's D 53:387 Mr 23 '17
- Vermont creamery housewarming. N Y Prod R 43:238 D 6 '16; Same. Hoard's D 52:730 D 15 '16; Same. Kimball's D F 14:789 D 15 '16
- Washington creamery report. Hoard's D 53: 788 Je 1 '17
- Ways of the wily promoter. Hoard's D 52:52 Ag 4 '16
- What a local creamery has done. M. Barnes. Hoard's D 54:59 Ag 10 '17
- Where cows are shares. W. F. Vedder. Am Coop J 12:742 Jl '17
- Year at Richmond, Vt. N Y Prod R 45:340 Ja 9 '18
- See also Dairies, Cooperative*
- Creamery butter manufacturers, American association of.** *See* American association of creamery butter manufacturers
- Creamery laboratories.** *See* Dairy laboratories
- Creamery machinery**  
Operations in a creamery machinery plant. F. A. Stanley. il Am Machinist (10th av at 36th st., N. Y. 15c) 48:177-81 Ja 31 '18
- Creatinine**  
Creatinine production by b. coli and b. typhi. H. J. Sears. bibliog J Bact 2:187-9 Mr '17
- Effect of autolysis upon muscle creatin. R. Hoagland and C. N. McBryde. bibliog J Ag Research 6:535-47 Jl 3 '16
- Crèches.** *See* Day nurseries

**Credit**

- Coal dealer's credit. C. H. Rennie. Am Coop J 12:164 O '16
- Credit. Wallaces' F 42:991 Jl 6 '17
- Granting of credit. S. T. Nivling. N Y Prod R 44:480-1 Jl 18 '17
- How I strengthen my credit. F. E. Bell. System on the Farm 1:361 D '17
- See also Agricultural credit; Collecting of accounts; Loans*
- Argentina**  
Banco el Hogar Argentino in 1915-16. Int R Ag Econ 79:46-7 Jl '17
- Business of the Mortgage company of the River Plate, Ltd., in 1916. Int R Ag Econ 79:47-8 Jl '17
- China**  
Functions of the agricultural and industrial banks. Int R Ag Econ 79:48-50 Jl '17
- Denmark**  
*See also Land credit associations*
- Germany**  
Prorogation of mortgage debts from 31 July 1914 to 31 December 1916. Int R Ag Econ 81:56-8 S '17
- Prussian legislation as to the Reutenguter and its results from 1891-1914. Int R Ag Econ 79:41-5 Jl '17
- Italy**  
Istituto nazionale di credito per la cooperazione. Int R Ag Econ 9,no 2:118-20 F '18
- Crédit foncier.** *See* Agricultural credit—France
- Credit unions**  
Credit union and the co-operative store. A. H. Ham. 8p '17 Russell Sage Foundation, Division of remedial loans, 130 E. 22d st., N. Y.
- Credit unions, an experiment in democracy. G. A. Flynn. Nat Conf Charities and Corrections. Pro (Wm. T. Cross, 315 Plymouth Court, Chicago \$2) 1916:430-3
- What is a credit union? W. R. Camp. N C Ag Ext C 60:1-4 '18
- Women should know about credit unions. Prog F 31:932 Jl 29 '16
- You should know about credit unions. 54p '17 Mass. credit union assn., 78 Devonshire st, Boston
- Credit unions, Agricultural**  
Credit unions and National farm loan associations. W: R. Camp. (In Nat. conf. on marketing and farm credits, 1916, p. 50-8) \$2 '17 C. W. Holman, sec., Madison, Wis.
- How a credit union works: Lowe's Grove. N. C. R. Thomas. Prog F 33:293 Mr 2 '18
- How to organize a credit union. W: R. Camp. N C Ag Ext C 39:1-4 '17
- Making the farmer his own banker. W: R. Camp. Prog F 31:450 Mr 25 '16
- Movement to organize credit in North Carolina. W. M. R. Camp. Int R Ag Econ 65: 16-20 My '16
- North Carolina credit unions. W: R. Camp. N C Ag Ext C 13:1-11 '16
- North Carolina credit unions growing. Prog F 31:765 Je 10 '16
- Organizing farmers' mutual savings banks. C. Poe. Prog F 31:445 Mr 25 '16
- Personal-credit unions advocated by secretary to aid small farmers. Weekly N L 6:8 D 11 '18
- Rural credit union. R. Thomas. Nat Stock & F 40:1266 F 24 '17
- Why not organize a local credit union? C. Poe. Prog F 31:51 Ja 8 '16
- Creed, What is your?** Country Gent 82:317 F 17 '17
- Creeping fig**  
Ideal house plant. G: W. Kerr. il Country Gent 81:332 F 12 '16
- Creosote**  
Relative resistance of various hardwoods to injection with creosote. C. H. Teesdale and J. D. MagLean. bibliog il U S Ag B 606:1-36 '18



**Crerar, Thomas Alexander, 1876-**  
New minister of agriculture in Canada. Ag  
Gaz of Canada 4:935 N '17

**Crescent creamery company**  
Recovers money paid internal revenue col-  
lectors for butter containing over 16%  
water. N Y Prod R 42:341 Je 21 '16

**Cresols**  
Phenolic insecticides and fungicides. G: P.  
Gray. il Cal Ag Exp B 269:329-81 '16

**Cresylic acid.** See Cresols

**Crete.** See Agriculture—Crete

**Cribs, Corn.** See Corn houses

**Crickets**  
Control of the black cricket. E. Clifton. J Ag  
New Zealand 12:187-9 Mr '16  
Controlling the coulee cricket. A. L. Melan-  
der. Wash Ag Exp Pop B 101:1-3 '16  
Coulee cricket. A. L. Melander and M. A.  
Yothers. bibliog il Wash Ag Exp B 137:1-56  
'17

Tree crickets as carriers of leptosphaeria  
coniophyrium (Fekl.) Sacc. and other fungi.  
W. O. Gloyer and E. B. Fulton. bibliog il  
N Y State Ag Exp Tech B 50:1-22 '16  
Tree crickets of New York: life history and  
bionomics (Tech B. 42). E. B. Fulton. bibliog  
il N Y State Ag Exp Rep 1915:433-77 '16

See also Changas

**Crime and criminals**

Testing criminal offenders; laboratory of the  
N.Y. police department. il J Heredity 7:  
255-61 Je '16

See also Defectives

**Crimson clover.** See Clover, Crimson

**Crocheting**

Crocheted buttons and handmade cord. H.  
Tachau. il Country Gent 81:1244 Je 17 '16

**Crocuses**

Autumn crocuses. W. R. Dykes. il Gard  
Chron (Lond) 64:183-4 N 9 '18  
Doubling of crocuses and daffodils. F. M.  
Fultz. il Sci Am Sup (233 Broadway, N. Y.  
10c) 86:244 O 19 '18  
Little-known fall crocus. E. I. Farrington.  
Country Gent 81:1033 My 13 '16

**Cronartium**

Contributions to our knowledge of the white  
pine blister rust. W. A. McCubbin. Phyt  
7:95-100 Ap '17  
Discovery of internal telia produced by a  
species of cronartium. R. H. Colley. bibliog  
il J Ag Research 8:329-32 F 26 '17  
Disease of pines caused by cronartium pyri-  
forme. G: G. Hedgcock and W: H. Long.  
bibliog il map U S Ag B 247:1-20 '15  
Dispersal distance of urediniospores of cronar-  
tium ribicola as indicated by their rate of  
fall in still air. W. A. McCubbin. Phyt 8:35-6  
Ja '18  
Does cronartium ribicola winter on the cur-  
rant? W. A. McCubbin. bibliog map Phyt  
7:17-31 F '17  
Incubation period of cronartium ribicola on  
the white pine. R. E. Stone. il Phyt 8:438-40  
Ag '18  
Notes on cronartium comptoniae III. P. Spauld-  
ing. Phyt 7:49-51 F '17  
Peridermium harknessii and cronartium quer-  
cuum. E. P. Meinecke. il Phyt 6:225-40 Je  
'16  
Piñon blister-rust. G: G. Hedgcock and  
others. bibliog il J Ag Research 14:411-24  
S 2 '18  
Pycnial stages of important forest tree rusts.  
J. R. Weir and E. E. Hubert. il Phyt 7:135-9  
Ap '17  
Uredinia of cronartium ribicola on ribes  
stems. G. B. Posey and others. Science  
(Science Press, Garrison, N.Y. 15c) n s 46:  
314-15 S 28 '17

**Crop competitions, Standing.** See Standing crop  
competitions

**Crop liens.** See Agricultural liens

**Crop reports**

Report on crops. Weekly N L 5:2 Ja 30 '18

**Crop rotation.** See Rotation of crops

**Crops**

Allowance for driage of crops in settlement  
operations. S. Grantham. Ag J of India 12:  
543-9 O '17

Critical months of the crop-growing season;  
with tables. Monthly Crop Rep 4:110-11 S  
'18

Crops for late planting. B. L. Moss. Prog F  
33:710 Je 15 '18

Do big crops pay better than small ones?  
C. H. Oathout. Banker-F 3:12 F '16

Food supply and prices. Ohio F 139:662 My  
12 '17

Graphic summary of seasonal work on farm  
crops. O. E. Baker and others. maps U S  
Ag Yearbook 1917:537-89

Greatest crops on record now ripening, with  
estimated yield. Am Fert 47:38b-8c S 15 '17  
Influence of soil variation on crop produc-  
tion; soils suited to varieties of apples.  
H. J. Wilder. Mass Ag Bd B 2 (5th ed):35-  
53 '16

Large crops in a poor season. B. W. Snow. O  
Judd Farmer 63:3 O 13 '17

Late crops. Market Growers J 22:421 Je 15 '18

Normal crop condition and its interpretation.  
Monthly Crop Rep 4:126 O '18

Prepare now for bigger crops next year. F. F.  
Rockwell. il Country Life 32:54-5 S '17

Prices and production—a contrast. North Am  
Review (171 Madison av, N.Y. 35c) 207:500-4  
Ap '18

Sources of fertilizer materials and the  
amount required by different crops. Va Ag  
Dept B 109:168-9 '16

Trend of farm prices and yield per acre  
of crops combined. Monthly Crop Rep 3:16  
F '17

Weather and wealth. E. Huntington. Hoard's  
D 52:177 S 1 '16

\* World crops. Living Age (41 Mt Vernon st,  
Boston 15c) 298:699-701 S 14 '18

See also Catch crops; Companion crops;  
Cover crops; Field crops; Fruit crops;  
Nurse crops; Root crops; Rotation of crops;  
Water requirements of crops; also names of  
fruit, grains and vegetables

### Composition

Composition and fertilizing value of farm  
crops and other farm materials; tabulation.  
N C Ag Ext C 70 3p '18

### Costs

Amount and cost of labor required for grow-  
ing crops in West Virginia. O. M. Johnson  
and A. J. Dadisman. map W Va Ag Exp B  
163:1-11 '16

Checking a crop loss. P. Cooper. System on  
the Farm 2:90 Mr '18

Cost of crop production. A. L. Thompson. N Y  
Ag Dept B 86:2251-7 Ag '16

Cost of producing crops on the college farms  
in 1915; tabulation. (In Report, 1916, p. 10-  
11) '17 Ontario ag. dept., Toronto, Canada

Fertilizers and production costs. Kimball's  
D F 16:88 F 1 '18

High cost of bumper crops. E. Davenport.  
Country Gent 83:3-4 F 16 '18

High cost of low crop yields. C. E. Thorne.  
Ohio Ag Exp B v 2:181-7 Je '17

Labor requirements of crop production. T. P.  
Cooper. F. W. Peck and A. Boss. Minn Ag  
Exp B 157:1-55 '16

### Prices

Crop prices and fertilizer cost. S. B. Haskell.  
Am Fert 47:54+ N 24 '17

### Statistics

Agricultural statistics. Ag Gaz of Canada 4:  
434-6. 533-40. 636-42. 741-6 Mv-Ag '17

Agricultural statistics for Wisconsin, 1915  
and 1916. Wis Ag Dept B 10:745-92 '16;

Same (Reprint). Wis Ag Dept B 11 '17

April 1 crop report: comparisons for winter  
wheat and rye states. Monthly Crop Rep  
3:31 Ap '17

Arrêté n. 5200 concernant l'enquête sur les  
terres récoltées en 1916; Arrêté n. 5271 con-  
cernant l'évaluation anticipée de la récolte  
de 1916; en Allemagne. Int Yearbook Ag  
Leg 1916:26-9 '17

## Crops—Statistics—Continued

- Canadian crop report. Monthly Crop Rep 4: 137 N '18
- Cereal and hay crops, 1917-1918. W. L. Johnston. J Dept Ag S Australia 21:861-3 Je '18
- Condition of crops in Holland. F. W. Mahin. (Commerce Reports no. 248) p 314 (O 23) '17 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Conditions of crops April 1, 1918. Ohio Ag Dept B v 9:39-48 My '18
- Crop acreages in United States for 10 years. Monthly Crop Rep 4:108 S '18
- Crop bulletin 133; statistics for 1917. W. O. Galloway. Ontario Ag Dept B 133:1-24 '17
- Crop production and railroad tonnage compared. Monthly Crop Rep 4:76 J1 '18
- Crop statistics by counties in Kentucky. Ky Ag Dept Rep 1916-1917:284-91 '18
- Crop statistics for Ontario. F. S. S. Johnson. (Commerce Reports no. 226) p 1155 (S 26) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Crop statistics, 1915-1917. Monthly Crop Rep 3:120-7 D '17
- Crop summary for 1917. Monthly Crop Rep 3: 117 D '17
- Estimated crop conditions for the month with comparisons. See Monthly crop report
- Farm crops. Cal Ag Bd Rep 1917:77-118 '18
- Farm crops. (*In* Statistical report, 1916, p. 66-118) '17 Cal. State bd. of ag., Sacramento
- Farm products of the United States. Science (Science Press, Garrison, N.Y. 15c) n s 47: 213-14 Mr 1 '18
- First joint crop report of the Nebraska state board of agriculture and the bureau of crop estimates for July. Neb Ag Bd B 257 3p '18
- Food crop values at new high mark. Am Fert 47:26-7 D 22 '17
- General crop conditions by states; maps. Monthly Crop Rep 3:65, 76, 87, 101 J1-O '17
- General review of crop conditions July 1, 1918. Monthly Crop Rep 4:72 J1 '18
- General review of crop conditions August 1, 1918. Monthly Crop Rep 4:94 Ag '18
- General review of crop conditions Sept. 1. Monthly Crop Rep 4:108 S '18
- General review of crop conditions Oct. 1, 1918. Monthly Crop Rep 4:124 O '18
- Good crops produced; minor cereals in large supply. B. W. Snow. O Judd Farmer 65: 342 O 19 '18
- Government crop report. Am Fert 48:26 Ap 13 '18
- Government crop report; big decreases. Am Fert 45:35-7 Ag 19 '16
- Government crop report; estimates for 1916 and comparison with 1915. Am Fert 44:84 Je 24 '16
- Government crop report 1916 and 1915, with the average for the five years, 1910-1914; table. Wallaces' F 42:31 Ja 5 '17
- How crops and farm animals are distributed in the United States; table. Field II 26:1031 D '16; Same. Int R Sci & Prac Ag 8, no 3:331-3 Mr '17
- International institute crop report; summary for 1917 with comparisons. Monthly Crop Rep 3:111 N '17; Same. Am Fert 47:50 D 8 '17
- Italian production of olives, rice, and hemp. D: F. Wilber. (Commerce Reports no. 222) p 1098 (S 21) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- June crop report, 1917. H. K. Bryson. Tenn Ag Dept B 24p J1 1 '17
- Largest 1916 crop yields. G: A. Sanborn. Monthly Crop Rep 4:2-4 Ja '18
- Missouri crop review for 1916. W. L. Nelson. II maps Mo Ag Bd v 14:126 D '16; Same. Mo Ag Bd Yearbook 1917:186-208
- Missouri crop review, 1917. maps Mo Ag Bd B v 15:1-48 D '17
- Mr Howard on the mathematical treatment of agricultural problems; a rejoinder. S. M. Jacobs. Ag J of India 12:252-7 Ap '17
- New Zealand live stock and crop statistics. A. A. Winslow. (Commerce Reports no. 237) p 128 (O 9) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Notes on crop situation. J. W. Brewer. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 13:78-82 Ap 20 '18
- Official report of the Board of agriculture of Ohio on prospect and conditions compared with an average and acreage of corn, potatoes, onions, cabbage and sugar beets, June 1, 1918. Ohio Ag Dept B v 9:51-62 Ag '18
- Official report of the Board of agriculture of Ohio on the acreage and condition of wheat and other crops, May 1, 1918, and live stock losses during winter and spring. Ohio Ag Dept B v 9:36-47 Ag '18
- Official report of the Department of agriculture of Ohio on the condition of crops Nov. 1, Dec. 1, 1917, and Jan. 1, 1918. Ohio Ag Dept B v 9:19-64 F '18
- Official report on condition of crops and live stock, June 1st, 1918. Ohio Ag Dept 2p typew '18
- Ohio crop report, October 1. Market News & Exchange B (Ohio ag. dept., Columbus) v 1:1-3 O 12 '18
- Raising of necessary crops in the Netherlands. P. L. Edwards. (Commerce Reports no. 215) p 980-1 (S 13) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- \* Ratios of areas under crop in Ontario. (*In* Report, Bur. of industries, 1917, p. 38) '18 Ontario ag. dept., Toronto
- Report and final results of the cereal, hay, and fodder crops, 1916-17. W. L. Johnston. J Dept Ag S Australia 21:405-9 D '17
- Report of acreage and condition of crops by percentages for the quarter ending March 31, 1917, as compared with same period for 1916. Fla Ag Dept Quar B v 27:51-65 Ap '17
- Report of condition and prospective yield of crops for quarter ending Sept. 30, 1916, as compared with same period last year. Fla Ag Dept Quar B v 26:45-57 O '16
- Report of condition and prospective yield of crops for quarter ending September 30, 1918, as compared with same period for 1917. Fla Ag Dept Quar B v 28:49-64 O '18
- Report of statistics committee. C: H. MacDowell. Am Fert 49:93-7 Ag 3 '18
- Seasonal change in crop prospects. Monthly Crop Rep 4:140 N '18
- Statistical report for June 20, 1918 containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 265:1-25 '18
- Statistical report for August 1, 1918; containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 267:1-38 '18
- Statistical report of the Illinois Department of agriculture, for December 1, 1917, containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 260:1-90 '18
- Statistical report of the Illinois Department of agriculture, Springfield, for August 1, 1917; containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 258:1-41 '17
- Statistics of crops other than grain crops, 1916. U S Ag Yearbook 1916:611-57; Same. Separate 720
- Statistics of crops other than grain crops, 1917. U S Ag Yearbook 1917:655-707; Same. Separate 760
- Strategy of food production. Rural Manhood 9:55-6 F '18
- \* Sugar beets—mixed grains in Ontario. (*In* Report, Bur. of industries, 1917, p. 35) '18 Ontario ag. dept., Toronto
- Table showing approximate areas and yields of the principal crops in each land district in the dominion for the season 1916-17. J Ag New Zealand 15:114-15 Ag '17
- United States crop summary for March. Monthly Crop Rep 4:21, 33 Mr-Apr '18
- United States crop summary for June 1. Monthly Crop Rep 4:57-61 Je '18
- United States crop summary for July 1. Monthly Crop Rep 4:69 J1 '18
- United States crop summary for August 1. Monthly Crop Rep 4:85 Ag '18
- United States crop summary for September 1. Monthly Crop Rep 4:101 S '18



**Crops—Statistics—Continued**

United States crop summary for October 1. Monthly Crop Rep 4:117-22 O '18  
United States crop summary for November 1. Monthly Crop Rep 4:133 N '18  
Yearly summaries of world production of important crops. Monthly Crop Rep 3:40 My '17

**Australia**

Cereal and hay crops, 1917-1918. W. L. Johnston. J Dept Ag S Australia 21:861-3 Je '18  
Report and final results of the cereal, hay, and fodder crops, 1916-17. W. L. Johnston. J Dept Ag S Australia 21:405-9 D '17

**Azores**

\* Crops in the Azores. J: Q. Wood. (Commerce Reports no. 212) p 934-5 (S 10) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**California**

Farm crops. Cal Ag Bd Rep 1917:77-118 '18  
Farm crops. (In Statistical report, 1916, p 66-118) '17 Cal. State Bd. of ag., Sacramento  
Monthly crop report. See California state commission of horticulture Monthly bulletin  
What crops? T: F. Hunt. Cal State Comm Hort B v 6:353-6 S '17

**Canada**

Area, yield, quality and value of the chief crops of Quebec, 1915, 1916 and 1917. J Ag (Quebec) 21:134 Mr '18  
Canadian crop report. Monthly Crop Rep 4: 137 N '18  
Crop bulletin 133: statistics for 1917. W. O. Galloway. Ontario Ag Dept Crop B 133:1-24 '17  
Crop production in 1915. Ag Gaz of Canada 3:33-42 Ja '16  
Crop statistics for Ontario. F. S. S. Johnson. (Commerce Reports no. 226) p 1155 (S 26) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

\* Sugar beets—mixed grains in Ontario: Ratios of areas under crop in Ontario. (In Report, Bur. of industries, 1917, p. 35, 38) '18 Ontario ag. dept., Toronto

**England**

Possibilities of increased crop production. E. J. Russell. J Bd Ag 23:555-60 S '16; Same cond. Int R Sci & Prac Ag 7, no 12:1819-21 D '16  
Suggestions for cropping in 1917. J Bd Ag 24: 179-82 My '17

**Florida**

Report of acreage and condition of crops by percentages for the quarter ending March 31, 1917, as compared with same period for 1916. Fla Ag Dept Quar B v 27:51-65 Ap '17  
Report of condition and prospective yield of crops for quarter ending Sept. 30, 1916, as compared with same period last year. Fla Ag Dept Quar B v 26:45-57 O '16  
Report of condition and prospective yield of crops for quarter ending September 30, 1918, as compared with same period for 1917. Fla Ag Dept Quar B v 28:49-64 O '18

**Georgia**

Cause to be thankful, Campbell county, Ga. Weekly N L 5:8 N 28 '17  
Prosperity for southern farmers. Am Fert 47: 62 Ag 18 '17

**Germany**

Arrêté n. 5200 concernant l'enquête sur les terres récoltées en 1916; Arrêté n. 5271 concernant l'évaluation anticipée de la récolte de 1916. Int Yearbook Ag Leg 1916:26-9 '17

**Illinois**

Statistical report for June 20, 1918 containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 265:1-25 '18  
Statistical report for August 1, 1918: containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 267:1-38 '18

Statistical report of the Illinois Department of agriculture, Springfield, for August 1, 1917, containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 258:1-41 '17

Statistical report of the Illinois Department of agriculture for December 1, 1917, containing summary of the reports of correspondents as to condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 260:1-90 '18

**Iowa**

Iowa's crops. Wallaces' F 42:1764 D 28 '17  
Iowa's song of prosperity. Wallaces' F 41: 1542 N 24 '16

**Ireland**

Crop report, no. 4 and fruit crop report—October, 1916. J Dept Ag Ireland 17, no 1: 64-87 '16  
Crop report no. 4 and fruit crop report—mid-October, 1917. J Dept Ag Ireland 18, no 1: 60-82 '18  
Detailed report on the state of the crops including the fruit crops—mid-July, 1917. J Dept Ag Ireland 17, no 4:619-38 '17  
Irish crop report for August. H. Sharp. (Commerce Reports no. 233) p 50-1 (O 4) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Italy**

Italian production of olives, rice, and hemp. D: F. Wilber. (Commerce Reports no. 222) p 1098 (S 21) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Kentucky**

Crop statistics by counties. Ky Ag Dept Rep 1916-1917:284-91 '18

**Maryland**

See also Maryland crop improvement association

**Michigan**

Michigan monthly crop reports. '18 Mich. Dept. of state, Lansing

**Missouri**

Crops for overflowed lands. J. C. Hackleman. Mo Ag Ext C 24:1-4 '17  
Factors influencing crop yields in Missouri. W. L. Nelson. Mo Ag Bd B v 15:1-34 Mr '17  
Missouri crop review for 1916. W. L. Nelson. il maps Mo Ag Bd B v 14:1-26 D '16; Same. Mo Ag Bd Yearbook 1917:186-208  
Missouri crop review, 1917. maps Mo Ag Bd B v 15:1-48 D '17

**Nebraska**

First joint crop report of the Nebraska state board of agriculture and the bureau of crop estimates for July. Neb Ag Bd B 257 3p '18

**Netherlands**

Condition of crops in Holland. F. W. Mahin. (Commerce Reports no. 248) p 314 (O 23) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Raising of necessary crops in the Netherlands. P. L. Edwards. (Commerce Reports no. 215) p 980-1 (S 13) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**New York**

Cherry and other W. N. Y. crops. il Rural N Y 77:937 Ag 3 '18

**New Zealand**

New Zealand live stock and crop statistics. A. A. Winslow. (Commerce Reports no. 237) p 128 (O 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Table showing approximate areas and yields of the principal crops in each land district in the dominion for the season 1916-17. J Ag New Zealand 15:114-15 Ag '17

**Ohio**

Condition of crops April 1, 1918. Ohio Ag Dept B v 9:39-48 My '18

**Crops—Ohio—Continued**

- Official report of the Board of agriculture of Ohio on prospect and conditions compared with an average and acreage of corn, potatoes, onions, cabbage and sugar beets, June 1, 1918. Ohio Ag Dept B v 9:51-62 Ag '18
- Official report of the Board of agriculture of Ohio on the acreage and condition of wheat and other crops, May 1, 1918, and live stock losses during winter and spring. Ohio Ag Dept B v 9:36-47 Ag '18
- Official report of the Department of agriculture of Ohio on the condition of crops, Nov. 1, Dec. 1, 1917, and Jan. 1, 1918. Ohio Ag Dept B v 9:19-64 F '18
- Official report on condition of crops and live stock, June 1st, 1918. Ohio Ag Dept 2p typew '18
- Ohio crop report, October 1. Market News & Exchange B (Ohio ag. dept., Columbus) v 1:1-3 O 12 '18

**Pennsylvania**

- Crop and livestock report, no. 40, August 1, 1918. Pa Ag Dept 12p Ag '18
- Crop and livestock report, no. 41, October 1, 1918. L. H. Wible, comp. Pa Ag Dept 13p '18

**Russia**

- Agriculture in Russia. Breeder's Gaz 69:1338 Je 29 '16

**Tennessee**

- June crop report, 1917. H. K. Bryson. Tenn Ag Dept B 24p Jl 1 '17

**United States**

- Balancing up the books on last year's crops. Ag Digest 1:262 Ja '17
- Big grain crops in the making. B. W. Snow. O Judd Farmer 65:23 Jl 13 '18
- Cereal crop losses prove heavy. B. W. Snow. O Judd Farmer 61:3 S 16 '16
- Composite condition of all crops October 1, 1918; map. Monthly Crop Rep 4:129 O '18
- Co-operative crop report by farmers' elevator managers. Am Coop J 11:1220-1 Ag '16
- Country's crops below average. Am Fert 45:36 S 16 '16
- Crop acreages in U.S. for 10 years. Monthly Crop Rep 4:108 S '18
- Crop conditions very favorable; estimated acreage of spring wheat. B. W. Snow. O Judd Farmer 64:507 My 11 '18
- Crop figures for the year. Coop Manager & F 7:28 D '17
- Crop losses more pronounced. B. W. Snow. O Judd Farmer 61:5 S 2 '16
- Crop round-up for a very bad year. B. W. Snow. O Judd Farmer 61:5-6 O 14 '16
- Crop situation. Purdue Ag 11:35-6 My '17
- Crop summary for 1917. Monthly Crop Rep 3:117 D '17
- Crops in the United States end danger of famine. Hoard's D 54:66 Ag 10 '17
- Decrease shown in crop production. Am Fert 45:42+ N 25 '16
- Drouth and hot winds cut corn. B. W. Snow. O Judd Farmer 65:175 S 7 '18
- Estimated crop conditions for the month with comparisons. See Monthly crop report
- Farm production. Weekly N L 4:1 Ja 31 '17
- Farm products of the United States. Science (Science Press, Garrison, N.Y. 15c) n s 47:213-14 Mr 1 '18
- General crop conditions by states; maps. Monthly Crop Rep 3:65, 76, 87, 101 Jl-O '17
- General crop improvement. B. W. Snow. O Judd Farmer 63:5 Jl 14 '17
- General review of crop conditions July 1, 1918. Monthly Crop Rep 4:72 Jl '18
- General review of crop conditions August 1, 1918. Monthly Crop Rep 4:94 Ag '18
- General review of crop conditions Sept. 1. Monthly Crop Rep 4:108 S '18
- General review of crop conditions Oct. 1, 1918. Monthly Crop Rep 4:124 O '18
- Generally good crop prospects. B. W. Snow. O Judd Farmer 61:6 Jl 15 '16
- Good crops in spite of a bad season. B. W. Snow. Il O Judd Farmer 65:307 O 12 '18
- Good crops produced; minor cereals in large supply. B. W. Snow. O Judd Farmer 65:342 O 19 '18
- Government crop report; big decreases. Am Fert 45:35-7 Ag 19 '16
- Government crop report; estimates for 1916 and comparison with 1915. Am Fert 44:84 Je 24 '16
- Government crop report 1916 and 1915, with the average for the five years, 1910-1914; table. Wallaces' F 42:31 Ja 5 '17
- Harvesting the West's great war crops. H. M. Wright. Forum (286 5th av., N.Y. 25c) 58:481-90 O '17
- Heavy losses to American crops. B. W. Snow. O Judd Farmer 61:6 Ag 19 '16
- How crops and farm animals are distributed in the United States; table. Field Il 26:1031 D '16; Same. Int R Sci & Prac Ag 8,no 3:331-3 Mr '17
- Increase in crop values. Am Fert 45:34-5 D 23 '16
- Largest 1916 crop yields. G. A. Sanborn. Monthly Crop Rep 4:2-4 Ja '18
- Late season but prospects good. B. W. Snow. O Judd Farmer 62:4 Je 9 '17
- Money value of farm crops greatest in 1916. Ag Digest 1:301 F '17
- Rank of states in crop value. Am Fert 45:35 Jl 8 '16
- Report of statistics committee. C. H. MacDowell. Am Fert 49:93-7 Ag 3 '18
- Seasonal change in crop prospects. Monthly Crop Rep 4:140 N '18
- Splendid values in staple crops. O Judd Farmer 61:1 Ag 26 '16
- United States crop summary for March. Monthly Crop Rep 4:21, 33 Mr-Apr '18
- United States crop summary for June 1. Monthly Crop Rep 4:57-61 Je '18
- United States crop summary for July 1. Monthly Crop Rep 4:69 Jl '18
- United States crop summary for August 1. Monthly Crop Rep 4:85 Ag '18
- United States crop summary for September 1. Monthly Crop Rep 4:101 S '18
- United States crop summary for October 1. Monthly Crop Rep 4:117-22 O '18
- United States crop summary for November 1. Monthly Crop Rep 4:133 N '18
- Value of 1916 U. S. crop placed at \$7,641,609, 000; all grains show big falling off—hay, tobacco, cotton make gains. Coop Manager & F 6:57 F '17
- Weekly crop reports. 4p il map '18 Am. steel and wire co., Chicago
- Why food is costing more. Country Gent 81:1999 N 18 '16
- Yearly variation in crop production. Monthly Crop Rep 4:62 Je '18
- See also United States—Crop estimates, Bureau of

**Wisconsin**

- Agricultural statistics for the years 1915 and 1916. A. W. Kalbus. Wis Ag Dept B 10:145-92 '16; Same (Reprint). Wis Ag Dept B 11 '17
- Crops, Rotation of. See Rotation of crops
- Crops, Water requirements of. See Water requirements of crops
- Crops and climate. See Climate; Plants, Effect of climate on
- Crops and soils
- Agricultural utilization of acid lands by means of acid-tolerant crops. F. V. Coville. U S Ag B 6:1-13 '13
- Farming practice in the sand hills section of Nebraska. J. Cowan. il map Neb Ag Exp B 156:1-67 '16
- Soil adaptation to crops. A. R. Whitson and H. B. Hendrick. U S Ag B 355:80-4 '16
- Soils and crops of the market-garden district of Biggleswade. T. Rigg. maps J Ag Sci 7:385-431 Ap '16
- Soils of the Sassafras series. J. A. Bonsteel. il map U S Ag B 159:1-52 '15
- Sulphur in relation to soils and crops. J. W. Ames and G. E. Boltz. bibliog Ohio Ag Exp B 292:221-56 '16
- Wheat and oats; soils that are suited to these crops. W. F. Massey. Prog F 32:880 Ag 18 '17



**Crossbreeding.** See Hybridization

**Crotonic acid**

*a*-Crotonic acid, a soil constituent. E. H. Walters and L. E. Wise. bibliog il J Ag Research 6:1043-6 S 18 '16

**Crouch, Jephtha**

Portrait. Breeder's Gaz 69:551 Mr 9 '16

**Crow blackbirds.** See Grackles

**Crow poison.** See Fly poison (plant)

**Crown gall**

Crown gall. J. J. Thornber. il Ariz Ag Exp Timely Hints 118:1-6 '16

Crown-gall injury in the orchard. D. B. Swingle and H. E. Morris. bibliog il Mont Ag Exp B 121:123-39 '18

Crown gall on raspberries and blackberries. P. Thayer. Ohio Ag Exp B v 1:218 Jl '16

Crown gall or plant cancer. C. O. Smith. il Cal State Comm Hort B v 5:201-11 Je '16

Crowngall studies showing changes in plant structures due to a changed stimulus. E. F. Smith. il J Ag Research 6:179-82 Ap 24 '16

Field experiments with crown gall, 1913-1917. il Tex Ag Exp B 211:1-21 '17

Field studies of the crown-gall of sugar beets. C. O. Townsend. il map U S Ag B 203:1-8 '15

Further evidence as to the relation between crown gall and cancer. E. F. Smith. Scientific Am Sup (233 Broadway, N.Y. 10c) 83: 42 Ja 20 '17

Further evidence that crown gall of plants is cancer. E. F. Smith. (In Pan American scientific congress Proc., 1915, v. 10, p. 472-89) '17

Is crown gall injurious to apple nursery stock? S. B. Fracker. J Econ Entom 11:133-5 F '18

Mechanism of tumor growth in crown gall. E. F. Smith. bibliog il J Ag Research 8:165-88 Ja 29 '17

Path to cancer through the plant. il Current Opinion (63 W. 36th st, N.Y. 25c) 64:193-4 Mr '18

Resistance of prunus to artificial inoculation with bacterium tumefaciens. C. O. Smith. il Phyt 6:186-94 Ap '16

Root-knot. A. H. Cockayne. J Ag New Zealand. 13:259-62 O '16

Root knot of fruit-trees. J. A. Campbell. il J Ag New Zealand 15:63-8 Ag '17

Varietal relations of crown gall. J. K. Shaw. Science (Science Press, Garrison, N.Y. 15c) n s 45:461-2 My 11 '17

**Bibliography**

Crown gall. H. Hasselbring. Bot Gaz 64:337-40 O '17

**Crown rot.** See Fruit—Diseases and pests

**Crows**

American crow in relation to agriculture. N. Criddle. il Ag Gaz of Canada 4:446-50 Je '17

Combating hawks and crows. W. F. Purdue. Ohio F 141:775 Je 15 '18

Crow and its relation to man. E. R. Kalmbach. il map U S Ag B 621:1-90 '18

Crows and jays. il Am For 22:610-11 O '16

Crows eating fruit. H. O. Mead. Rural N Y 77:328 Mr 2 '18

Fighting against the crow. Rural N Y 77:579 Ap 20 '18

Habits of the crow. C. H. Chesley. Wallaces' F 43:793 My 10 '18

How to combat crows. Prac F 113:182 My 1 '17

Winter crow roosts. E. R. Kalmbach. il map U S Ag Yearbook 1915:83-100

**Croydon vacant lands cultivation society**

Croydon vacant lands cultivation society. E. L. Hudson. J Bd Ag 22:963-8 Ja '16

**Crushing machinery**

Labor-saving high-speed pulverizer. il Am Fert 49:46 S 28 '18

**Cryoscopy.** See Freezing points

**Cryptogams**

See also Algae; Ferns; Fungi; Lichens; Mosses

**Cryptorhynchus lapathi.** See Poplar and willow borers

**Crystallography**

Application of optical methods of identification to alkaloïds and other organic compounds. E. T. Wherry. U S Ag B 679:1-9 '18

**Cuba**

See also Agricultural education—Cuba; Agriculture—Cuba; Live stock—Cuba

**Industries and resources**

Sugar making in Cuba. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:120 Ag 24 '18

**Cuckoos**

Cuckoos. A. A. Allen. il Am For 24:21-4 Ja '18

See also Roadrunners

**Cuculidae.** See Cuckoos

**Cucumber angular leaf-spot**

Angular-leafspot of cucumber: dissemination, overwintering, and control. E. Carsner. bibliog il J Ag Research 15:201-20 O 21 '18

Angular leaf spot of cucumbers. E. F. Smith and M. K. Bryan. il J Ag Research 5:465-76 D 13 '15

Seed treatment control and overwintering of cucumber angular leaf-spot. W. W. Gilbert and M. W. Gardner. Phyt 8:229-33 My '18

**Cucumber beetles, Striped**

Beetles and wilt disease of cucurbits. Market Growers J 18:80 F 1 '16

Control of the striped cucumber beetle. H. D. Brown. il Ill Ag Exp C 220:1-4 '18; Same. Market Growers J 22:387-8 Je 1 '18

Controlling striped cucumber beetles. Market Growers J 18:400 Je 15 '16

Controlling striped cucumber beetle. H. D. Brown. Market Growers J 22:387-8 Je 1 '18

Insecticide tests with diabrotica vittata. N. F. Howard. J Econ Entom 11:75-9 F '18

Striped cucumber beetle. H. A. Gossard. il Ohio Ag Exp B v 2:117-20 Ap '17

Striped cucumber beetle. Q. S. Lowry. bibliog il Conn State Ag Exp B 203:262-73 '18

Transmission and control of bacterial wilt of cucurbits. F. V. Rand and E. M. A. Enlows. il J Ag Research 6:417-34 Je 12 '16

**Cucumber beetles, Twelve-spotted**

Injury to peanuts by the twelve-spotted cucumber beetle. D. E. Fink. il J Econ Entom 9:366-8 Je '16

Notes on the twelve-spotted cucumber beetle. H. A. Sell. J Econ Entom 9:551-6 D '16

**Cucumber blight**

Ammonia Bordeaux for cucumber blight. H. F. Button. Rural N Y 76:1003 Ag 25 '17

**Cucumbers**

Care of cucumbers. C. W. Waid. Market Growers J 18:287 Ap 15 '16

Chat with a cucumber pioneer. il Rural N Y 76:1367 D 1 '17

Cucumber graft worth \$100. il Rural N Y 75: 613 Ap 15 '16

Cucumber growing. C. P. Halligan. Mich Ag Exp C 30:4p '16; Same. Mich Ag Bd Rep 1916:334-9

Cucumber pickle industry in Indiana. G. Shumaker. Purdue Ag 11:27-30 Mr '17

Cucumber plants. Am Flor 50:658 Ap 13 '18

Cucumber relishes. Rural N Y 75:1078 Ag 12 '16

Cucumbers for pickles. A. E. Wilkinson. Ohio F 140:75 Ag 4 '17

Cucumbers for spring crop. C. W. Waid. Market Growers J 18:132 F 15 '16

Cucumbers without fertilization. Am Flor 51: 234 Ag 31 '18

Early cucumbers. il Country Gent 81:394 F 19 '16

Early cucumbers from Norfolk. J. T. Reed. il Country Gent 82:797 Ap 28 '17

Early started cucumbers. E. A. S. Peckham. Gard M 23:116 Mr '16

**Cucumbers—Continued**

- Experiences with cucumbers; symposium. Market Growers J 23:133+ O 1 '18
- First generation crosses in cucumbers. H. K. Hayes and D. F. Jones. Conn State Ag Exp Rep 1916, pt 5:319-21 '17
- Growing and marketing of squashes, melons and cucumbers. H. M. Howard. Mass Ag Bd B 5:116-25 '18 (3d ed. rev.)
- Growing Boston's cukes. E. I. Farrington. il Country Gent 81:1472 Ag 5 '16
- Growing cucumbers under glass. C. W. Waid. Market Growers J 22:323 Ap 15 '18
- Harrison cuke plant at Kankakee, Illinois. S. E. Durst. Market Growers J 20:159 F 15 '17
- Intensified cucumber culture. Prac F 112:251 Je 15 '16
- Intensive cucumber growing in hothouses. P. Aquatias. Gard Chron (Lond) 60:199 O 21 '16
- Melons in dirt bands; seedlings started this way will make a good crop. C. E. Durst. il Country Gent 83:38 F 23 '18
- Money in cucumber pickles. J. E. Taylor. Gard M 23:6 F '16
- New varieties of vegetables. il Ag Gaz of Canada 4:216-17 Mr '17
- Pickles and profits. J. W. Henceroth. (Soil improvement com. Pamph. 21) Sp n.d. Nat. fertilizer assn., Chicago
- Pickling cucumbers. C. E. Brehm. Country Gent 82:1240 Ag 4 '17
- Preserving cucumber pickles. J. G. Doyle. il Country Gent 81:1495 Ag 5 '16
- Some cucumbers. G. Shockey. Ohio F 140:178 S 1 '17
- Success in mulching cucumbers. B. V. Egbert. Market Growers J 19:281 D 15 '16
- Success with cucumbers. D. K. Tressler. il Ohio F 139:324 Mr 3 '17
- Training and pruning cucumbers. C. W. Waid. Market Growers J 21:104 S 1 '17

**Diseases and pests**

- Common diseases of cucumbers and melons. W. H. Martin. il N J Ag Exp C 68:1-11 '17
- Cucumber mosaic disease. W. W. Gilbert. il Phyt 6:143-4 Ap '16
- Enemies of cucumbers and related plants. il Purdue Ag 10:38-40 Je '16
- Experiments with the cucumber mosaic disease. I. C. Jagger. Phyt 6:148-51 Ap '16
- Greenhouse red spider attacking cucumbers and methods for its control. S. C. Vinal. bibliog Mass Ag Exp B 179:153-82 '17
- Hosts of the white pickle mosaic disease of cucumber. I. C. Jagger. Phyt 8:32-3 Ja '18
- Mosaic disease of cucumbers. Market Growers J 19:34 Jl 15 '16; Same cond. Am Flor 46:1164 Je 17 '16
- New infectious disease of cucumber. S. P. Doolittle. Phyt 6:145-7 Ap '16
- Stemphyllium leafspot of cucumbers. G. A. Osner. il J Ag Research 13:295-306 Ap 29 '18
- Verticillium albo-atrum a hyphomycete causing Vissnes juka (wilt) of cucumber in Sweden. T. Lindfors. Int R Sci & Prac Ag 9:no 5:634-5 My '18

*See also* Cucumber angular leaf-spot; Cucumber beetles; Striped; Cucumber beetles. Twelve-spotted; Cucumber blight; Cucurbits—Diseases and pests

**Seed**

- Treat cucumber seed. Weekly N L 5:5 Mr 6 '18

**Cucurbits**

- Studies in seed germination; the genus *marah* (megarrhiza), cucurbitaceae. A. W. Hill. il Ann Bot 30:214-22 Ap '16
- Transplanting cucurbits; symposium. Market Growers J 18:182+ Mr 1 '16

*See also* Cucumbers; Honey dew melons; Melons; Muskmelons; Squashes; Water-melons

**Composition**

- High calcium content of some cucurbit vines. L. K. Wilkins. bibliog N J Ag Exp B 310: 1-20 '17

**Diseases and pests**

- Beetles and wild disease of cucurbits. Market Growers J 18:80 F 1 '16
- Dissemination of bacterial wilt of cucurbits. F. V. Rand. il J Ag Research 5:257-60 N 8 '15
- Notes on *anasa andresii* Guér., an enemy of cucurbits. T. H. Jones. J Econ Entom 9: 431-4 Ag '16
- Save the cukes and melons; protect them from insects and diseases. W. C. O'Kane. il Country Gent 83:24 Je 29 '18
- Squash bugs. J. W. Chamberlin. Ohio F 138: 3 Jl 1 '16
- Transmission and control of bacterial wilt of cucurbits. F. V. Rand and E. M. A. Enlows. il J Ag Research 6:417-34 Je 12 '16

*See also* Melon aphid

**Cultivation.** *See* Tillage

**Cultivators**

- Adjusting surface cultivation. G. W. Iverson. O Judd Farmer 62:8 My 12 '17
- Cultivators and crop cultivation. F. R. Jones. Prog F 32:618, 661, 693, 759 My 19, Je 2, 16, Jl 7 '17
- Cultivators: kinds and how to use them. G. H. Alford. il Prog F 33:124 F 2 '18
- Disk harrow and disk cultivator. G. H. Alford. Prog F 31:184 F 5 '16
- Farmers' experience meeting; how to reduce hoeing expenses. Prog F 33:130 F 2 '18
- Gasoline motor corn cultivator. F. C. Perkins. il Scientific Am (233 Broadway, N.Y. 10c) 117:81 Ag 4 '17
- Homemade tractor cultivator. W. C. Fleury. il Rural N Y 77:1154 O 12 '18
- Maillet motor cultivator with controlled rotary blades. V. Fremiel. il Int R Sci & Prac Ag 7, no 10:1507-10 O '16
- Motor cultivator promises relief. F. M. White. il O Judd Farmer 64:3 F 16 '18
- Plea for the two-horse cultivator. A. L. French. Prog F 33:126 F 2 '18
- Tractor cultivators. K. J. T. Ekblaw. Nat Stock & F 41:1166 F 16 '18

**Culverts**

- Concrete arch. H. H. Shepard. Country Gent 81:468 F 26 '16

**Cumarin**

- Cause of the disappearance of cumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. bibliog il Ala Ag Exp B 195:49-64 '17

**Cup-fungi.** *See* Fungi

**Cuprammoniums**

- Cuprammonium washes; their preparation, biological properties, and application. O. Butler. bibliog il Phyt 7:235-68, pl 3-10 Ag '17

**Curb bit.** *See* Bits

**Curing**

- How to handle raw furs. A. R. Harding. Nat Stock & F 41:764 N 10 '17
- Moth-proofing bird skins. R. S. Wheeler. Country Gent 81:973 My 6 '16
- Preparing furs for market. Prac F 112:414 N 15 '16
- Preparing furs for market. G. J. Thiessen. Ohio F 138:550 D 2 '16
- Talks to young trappers. G. J. Thiessen. il Country Gent 83:32 Ja 26 '18

*See also* Tanning

**Curing of meat.** *See* Meat—Preservation

**Currant fruit flies.** *See* Fruit flies

**Currant fruit flies, Dark.** *See* Dark currant fruit flies

**Currant worms**

- Common currant worm. R. E. Wilson. Purdue Ag 11:39 Je '17
- Currant worm. W. H. Goodwin. Ohio Ag Exp B v 2:197-8 Je '17

**Currants**

- Abnormal blossom on black currant. R. G. Hatton and J. Amos. il Gard Chron (Lond) 61:180 My 5 '17
- Black currants. W. Swan. Gard Chron (Lond) 60:86 Ag 19 '16



**Currants—Continued**

- Culture of the currant. W: F. Purdue. Ohio F 137:766 Je 3 '16  
 Currant as a market garden product. B. Wallner, jr. Minn Hort 44:22-3 Ja '16  
 Currant culture. Fruit-Grower 27:163 Mr 1 '16  
 Currant culture. Prac F 112:265 Jl 1 '16  
 Currants. E. P. Powell. Country Gent 81:395 F 19 '16  
 Currants are profitable. C. L. Burkholder. il Green's Fruit Grower 36:2 Ag '16  
 Currants in New York state. O. M. Taylor. il N Y Ag Dept B 79:pt 2:1381-8 Ja '16; Same. N Y Ag Dept Rep 1916:pt 3:1381-8 '17  
 Experience with currants. C. O. Ormsby. Fruit-Grower 27:164 Mr 1 '16  
 Girdling the Corinth grape to make it bear; the Zanth currant industry in California. G: C. Husmann. il J Heredity 9:291-10 My '18  
 Gooseberries and currants. J. Oskamp. il Ind Ag Exp B 207:1-11 '17  
 History and development of the red currant. E: A. Bunyard. bibliog il Royal Hort Soc J 42:pts 2-3:260-70 S '17  
 How I grow currants successfully. J. S. Underwood. Market Growers J 18:168 Mr 1 '16  
 How to grow currants. S: Underwood. Fruit-Grower 27:165 Mr 1 '16  
 How to propagate currants. O Judd Farmer 60:21 Mr 4 '16  
 Pruning black currants. Gard Chron (Lond) 64:96 S 7 '18  
 Revision of the red currants. E. A. Bunyard. il Gard Chron (Lond) 62:205, 217, 232, 237 N 24-D 15 '17  
 Strawberries, currants and gooseberries; with discussion. A. W. Brayton. Ill State Hort Soc Trans 1917:257-64 '18  
 Value of a currant bush. Rural N Y 76:358 Ag 11 '17

**Diseases and pests**

- Black currant eelworm. A. M. Taylor. il J Ag Sci 8:246-75 Mr '17  
 Currant fruit fly; life history, habits, natural enemies and methods of control. H: H. P. Severin. bibliog il Maine Ag Exp B 264:177-247 '17; Same. Maine Ag Exp Rep 1917:177-247  
 Important currant and gooseberry diseases. A. S. Colby. Am Fruit Grower 38:14 S '18  
 Migratory habits of myzus ribis (Linn.). C. P. Gillette and L. C. Bragg. il J Econ Entom 10:338-40 Je '17  
 Studies in the life histories of some species of septoria occurring on ribes. R. E. Stone. il Phyt 6:419-27 D '16  
 Yellow currant and gooseberry fruit-fly. L. A. Whitney. il Cal State Comm Hort B v 5:152-7 Ap '16  
 See also Currant worms; Dark currant fruit flies; Pine blister rust

**Curtains**

- Brightening your rooms. G. R. Wilmot. il Country Gent 82:354 F 17 '17  
 Curtaining the home. M. E. Hall. O Judd Farmer 60:26 Ja 29 '16  
 Selecting your window curtains. G. R. Wilmot. il Country Gent 81:2061 N 25 '16  
 Treatment of windows. L. Bailey. J Ag (Quebec) 22:83 N '18 (to be cont)  
 Window draperies. L. G. Harring. il Country Life 32:50-3 O '17

**Curtiss, C. F.**

- Portrait. Breeder's Gaz 70:7 Jl 6 '16

**Cuscuta.** See Dodder

**Cushion plants**

- New Zealand cushion plants. Gard Chron (Lond) 62:210 N 24 '17

**Custards**

- Reliable dessert. L. U. Adams. il Country Gent 82:83 Ja 13 '17  
 Rennet custard—the dish that makes itself. E. D. Bache. J Home Econ 8:195-6 Ap '16  
 Use of the thermometer in the cooking of soft custards. A. W. Williams. J Home Econ 8:178-9 Ap '16  
 See also Junket

**Cut glass.** See Glassware

**Cut-over land conference of the South**

- Dawn of a new constructive era, being the full and complete report of the conference held at New Orleans, La., April 11-13, 1917. 244p \$2.50 '17 Southern pine assn., New Orleans, La.  
 Meeting, New Orleans, La., April 11-13, 1917. Am For 23:293-4 My '17

**Cutworms**

- Control of cutworms in the prairie provinces. E. H. Strickland. Sp il '16 Canada Ag  
 Control of the variegated cutworm in Ventura county, California. G. E. Benschel. il J Econ Entom 9:303-6 Ap '16  
 Cutworm. il Hoard's D 51:752 My 26 '16  
 Cutworm remedies. Weekly N L 4:7 Ap 25 '17  
 Cutworms. Ohio F 139:606 Ap 28 '17  
 Cutworms. H. T. Fernald. Mass Ag Ext C 31:1-2 '17  
 Cutworms and their control in corn and other cereal crops. W. R. Walton and J. J. Davis. il Farmers' B 739:1-3 '16  
 Cut-worms—how can they be controlled? J: W. Scott. Wyo Ag Exp Rep 1917:162-4 '17  
 Cutworms in gardens. W. C. O'Kane. N H Ag Ext Press B 63 1p '17  
 Cut worms; their habits, characteristics and means of control. H. A. Gossard. Ohio Ag Exp B v 2:85-90 Mr '17  
 Euxoa excellens, a little known cutworm in British Columbia. A. Gibson. Int R Sci & Prac Ag 9:no 4:525 Ap '18  
 How to detect outbreaks of insects and save the grain crops. W. R. Walton. il Farmers' B 835:11-13 '17  
 How to prevent cutworm losses. Weekly N L 5:16 Ap 17 '18  
 Poison kills cutworms. O Judd Farmer 60:9 Je 17 '16  
 Poisoned bait for cutworms. Am Flor 46:1116 Je 10 '16  
 Poisoning cutworms. Green's Fruit Grower 36:22 Ap '16  
 Sorosporella uveella and its occurrence in cutworms in America. A. T. Speare. bibliog il J Ag Research 8:189-94 F 5 '17  
 See also Army cutworms

**Cyanamid**

- Cyanamid. D. S. Reed. Penn State F 9:353 Mr '16  
 Cyanamid as a source of nitrogen. Pa Ag Exp B 147:23-5 '17

**Cyanide**

- Fixation of nitrogen as cyanide. Am Fert 46:37-9 Ap 14 '17

**Cyanide of potash.** See Potassium cyanide

**Cyanuric acid**

- Isolation of cyanuric acid from soil. L: E. Wise and E. H. Walters. bibliog il J Ag Research 10:85-92 Jl 9 '17

**Cyatheaceae**

- Apogamy in the cyatheaceae. A. G. Stokey. bibliog il Bot Gaz 65:97-102 Ja '18

**Cycadaceae**

- Stangeria paradoxa. C: J. Chamberlain. bibliog il Bot Gaz 61:353-72 My '16

**Cyclamen mites**

- Cyclamen mite. G. F. Moznette. bibliog il map J Ag Research 10:373-90 Ag 20 '17; Same cond. Am Flor 51:188 Ag 17 '18  
 Cyclamen mite. W: A. Ross. il Ag Gaz of Canada 4:174-5 Mr '17  
 Tarsonemus pallidus Banks, a pest of geraniums. F. Garman. il Md Ag Exp B 208:327-42 '17; Same. Md Ag Exp Rep 1916-1917 '17

**Cyclamens**

- Cultivation of cyclamens. J. W. Forsyth. Gard Chron (Lond) 64:21, 33 Jl 20-27 '18  
 Cyclamen latifolium. C. Blair. Gard Chron (Lond) 64:106 S 14 '18  
 Cyclamens. Am Flor 50:2 Ja 19 '18  
 Cyclamens. W: C. Hall. Am Flor 49:210 Ag 18 '17  
 Essentials in cyclamen culture. J. Stuart. il Gard Chron Am 21:271 Jl '17  
 My experience with cyclamen in the house. E. von R. Hovey. Gard M 26:170 D '17

**Cyclamens—Continued**

- Notes from a Galloway garden. H. Maxwell. Gard Chron (Lond) 61:69 F '17  
 Suggestions for plant growers. Am Flor 46: 1130 Je '16

**Diseases and pests**

- Cyclamen mite. W. A. Ross. il Ag Gaz of Canada 4:174-5 Mr '17

**Cydonia japonica.** See Japanese quince

**Cylas formicarius.** See Sweet potato root borers

**Cylinders (engines)**

- More about cylinder end play. C. Christianson. Power F 25:54 J1 '16  
 Still cylinder sideplay. J. W. Deeds. Power F 25:42 N '16

**Cylindrosporium**

- Contribution to the life history and physiology of cylindrosporium on stone fruits. B. B. Higgins. bibliog il Am J Bot 1:145-73 Ap '14

**Cyllene robiniae.** See Locust borers

**Cypress**

- Bald cypress. S. B. Detwiler. il map Am For 22:577-80 O '16  
 Commercial uses of cypress. il Am For 22: 581-4 O '16  
 Coons cypress silo co. builds silos of the wood eternal. il Am Lumberman (431 S. Dearborn st, Chicago 15c) 2246:40 Je 1 '18  
 Cypress and juniper trees of the Rocky Mountain region. G. B. Sudworth. il maps U S Ag B 207:1-36 '15  
 Notes on conifers; cupressus pisifera. A. B. Jackson. il Gard Chron (Lond) 59:58 Ja 29 '16  
 Southern cypress. W. R. Mattoon. il U S Ag B 272:1-74 '15  
 Tree of legend and romance; cypress in California. M. Daniels. il Am For 22:76-81 F '16  
 Water requirements and growth of young cypress. W. R. Mattoon. il Soc Am For Pro 11:192-7 Ap '16

**Cypripediums.** See Moccasin flowers

**Cyprus.** See Agriculture—Cyprus

**Cyrtandra**

- Cyrtandreae hawaiienses, sect. crotonocalyces Hillebr. J. F. Rock. Am J Bot 5:259-77, 18-23 pl My '18  
 Revision of the Hawaiian species of the genus cyrtandra, section cylindrocalyces Hillebr. J. F. Rock. il Am J Bot 4:604-23 D '17

**Cysticercus ovis.** See Sheep—Diseases and pests

**Cystospora**

- Pox, or pit (soil rot), of the sweet potato. J. J. Taubenhaus. bibliog il J Ag Research 13:437-50 My 27 '18

**Cytisus proliferus.** See Tagasaste

**Cytology.** See Cells

**Cytospora**

- Undescribed canker of poplars and willows caused by cytospora chrysosperma. W. H. Long. il J Ag Research 13:331-45 My 6 '18

**D****Dachshunds**

- Long-haired dachshund. W. A. Dyer. il Country Life 30:47 S '16

**Dadant, Charles,** 1817-1902

Centenary. pors il Am Bee J 57:187-90 Je '17

**Dad's** Hallowe'en party; story. M. A. Bartlett. Ohio F 142:434 N 2 '18

**Daffodils**

- Daffodil developments. J. Jacob. Royal Hort Soc J 42,pts 2-3:229-35 S '17  
 Daffodil show in London. Am Flor 46:1035 Je 3 '16  
 Daffodils for the house. Gard Chron (Lond) 59:229 Ap 29 '16  
 Daffodils in 1916. Gard Chron (Lond) 59:258 My 13 '16  
 Daffodils in 1917. Gard Chron (Lond) 61:234 Je 9 '17

Daffodils misnamed. E. A. Hartland. Am Flor 48:906 My 12 '17

Doubling of crocuses and daffodils. F. M. Fultz. il Sci Am Sup (233 Broadway, N. Y. 10c) 86:244 O 19 '18

Eelworm in daffodils. A. J. Bliss. Gard Chron (Lond) 60:83 Ag 19 '16

Late-flowering daffodils. Gard Chron (Lond) 59:277 My 27 '16

My experiences with some newer daffodils. S. R. Duffy. il Gard M 24:50-1 S '16

**Daggy's corn worm.** See Fall army worms

**Dahlias**

Boston dahlia exhibition, September 14-15. Am Flor 51:464 S 21 '18

Classifying the dahlia. F. H. Hall. Gard M 23:304 Je '16

Color manual of modern dahlias. F. H. Hall. il Country Life 32:26-40 Je '17

Dahlia as a cut flower. il Am Flor 47:386 S 9 '16

Dahlia cambrai. il Gard Chron (Lond) 64:156 O 19 '18

Dahlia classification. Am Flor 47:342 S 2 '16; Same cond. Country Gent 81:1123 My 27 '16

Dahlia classification. Gard Chron Am 20:511 D '16

Dahlia devotees, then and now. C. L. Thayer. il Gard M 23:235-6 My '16

Dahlia growing for profit. Am Flor 48:1057 Je 2 '17

Dahlia imperialis. S. Mottet. il Gard Chron (Lond) 59:16 Ja 8 '16

Dahlia; its reputed introduction in 1789. C. H. Payne. bibliog Royal Hort Soc J 42,pts 2-3: 305-16 S '17; Same cond. Gard Chron (Lond) 60:143 S 23 '16

Dahlia names. Am Flor 46:1336 J1 15 '16

Dahlia utility. Am Flor 49:540 S 29 '17

Dahlias and gladioli. Rural N Y 75:402 Mr 4 '16

Dahlias and their culture. il Gard Chron Am 20:190-1 Ap '16

Dahlias and their culture (C. 43). F. H. Hall. il N Y State Ag Exp Rep 1915:673-95 '16

Dahlias and their culture. R. Vincent, jr. il Gard Chron Am 22:108-9 Ap '18

Dahlias and their culture. R. Vincent, jr. Am Flor 49:7 J1 21 '17

Dahlias for home decoration. il Gard Chron Am 22:193 J1 '18

Dahlias for market. J. H. Sperry. il Country Gent 82:903 My 19 '17

Dahlias in baskets and design work. il Am Flor 48:842 My 5 '17

Dahlias; the farm flower. E. J. Farrington. il Rural N Y 77:646 My 4 '18

Development of the dahlia. il Gard Chron Am 21:367 O '17

Feature the dahlia. Am Flor 51:346 S 7 '18

Getting the most out of dahlias. O. E. Dunlap. il Gard M 27:193-4 My '18

Growing dahlias for profit. E. B. Wright. Fruit-Grower 28:127 F 15 '17

Hand-fertilizing dahlias. Gard M 24:34 S '16

Ideal premium lists. M. Youngs. Gard M 24: 66 S '16

Inconsistent dahlia. L. C. Richards. Gard M 23:314 Je '16

New classification of the American dahlia society. G. W. Kerr. il Country Gent 81: 860 Ap 15 '16

New dahlias and how to grow them. H. A. Walker. il Country Life 30:66 My '16

Plant notes. Am Flor 46:929 My 20 '16

Pompon dahlia. C. H. Payne. il Gard Chron (Lond) 60:107, 119, 133 S 2-16 '16

Progress in dahlias. Gard Chron (Lond) 64: 110 S 14 '18

Raising seedling dahlias. Gard Chron Am 22: 110 Ap '18

Short Hills dahlias. Mrs C: H. Stout. Gard Chron Am 22:110 Ap '18

Vincent's dahlia show. A. M. Herr. Am Flor 49:649 O 13 '17

See also American dahlia society; California dahlia society

**Diseases and pests**

Dahlia troubles and diseases. J. B. S. Norton. Am Flor 47:387 S 9 '16



**Daikon**

\* Daikon: food plant used in Japan. *il Sci Am Sup* (233 Broadway, N.Y. 10c) 86:277 N 2 '18

**Dairies, Cooperative**

Collective dairies in Italy. *bibliog Int R Ag Econ* 76:7-18 Ap '17

Co-operative dairies and their relations with the credit societies in Germany. *Int R Ag Econ* 63:48-9 Mr '16

Cooperative dairy at Telinkheri in its relation to dairying in the Central Provinces. *il Ag J of India* 13:54-64 Ja '18

Cooperative dairy societies in Great Britain. *Int R Ag Econ* 65:21-30 My '16

Dairy industry in the province of Quebec, and co-operation. *Int R Ag Econ* 68:5-15 Ag '16

Danish dairies in 1914. *Int R Ag Econ* 67:1-5 Jl '16

Good dairy idea: Newport co-operative dairy co. of Vermont to build a large dairy plant. *M. R. Tolstrup. Hoard's D* 54:491 N 2 '17

Milk industry and co-operative dairies in Pomerania in 1913. *Int R Ag Econ* 64:18-21 Ap '16

New Zealand co-operative dairies. *E. W. Gage. il Am Coop J* 14:6 S '18

Organisation of the milk supply. *J Bd Ag* 22: 1307-8 Mr '16

Swiss central federation of milk producers. *Int R Ag Econ* 67:43 Jl '16

Work of the co-operative dairies of the provincial federation of Silesia in 1913. *Int R Ag Econ* 63:33-5 Mr '16

*See also* Cheese factories, Cooperative; Creameries, Cooperative; Dairying, Cooperative; Milk depots, Cooperative

**Dairy bacteriology**

Bacteria concerned in the production of the characteristic flavor in cheese of the Cheddar type. *A. C. Evans and others. bibliog J Ag Research* 2:167-92 Je '14

Milking machines: as a source of bacteria in milk; methods of maintaining in a bacteria-free condition. *G. L. Ruehle and others. il N Y State Ag Exp B* 450:113-81 '18; Summarized by F. H. Hall. (Control of bacteria in milking machines). *B* 450 Popular ed 15p

1916 B. of A. I. report; work of the dairy research laboratories. *N Y Prod R* 43:354 D 27 '16

Pasteurization of sour, farm-skimmed cream for buttermaking. *O. F. Hunziker and others. Ind Ag Exp B* 208:1-76 '17; Excerpts. *N Y Prod R* 45:372, 438, 548; 46:640 Ja 16, 30, F 20, Ag 28 '18; Summary. *Ind Ag Exp Rep* 1917:33-5 '18

Public health studies concerning cheese. *E. C. Schroeder and G. W. Brett. Int Assn Dairy & Milk Inspec Rep* 1917:190-204; Same. *Am Vet M Assn J* 52:674-85 F '18

Relation of bacteria in dairy products to health. *H. A. Harding. Creamery* 5:38+ N '16

Relation of the action of certain bacteria to the ripening of cheese of the Cheddar type. *E. B. Hart and others. bibliog J Ag Research* 2:193-216 Je '14

Use of bacillus bulgaricus in starters for making Swiss or Emmental cheese. *C. F. Doane and E. E. Eldredge. il U S Ag B* 148:1-16 '15

*See also* Cream—Bacteriology; Ice cream—Bacteriology; Milk—Bacteriology

**Dairy barns.** *See* Barns and stables—Dairy barns

**Dairy buildings**

Common sense dairy buildings. *R. E. White. il plan Field* 11 26:746-7 S '16

Dairy buildings at United States naval academy. *C. D. Francis. Hoard's D* 52:725 D 15 '16

Modern dairy buildings at Strathglass farm; with plans. *il Field* 11 26:435-6 My '16

Modern dairy buildings: Longview farm. *il Field* 11 26:205-7 Mr '16

Modern dairy buildings; Mt. Loretto school farm. *il Field* 11 26:341-2+ Ap '16

Plan for a small dairy house. *E. Kelly and K. E. Parks. Kimball's D F* 16:622 Ag 15 '18

Plans of dairy buildings approved by the State dairy bureau. (In 11th biennial report, p 16-37) *il plans '16 Cal. State dairy bur., 268 Market st, San Francisco*

Small cold storages and dairy buildings. *J. A. Ruddick and J. Burgess. 21p plans '17 Canada Ag*

*See also* Barns and stables—Dairy barns; Farm buildings; Milk houses

**Dairy cattle congress**

Attractive premiums offered at the Dairy cattle congress. *E. S. Estel. Jersey B* 35: 1392 S 6 '16

Dairy cattle congress, 1916. *E. S. Estel. Kimball's D F* 14:566 S 15 '16

Dairy cattle congress, 1917. *E. S. Estel. il Kimball's D F* 15:617 S 15 '17

Dairy congress buys permanent home at Waterloo, Iowa. *Breeder's Gaz* 69:1071 My 18 '16

Exhibit to be held at Waterloo, Ia., Sept. 30-Oct. 6. *Kimball's D F* 16:654 S 1 '18

8th annual congress, Waterloo, Oct. 1-7. *il Jersey B* 36:1556-7 O 10 '17; *Breeder's Gaz* 72:614+ O 11 '17; *Wallaces' F* 42:1383-4 O 12 '17; *Kimball's D F* 15:744-5+ O 15 '17; *Hoard's D* 54:402-3+ O 19 '17

Iowa dairy show Jersey prizes. *Jersey B* 35: 1306 Ag 23 '16

1916 Dairy cattle congress, Waterloo, Ia., Oct. 2-8. *Wallaces' F* 41:1126, 1332-3 Ag 25, O 13 '16; *Kimball's D F* 14:546, 655+ S 1, O 15 '16; *Jersey B* 35:1588-9 O 11 '16

*Breeder's Gaz* 70:665-6 O 12 '16; *Hoard's D* 52:467-8 O 27 '16

1916 Dairy cattle congress. *E. S. Estel. Hoard's D* 51:746 My 26 '16

1916 Dairy cattle congress, Oct. 2-8. *E. S. Estel. Kimball's D F* 14:484 Ag 1 '16

9th annual congress will be held September 30 to October 6. *E. S. Estel. Jersey B* 37:791 My 15 '18

Show to be held at Waterloo, Ia., Sept. 30-Oct. 6. *il Kimball's D F* 16:515, 589-90+ S 15, O 15 '18; *Hoard's D* 56:404-5+ O 18 '18; *Jersey B* 37:1662-3 O 9 '18; *O Judd Farmer* 65:308 O 12 '18; *Wallaces' F* 43:1464+ O 11 '18

**Dairy clubs**  
Boys and girls learn dairying and make profits from banker's cows. *il Banker-F* 3:7 S '16

Club for your school. *Hoard's D* 56:304 S 27 '18

Martin dairy club. *Hoard's D* 55:112 F 8 '18

1916 Indiana dairy club contest. *C. R. George. Jersey B* 35:275 F 23 '16

**Dairy conference, May 5-6, 1916**  
Account of meeting and resolutions passed, conference of May 5-6. *N Y Prod R* 42:85+ My 10 '16

Conference of the allied dairy interests in Washington, D.C. *Breeder's Gaz* 69:1064 My 18 '16

Dairy platform resolutions adopted. *Nat Stock & F* 40:208 My 20 '16

Important gatherings of dairymen, Washington, D.C., May 5-6. *Hoard's D* 51:692 My 19 '16

National dairy conference to develop uniform rules for care of dairy products. *Ohio F* 137:711 My 20 '16

Public discussions of needs of dairy industry. *Creamery* 4:24-5+ My '16

Washington dairy convention. *Jersey B* 35: 768 My 17 '16

Washington meeting of dairymen. *H. G. Van Pelt. Kimball's D F* 14:372-3+ Je 1 '16

**Dairy conference, June 25, 1917**  
Dairymen meet food administrator Hoover, Washington, June 25, 1917. *Creamery* 5:27-8 Jl '17

**Dairy conference, April 12-13, 1918**  
Important and representative conferences, Chicago, April 12-13. *Jersey B* 37:641, 646 Ap 24 '18; *Hoard's D* 55:615 Ap 26 '18; *N Y Prod R* 45:936 Ap 24 '18; *Kimball's D F* 16:342+, 351 My 1 '18; *Creamery* 7:29-33 My '18

**Dairy conference, April 12-13, 1918—Cont.**

Resolutions adopted at a conference of the national dairy industry, Chicago, April 12-13. *Nat Stock & F* 42:127 Ap 27 '18; *Ohio F* 141:592 Ap 27 '18

**Dairy cows. See Cows****Dairy exchanges**

New system adopted on dairy exchanges, effective January 1. *N Y Prod R* 45:262 D 26 '17

**Dairy exhibits. See Dairy shows****Dairy extension conference, March 22, 1917**

Conference at Washington, D. C., March 22, 1917. *Hoard's D* 53:524 Ap 13 '17

Conference of dairy breed associations and dairy division of the United States Department of agriculture, March 22, 1917. *W. Macmonnies, Jersey B* 36:511 Ap 4 '17

Meeting in Washington, D.C., March 22, 1917. *Field II* 27:364 My '17

**Dairy extension work**

Cheese-factory extension work. B. H. Rawl. *Country Gent* 81:886 Ap 22 '16

Dairy division conference. *Hoard's D* 51:966 Jl 14 '16

Dairy extension for high school agricultural teachers. I. J. Mathews. *Hoard's D* 52:905 Ja 19 '17

Dairy work at Madison; investigation undertaken by Wisconsin experiment station. H. L. Russell. *N Y Prod R* 42:510 Jl 19 '16

Egypt takes the cow cure. C. E. Gapen. *il Country Gent* 81:1499-1500 Ag 12 '16

**Dairy farm management**

Basis of dairy farming. W. M. Kelly. *Ohio F* 137:462 Mr 25 '16

Business of ten dairy farms in the bluegrass region of Kentucky. J. H. Arnold. *U S Ag B* 548:1-12 '17

Danish farm management. *Field II* 28:604 Ag '18

Exact cost and income on a small dairy farm. A. J. Bill. *Hoard's D* 51:282+ Mr 10 '16

Farm management. A. Leitch. (*In Reports, Dairymen's assns.*, 1916, p. 13-21) '17 Ontario ag. dept., Toronto

Feeding and farm management. M. H. Roberts, jr. *il Jersey B* 37:1634-5+, 1770-1+, 1860-1+, 1942-3+ O 9, 23, N 6, 20 '18

Fit your dairy to your farm. W. M. Kelly. *il Ohio F* 139:230 F 17 '17

From just a farm to a paying dairy farm. G. H. Dacy. *il Prac F* 112:119 Mr 15 '16

Getting rid of horse hauling. J. B. Robertson. *il System on the Farm* 2:10-11 Ja '18

Handling dairy-farm manure right. C. A. LeClair. *il plans Country Gent* 82:2006+ D 22 '17

How we work with our neighbors and eight other breeding policies. B. Fruit. *il System on the Farm* 2:51-3 F '18

Incidental income on the dairy farm. J. Marsh. *Hoard's D* 51:312-13 Mr 10 '16

Labor comparison of dairy and poultry business. W. H. Jenkins. *Nat Stock & F* 41:1176 F 16 '18

Labor cost on a dairy farm. W. S. Tomlinson. *Ohio F* 141:580 Ap 20 '18

Lowering costs while increasing production. *il System on the Farm* 1:182-3 Jl '17

Making a dairy from dairy profits. J. E. Smith. *il O Judd Farmer* 60:3 Ja 1 '16

Making a large farm pay. C. S. Phelps. *Hoard's D* 51:459 Ap 7 '16

Management of dairy herds. E. V. Ellington. *Idaho Ag Exp B* 102:1-41 '17

Management of the dairy herd. R. W. Clark. *il Colo Ag Ext B* 127:1-13 '17

Managing the dairy farm for profit. D. H. Otis. *Wis Dairymen's Assn Rep* 1913-1916:133-41 '17

Peaks and valleys in the farming game. R. G. Jones. *Hoard's D* 51:619 My 5 '16

Practical balance for a successful dairy farm. G. F. Warren. *Int R Sci & Prac Ag* 7, no 4: 580-5 Ap '16; Same cond. *J Ag (Quebec)* 21:ix Ag '17

Problem in dairy farm management. T. Butler. *Prog F* 31:671 My 20 '16

Profitable dairy-farm organization in Kentucky. W. D. Nicholls and J. B. Hutson. *il Ky Ag Exp B* 217:97-146 '18

Reducing losses on milk bottles. System on the Farm 1:257-8 S '17

Relation of size of dairy to economy of milk production. J. A. Hopkins, jr. *Del Ag Exp B* 118:1-50 '18

Well-managed Ohio dairy farm. L. L. Rum-mell. *il Ohio F* 140:421 N 10 '17

*See also Dairy farms*

**Dairy farm names**

Naming the dairy. *Country Gent* 81:58 Ja 8 '16

**Dairy farm surveys**

Average farms and others. A. M. Loomis. *Country Gent* 81:1265 Je 24 '16

Cattaraugus county, N.Y., cow census. W. W. White. *Hoard's D* 50:866: 51:100, 210, 333, 482, 628, 697, 872, 964; 52:44, 210, 282, 432, 583, 637, 710 Ja 21, F 11, Mr 3, 17, Ap 7, My 5, 19, Je 23, Jl 14, Ag 4, S 8, 22, O 20, N 17-24, D 8 '16

Cost of milk production. J. B. Lindsey. *Mass Ag Ext B* 11:1-8 '16

Cost of producing milk on 174 farms in Delaware county, New York (B. 364). A. L. Thompson. *il maps Cornell Ag Exp Rep* 1916:115-79 '17

Cow and the man factors for success; farm survey work of New York farm bureaus. A. M. Loomis. *il Hoard's D* 51:961 Jl 14 '16

Dairy farm survey. J. Gould. *Hoard's D* 51:330 Mr 17 '16

Dairy surveys in New York. A. M. Loomis. *Ohio F* 137:684 My 13 '16

Investigation of the cost of milk production in western Washington. F. W. Rader. *Western Wash Ag Exp B* v 6:63-9 Ag '18

Profitable dairy-farm organization in Kentucky. W. D. Nicholls and J. B. Hutson. *il Ky Ag Exp B* 217:97-146 '18

Relation of size of dairy to economy of milk production. J. A. Hopkins, jr. *Del Ag Exp B* 118:1-50 '18

Studies from the survey on the cost of market milk production. K. B. Musser and others. *Conn Ag Coll Ext B* 7:1-28 '17

Study of share-rented dairy farms in Green county, Wis., and Kane county, Ill. E. A. Boeger. *map U S Ag B* 603:1-14 '18

Work of the farm bureaus; results of dairy farm surveys. A. M. Loomis. *Kimball's D F* 14:465 Jl 15 '16

**Dairy farm tours. See Farm tours****Dairy farms**

Aliso dairy farm. C. Van Vuren. *il Hoard's D* 53:3 Ja 26 '17

Another good dairy farm. E. J. Turner. *J Dept Ag Victoria* 15:566-9 S '17

Ayrshires of Strathglass. A. G. Morrell. *il Country Life* 30:56-7 Je '16

Back-to-the-lander makes good. *Hoard's D* 53:839 Je 8 '17

Barn and farm power. *il Kimball's D F* 16:439 Je 1 '18

Beginning wrong—finishing strong. H. S. Stabler. *il Country Gent* 81:2215-16 D 30 '16

Big dairy with a big purpose. A. L. Tichane. *il Jersey B* 37:2021-2 D 4 '18

Building a herd of Guernseys. R. A. Atwood. *il O Judd Farmer* 62:1 Je 23 '17

Business of dairying. W. C. Cowgill. *il Country Gent* 82:1002 Je 9 '17

Capital city Holstein herd at Soldiers' Home farm near Washington. D. C. J. B. Bain. *il Kimball's D F* 15:3-4 Ja 15 '17

Chimacum stock farms. A. B. Nystrom. *il Hoard's D* 52:907 Ja 19 '17

Combination grain and dairy farm. R. E. Hundertmark. *il Hoard's D* 51:231 Mr 3 '16

Cows, corn and clover. G. H. Dacy. *il Country Gent* 82:1106 Jl 7 '17

Cows did it; how a run-down cotton farm that was too poor to grow truck was made into a paying dairy farm. J. L. Mitchell, jr. *Prog F* 32:1046 O 6 '17

Dairy cows make Benson. W. Johnson. *Kimball's D F* 16:535 Jl 1 '18

Dairy day in latitude 47 degrees. J. A. MacDonald. *Rural N Y* 77:124 Ja 26 '18

Dairy dream coming true. H. R. O'Brien. *il Country Gent* 83:9 S 7 '18

Dairy farm that pays. R. G. Miller. *Kimball's D F* 15:546 Ag 15 '17



**Dairy farms—Continued**

Dairy farming saved and made the farm. R. G. Miller. Kimball's D F 14:822 Ja 1 '17  
 Dairy in the southwest near El Paso, Texas. S. P. Cowgill. il Country Gent 81:1394 Jl 22 '16  
 Dairy profits \$900 a month; Blairs dairy farm in North Carolina. W. M. Brown. il Kimball's D F 15:144 Mr 1 '17  
 Dairying in the Old Dominion. M. T. Mahoney. Prac F 113:221 Je 1 '17  
 Dairying made this farm a success; Augustine Bros. farm in Wisconsin. H. I. Wood. il Hoard's D 51:929 Jl 7 '16  
 Dairyman who doesn't depend on milk. E. B. Heaton. il O Judd Farmer 65:524 D 7 '18  
 Daisy Hill farm and its Holsteins. il Kimball's D F 16:651+ S 1 '18  
 Dane's success with cows. il Wallaces' F 42:435 Mr 9 '17  
 Day on a dairy farm. J. G. Morse. Rural N Y 76:1160 O 6 '17  
 Developing Ohio state dairy champions. L. L. Rummell. il Ohio F 141:525+ Ap 13 '18  
 Dream of 30 years realized. il Hoard's D 53:601 Ap 27 '17  
 Durham, a city with a clean milk supply. S. R. Winters. il Hoard's D 54:827 Ja 4 '18  
 Edgemoor farm. San Diego co., Cal. il Hoard's D 52:65 Ag 11 '16  
 Farm with a personality; Miller farm. Henrico county. Va. W. H. Dean. il Country Gent 81:1715-16 S 23 '16  
 Farm with the twin silos. Linn county, Iowa. il Wallaces' F 41:919 Je 30 '16  
 Farmer who knows how; Fairview farms. H. H. Lyon. il Hoard's D 52:29+ Ag 4 '16  
 Fifteen years of record keeping. il Hoard's D 56:35 Ag 2 '18  
 Flintstone farm and its milking shorthorns. E. L. D. Seymour. il Country Life 30:44-5 Ag '16  
 Fortune in fourteen years of dairy cattle breeding. il Wallaces' F 41:1367 O 20 '16  
 Forty cows on forty acres. D. E. Andrews. il Kimball's D F 15:269 Ap 15 '17  
 Forty cows on forty acres. G. H. Dacy. il Country Gent 82:1518 O 6 '17  
 Fox brothers' Guernseys; Waukesha Guernsey farms. D. E. Andrews. Kimball's D F 14:453 Jl 15 '16  
 Fresh-air-cold-figure farm; Wood Brook farm. M. C. Telfer. il Hoard's D 55:979+ Jl 5 '18  
 From planter to dairyman. C. H. Staples. il Kimball's D F 14:273 Ap 15 '16  
 Full pail of milk; Bigger farm. Kansas. H. W. Doyle. il Hoard's D 52:343 O 6 '16  
 Gold medal milk plant. il Prac F 112:199 My 1 '16  
 Good dairying in Macoupin county. O Judd Farmer 63:3 O 20 '17  
 Grow into dairying. S. L. Coleman. Kimball's D F 15:344 My 15 '17  
 Happy and useful old age on the farm; farm of E. Z. Parks. Cattaraugus Co., N.Y. W. M. Kelly. il Ohio F 138:137-8 Ag 19 '16  
 He stuck to it. W. E. Duckwall. il Nat Stock & F 40:1352 Mr 10 '17  
 Holsteins, alfalfa, silage—a winning combination; Brookside farm. R. G. Jones. Hoard's D 52:693 D 8 '16  
 Holsteins helped Enns. J. Deare. il Country Gent 83:40 Ja 19 '18  
 Home grown feed and help. E. Troeger. il Ohio F 141:533 Ap 13 '18  
 Home of Golden Fern's Noble; Brookwood farms. il Jersey B 37:45 Ja 9 '18  
 How a dairyman made good. C. W. Burkett. (In De Laval dairy hand book, p 7-9) il '16  
 De Laval separator co., New York  
 How a large southern herd is managed. il Jersey B 37:305-6 F 27 '18  
 How we run our dairy. C. S. Dean. Prac F 112:61 F 1 '16  
 Income from six cows. Wallaces' F 43:939 Je 14 '18  
 Intensive dairying in Australia. J. R. MacDonald. J Ag New Zealand 14:302-3 Ap '17  
 Iowa state dairy farm. Wallaces' F 41:1002 Jl 21 '16  
 Is the dairy farmer interested in tractors? il Hoard's D 53:912 Je 29 '17

Jerseys at Wildwood. Jersey B 35:1644 O 18 '16  
 La Cima—the summit. J. G. Watson. il Kimball's D F 14:657 O 15 '16; Same. Jersey B 35:1470 S 20 '16  
 Leading dairyman endorses million acre wheat campaign. Ag Digest 2:568 Ag '17  
 Line-breeding at Jean Du Luth farms. il Hoard's D 55:3 Ja 25 '18  
 Little visits to big Holstein farms. H. G. Van Pelt. il Kimball's D F 16:438 Je 1 '18  
 Longcliff dairy herd. C. R. Benjamin. il Purdue Ag 12:533-4 Je '18  
 Loveland farms and its Ayrshires. D. E. Andrews. il Kimball's D F 14:225 Ap 1 '16  
 Making profits and progress. Mixer farm at Hardwick, Mass. il Field 11 26:416-17 My '16  
 Meridale and its Jerseys. J. Andrews. il Kimball's D F 15:483+ Jl 15 '17  
 Milk trade on small capital. O Judd Farmer 62:20 F 3 '17  
 Mixer Guernseys—a breeding herd. il Hoard's D 53:557-8 Ap 20 '17  
 Modern Illinois dairy. Hoard's D 51:453 Ap 7 '16  
 New farms for old. J. R. Sibley. il Jersey B 37:1690, 1719 O 9-16 '18  
 Ohio dairy. W. E. Buckwall. il Hoard's D 52:689 D 8 '16  
 Pacific Northwest Holstein herd. il Hoard's D 52:869 Ja 12 '17  
 Pelletier at Pontiac. il Hoard's D 53:467 Ap 6 '17  
 Picturesque farm in Kansas. il Jersey B 37:265 F 20 '18  
 Pioneer dairyman of Iowa. il Hoard's D 52:799 D 29 '16  
 Poorer lot; Ben Pringle and the beginning of Old Inn farm's success. A. M. Loomis. il Country Gent 82:235-6 F 10 '17  
 Practices of a dairyman in Vermont. Hoard's D 54:251 S 21 '17  
 Producer who retails. il Wallaces' F 42:867 Je 1 '17  
 Producing certified milk economically. C. M. Baker. il Hoard's D 55:43 F 1 '18  
 Professional man makes a good dairy farmer. W. H. Jenkins. il Hoard D 51:281 Mr 10 '16  
 Profit in purebreds. L. L. Rummell. il Ohio F 142:397+ O 26 '18  
 Profitable eighty-acre Kentucky dairy farm. T. R. Bryant. Jersey B 35:771 My 17 '16  
 Profitable small dairy farm. F. E. Ellis. il Hoard's D 52:313 S 29 '16  
 Progress. il Purdue Ag 10:25-6+ Ja '16  
 Progressive Jersey dairy in Colorado; farm of A. M. McClenahan. C. H. Wolfe. Jersey B 35:1130 Jl 19 '16  
 Progressive Jewish farmer. P. Schereschesky. Hoard's D 55:379 Mr 22 '18  
 Prosperity at Homestead farm. A. M. Hellings. Jersey B 37:512 Ap 3 '18  
 Pusa (India) dairy herd. G. S. Henderson. il Ag J of India 12:328 Ap '17  
 Renting dairy farms on shares. Hoard's D 55:987 Jl 5 '18; Same. Wallaces' F 43:1042 Jl 12 '18; Same. Prog F 33:1050 S 28 '18; Same. Ohio F 142:377 O 19 '18  
 Rival stock farm. D. E. Andrews. il Kimball's D F 14:175 Mr 15 '16  
 Rosamond Holstein farm. C. Van Vuren. il Hoard's D 45:5 Jl 27 '17  
 Roycroft Jerseys. il Hoard's D 51:5-6 Ja 28 '16  
 Saranac Inn dairy. H. C. Campbell. il Hoard's D 55:805 My 31 '18  
 Scenes from a Holland certified dairy. L. Dukstra. il Hoard's D 55:1011 Jl 12 '18  
 Scenes from Ingleside farm; the home of the Detroit creamery company, Michigan. il Hoard's D 54:795 D 28 '17  
 Sherwood dairy farm. F. F. Gilmore. Hoard's D 54:617 N 23 '17  
 Story of Brookwood. H. G. Gulliver. il Field 11 28:748-60 O '18  
 Stratford model dairy and experimental area. J. W. Deem. il J Ag New Zealand 15:317-21 D '17  
 Stratford model dairy farm; first year's operations. J. W. Deem. J Ag New Zealand 17:231-2 O '18  
 Successful farming with pure-bred cattle. W. H. Jenkins. il Nat Stock & F 42:511 Ag 31 '18

**Dairy farms —Continued**

- Successful ice cream business on a dairy farm. D. V. Vandiver. *il* Hoard's D 53:273 Mr 9 '17
- Sunnyside not a Mississippi bubble. H. Jenkins. *il* Jersey B 37:507 Ap 3 '18
- Summants boll weevil with Jerseys in Louisiana. C. H. Staples. *il* Jersey B 37:935 Je 12 '18
- Tenants partners on Illinois farms. O Judd Farmer 61:3 S 30 '16
- Trimming overhead; Iowanola dairy. E. T. Leavitt. Hoard's D 55:93 F 3 '18
- Two Illinois brothers succeed with purebred Guernseys. O Judd Farmer 60:6 Ja 1 '16
- Unique dairy partnership. P. B. Paxson. Kimball's D F 14:572 S 15 '16
- University dairy farm at Notre Dame. A. J. Hayes. *il* Hoard's D 51:579 Ap 28 '16
- Visit to John Rathbun's dairy farm. E. B. Heaton. O Judd Farmer 65:429 N 9 '18
- Visiting two Oregon dairy farms. J. W. Pixley. Hoard's D 53:45 F 2 '17
- Well-managed dairy farm; F. G. Johnson and son's Mountain View farm at Foster. *il* J Ag (Quebec) 21:185 Je '18
- Well managed dairy farm; Maple Grove dairy, Ohio. R. L. Grady. *il* Hoard's D 56:693 D 13 '18
- Well-managed Ohio dairy farm. L. L. Rummell. *il* Ohio F 140:421 N 10 '17
- Where Crane bros., Indiana, produce market milk. *il* plans Hoard's D 56:355 O 11 '18
- Whiteside dairy accomplishment. O Judd Farmer 63:1 S 29 '17
- Why couldn't I? J. Eby. *il* Country Gent 83:7 Ja 19 '18
- Wilderness conquered. F. P. Cowing. *il* Hoard's D 52:161 S 1 '16
- See also Dairy buildings; Dairy farm management
- Dairy food and drug officials, American association of.** See Association of American dairy, food and drug officials
- Dairy houses.** See Milk houses
- Dairy improvement associations.** See Cow testing associations
- Dairy industry and trade**
- American dairy farmer's task. E. W. Gage. *il* Kimball's D F 16:588+ Ag 1 '18
- Billion dollar industry. Kimball's D F 14:557-60+, 626+ S 15-O 1 '16
- Bright future for dairymen. D. H. Propps. Kimball's D F 15:833 N 15 '17
- Buttermakers' duty to nation. N Y Prod R 45:122-3+ N 28 '17
- Changing currents in the milk stream. F. H. Higgins. Hoard's D 54:407 O 19 '17
- Condition of dairy industry. N Y Prod R 44:438 Jl 11 '17
- Conservative dairy thoughts. Ohio F 141:430 Mr 23 '18
- Dairy cows and food products. M. I. Requa. Kimball's D F 16:71 F 1 '18
- Dairy farmer in 1917. H. H. Dean. (*In* Reports, Dairymen's assns., 1916, p. 88-92) '17
- Dairy industry as a fundamental part of the agriculture of the future. B. H. Rawl. J Dairy Sci 1:428-32 Ja '18
- Dairy industry co-operation. F. M. Foulser. N Y Prod R 46:210 Je 5 '18
- Dairy industry important in war times. M. D. Munn. Jersey B 37:1081-2 Jl 10 '18
- Dairy industry in the province of Quebec, and co-operation. *Int R Ag Econ* 68:5-15 Ag '16
- Dairy industry of the South; milk situation in Louisiana. R. G. Miller. Hoard's D 55:728 My 17 '18
- Dairy operations on a war basis. *Ag Digest* 3:17 Jl '18
- Dairying industry; conference of factory managers. J Dept Ag S Australia 20:945-54 Jl '17
- Dairying industry of Ontario. G. R. Taggart. (*Commerce Reports* 25) p 394-5 (Ja 30) '17 U. S. Bureau of foreign and domestic commerce, Washington, D. C.
- Dairymen's outlook. Kimball's D F 16:666 S 1 '18
- Dairymen's responsibility. M. D. Munn. Kimball's D F 16:489 S 15 '18

- Dairymen must co-operate. M. D. Campbell. Hoard's D 56:509+ N 8 '18
- Dairymen must meet problem. F. W. Merrill. Kimball's D F 16:489 Je 15 '18
- Educational campaign wins at convention of the American warehousemen's association. N Y Prod R 45:185 D 12 '17
- English dairy trade. N Y Prod R 42:610, 660 Ag 9-16 '16
- Federated dairies of Schleswig-Holstein. *Int R Ag Econ* 68:1-4 Ag '16
- Future of the dairy industry. A. Levin. *Prac F* 14:107 Mr 1 '18
- Future of the dairy industry. E. W. Simons. *il* Hoard's D 56:33 Ag 2 '18; *Excerpt.* Nat Stock & F 42:369 Jl 13 '18
- Future of the milk business. C. H. Kilbourne. *Creamery* 4:15-17 Jl '16
- General outlook for the dairy industry. O. Erf. Ohio F 140:315 O 13 '17
- Hoover and dairymen confer; with proclamation. Kimball's D F 15:493 Jl 15 '17; Same (proclamation). Jersey B 36:1079 Jl 11 '17; Same (proclamation). N Y Prod R 44:438 Jl 11 '17
- Hoover confers with dairymen. Kimball's D F 16:593 O 15 '18
- India may increase use of cream separators. *Creamery* 4:49 Ap '16
- Market milk situation in Wisconsin. Hoard's D 54:587 N 16 '17
- Milk situation in New England; a review of the report of the Boston chamber of commerce. Kimball's D F 16:66+ F 1 '18
- New Zealand season. N Y Prod R 46:478 Jl 24 '18
- Producers organize; urge support of representatives in Washington. N Y Prod R 46:944 O 16 '18
- Progress in the milk business, especially in New York city. C. H. Kilbourne. *Creamery* 4:15-19 Mr '16
- Progress in the New South Wales dairying industry. M. A. O'Callaghan. *Ag Gaz* of New South Wales 28:356-8 My '17
- Provincialism in the dairy industry. C. E. North. *Creamery* 5:21-5 Ap '17
- Reducing my biggest loss. H. V. Stanley. *il* System on the Farm 2:12-13 Ja '18
- Report of the federal milk commission. *Prac F* 114:107 Mr 1 '18
- Report of the inspectors-general. (*In* Report, 1917, p. 114-19) plans '17 Quebec ag. dept., Quebec
- Role of the dairy industry in a system of national agricultural development. B. H. Rawl. (*In* Pan American scientific congress Proc., 1915, v. 3, p. 585-90) '17
- Shall we bite off our noses? Kimball's D F 16:339+ My 1 '18
- Should all heifers be raised? W. J. Fraser. Jersey B 36:1327, 1363, 1399 Ag 29-S 12 '17; Same. N Y Prod R 44:688, 726, 798 Ag 29-S 5, 19 '17; Same. Hoard's D 54:301, 322, 371 S 28-O 12 '17; Same. *Creamery* 6:65-7 O '17; Same. Wallaces' F 42:1435, 1535, 1593 O 19, N 9, 23 '17; Same cond. O Judd Farmer 63:3 S 15 '17; *Excerpt.* *Ag Digest* 2:659 O '17; *Excerpt.* J Ag (Quebec) 21:122 F '18
- Some aspects of the dairying industry of England and Wales. W. Gavin. *maps J Bd Ag* 23:sup5-52 S '16
- Some financial factors in the production of market milk; with discussion. F. Rasmussen. *Int Assn Dairy & Milk Inspep Rep* 1916:154-66
- Some suggestions in connection with the milk problem. *plan Cornell Ag Ext B* 12:453-7 '17
- Square deal for dairymen; what organization meant for California milk producers. J. M. Henderson. *Banker-F* 5:10 S '18
- Tough competition; dairymen's trust and the allied condensed milk contracts. N Y Prod R 45:56 N 14 '17
- Valuable gift; P. M. Sharples offers dairy cattle to promote Red cross funds, infant welfare, the dairy industry and French dairy reestablishment. N Y Prod R 46:414 Jl 10 '18
- War and its effect on the dairying industry. J. A. Ruddick. (*In* Reports, Dairymen's assns., 1916, p. 122-3) '17 Ontario ag. dept., Toronto



**Dairy industry and trade—Continued**

- \* War and the dairying industry. J. A. Rud-dick. (*In* Report, Dairymen's assns., 1917, p 117-20) '18 Ontario ag. dept., Toronto
- War conditions in England. N Y Prod R 46: 808 O 2 '18
- When Aladdin rubs his lamp; power of ad-vertising. H. S. K. Willcox. Hoard's D 56: 249 S 20 '18
- Why milk will be scarcer and higher. A. G. Morrell. *il* Country Gent 82:1346-7 S 1 '17
- Why we should use more milk. C. E. Gapen. *il* Country Gent 83:3-4+ My 25 '18
- See also Butter trade; Cheese industry and trade; Dairy exchanges; Dairymen's associa-tions; Milk industry and trade

**Bibliography**

- Cattle & dairying in California; a selective list of articles on cattle and dairying in California in the California state library. V. Clowe, comp. 24p '17 Cal. library school, Sacramento
- Obtainable only thru Public affairs in-formation service, 958-964 University av, N. Y. (Typew \$1.20)

**Regulation**

- Dairy industry act explained. M. A. O'Cal-laghan. Ag Gaz of New South Wales 27: 409-14 Je '16
- Dairy industry act, 1915, and regulations. M. A. O'Callaghan. Ag Gaz of New South Wales 27:707-12 O '16
- Dairy industry act; regulations established by order-in-council. Ag Gaz of Canada 5: 946-9 O '18
- Dairy trade control. N Y Prod R 44:785 S 19 '17
- Report of committee on milk regulations with introductory remarks. J. B. Newman. Assn Am Dairy Food & Drug Offic Pro 1918:57-69
- Rules and regulations for clean and safe milk supply. E. Kelly and others. J Dairy Sci 1: 356-60 N '17; Same. *Int Assn Dairy & Milk Inspec Rep* 1917:106-11; Discussion. 111-13 '17

**Statistics**

- Balance of trade in dairy products. Kimball's D F 16:840 N 1 '18
- Commercial stocks of dairy and related prod-ucts, Jan. 1. U S Food Surveys 1:1-23 Je 22 '18
- Commercial stocks of dairy and related prod-ucts, July 1. U S Food Surveys 2:1-20 Ag 31 '18
- Dairy manufactures for 1914. Creamery 4:18 Je '16; Same. N Y Prod R 42:276 Je 7 '16
- Exports and imports of dairy products. Hoard's D 52:56 Ag 4 '16
- Minnesota creameries, cheese, ice cream and canning factories; creamery list for 1917; creamery statistics for 1910 to 1916. 73p *il* '17 Minn. State dairy and food dept., St Paul
- Our dairy manufactures. N Y Prod R 44: 1070-1 O 24 '17
- Production and consumption of dairy prod-ucts. E. Merritt. U S Ag B 177:1-19 '15
- Quebec dairy statistics for 1915. G. E. Mar-quis. J Ag (Quebec) 20:39 Ag '16
- Statistics of dairy products. U S Ag Yearbook 1917:725-32; Excerpts. Creamery 7:37-9 J '18
- Statistics of production and marketing of dairy products. R. C. Potts. J Dairy Sci 1: 403-19 Ja '18
- Wisconsin dairy statistics. G: T. Weigle. N Y Prod R 46:218 Je 5 '18; Same. Hoard's D 55:939 Je 21 '18

**Dairy inspection**

- Bacterial testing versus dairy inspection. C: E. North. Hoard's D 55:496 Ap 5 '18
- Bearing of dairy inspection on better control of milk-borne diseases of man. J. W. Kerr. *Int Assn Dairy & Milk Inspec Rep* 1915:87-95; Same cond. Creamery 4:19 Ja '16
- Care to give milk in the cities. R. G. Mayotte. (*In* Report, Quebec Dairymen's assn., 1916, p. 217-27) '17
- Cheese factory and creamery instruction and inspection in the provinces. *il* Ag Gaz of Canada 3:964-85 N '16

- City milk supplies and the score card system. E. L. D. Seymour. Country Life 31:78 N '16
- City's milk supply. L. W. Rowles. *il* Country Gent 81:22 Ja 1 '16
- Common sense about milk. H. Quick. *il* Country Gent 81:1143-4 Je 3 '16
- Control of public milk supplies by the use of the microscopic method. R. S. Breed and J. D. Brew. *bibliog J Dairy Sci* 1:259-71 S '17
- Dairy farm inspection. Creamery 7:25-6 F '18
- Dairy farm inspection. H. H. Lyon. Hoard's D 56:363 O 11 '18
- Dairy farm score card. E. Kelly. J Dairy Sci 1:400-8 Ja '18
- Dairy inspection. W. H. Bailey. Am Vet M Assn J 52:686-92 F '18
- Dairy inspection methods. G. H. Conn. Ohio F 139:278 F 24 '17
- Dairy inspection needs. Ohio F 139:448 Mr 24 '17
- Dairy inspection needs. A. D. Burke. Ohio F 139:515 Ap 7 '17
- Dairy inspection needs. Ohio F 139:448 Mr 24 '17
- Dairy score card. Hoard's D 53:648 My 4 '17
- Dairy score card and its relation to milk qual-ity; with discussion. R. S. Breed. N Y Farms & Markets Dept Ag B 104:62-75 F '18
- Dairymen on the milk problem. C. A. Perrin. Rural N Y 75:1576 D 23 '16
- Décret portant réglementation du fonction-nement de la section d'inspections dé-partermentales de police animale à l'Uru-guay. *Int Yearbook Ag Leg* 1916:685-6 '17
- Delaware grangers oppose milk inspection. J. B. Rumbf. Hoard's D 53:386 Mr 23 '17
- Example of barn scoring. F. J. Hickey. Rural N Y 76:483 Mr 31 '17
- Farmers and the milk investigation commit-tee. Rural N Y 75:1099 Ag 19 '16
- Federal inspection applied to dairy products shipped in interstate commerce. N Y Prod R 42:794 S 13 '16
- History of milk inspection in Chicago and future of municipal milk inspection. W. A. Evans. Assn Am Dairy Food & Drug Offic Pro 1918:34-41
- How may an inspector know when milk is good. H. A. Harding. Mass Ag Bd Year-book 1917,pt 2:74-84 '18
- How the inspector won the banner. Creamery 7:30 F '18
- Inspection and sanitation of dairies. J. O. La-Bach and N. M. Cregor. Ky Ag Exp B 211: 211-28 '17
- Inspection is insufficient. Hoard's D 50:835 Ja 14 '16
- Inspection of dairy products. J. F. Singleton. Ag Gaz of Canada 3:510-11 Je '16
- Keep it clean—keep it cold. Kimball's D F 15: 351 My 15 '17
- Laboratory milk and meat inspection. J. F. Mitchell. Am Vet M Assn J 51:363-73 Je '17
- Linthicum resolution. W. M. Chandler. N Y Prod R 42:922+ O 4 '16
- Linthicum resolution. W: T. Creasy. N Y Prod R 42:477 J1 12 '16; Same. Hoard's D 52:12 J1 28 '16
- Maine farmer and milk inspector. B. W. Mc-Keen. Rural N Y 76:928 J1 28 '17
- Market milk inspection in Wisconsin. (*In* annual report, 1917, p. 111-34) maps '17
- Dairy and food comr., Madison, Wis.
- Means of improving a city milk supply. R. A. Lawson. *il* Purdue Ag 10:31-4 Je '16
- Meat and milk inspection with regard to pub-lic health. G. F. Sloane. Am Vet M Assn J 52:63-6 O '17
- Milk dealer's laboratory. A. Petitclarc. Creamery 5:52+ O '16
- Milk inspection problem. Ohio F 140:44 J1 21 '17
- Milk inspection problem. R. E. Hundertmark. Ohio F 139:364 Mr 10 '17
- Milk inspection problem. I. J. Mathews. Ohio F 139:716, 744, 768 My 26-Je 9 '17
- Milk quality as determined by present dairy score cards (B. 398). J. D. Brew. N Y State Ag Exp Rep 1915:125-50 '16
- Milk sanitation on the farm. L. B. Dunham. *il* Ohio F 139:146 F 3 '17
- Milk situation. Rural N Y 75:1476 N 25 '16

**Dairy inspection—Continued**

- Municipal inspection of dairy products. J. T. Ashcraft. *Il Modern City* (43 Franklin bldg., Baltimore, 35c) 1:14-16 My '17
- Need for dairy inspection. D. F. Mattson. *Ohio F* 138:253 S 16 '16
- New dairy score card proposed by C. E. North. *Kimball's D F* 15:379 Je 1 '17; Same abridged. *Creamery* 5:60 My '17; Same abridged. *N Y Prod R* 44:278 Je 13 '17
- New method for scoring dairies. H. F. Judkins. *Creamery* 7:27-9 Jl '18
- Policy of the U. S. Bureau of chemistry regarding dairy and milk inspection under the pure food law. C. L. Alsberg. *Int Assn Dairy & Milk Inspc Rep* 1915:113-16; Same. *Creamery* 4:30-1 F '16
- Practical dairy inspection. F. D. Holford. *Am Vet M Assn J* 50:52-6 O '16
- Preliminary report of the effect of the sanitary milk code upon the milk supply of the state. L. R. Williams. *N Y Ag Dept B* 80:1613-18 F '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1613-18 '17
- Present practicability of federal standards for milk handling. H. A. Harding. *Creamery* 4:19-23 My '16
- Present status of milk supervision in the cities of Ohio. F. G. Boudreau. *Ohio Pub Health J* (Ohio State bd. of Health, Columbus) 8:76-80 F '17
- Present status of official supervision of the Massachusetts milk supply by federal, state and local authorities. (*In* Report, Mass. Special milk board, 1915, p. 110-25) '16 Mass. State dept. of health, Boston
- Present status of the score card of milk quality. H. A. Harding. *Creamery* 4:14 Jl '16
- Production and distribution of milk as it concerns our public health service. H. E. Egan. *Ohio Pub Health Journal* (Ohio State Bd of Health, Columbus) 7:315-21 Ag '16
- Rules and regulations suggested as necessary for securing a clean and safe milk supply. E. Kelly. *N Y Prod R* 45:54 N 14 '17
- Sanitary aspects of milk control. R. B. Fitz-Randolph. *N J Ag Dept B* 12:501-17 '18
- Sections of sanitary code and regulations governing the production, transportation, pasteurization, and sale of milk, cream, condensed or concentrated milk, condensed skimmed milk, and modified milk. (Misc. no. 17) 36p '16 Dept. of health, N.Y. city
- Securing clean and safe milk supply. *Creamery* 6:32a-32b N '17
- Soil fertility and sanitary milk requirements. *Creamery* 5:15 Ag '17
- Some of the most important features of dairy inspection. J. O. Jordan. *Maine Ag Dept B* v 18:81-6 Je '18
- Stabling for dairy cows—dairy inspection. H. P. Miller. *Ohio F* 138:145 Ag 19 '16
- Standardizing the dairy. J. Mappelbeck. *il Country Gent* 81:1823-4 O 14 '16
- Status of local milk inspection. (*In* Report, Mass. Special milk board, 1915, p. 293-338) '16 Mass. State dept. of health, Boston
- Suggestion for success of milk inspection. C. F. Marshall. *Creamery* 5:54 Jl '17
- Summary of milk board's own dairy inspections. (*In* Report, Mass. Special milk board, 1915, p. 60-72) '16 Mass. State dept. of health, Boston
- Summary of report of milk board; with statement of conclusions and draft of proposed act relative to the inspection of milk. *Pub Health* (State dept. of health, Boston, Mass.) B v 3 27-45p F '16
- Survey of dairy score cards. C. E. North. *Am Journal of Public Health* (126 Massachusetts av., Boston 30c) 7:25-39 Ja '17
- United States public health service and its interest in a better milk supply. A. F. Stevenson. *Creamery* 5:25-7 Ag '17
- Washington's meeting of dairymen. H. G. Van Pelt. *Kimball's D F* 14:372-3+ Je 1 '16
- What is meant by quality in milk. H. A. Harding and others. *bibliog J Dairy Sci* 1:199-217 S '17; Same. *Il Ag Exp C* 205:1-16 '17; Same. *N Y State Ag Exp B* 438:459-75 '17
- Work of the agricultural colleges and experiment stations in its relation to a better milk supply. W. A. Stocking. *Int Assn Dairy & Milk Inspc Rep* 1915:153-9; Same cond. *Creamery* 4:20 Ja '16
- Work of the dairy inspector. A. C. Norris. *Ohio F* 137:38, 101, 214-15, 258, 461 Ja 8, 22, F 12-19, Mr 25 '16
- See also Cheese factory inspection; also International association of dairy and milk inspectors

**Dairy inspectors**

- Municipal milk inspectors in New York; data gathered by N.Y. State bureau of municipal information. (Report no 250) 2p '17
- Tables under the following heads: Requirements for holding position of milk inspector; What other duties, if any, does he perform; Annual salary. Obtained only thru Public Affairs Information Service, 958-964 University av., N.Y. (Typew 20c)
- Protection and adequate compensation for inspectors. E. Kelly and W. S. Gimper. *Creamery* 5:24-6 N '16
- Qualifications of a dairy inspector. A. C. Norris. *Ohio F* 140:428 N 10 '17
- Report of the committee on methods of appointment of dairy and milk inspectors and their compensation. *Int Assn Dairy & Milk Inspc Rep* 1916:181-90

**Dairy laboratories**

- Chemical and bacteriological research laboratory. G. L. McKay. *Hoards D* 52:42 Ag 4 '16; Same cond. *N Y Prod R* 42:580 Ag 2 '16
- Dairy laboratory established at Chicago by American association of creamery butter manufacturers. G. W. McKay. *N Y Prod R* 43:70 N 8 '16
- Laboratory milk and meat inspection. J. F. Mitchell. *Am Vet M Assn J* 51:363-73 Je '17
- Value of a laboratory. F. W. Robison. *N Y Prod R* 44:950 O 10 '17

**Dairy law**

- After St Louis dairies. O Judd Farmer 60:6 My 20 '16
- Agricultural law, 1916; dairy products. *N Y Ag Dept B* 83:1972-2003 My '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1972-2003 '17
- Bills at Albany. *N Y Prod R* 41:952 Mr 29 '16
- Boston milk regulations. *Creamery* 5:35 Je '17
- Butter moisture law. G. T. McKay. *N Y Prod R* 41:582 F 2 '16
- California dairy laws. F. W. Andreason. *Creamery* 5:31 Ag '17
- California pure milk law. M. M. Webster. *Cal State Bd Health* (Sacramento) Monthly B v 13:526-8 Je '18
- California's new dairy laws. L. L. DeBra. *Hoards D* 54:183 S 7 '17
- Cheese moisture law, New York. *N Y Prod R* 41:534 Ag 1 '17
- Commerce du bétail et des produits animaux; Industrie des produits animaux. *Int Yearbook Ag Leg* 1916:268-317, 721-61 '17
- Cream for butter and ice cream must be pasteurized in Indiana. *Creamery* 4:54 My '16
- Creamery and testers' license law in Indiana. O. F. Hunziker and G. L. Ogle. map plan *Ind Ag Exp C* 55:1-34 '16
- Dairies regulation act. T. A. F. Wiancko. *Ag Gaz* of Canada 4:498 Je '17
- Dairy and pure food laws of the state of Connecticut; corrected to the close of the legislative session of 1917. 56p n.d. Conn. Dairy and food comr., Hartford
- Dairy laws of Iowa effective April 30, 1917. 12p '17 Ia. Dairy and food comm., Des Moines
- Digest and copy of law regulating the weighing, testing and purchasing of milk and cream. W. J. Carson. *N J Ag Exp C* 62:1-16 n.d.
- Ice-cream—manufacture and sale. (*In* Municipal ordinances, 1916, p. 180-2) '17 U.S. Pub. health service, Washington, D.C.
- Ice cream regulations, New York city. *Creamery* 4:40 Je '16
- Important New York state law. *Creamery* 4:17 Je '16
- Insanitary milk and cream—the Michigan law. *Creamery* 4:29 Ja '16



**Dairy law—Continued**

- Inspection rules to be enforced by California dairy bureau. Creamery 4:42 Je '16
- Laws of California relative to production and standard of dairy products. 51p '17 Cal. State dairy bur., 268 Market st, San Francisco
- Laws relating to the manufacture and sale of food products, 1917. 84p '17 Oregon state printing dept., Salem
- Legal control of oleomargarine. H: C. Sherman. Hoard's D 56:105 Ag 16 '18
- Legislation pertaining to clean milk containers. Boston Health Dept B 6:178-9 Ag '17
- Licensing testers. N Y Prod R 42:906 O 4 '16
- Manitoba legislation. N Y Prod R 42:839 S 20 '16
- Manual of laws pertaining to the Department of farms and markets; dairy products. N Y Farms & Markets Dept Ag B 108:63-95 Je '18
- Milk and cream regulations. Hoard's D 53:132 F 16 '17
- Milk and milk products—production, care, and sale. (*In* Municipal ordinances, 1916, p. 106-79) '17 U.S. Pub. health service, Washington, D.C.
- Mississippi ice cream law. Creamery 7:50 N '18
- New California laws. N Y Prod R 44:770 S 12 '17
- New dairy industry legislation in New South Wales, Australia. M. A. O'Callaghan. Int R Sci & Prac Ag 7,no 11:1687-9 N '16
- New dairy law in New Jersey. N Y Prod R 42:729 Ag 30 '16
- New testers license law, New York; text. N Y Prod R 44:302 Je 20 '17
- New Wisconsin cheese moisture and whey butter laws. N Y Prod R 44:278 Je 13 '17
- New York milk dealers protected. Hoard's D 51:791 Je 2 '16
- N. Y. state cheese law. N Y Prod R 44:405 Jl 4 '17
- Ordinance no. 271; an ordinance concerning the keeping, use and sale of milk in Sacramento. Official Gazette (Sacramento, Cal.) 3:4-6 My 7 '17
- Pa. storage law limiting storage period of butter constitutional. N Y Prod R 44:536 Ag 1 '17
- Production of pure milk; California. Cal State Bd of Health (Sacramento) Spec B 13:12p '16
- Regulations governing cream and milk stations. 4p '17 Ia. Dairy and food comm., Des Moines
- Results of creamery and cheese factory license law in Wisconsin. C. E. Lee. Hoard's D 52:130 Ag 25 '16
- South Dakota regulations affecting creameries, milk depots and ice cream factories. N Y Prod R 42:192 My 24 '16
- Suggest legislation; some of the resolutions passed at Albany conference. N Y Prod R 43:389 Ja 3 '17
- Summary of present milk laws in Massachusetts. (*In* Report, Mass. Special milk board, 1915, p. 37-41) '16 Mass. State dept. of health, Boston
- Summary of proposed laws relating to milk in Massachusetts. (*In* Report, Mass. Special milk board, 1915, p. 33-7) '16 Mass. State dept. of health, Boston
- \* Supplement to Wisconsin Dairy and food laws of August 1913. 21p '17 Wis. Dairy and food comr., Madison
- To eradicate tuberculosis. Wallaces' F 42:440 Mr 9 '17
- Two acts of Wisconsin legislature. Hoard's D 53:897 Je 22 '17
- Why a cow can't keep the law. A. C. Laut. Country Gent 82:1444-5+ S 22 '17
- Wisconsin butter and cheese license law. G: J. Weigle. Wallaces' F 41:415 Mr 10 '16
- Wisconsin license law. C. E. Lee. N Y Prod R 42:626 Ag 9 '16
- Wisconsin license law; beneficial effects. C. E. Lee. N Y Prod R 42:14 Ag 26 '16; Same. Hoard's D 51:672 My 12 '16
- Wisconsin skim cheese law. J. L. Sammis. N Y Prod R 45:514 F 13 '18

**Dairy machinery**

- Modern dairy machinery. E. H. Leidecker. Purdue Ag 12:537-8 Je '18
- Motors replace steam engine in dairy. J. P. Moore. *El Electrical Review* (515 Monadnock blks., Chicago 15c) 72:120 Ja 19 '18
- New patents. Creamery 7:38 Ja; 35-6 F; 45-6 My; 42-3 Je; 31-2 Ag; 62 O; 40 D '18
- Review of the dairy show exposition. *il* Creamery 5:29-40 O '16
- See also* Creamery machinery; Dairy utensils; Milk bottle washing machines; Milk can emptying machines; Milking machines; also Davis-Watkins dairymen's manufacturing company
- Dairy machinery industry**
- From the supply men's interest. E. G. Dietrich. N Y Farms & Markets Dept Ag B 104:107-10 F '18
- Dairy marketing conference**
- Conference held during National dairy show. Hoard's D 54:539 N 9 '17
- Important meeting held during the Dairy show. N Y Prod R 44:1133 O 31 '17
- Dairy products**
- Advertising benefit to consumers. S. Sosland. Hoard's D 56:586 N 22 '18
- Agricultural situation for 1918; dairy production should be maintained. U S Ag C 85:1-24 '18; Excerpts. Creamery 7:20 Ap '18
- Amount of dairy products. Hoard's D 51:878 Je 23 '16
- Better prices for dairy products. Kimball's D F 14:90 F 15 '16
- B. A. I. report of 1912. C. Vrooman. N Y Prod R 42:724 Ag 30 '16
- Butter, cheese and condensed milk. Ohio F 137:817 Je 17 '16
- Butter in California. H. A. Crofts. Kimball's D F 14:768 D 1 '16
- Buttermakers' duty to nation. N Y Prod R 45:122-3+ N 28 '17
- Case of the dairy cow. Wallaces' F 43:1247 S 6 '18
- Changing currents in the milk stream. F. H. Higgins. Hoard's D 54:407 O 19 '17
- Chicago Tribune dairy attitude. Kimball's D F 16:479 Je 1 '18
- Comparative food values of dairy produce. R. T. Archer. J Dept Ag Victoria 14:668-72 N '16
- Conserving milk for food. Wallaces' F 43:312 F 15 '18; Same cond. Ag Digest 2:880 Mr '18
- Dairy and food situation of the world. H. Hoover. Creamery 7:27-31 Je '18; Same. Jersey B 37:933-4+ Je 12 '18; Same. Hoard's D 55:890, 920 Je 14-21 '18; Excerpts. Nat Stock & F 42:299 Je 15 '18
- Dairy conference with Bureau of animal industry. Hoard's D 51:694 My 19 '16
- Dairy industry in Italy. A. H. Kolbe. Jersey B 35:899 Je 7 '16
- Dairy industry in the province of Quebec. J Ag (Quebec) 20:109 N '16
- Dairy interests must get together. Kimball's D F 14:232 Ap 1 '16
- Dairy production in Canada. (*In* Reports, Dairymen's assns., 1916, p. 62-7) '17 Ontario ag. dept., Toronto
- Dairy products and changing conditions. Hoard's D 55:1035 Jl 12 '18
- Dairy products and Food administration. Hoard's D 55:690 My 10 '18
- Dairy products and the machinery of production vital in war time; photographs. Ag Digest 2:708-9 N '17
- Dairy products and their food value. Ia Ag Ext Short Course Notes 16:1-12 '17-'18
- Dairy products essential to health. E. V. McCollum. N J Ag Dept B 16:57-71 '18
- Dairy products in Canada. J: G. Foster. N Y Prod R 44:732 S 5 '17
- Dairy products in Ontario. H. H. Dean. (*In* Reports, Ontario ag. and exp. union, 1916, p. 57-61) '17 Ontario ag. dept., Toronto
- Dairy products make us what we are. E. V. McCollum. Kimball's D F 16:356-7+ My 1 '18; Same. Jersey B 37:973-4+, 1015+ Je 19-26 '18; Excerpts. Creamery 7:30-3 My '18
- Dairying and public health. B. W. Hammer. N Y Prod R 41:852+ Mr 15 '16

**Dairy products—Continued**

- Dairyman's war obligation and opportunity. Hoard's D 55:4 Ja 25 '18
- Decline in Holland's yield of dairy products. Wallaces' F 42:767 My 4 '17
- Determination of fat in certain milk products. C. K. Francis and D. G. Morgan. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:861-2 S '17
- Drink milk—beat the kaiser. Kimball's D F 16:655 S 1 '18
- Exports and imports of dairy products. G. L. McKay. Breeder's Gaz 70:652 O 12 '16
- Farrell defends dairy interests. J. J. Farrell. N Y Prod R 41:954-5 Mr 29 '16; Same. Hoard's D 51:501+ Ap 14 '16
- Federal inspection applied to dairy products shipped in interstate commerce. N Y Prod R 42:794 S 13 '16
- Federal regulation and inspection of milk, butter and other dairy products. J. C. Linthicum. N Y Prod R 41:990 Ap 5 '16
- Feeding flavor in. G. L. Hyslop. Hoard's D 52:358 O 6 '16
- Food questions answered with respect to dairy products. Creamery 7:33-4 Je '18; Same cond. N Y Prod R 46:258 Je 12 '18; Same cond. Hoard's D 55:987 Jl 5 '18
- Food value of dairy products. E. H. Farrington. Creamery 7:25-6 Ja; 27-9 F '18
- Government production reports now being compiled for dairy products by Bureau of markets. N Y Prod R 44:1148 O 31 '17
- Greater use of dairy products. W. A. Stocking. Cornell Countryman 15:527 Je '18
- Husbanding food resources. Creamery 5:31-2 My '17
- Imitation—the rarest flattery. M. G. Dunn. Hoard's D 53:137 F 16 '17
- Increasing consumption of dairy products. E. Kelly. il Hoard's D 56:217 S 13 '18
- Linthicum resolution. W. M. Chandler. N Y Prod R 42:922+ O 4 '16
- Linthicum resolution and the B. A. I. report. C. H. Sloan. N Y Prod R 42:140 My 17 '16
- Linthicum resolution hearing. N Y Prod R 41:1069 Ap 19 '16
- Live-stock advisory committee's recommendations as to dairy products. Creamery 7:28 My '18
- Making mouths water creates demand. H. G. Van Pelt. il Kimball's D F 16:440 Je 1 '18
- Metallic flavor in dairy products. E. S. Guthrie. bibliog Cornell Ag Exp B 373:609-43 '16; Same. Cornell Ag Exp Rep 1916:609-43 '17; Same cond. N Y Prod R 42:103 My 10 '16
- Milk and cream in 1917. J. Gordon. N Y Prod R 43:202+ N 29 '16
- Milk conservation urged. H. D. Wendt. Creamery 5:19 Je '17
- Milk industry and co-operative dairies in Pomerania in 1913. Int R Ag Econ 64:18-21 Ap '16
- Minnesota dairy products campaign. F. W. Merrill. il Kimball's D F 16:449 Je 1 '18
- New possibilities in dairying. W. Sadler. J Ag (Quebec) 19:175, 198, 221 F-Ap '16
- 1916 B. of A. I. report. N Y Prod R 43:318 D 20 '16
- Nutritive value of dairy products. W. B. Barney. il Kimball's D F 15:620 S 15 '17
- Our dairy manufactures. N Y Prod R 44:1006 O 17 '17
- Present supply of dairy products. H. L. Russell. Hoard's D 56:161 Ag 30 '18
- Pressing needs for dairy cows. Jersey B 36:1593-4 O 17 '17
- Producers should advertise milk. D. D. Aitken. Hoard's D 55:426 Mr 29 '18
- Profitable utilisation of surplus milk. J Bd Ag 24:322-6 Je '17
- Proposed federal investigation. N Y Prod R 41:685, 686 F 23 '16
- Relation of bacteria in dairy products to health. H. A. Harding. Creamery 5:38+ N '16
- Soldiers want dairy products. S. Sosland. Hoard's D 55:761 My 24 '18
- Some correspondence. Jersey B 35:849 My 31 '16
- Strawberries and grease. Hoard's D 56:183 S 6 '18

- Utilizing dairy by-products. G. D. Turnbow. Kimball's D F 16:208 Mr 15 '18
- Values of milk and its products. R. M. Washburn. Kimball's D F 16:109 F 15 '18
- War time dairying. J. H. Frandsen. il Jersey B 37:341-2+ Mr 6 '18; Excerpts. Kimball's D F 16:156-7 Mr 1 '18
- Why a dairy show? R. M. Gow. Jersey B 36:1606 O 17 '17
- Why farmers should consume more dairy products. B. H. Rawl. il Hoard's D 52:759 D 22 '16
- Work of Food administration. Hoard's D 55:614 Ap 26 '18
- See also Butter; Buttermilk; Cheese; Cream; Dairying; Ice cream; Milk; Milk, Goats'; Oleomargarin; also Dairy conference, Oregon cooperative dairy exchange

**Analysis**

- Analyses of milk, etc., in Americus, Atlanta, Columbus and Marietta. Ga Ag Dept B v 5: 17-32 D '17
- Dairy products. Assn Offic Ag Chem J 2,no 3,pt 2:287-98 N '16
- Investigation of dairy products quarter ending Dec. 31, 1916. Maine Ag Dept Dairy B 25:1-9 F '17
- List of the analyses of samples of butter and other food products made under the direction of the Dairy and food commissioner with the approval of the secretary of the Department of agriculture to Jan. 1, 1918. Pa Ag Dept Dairy B v 15:113-33 Ja '18
- Report on dairy products (adulteration). J. Hortvet. Assn Offic Ag Chem J 1,no 4,pt 1: 538-44; 2:238-57 F '16, F '17

**Judging**

- See also Students' dairy products judging contest

**Marketing**

- Advertising dairy products. il Creamery 5: 15-19 F '17
- Cold storage as a factor in marketing dairy products. V. Schwarzkopf. Purdue Ag 12:361-2 Mr '18
- Co-operative marketing of dairy products. E. L. Brigham. il Hoard's D 54:360+ O 12 '17
- Des Moines boosts dairy products. C. M. Kennedy. O Judd Farmer 64:577 Je 1 '18
- For a wider use of dairy products. O Judd Farmer 61:3 Jl 8 '16
- Marketing dairy products. R. C. Potts. N Y Prod R 41:1038-9 Ap 12 '16
- Marketing dairy products; interesting consideration of milk marketing problem. R. C. Potts. N Y Prod R 43:350+ D 27 '16; Same. N Y Ag Dept B 93:60-8 Mr '17
- Milk dairy situation. O. W. Mapes. Rural N Y 75:1139 Ag 26 '16
- Snatching profit from the jaws of waste. Creamery 4:11-13 Mr '16
- Survey of the dairy marketing conditions and methods in New Hampshire. L. M. Davis. maps N H Ag Ext B 8:1-45 '17
- See also Dairy marketing conference

**Pasteurization**

- Annual report and pasteurization of by-products; with discussion. M. P. Bouchard. (In Report, Quebec Dairymen's assn., 1916, p. 187-94) '17
- Pasteurization; its commercial value in the dairy industry. O. F. Hunziker. N Y Prod R 42:194+; 234-5 My 24-31 '16; Same. Hoard's D 51:835, 868 Je 16-23 '16; Same. Creamery 4:11-17 Je '16
- Preventing the spread of contagious and infectious diseases of animals. Wis Ag Dept C 8 6p, '17
- Why pasteurize by-products? E. G. Hastings. N Y Prod R 46:146 My 22 '18

**Prices**

- Canadian dairy produce prices. F. E. Ellis. Hoard's D 55:765 My 24 '18
- How can we secure fair prices for dairy products? Mrs D. C. Cornman. Nat Stock & F 40:1115 Ja 27 '17



**Dairy products—Prices—Continued**

- \* Milk and dairy products. (*In* Official statement, no. 7, p. 14-16) '18 U.S. Food administration, Washington, D.C.
- Prices of milk, cream, fermented milk and cottage cheese in certain big cities; tabulation. Creamery 7:28 D '18
- \* Some reasons why the prices of dairy products has advanced. H. H. Dean. (*In* Report. Dairymen's assns., 1917, p. 114-16) '18 Ontario ag. dept., Toronto

**Standards**

- Commission on milk standards; third report of the commission appointed by the New York milk committee. (Reprint no. 386 Pub. health reports) 2Sp '17 U.S. Public health service, Washington, D.C.
- Definition and standards for milk and milk products. Hoard's D 51:904 Je 30 '16
- Definitions and standards for dairy products. N Y Prod R 44:186 My 30 '17; Same. Creamery 5:27-8 Je '17
- Definitions and standards; hearing before joint committee given at St Paul. N Y Prod R 46:321 Je 26 '18
- Legal standards for dairy products. Hoard's D 51:825 Je 9 '16
- Meeting on definitions and standards. Creamery 5:34-5 Jl '17
- Milk and its products. Creamery 4:30 My '16
- Public hearing on standards. C: K. Kilbourne. Creamery 4:51 My '16
- Report of the joint committee on definitions and standards; standards for milk and cream. Assn Am Dairy Food & Drug Office Pro 1917:122-5
- Report on standards. N Y Prod R 43:742 Mr 7 '17
- Standardizing dairy products. T. Mojonner. Creamery 7:44 My '18
- Standards of dairy products. N Y Prod R 44:297+ Je 20 '17
- Two acts of Wisconsin legislature. Hoard's D 53:897 Je 22 '17

*See also* Butter—Standards; Cheese—Standards

**Testing**

- Dairy products, pure and adulterated. T. J. McInerney. Cornell Countryman 15:466+ My '18
- Report on dairy products (adulteration). J. Hortvet. Assn Offic Ag Chem J 1, no 4, pt 1:538-44; 2:238-57 F '16, F '17

**Transportation**

- Maintenance of any quantity rates on dairy products. J. J. Farrell. N Y Prod R 41:1042 Ap 12 '16
- Question of freight rates; dairy interests heard separately in the classification examination at Chicago. N Y Prod R 47:1 N 6 '18
- Railroad rates on dairy products. W. B. Quar-ton. Hoard's D 52:739 D 15 '16

**Dairy record association.** *See* American dairy record association

**Dairy schools**

- Cumberland and Westmoreland travelling dairy schools. il J Bd Ag 22:1008-9 Ja '16
- Dairy education in New South Wales. M. A. O'Callaghan. Ag Gaz of New South Wales 28:483-5 Jl '17
- Dairy school, Ontario agricultural college. H. H. Dean. il Ag Gaz of Canada 3:47-50 Ja '16
- Dairying at Colorado agricultural college. il Kimball's D F 14:583 S 15 '16
- Eastern dairy school, Kingston, Ontario. L. A. Zufelt. il Ag Gaz of Canada 3:50-5 Ja '16
- Nebraska's cream quality short course. H. R. Campbell. Creamery 4:26-7 Ap '16
- Schools promote dairying in North Carolina. S. R. Winters. Kimball's D F 15:521 Ag 1 '17
- Special Nebraska short course in dairying. Creamery 4:39 Ja '16
- Studying dairy manufacture. il Prac F 112:256 Je 15 '16
- Wisconsin dairy school. N Y Prod R 43:14 N 1 '16

*See also* Cheese schools, Cooperative; Dairying—Study and teaching; St-Hyacinthe dairy school

**Dairy science association, American.** *See* American dairy science association

**Dairy shows**

- California dairy exhibits. N Y Prod R 44:874 O 3 '17
- Connecticut scorings at Storrs show. N Y Prod R 45:244 D 19 '17
- Dairy exhibit at patriotic food show. il Creamery 7:19 F '18
- Dairy exhibit at the South Dakota state fair. R. Wylie. Hoard's D 56:408 O 18 '18
- Dairy show in Sanders co., Montana. F. M. Hillman. il Hoard's D 56:43 Ag 2 '18
- Iowa dairy association; unusual inducements to enter butter and cheese in the competitions. N Y Prod R 46:658 Ag 28 '18
- List of scores awarded exhibitors of milk, cream and butter at Boston, Jan. 6. N Y Prod R 41:508 Ja 19 '16
- Milk shows and increased sales. Rural N Y 77:776 Je 8 '18
- Northwest dairy products show. G. E. Frevert. Hoard's D 51:457+ Ap 7 '16
- Successful dairy show in Denver. il Jersey B 36:231-2 F 14 '17

*See also* Butter—Exhibits; Cattle shows; Cheese contests; Cow contests; Cream contests; Live stock shows; Milk contests; also Dairy cattle congress; National dairy show; National western stock show; Southeastern states butter and cheese show; Southwestern dairy show; Western dairy products show

**Dairy utensils**

- Arrangement to keep flies from milk strainer. il Hoard's D 56:10 Jl 26 '18
- Cleaning test bottles. N Y Prod R 44:466 Jl 18 '17
- Dairy farm equipment. G. H. Alford. Prog F 33:538 Ap 27 '18
- Demonstration of simple steam sterilizer for farm and dairy utensils. G: B. Taylor. Assn Am Dairy Food & Drug Office Pro 1916:92-5
- Factors of importance in producing milk of low bacterial count. C. L. Roadhouse. il plan Cal Ag Exp C 179:1-11 '17
- Germ content of milk as influenced by the utensils. M. J. Prucha and others. il Ill Ag Exp B 204:217-57 '18; Abstract. Kimball's D F 16:320 Ap 15 '18
- Germ content of milk influenced by utensils. J. Vanderleek, J Ag (Quebec) 21:171 My '18
- Homemade dairy sterilizer. il O Judd Farmer 62:14 F 10 '17
- Home-made sterilizer. Hoard's D 51:176 F 18 '16
- Importance of clean utensils in clean milk production. G: B. Taylor. Int Assn Dairy & Milk Inspep Rep 1917:164-72
- Keep dairy utensils clean. Prac F 113:294 Ag 15 '17
- Legislation pertaining to clean milk containers. Boston Health Dept B 6:178-9 Ag '17
- Milk utensils as sources of contamination. M. J. Prucha. Creamery 7:54 My '18
- Milking; some general advice for patrons. N Y Prod R 45:154-5 D 5 '17
- Pails and strainer. A. C. Norris. Ohio F 137:258 F 19 '16
- Pasteurizer for small dealers. Creamery 5:46 Je '17
- Produce clean milk. Weekly N L 5:11 Ap 17 '18
- Production of clean milk. F. H. Bothell. Creamery 7:36-7 My '18
- Simple means of sterilizing farm dairy utensils. il Hoard's D 53:1005 Jl 20 '17
- Simple steam sterilizer for farm dairy utensils. S. H. Ayers and G: B. Taylor. il Farmers' B 748:1-11 '16; Same. Ia Ag Bd Yearbook 1916:352-62; Same cond. Creamery 4:17 Ag '16; Same cond. Ohio F 138:325 O 7 '16; Same cond. Jersey B 35:1769 N 8 '16; Same cond. Hoard's D 52:621 N 24 '16; Same cond. Power F 25:44+ D '16
- Sterilization of dairy utensils on the farm and a demonstration of a new steam sterilizer. G: B. Taylor. il Int Assn Dairy & Milk Inspep Rep 1916:200-6
- Sterilizer for dairy. Prog F 31:1032 Ag 26 '16
- Sterilizing dairy utensils. H. F. Judkins. Kimball's D F 16:583 Jl 15 '18

**Dairy utensils—Continued**

To sterilize milk containers. Creamery 5:53 Mr '17

What American inventors have done for dairying. A. Levin. Creamery 5:21-2 Ja '17

See also Churns; Cream separators; Milk bottles; Milk cans; Milk pails; Milking machines

**Dairying**

Advantages in winter dairying. N. A. Nowell. O Judd Farmer 60:7 Mr 11 '16

Advantages of winter dairying. H. C. Ferguson. Prog F 32:176 F 10 '17

Barnyard—a fertile source of dirty milk. A. C. Norris. il Ohio F 137:214 F 12 '16

Boy farmer. J. G. Poynton. Wis Dairymen's Assn Rep 1913-1916:196-202 '17

Brains count more than acres and labor. E. Nordman. Hoard's D 53:679 My 11 '17

Building a profitable herd. C. W. Schwark. Hoard's D 55:991 Jl 5 '18

Building up a dairy herd. C. L. Hill. (In De Laval dairy hand book, p. 32-6) '16 De Laval separator co., New York

Business side of a dairy herd. C. H. Eckles. il Country Gent 83:9+ S 14 '18

Butterfat and income. J. C. McDowell. U S Ag Yearbook 1917:357-62

Call to arms. W. O. Mills. Hoard's D 53:941 Jl 6 '17

Care, feed and management of the dairy herd in Iowa. H. H. Kildee. Int R Sci & Prac Ag 8,no 4:616-22 Ap '17

\* Care of milk and cream. (B. 62) il plan 6p '16 Minn. Dairy and food dept., St Paul

Care of milk and cream. E. A. Markham. J Ag (Quebec) 20:14 Jl '16

Care of milk and cream on the farm. W. Dempster. plan J Ag New Zealand 15:248-50 N '17

Care of milk and cream on the farm. G. L. McKay. Breeder's Gaz 69:1329 Je 29 '16

Causes of dairy failures. W. C. Jeffries. Ohio F 137:300 F 26 '16

Cheese values; economic factors which affect the price of cheese. N Y Prod R 45:14+ N 7 '17

Clean milk. K. Trever. Hoard's D 54:380 O 12 '17

Clean milk from simple equipment. H. E. McCartney. il Hoard's D 50:819 Ja 14 '16

Clean milk in ordinary barns. Ohio F 142:32 Jl 13 '18; Excerpts. Hoard's D 55:1023 Jl 12 '18

Combining dairy and sheep farming. R. H. Harding. J Ag (Quebec) 20:vi Ja '17

Coming out by the milky way. H. S. Stabler. il Country Gent 81:318-19 F 12 '16

Community efforts in dairying. E. Brown. Ohio F 139:717 My 26 '17

Consumers increase milk costs. A. D. Burke. Ohio F 140:268 S 29 '17

Corn, alfalfa and milk. Jersey B 36:1981 D 19 '17

Cost of production and profit. A. W. Langdon. Hoard's D 53:100 F 9 '17

Cost of starting in dairying. I. J. Mathews. Ohio F 141:725 Je 1 '18

Costs and profits in dairying. C. W. Larson. N Y Farms & Markets Dept Ag B 97:255-66 Jl '17

Cow accounting. G. R. Harrison. Hoard's D 51:325 Mr 17 '16

Cow counsel. H. M. Seeley. Nat Stock & F 41:345 Je 30 '17

Cow makes farming more profitable. 125p il maps '17 International harvester co., Agricultural extension dept., Harvester bldg., Chicago

Cows as money makers. K. Perkins. Ohio F 142:53 Jl 20 '18

Dairy and milk inspection from the standpoint of the milk and cream producer. H. W. Wiley. Int Assn Dairy & Milk Inspep Rep 1915:72-9

Dairy cow and her home farm. C. C. Hayden. il Ohio F 137:557 Ap 15 '16

Dairy cow and her place on the farm. A. J. Glover. Ill Farmers Inst Rep 1917:58-64 '17

Dairy cow and the cost of milk production. H. H. Wing. N Y Farms & Markets Dept Ag B 104:79-86 F '18

Dairy cow as a factor in the war. A. C. Palmer. Hoard's D 55:177 F 22 '18

Dairy cows and food products. M. I. Requa. Kimball's D F 16:71 F 1 '18

Dairy cows as manufacturing machines. J. C. Orcutt. il Kimball's D F 14:787-8 D 15 '16

Dairy cow's big job. R. M. Cleveland. il Country Life 33:59-61 Ja '18

Dairy day dream. E. L. Vincent. Hoard's D 56:1 Jl 26 '18

Dairy department. See monthly numbers of Field illustrated

Dairy dream come true. il Kimball's D F 16:72 F 1 '18

Dairy drudgery. Mrs D. C. Cornman. Nat Stock & F 41:465 Ag 11 '17

Dairy economics. il Hoard's D 55:139 F 18 '16

Dairy farm equipment. I. J. Mathews. Ohio F 139:148, 232 F 3, 17 '17

Dairy farmer's problems. E. L. Vincent. Hoard's D 56:39 Ag 2 '18

Dairy helps for rural schools and club members; questions and answers. T. W. Moseley. Okla Ag Ext C 56:1-16 '17

Dairy ideas from various sources. Prac F 113:326 S 15 '17

Dairy preparedness. C. H. Claudy. il Scientific Am (233 Broadway, N. Y. 10c) 116:620-1 Je 23 '17

Dairy preparedness. J. H. Frandsen. Jersey B 36:790 My 23 '17; Same. Hoard's D 53:763 My 25 '17

Dairy problem. Rural N Y 75:210 F 5 '16

Dairy situation. F. C. Minkler. Kimball's D F 15:413+ Je 15 '17; Same pt. II and III. Rural N Y 76:778, 800 Je 9-16 '17

Dairy situation. D. H. Propps. Jersey B 36:1789 N 14 '17

Dairy trinity. W. A. Martin. Ohio F 137:134 Ja 29 '16

Dairying. J Dept Ag S Australia 20:589-91 F '17

Dairying. L. W. Lighty. Nat Stock & F 41:50-1 Ap 7 '17

Dairying a business proposition. R. I. Grady. Hoard's D 54:873 Ja 11 '18

Dairying and community welfare. E. F. Burton. Wallaces' F 43:584 Mr 29 '18

Dairying and the war. Pa Ag Dept Dairy B v 15:27-9 Je '17

Dairying as a business. F. Williams. Prog F 33:482 Ap 13 '18

Dairying becomes a profession. A. L. Tichane. Jersey B 36:1294 Ag 22 '17

Dairying for dollars. Mrs R. W. Fletcher. Ill Farmers Inst Household Sci 1917:158-62 '18

Dairying for the small farmer. A. J. Reed. Prog F 31:1430 D 9 '16

Dairying the backbone. E. L. Vincent. Nat Stock & F 41:1321 Mr 16 '18

Dairying versus beef feeding. F. Nichols. Hoard's D 55:90 F 8 '18

Dairying—yesterday, today and tomorrow. M. D. Munn. Mo Ag Bd Yearbook 1916:97-106

Dairymen's outlook. J. Bower. Hoard's D 53:180, 240 F 23-Mr 2 '17

Dairymen's profit; money in producing cheese milk? N Y Prod R 43:288 D 13 '16

Dairymen go over the top. N. Negley. Jersey B 37:78 Ja 16 '18

Dairymen tell whys and wherefores. il O Judd Farmer 63:1 D 29 '17

Dairymen's dilemma. il Country Gent 82:1087 Je 30 '17

Dairymen's needs. J. C. Burnam. Wallaces' F 43:621 Ap 5 '18

Dairymen's patriotism on test. L. L. Heller. il Field 11 27:543-4 Jl '17

Day on a dairy farm. Rural N Y 76:1437 D 22 '17

Dealing in dairy futures. I. J. Mathews. Kimball's D F 15:416 Je 15 '17

Do we keep cows, or do cows keep us? W. Jack. Prac F 112:122 Mr 15 '16

Dying industry. C. J. Emery. Hoard's D 55:692 My 10 '18

Economy in milk production. J Bd Ag 24:871-6 N '17

Eliminating the obstacles in dairying. D. E. Andrews. Prac F 112:262 Jl 1 '16

Embarking in the dairy business. T. Butler. Prog F 32:919 S 1 '17



**Dairying—Continued**

- Equipping the dairy farm. W. Jack. *Prac F* 113: 118 Mr 15 '17
- Essentials for clean milk. J Ag (Quebec) 20: 68 S '16
- Essentials of safe milk production. Creamery 6:23-5 S '17
- Experiments with dairy cows. Hoard's D 51: 423 Mr 31 '16
- Extension circulars. Mass Ag Ext C 28, 33, 36 '17
- Titles are: Importance of the dairy cow; Dairy problem; Importance of raising heifer calves
- Factors and methods in the profitable production of sanitary milk. W. D. Nicholls. *il plans Ky Ag Exp B* 206:1-43 '17
- Factors and opportunities in successful dairy farming. J. A. Foord. Md Ag Soc Rep 1916, v 1:254-65 '17
- Factors for success in farming. H. O. Watrud. Hoard's D 51:97 F 11 '16
- Factors influencing the cost of milk. W. M. Kelly. Ohio F 140:601-2 D 29 '17
- Fall work with dairy herd. G. A. Meredith. Ohio F 140:428 N 10 '17
- Farm well is an important factor in dairying. A. C. Norris. Ohio F 137:461 Mr 25 '16
- Farmer with small capital. Hoard's D 51:318 Mr 10 '16
- Farmers' week at Cornell; dairy lectures. W. H. Jenkins. *il Kimball's D F* 15:290 Mr 15 '17
- Fit your dairy to your farm. W. M. Kelly. *il Ohio F* 139:230 F 17 '17
- For a clearing house for blooded dairy stock. Creamery 5:15-16 Je '17
- Four essential factors in the production of milk of low bacterial content. S. H. Ayers and others. U S Ag B 642:1-61 '18; Excerpts. Creamery 7:35-7 Je '18; Summary. Hoard's D 55:986 J1 5 '18; Summary. N Y Prod R 46: 450 J1 '17 '18
- Fundamentals in dairying. E. Van Alstyne. N Y Ag Dept B 85:2220-7 J1 '16
- Future dairying. Hoard's D 56:659 D 6 '18
- Future of dairying. J. Gould. Rural N Y 76: 1216, 1244 O 20-27 '17
- Getting at facts in dairying. *il Ag Digest* 2: 835 F '18
- Getting better results in the dairy. D. T. Hendrickson. *Prac F* 112:224 My 15 '16
- Getting desired results in the milk-house. A. C. Norris. Ohio F 137:101 Ja 22 '16
- Girl who must earn her own living: keeping cows. Prog F 31:512 Ap 8 '16
- Grading up the herd. J. F. Woodcock. *il Purdue Ag* 10:34+ Mr '16
- Half-and half system most successful. Jersey B 37:1223 J1 31 '18
- Handling milk in summer. *il Ohio F* 141:748 Je 8 '18
- High ideals in dairying. S. Sosland. Hoard's D 55:1013 J1 12 '18
- Hope for dairying lies in keeping better cows. H. S. K. Willcox. Rural N Y 77:993 Ag 24 '18
- How to build up a dairy herd. F. Williams. Prog F 33:618 My 18 '18
- How to secure better milk for cheese factories: discussion. N Y Ag Dept B 80:1489-94 F '16; Same. N Y Ag Dept Rep 1916, pt 3: 1489-92 '17
- Importance of good health in producing dairy herds. A. L. Brockway. N Y Farms & Markets Dept Ag B 104:175-83 F '18
- Increase dairy production. Hoard's D 53:788 Je 1 '17
- Individual cow. G. M. Putnam. Maine Ag Dept B v 18:51-66 Je '18; Excerpts. Hoard's D 56:3 J1 26 '18
- Inspection and sanitation of dairies. J. O. LaBach and N. M. Cregor. Ky Ag Exp B 211:211-28 '17
- Investigate the dairy cow, a great food producer and soil improver. Va Ag Dept B 126:83-90 '18
- Is the dairyman a profiteer? C. E. Gapen. *il Country Gent* 82:1719-20 N 10 '17
- Job for the banker. J. H. Collins. Country Gent 81:1937 N 4 '16
- Junior dairyman. *il Hoard's D* 53:177+ F 23 '17
- Large herds most profitable. Hoard's D 56:17 J1 26 '18
- Livestock and dairy. See weekly numbers of Progressive farmer
- Livestock and dairy situation. W: A. Martin. Ohio F 141:305 Mr 2 '18
- Livestock and dairying. See weekly numbers of Progressive farmer
- Looking ahead in dairying. *il Ohio F* 142:165+ Ag 24 '18
- Making butter and cheese on the farm. C. Larsen and V. R. Jones. *il S D Ag Exp B* 164:347-74 '16
- Making clean milk. W. J. Dougan. Wis Dairy-men's Assn Rep 1913-1916:183-9 '17; Same. Hoard's D 52:757 D 22 '16
- Man who quits. Nat Stock & F 40:1114 Ja 27 '17
- Milk hygiene. (*In Report*, 1916, p. 27-30) '17
- Oregon state live stock sanitary board, Salem
- Milk producer's problem. L. S. Gillette. Hoard's D 54:324 O 5 '17
- Milk producer's problem. W. L. Nelson. Hoard's D 54:580-1 N 16 '17
- Milk producer's story. R. B. Swift. Breeder's Gaz 69:868 Ap 20 '16
- Milk production in August. R. E. Caldwell. Hoard's D 54:122 Ag 24 '17
- Milk production in the lean months. C. C. Hayden. *il Ohio F* 140:93-4 Ag 11 '17
- Milking stool. J. Jones. Nat Stock & F 42: 193 My 18 '18
- Milking the cow or milking the farmer. *il Am Coop J* 13:83-4 N '17
- Mixing steel and butter. W. E. Brown. Jersey B 36:1869-70 N 28 '17
- Model farm dairy. O. Howell. *il plan Field* 11 27:676 S '17
- Modern dairy farm. H: H. Dean. *Prac F* 112:34 Ja 15 '16
- Necessity of dairying during the war. O. Erf. Hoard's D 56:251 S 20 '18
- New dawn of the dairy industry. E. L. D. Seymour. *il Country Life* 30:48 O '16
- One dairyman's road to success. H. F. Heller. *il Prac F* 112:sup6 Mr 1 '16
- Opportunities today for dairymen. H. H. Dean. *il Prac F* 113:345+ O 15 '17
- Our dairy business. Ag Digest 2:531-2 J1 '17
- Outlook for dairying. W: A. Martin. Ohio F 140:244 S 22 '17
- Outstanding facts in the dairy industry. E. Davenport. (*In De Laval dairy hand book*, p 3-6) '16 De Laval separator co., New York
- Patriotism and profit for the dairyman. W. Macmonnies. Jersey B 36:1514 O 3 '17
- Patriotism for the dairymen. R. W. Latta. Hoard's D 53:727 My 18 '17
- Peace and rumors of peace in cowdom. N. Negley. Hoard's D 55:85 F 8 '18
- Pertinent points on dairy farming. P. McConnell. Jersey B 37:47 Ja 9 '18
- Place of the dairy cow on the small farm. Mrs B. R. Martin. *Prac F* 112:277 J1 15 '16
- Poultry on dairy farms. *il Kimball's D F* 16:92 F 1 '18
- Power on the dairy farm. F. M. White. *il Hoard's D* 53:911 Je 29 '17
- Present dairy situation. G: Murray. Ohio F 141:749 Je 8 '18
- Present milk situation. *Prac F* 113:437-8 D 15 '17
- Preserving the herd's health. L. C. Reynolds. Ohio F 137:422 Mr 18 '16
- Pride in a modern dairy. F. E. Walser. Breeder's Gaz 69:240 F 3 '16
- Problem of a young dairyman. F. L. Allen. Rural N Y 75:1275 O 7 '16
- Problems of supply and demand. R. S. Smith. Int Assn Dairy & Milk Inspec Rep 1915:198-200
- Proclamation of the American Jersey cattle club. M. D. Munn. Hoard's D 54:252 S 21 '17
- Production costs in dairying. H. L. Blanchard. Wallaces' F 41:1639 D 15 '16
- Production of clean milk for human consumption. H. Munro. J Ag New Zealand 16:27-31 Ja '18
- Production of pure milk. J. J. Hooper. *il plan* Hoard's D 55:271 Mr 8 '18
- Production of sanitary milk. *il Ohio F* 137:382 Mr 11 '16
- Production of sanitary milk. C: E. North. N H Ag Dept Rep v 34:63-81 '16

**Dairying—Continued**

Production, profit and patriotism. N. Negley. Jersey B 36:1977-8 D 19 '17  
 Profitable dairy feeding. W. A. Freehoff, il Country Gent 83:30 Mr 9 '18  
 Profitable eastern dairying on purchased feed. L. G. Brown. Jersey B 35:1243 Ag 9 '16  
 Profitable vs. unprofitable dairying. W. O. Mills. Hoard's D 52:874 Ja 12 '17  
 Purity and dairy products. J. A. Raiser. Ohio F 138:124 Ag 12 '16  
 Records on a rented farm. E. Rogers, il Ohio F 141:494 Ap 6 '18  
 Reducing dairy leaks. E. Brown. Ohio F 141:12 Ja 5 '18  
 Regulating the quality of market milk. R. S. Breed, il Ohio F 137:289+ F 26 '16  
 Relation of the dairy cow to profitable dairying. W. M. Kelly. Prac F 113:401 D 1 '17  
 Rosy future ahead for dairying. W. J. Kittle. O Judd Farmer 65:204 S 14 '18  
 Save the heifer calf. C. W. Burkett. Coop Manager & F 7:104 Jl '18  
 September and October dairy problems. W. M. Kelly. Ohio F 140:216 S 15 '17  
 Shall milk producers raise calves? O Judd Farmer 60:10 Ap 22 '16  
 Shall the dairy cow be marketed? Ohio F 140:137 Ag 25 '17  
 Sheep vs. dairying. C. H. Sapp. Nat Stock & F 41:750 N 3 '17  
 Short course on quality. H. R. Campbell. Hoard's D 51:462 Ap 7 '16  
 Should all heifers be raised? W. J. Fraser. Jersey B 36:1327, 1363, 1399 Ag 29-S 12 '17; Same. N Y Prod R 44:688, 726, 798 Ag 29-S 5, 19 '17; Same. Hoard's D 54:301, 322, 371 S 28-O 12 '17; Same. Creamery 6:65-7 O '17; Same. Wallaces' F 42:1435, 1535, 1593 O 19, N 9, 23 '17; Same cond. O Judd Farmer 63:3 S 15 '17; Excerpt. Ag Digest 2:659 O '17; Excerpt. J Ag (Quebec) 21:122 F '18  
 Side-lines on the dairy farm. J. Marsh. il Ohio F 137:298 F 26 '16  
 Six don'ts in dairying. W. C. Jeffries. Ohio F 142:600 D 14 '18  
 Slaughter of calves. H. R. Smith. Country Gent 82:1064 Je 23 '17  
 Smith comes through. G. H. Campbell. Hoard's D 55:369 Mr 22 '18  
 Some economics of sanitary milk production; with discussion. L. P. Brown and J. E. Thomson. N Y Farms & Markets Dept Ag B 104:51-62 F '18  
 Some financial factors in the production of market milk; with discussion. F. Rasmussen. Int Assn Dairy & Milk Inspec Rep 1916:154-66  
 Sources of contamination of the milk supply. N. S. Gibson. Ag J of India 12:473-6 Jl '17  
 Speeding up the dairy farm. Ag Digest 2:747 D '17  
 Speeding up the dairy farm. W. M. Kelly. Hoard's D 54:622 N 23 '17  
 Standardizing the dairy. J. Mappelbeck, il Country Gent 81:2040-1 N 25 '16  
 Starting in dairying. W. A. Martin. Ohio F 142:480 N 16 '18  
 Starting in the dairy business. J. W. Ridgeway. Prog F 31:1420 D 9 '16  
 Stay with your dairy farm. W. C. Jeffries. Ohio F 137:494 Ap 1 '16  
 Strategy of seven milk producers. H. H. Lyon. Hoard's D 54:618 N 23 '17  
 Studying dairy efficiency. O Judd Farmer 62:6 My 12 '17  
 Successful breeder of dairy shorthorns. J. R. Wiley. il Ohio F 137:93+ Ja 22 '16  
 Summer milk production. O. R. Schultz. Ohio F 141:724 Je 1 '18  
 Ten rules of success on the dairy farm. J. A. Woodside. Hoard's D 51:497 Ap 14 '16  
 Thermometer in the dairy. R. W. Latta. Jersey B 36:1267 Ag 15 '17  
 Things that make dairying unprofitable. H. E. Yeomans. Ohio F 138:621 D 23 '16  
 Trend of the dairyman. W. C. Jeffries. Ohio F 137:339 Mr 4 '16  
 Trouble with dairy business. Ohio F 141:46 Ja 12 '18  
 Trouble with dairy business. S. A. Perry. Ohio F 140:584 D 22 '17  
 Trouble with the milk business. C. E. Gapen. il Country Gent 82:726 Ap 14 '17

Uniform and up-to-date milk regulations. Creamery 7:29-32 S '18  
 United States public health service and its interest in a better milk supply. A. F. Stevenson. Int Assn Dairy & Milk Inspec Rep 1916:191-9  
 Value of pure bred sire. W. J. Frazer. Coop Manager & F 6:98 Ag '17; Same. Coop Manager & F 7:72 O '17  
 Variation in dairy farming. C. A. Fowler, il Penn State F 9:433+ O '16  
 Wanted—a dairy Sheridan. W. A. Martin. Ohio F 142:426 N 2 '18  
 War and the dairy cow. M. D. Munn. Kimball's D F 15:329 My 1 '17  
 War and the dairy cow. R. A. Pearson. Kimball's D F 15:713-14 O 1 '17  
 War cripple in the dairy. W. M. Hussie. Hoard's D 56:550 N 15 '18  
 War crisis in dairying. O Judd Farmer 64:6 Mr 23 '18  
 War time dairying. J. H. Frandsen. il Jersey B 37:341-2+ Mr 6 '18  
 War's effect upon the dairy industry. E. Davenport. Assn Am Dairy Food & Drug Office Pro 1918:108-11; Same. Creamery 7:27-8 S '18; Same. Wallaces' F 43:1522 O 18 '18  
 What a Minnesota dairyman discovered. C. J. Emery. Hoard's D 53:704 My 11 '17  
 What a paying cow must produce. D. B. Hogan. Breeder's Gaz 69:490 Mr 2 '16  
 What are the dairyman's feed bills? Prac F 113:358 O 15 '17  
 What good cows did for me. J. Day. il Prac F 114:198 My 15 '18  
 What the dairy cow did. Rural N Y 77:684 My 11 '18  
 What thirty years of dairying has taught me. B. J. Cole, il Prac F 115:109 Mr 15 '18  
 Where the dairyman's profits go. J. J. Ricketts. J Dept Ag Victoria 15:506-8 Ag '17  
 Why a cow can't keep the law. A. C. Laut. Country Gent 82:1444-5+ S 22 '17  
 Why farmers should consume more dairy products. B. H. Rawl. il Hoard's D 52:759 D 22 '16  
 Why the banker should encourage dairying. W. R. Finlayson. Ag Digest 1:380 Ap '17  
 Will a village dairy pay? J. F. De Vine. Rural N Y 77:50 Ja 12 '18  
 Winter dairy. Country Gent 81:743 Ap 1 '16  
 Winter dairy helps. W. M. Kelly. Ohio F 139:446 Mr 24 '17  
 Wintering the dairy herd. J. H. McKenney. Ohio F 138:596 D 16 '16  
 With a beginner in dairying. I. J. Mathews. Hoard's D 55:377 Mr 22 '18  
 Working with the bankers. W. Macmonnies. Jersey B 36:675 My 2 '17

See also Butter; Cattle; Cheese; Cheese factories; Cows; Cream; Cream separators; Creameries; Dairying; Cooperative; Goats; Milk; Milking; Milking machines; Milking suits; also headings beginning Dairy

**Accounting**

Old problem again. Hoard's D 54:538 N 9 '17  
 Practical examples in dairy arithmetic. H. E. Ross and others. Cornell Ag Exp Rep 1916, v 2:1079-99 '17

**Bibliography**

Animal industry: United States public documents pertaining to farm animals, poultry, and dairying, for sale by the Superintendent of documents, Washington, D. C. (Price list 38—8th ed) 34p '16 Supt. of doc., Washington, D. C.

**Directories**

Directory of federal and state dairy, food, drug, and feeding stuffs officials. 10p '18  
 U.S. Bur. of chemistry, Washington, D.C.

**Study and teaching**

College students' dairy. F. W. Albertson. il Hoard's D 55:225 Mr 1 '18  
 Dairy course for women only. il Kimball's D F 16:264 Ap 1 '18  
 Dairy instruction car. Ag Gaz of Canada 3:449-50 My '16  
 Dairy short course for women. B. Sobel. il Purdue Ag 12:431-2 Ap '18



**Dairying—Study and teaching—Continued**

- Dairying project; four months' practical course in use of Babcock tester and herd record work. C. A. Norcross and V. E. Scott. *il Nev Ag Ext B* 2:1-20 '16
- High school creamery at Duluth. Kimball's *D F* 14:535 S 1 '16; Same cond. Hoard's *D* 51:698 My 19 '18
- President's address before the American dairy science association. W. A. Stocking, jr. *J Dairy Sci* 1:85-90 *Jl* '17
- Students learn to fit show cattle. A. B. Nyström. *il Hoard's D* 51:992 *Jl* 21 '16
- Teaching dairying in the high school. I. J. Mathews. *il Hoard's D* 54:867 *Ja* 11 '18
- Women for dairy work. Wallaces' *F* 43:659 *Ap* 12 '18
- Women in dairy manufacturing. E. H. Farrington. Hoard's *D* 55:515 *Ap* 12 '18
- See also* Cheese making—Study and teaching; Dairy schools; also Western dairy instructors

**Africa**

- Dairying in Africa. Wallaces' *F* 42:927 *Je* 15 '17

**Alabama**

- Alabama goes into dairying. W. Macmonnies. *Breeder's Gaz* 72:208 *Ag* 16 '17
- Ten days in Alabama. W. Macmonnies. *il Hoard's D* 54:149+ *Ag* 31 '17

**Argentina**

- Dairy industry in Argentina and plans for its future development. P. Berges. *Int R Sci & Prac Ag* 7,no 9:1357-62 S '16

**Arizona**

- Dairy progress in Arizona. M. E. Bemis. *il Hoard's* 51:456 *Ap* 7 '16
- Dairying in Arizona and the coast states. G. L. McKay. Hoard's *D* 50:817 *Ja* 14 '16
- Dairying in Salt River valley. H. Welch. Kimball's *D F* 13:800 *Ja* 1 '16
- Excellent Arizona Jerseys. W. A. Barr. *Jersey B* 37:1328 *Ag* 21 '18

**Arkansas**

- Arkansas and the cow; what dairying did for Wisconsin. Banker-F 5:15-16 *Je* '18
- Arkansas dairy situation. C. O. Carpenter. *Prog F* 32:1106 O 20 '17

**Australia**

- Another good dairy farm. E. J. Turner. *J Dept Ag Victoria* 15:566-9 S '17
- Dairy education and supervision in South Australia. *J Dept Ag S Australia* 22:129-32 S '18
- Dairy farming on the Yanco irrigation area. M. A. O'Callaghan. *Ag Gaz of New South Wales* 28:359-62 *My* '17
- Dairy news from Australia. Hoard's *D* 55:698 *My* 10 '18
- Dairying. R. E. Clements. *J Dept Ag S Australia* 20:694-5 *Ap* '17
- Dairying industry; conference of factory managers. *J Dept Ag S Australia* 20:945-54 *Jl* '17
- Great progress in dairying. P. G. Hampshire. *Ag Gaz of New South Wales* 28:475-6 *Jl* '17
- Intensive dairying in Australia. J. R. MacDonald. *J Ag New Zealand* 14:302-3 *Ap* '17
- Loi n. 45 réglementant la manufacture, la vente, le magasinage, le transit et l'exportation des produits laitiers, y compris la margarine, et fixant les types desdits; portant des dispositions pour le contrôle, le battage, le malaxage et le classement de la crème, et fixant la base de paiement de la crème; visant aussi d'autres fins y afférentes et modifiant la loi de 1901 sur l'inspection des laiteries et certaines autres lois. *Int Yearbook Ag Leg* 1916:731-7 '17
- New South Wales dairy industry. M. A. O'Callaghan. *Ag Gaz of New South Wales* 28:49-60 *Ja* '17
- Progress in the New South Wales dairying industry. M. A. O'Callaghan. *Ag Gaz of New South Wales* 28:356-8 *My* '17
- Review of the butter export season; with discussion. R. Crowe. *J Dept Ag Victoria* 16:364-70 *Je* '18

- Road to success in dairy farming. J. S. McFadzean. *il J Dept Ag Victoria* 16:10-15 *Ja* '18
- Standard cows; 5th annual report on the testing of pedigree herds. W. A. N. Robertson. *il J Dept Ag Victoria* 15:513-41 S '17
- Standard herd test; sixth annual report on the testing of pedigree herds. R. T. Archer. *il J Dept Ag Victoria* 16:513-54 S '18

**California**

- California dairy adjustments. R. L. Adams. Hoard's *D* 56:613+ N 29 '18
- California dairymen can lead world. E. H. Webster. *il Hoard's D* 54:33+, 61, 94 *Ag* 3-17 '17
- Square deal for dairymen; what organization meant for California milk producers. J. M. Henderson. Banker-F 5:10 S '18
- Where water and cows win. L. L. De Bra. *il Hoard's D* 56:68 *Ag* 9 '18

**Canada**

- At the eastern Ontario dairy convention. *J Ag (Quebec)* 20:163 F '17
- B. C. dairy news. *J: Pawtuckaway. Hoard's D* 56:190 S 6 '18
- Canadian dairy notes. F. E. Ellis. Hoard's *D* 51:139+; 52:620; 53:375, 758, 949; 54:401; 55:41, 461; 56:447 F 18, N 24 '16, Mr 23, My 25, *Jl* 6, O 19 '17, F 1, Ap 5, O 25 '18
- City engineer becomes successful dairyman. K. G. Mackay. *il Hoard's D* 51:771 *Je* 2 '16
- Cow testing in Canada. E. W. Gage. *il Kimball's D F* 16:435 *Je* 1 '18
- Dairy cattle. A. Leitch and others. *il plans Ontario Ag Dept B* 253:1-71 '17
- Dairy industry in Saskatchewan in 1915. *Int R Ag Econ* 67:39 *Jl* '16
- Dairy industry in the prairie provinces. R. D. Colquette. *Int R Ag Econ* 9,no 1:75-7 *Ja* '18
- Dairy industry in the province of Quebec, and cooperation. *Int R Ag Econ* 68:5-15 *Ag* '16
- Dairying in Alberta. W. M. Tait. Hoard's *D* 51:262 *Mr* 3 '16
- Dairying in British Columbia. *J: Pawtuckaway. Hoard's D* 54:916 *Ja* 18 '18
- Dairying in Ontario. W. A. Cordes. Hoard's *D* 51:975 *Jl* 14 '16
- Dairying industry of Ontario. G. R. Taggart. (*Commerce Reports* 25) p 394-5 (*Ja* 30) '17
- U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- In the Denmark of Canada. J. A. McDonald. Kimball's *D F* 15:904-5 *D* 15 '17
- Loi concernant la fabrication du beurre et du fromage. *Int Yearbook Ag Leg* 1916:749-61 '17
- Paying for milk at cheese factories and creameries. F. E. Ellis. Hoard's *D* 51:620+ *My* 5 '16
- Present conditions and prospects of the dairying industry in Canada. J. A. Ruddick. *J Ag (Quebec)* 20:137 *Ja* '17
- Prospects for dairy cattle breeding. E. S. Archibald. (*In Report, Live stock branch, 1916, p. 66-70*) '17 Ontario ag. dept., Toronto, Canada
- Quebec dairy statistics for 1915. G. E. Marquis. *J Ag (Quebec)* 20:39 *Ag* '16
- \* Report of chief dairy instructor and sanitary inspector for western Ontario, 1917. F. Hems. (*In Report, Dairymen's assns., 1917, p. 105-12*) '18 Ontario ag. dept., Toronto
- \* Report of dairy instructor and sanitary inspector for eastern Ontario. G. G. Publow. (*In Report, Dairymen's assns., 1917, p. 25-33*) '18 Ontario ag. dept., Toronto
- Report of the inspectors-general. (*In Report, 1917, p. 114-19*) plans '17 Quebec ag. dept., Quebec
- Winter dairying profitable in western Canada. W. M. Tait. Hoard's *D* 53:46 F 2 '17
- See also* British Columbia dairymen's association; Fraser Valley milk producers' association; Saskatchewan dairymen's association

**China**

- Dairy in southern China. C. O. Levine. *il Hoard's D* 55:273+ *Mr* 8 '18

**Colorado**

- Corn and cows in Colorado. W. F. Wilcox. *il Kimball's D F* 14:759 *D* 1 '16

**Dairying—Colorado—Continued**

Dairy day in Colorado. il Kimball's D F 15:272 Ap 15 '17  
Dairy day in Colorado. C. W. Hall. il Kimball's D F 16:262 Ap 1 '18

**Connecticut**

Connecticut dairy survey. Hoard's D 54:45 Ag 3 '17

*See also* Connecticut dairymen's association

**Delaware**

Dairy extension in Delaware. R. O. Bausman. il Hoard's D 55:763 My 24 '18

**Denmark**

Dairying in Denmark in 1917. O. Molgaard. Kimball's D F 16:255 Ap 1 '18  
How the Danes began in dairying. Wallaces' F 43:1825 D 13 '18

Notes from our Danish correspondent. O. Molgaard. Kimball's D F 16:630 Ag 15 '18

Pasteurization in Denmark. J. J. Dunne. Hoard's D 53:556 Ap 20 '17

War and dairying in Denmark. O. Molgaard. Kimball's D F 15:515-16 Ag 1 '17

**Eastern states**

Dairy situation. Hoard's D 53:852 Je 15 '17  
Market outlook for the East. R. W. Balderson. il Hoard's D 55:276 Mr 8 '18

**Europe**

Principal dairy breeds and dairy farming in Europe. H. M. Landon. il Hoard's D 51:43 F 4 '16

War orders and our dairymen. W: H. Dean. il Country Gent 81:1607-S 2 '16

**Florida**

Correction on conditions in Florida. W. M. Traer. Hoard's D 55:926 Je 21 '18

Dairying in Florida. T. M. Fouts. il Kimball's D F 14:802 D 15 '16

Dairying in Florida. A. H. Kolbe. il Kimball's D F 15:558 Ag 15 '17

Dairying in Florida. J. M. Scott. il Fla Ag Exp B 142:59-76 '18

Dairying in Florida. J. B. Simonton. il Jersey B 36:1829 N 21 '17

**Georgia**

*See also* Georgia dairy and live stock association

**Germany**

Federated dairies of Schleswig-Holstein. Int R Ag Econ 68:1-4 Ag '16

**Great Britain**

Dairying industry of England and Wales. J Bd Ag 23:593-7 S '16; Same. Int R Sci & Prac Ag 8,no 2:296-8 F '17

Enterprise in dairy farming. J. R. Bond. il J Bd Ag 23:437-46 Ag '16

Milk production in war time. J Bd Ag 22:981-6 Ja '16

Some aspects of the dairying industry of England and Wales. W. Gavin. maps J Bd Ag 23:sup 5-52 S '16

War conditions in England. N Y Prod R 46:808 O 2 '18

**Honduras**

Dairying in Honduras. H. I. Brosious. il Kimball's D F 14:561-2+ S 15 '16

**Idaho**

Dairying in Idaho. J. F. Bruins. Hoard's D 55:30 Ja 25 '18

Experience in dairying on irrigated lands. J. T. Stinson. Hoard's D 51:230 Mr 3 '16

Idaho dairy notes. J. F. Bruins. il Hoard's D 55:945; 56:691 Je 28, D 13 '18

Southern Idaho—the north side project. G. H. Nichols. Hoard's D 51:865 Je 23 '16

*See also* Idaho state dairy association

**Illinois**

Dairy campaign assured. O Judd Farmer 62:11 Mr 17 '17

Dairy cow to the rescue. F. M. Chase. il Hoard's D 53:885+ Je 22 '17

Dairying promises well in Egypt. il O Judd Farmer 64:665 Je 29 '18

Diversify for safer dairy farming. O Judd Farmer 64:4 F 23 '18

Egypt takes the cow cure. C. E. Gapen. il Country Gent 81:1499-1500 Ag 12 '16

Good dairying in Macoupin county. O Judd Farmer 63:3 O 20 '17

Harrisburg's dairy day. il Kimball's D F 14:478 JI 15 '16

Illinois breeders meet. Hoard's D 55:336 Mr 15 '18

Illinois dairymen meet. L. G. Parker. Kimball's D F 14:69 F 1 '16

Making Egypt a dairy country. H. S. Stone. il Kimball's D F 16:33 Ja 15 '18

Methods in Illinois dairy. O Judd Farmer 60:17 Mr 18 '16

More about Illinois dairy situation. O Judd Farmer 63:1 Ag 25 '17

Promoting dairy interests in Illinois. Hoard's D 50:784 Ja 7 '16

Pure-bred dairy cattle in Illinois. W. T. Crandall. maps O Judd Farmer 60:4 Ja 1 '16

Students visit Chicago dairy districts. R. A. Avery. Hoard's D 53:882 Je 8 '17

Two points for Illinois dairymen. E. B. Heaton. il O Judd Farmer 60:5 My 20 '16

University boys visit dairy district. E. L. Bill. O Judd Farmer 62:3 My 19 '17

What dairymen can do. J. E. Readhimer. O Judd Farmer 64:21 Mr 2 '18

With Lake county (Ill.) milk producers. O Judd Farmer 63:3 N 3 '17

*See also* Chicago milk investigation; Illinois state dairymen's association

**India**

Cooperative dairy at Telinkheri in its relation to dairying in the Central provinces. il Ag J of India 13:54-64 Ja '18

Dairying industry of India. L. L. Joshi. Jersey B 37:1088 JI 10 '18

Few dairy scenes in far-away India. il Hoard's D 54:399 O 19 '17

Ganeshkhind dairy herd. Willingdon. il Ag J of India 13:1-9 Ja '18

Hand-feeding and management of buffalo calves at a dairy. R. G. Allan and J. V. Takle. Ag J of India 11:223-37 JI '16

Survey of the Madras dairy trade, by A. Caruthy. Review. Ag J of India 13:568-70 JI '18

**Indiana**

Boone country dairying: most profitable of agricultural industries. il Purdue Ag 10:30-1 F '16

Cream of Crawford county. il Jersey B 36:1139 JI 25 '17

Dairy cow campaign in Indiana. E. I. Lewis. Jersey B 36:672 My 2 '17

Dairy products as war food. R. E. Caldwell. Purdue Ag 12:24-7 O '17

Dairying makes farmers prosperous. Ohio F 142:481 N 16 '18

Dairying on the boom in southern Indiana. W. O. Mills. Hoard's D 56:450 O 25 '18

How Mr Russell makes thirty acres pay. Jersey B 37:680 My 1 '18

Increasing dairy production in Indiana. Purdue Ag Ext B 56:1-8 '17

Indiana's dairy revival. C. R. George. Field II 28:715 O '18

Opportunities for dairying in Indiana. C. L. Rowe. il Purdue Ag 10:30-2+ Mr '16

3d annual report of the Creamery license division for the year ending March 31, 1917. il maps Ind Ag Exp C 63:1-44 '17

*See also* Indiana agricultural experiment station—Creamery license division; Indiana state dairy association

**Iowa**

Dairy campaign in Iowa. Jersey B 36:554 Ap 11 '17

Dairy day at the Iowa short course. Kimball's D F 14:111 F 15 '16

Dairying in southern Iowa. Wallaces' F 41:262 F 18 '16

Farm with the twin silos. Linn county, Iowa. il Wallaces' F 41:919 Je 30 '16



**Dairying—Iowa—Continued**

Future dairying in Iowa. W. B. Barney. Wallaces' F 41:230 F 11 '16; Same. Kimball's D F 14:101 F 15 '16  
Iowa buttermakers' association convention at Cedar Rapids. N Y Prod R 41:721+ Mr 1 '16  
Iowa dairy industry. Wallaces' F 42:409 Mr 2 '17  
Iowa plans campaign for better butter. A. W. Rudnick. Creamery 5:38 Mr '17; Same. N Y Prod R 43:744 Mr 7 '17  
Value of official testing. J. H. Frandsen. Wallaces' F 41:95 Ja 21 '17  
Why a feeder is quitting. il Wallaces' F 41:991 J1 21 '16  
Yankee in Iowa; notes on live stock farming. H. F. Judkins. Rural N Y 77:1222 O 26 '18  
*See also Iowa—Dairy and food commissioner*

**Ireland**

Cooperative creameries in Ireland. Ag Digest 2:923-4 Ap '18

**Italy**

*See also Unione nazionale delle latterie sociali*

**Kansas**

Dairy progress in Kansas. F. B. Nichols. Hoard's D 54:460, 869 O 26 '17, Ja 11 '18  
Dairy progress in western Kansas. F. B. Nichols. Hoard's D 51:200 F 25 '16  
Kansas dairy community. Country Gent 82:1111 J1 7 '17  
Kansas dairy notes. S. Sosland. Hoard's D 55:766 My 24 '18  
Marketing of Kansas butter. T. Macklin. il maps Kan Ag Exp B 216:1-79 '17; Same cond. Hoard's D 53:716-17+ My 18 '17; Summary. N Y Prod R 44:476 J1 18 '17  
Relation of the farm cream separator to butter production and the use of neutralizers. T. A. Borman. N Y Prod R 46:1022-3 O 30 '18  
*See also Kansas state dairy association*

**Kentucky**

Business of ten dairy farms in the bluegrass region of Kentucky. J. H. Arnold. U S Ag B 548:1-12 '17  
Outlook for dairy profits. W. D. Nicholls. Breeder's Gaz 72:42 J1 12 '17; Same. Hoard's D 53:1017 J1 20 '17; Same. Kimball's D F 15:549 Ag 15 '17  
Profitable dairy-farm organization in Kentucky. W. D. Nicholls and J. B. Hutson. il Ky Ag Exp B 217:97-146 '18  
*See also Kentucky dairy cattle club*

**Louisiana**

Dairy and live stock interest in Louisiana. R. G. Miller. Breeder's Gaz 71:12 Ja 4 '17  
Dairy day at Louisiana farmers' short course. J. M. Cadwallader. Hoard's D 53:183 F 23 '17  
Dairy industry of the South. C. W. Radway. (In Cut-over land conf. of the South, 1917, p. 174-8) \$2.50 '17 Southern pine assn., New Orleans, La.  
Dairy industry of the South; milk situation in Louisiana. R. G. Miller. Hoard's D 55:728 My 17 '18  
Dairy meetings in Louisiana. J. M. Cadwallader. Hoard's D 51:288 Mr 10 '16  
Louisiana's opportunities as a dairy state demonstrated. Kimball's D F 14:52 F 1 '16  
Northern dairy cattle in Dixie. R. G. Miller. Kimball's D F 15:138 Mr 1 '17  
Reconstruction in Louisiana. R. G. Miller. il Kimball's D F 15:380 Je 1 '17  
*See also Louisiana dairymen's association*

**Maine**

Timely topics for Maine dairymen. F. S. Adams; H. M. Tucker. il Maine Ag Dept B v 16:1-15 S '17

**Massachusetts**

Massachusetts dairy meeting. W. P. B. Lockwood. Jersey B 35:481 Mr 29 '16  
Massachusetts milk producers. Rural N Y 76:126 Ja 27 '17

Mixer farm; a Massachusetts milk plant, breeding establishment and general farm. E. L. D. Seymour. il Country Life 31:50-1 Ja '17

Report of the special milk board of the Mass. State dept. of health. 35sp map '16 Mass. State dept. of health, Boston

*See also Massachusetts—Dairy bureau; Massachusetts dairymen's association*

**Michigan**

Dairy interests. J. W. Helme. N Y Ag Dept B 81:1797-1808 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1797-1808 '17  
Dairy interests of Michigan in Kalamazoo meetings. N Y Prod R 41:641+ F 16 '16  
Michigan breeders meet. Hoard's D 53:92 F 9 '17  
Michigan milk producers organize. Hoard's D 51:810 Je 9 '16  
*See also Detroit milk investigation; Michigan—Dairy and food department; Michigan association of ice cream manufacturers; Michigan dairymen's association; Michigan milk producers' association*

**Minnesota**

Live stock improvement and community spirit. W. J. Corwin. Hoard's D 54:62 Ag 10 '17  
Minnesota dairy breeders' association meeting. Kimball's D F 14:67+ F 1 '16  
Minnesota dairymen and Jersey men meet. Jersey B 37:80 Ja 16 '18  
Special recognition for Minnesota tuberculosis-free pure-bred herds. M. H. Reynolds. Hoard's D 51:843 Je 16 '16  
*See also Minnesota—Dairy and food commissioner, State; Minnesota state dairymen's association; Twin City milk producers' association*

**Mississippi**

Dairy cow in Mississippi. W. Macmonnies. il Kimball's D F 15:547 Ag 15 '17  
Dairy farming in south Mississippi. J. P. La Master. Prog F 33:794 J1 13 '18  
How the dairy cow brought prosperity in the wake of the boll weevil. L. A. Higgins. il U S Ag Yearbook 1917:303-10; Same. Separate 744; Same cond. Banker-F 5:14-15 N '18  
*See also Mississippi creamerymen's association*

**Missouri**

Dairy kingdom in the making. B. E. Coffin. il Hoard's D 54:839 Ja 4 '18  
Dairying to the front in Missouri. W. L. Nelson. Jersey B 36:835 My 30 '17  
Modern dairy buildings; Longview farm. il Field H 26:205-7 Mr '16  
*See also Missouri—Dairying, State bureau of; Missouri state dairy association*

**Nebraska**

Some Nebraska dairymen. il Wallaces' F 41:1495 N 17 '16  
War time dairying. J. H. Frandsen. il Neb Ag Bd B 245:279-90 '18  
*See also Nebraska state dairymen's association*

**Netherlands**

Dairy industry in Holland and co-operative organization. H. M. R. Leopold. Int R Ag Econ 9, no 1:1-8 Ja '18

**New England**

Co-operative dairying. E. L. Brigham. il Mass Ag Bd C 69:1-12 '17  
From 64th annual report  
Dairy farm conditions in New England. Hoard's D 53:882 Je 22 '17  
Dairy situation in New England. P. M. Harwood. N H Ag Dept Rep v 34:19-29 '16  
Dairying in New England. H. F. Holcomb. Kimball's D F 14:268 Ap 15 '16  
Granite state dairymen meet. Hoard's D 53:277 Mr 9 '17  
Milk situation in New England; a review of the report of the Boston chamber of commerce. Kimball's D F 16:66+ F 1 '18

**Dairying—New England—Continued**

New England milk business. J. T. Bartlett, Jr. il Country Gent 81:1297 J1 1 '16  
 New England milk case. Hoard's D 51:702 My 19 '16  
 New England opportunities. H. H. Holcomb. Kimball's D F 15:872 D 1 '17  
 New farming for old New England; mutton and milk offer splendid opportunities. F. A. Waugh. il Country Gent 83:1+ S 7 '18  
*See also* New England milk producers' association

**New Hampshire**

Survey of the dairy marketing conditions and methods in New Hampshire. L. M. Davis. maps N H Ag Ext B 8:1-45 '17  
*See also* Granite state dairymen's association

**New Jersey**

Dairy herd. N J Ag Exp Rep 1916:194-205 '17  
*See also* New Jersey state dairymen's association

**New Mexico**

Consider the cow; how a county agent is building a community. H. B. Link. il Country Gent 81:1429 J1 29 '16  
 Dairying in New Mexico. J. R. Meeks. Purdue Ag 12:275+ F '18

**New York**

Annual meeting New York state agricultural society. Jersey B 35:161 F 2 '16  
 Cattaraugus county, N. Y., cow census. W. W. White. Hoard's D 50:866, 51:100, 240, 333, 482, 628, 697, 872, 964; 52:44, 210, 282, 432, 583, 637, 710 Ja 21, F 11, Mr 3, 17, Ap 7, My 5, 19, Je 23, J1 14, Ag 4, S 8, 22, O 20, N 17-24, D 8 '16  
 Dairy demonstration work in New York state. N Y Ag Dept B 85:2171-2236 J1 '16  
 Dairy outlook in lower New York. Rural N Y 76:973 Ag 11 '17  
 Dairy problems in New York state. C: W. Wicks. N Y Ag Dept B 93:71-82 Mr '17  
 Dairy products' investigation in New York. G. W. Harrison. Jersey B 35:1245 Ag 9 '16  
 Dairying in eastern New York. J. J. Fletcher. Ohio F 139:788 Je 16 '17  
 Future of the dairy business. G: E. Howell. Rural N Y 77:778 Je 8 '18  
 New York agricultural society meeting. H. H. Lyon. Hoard's D 51:239+ Mr 3 '16  
 New York breeders' meeting. H. H. Lyon. Hoard's D 53:96 F 9 '17  
 New York dairy notes. H. H. Lyon. Hoard's D 55:984; 56:135, 287 J1 5, Ag 23, S 27 '18  
 New York dairy situation. H. H. Lyon. Hoard's D 53:858 Je 15 '17  
 New York dairying. Wallaces' F 41:502 Mr 24 '16  
 New York farmers' week. H. H. Lyon. Hoard's D 51:329 Mr 17 '16  
 New York feed notes. H. H. Lyon. Hoard's D 54:39 Ag 3 '17  
 New York milk situation. H. H. Lyon. Hoard's D 54:249 S 21 '17  
 Our present dairy conditions. W. M. Kelly. Ohio F 137:653 My 6 '16  
 Up state milk notes. Rural N Y 76:971 Ag 11 '17  
*See also* Dairymen's league; New York milk investigation; New York state dairymen's association

**New Zealand**

Certificate-of-record cows; highest New Zealand milk-record. W. M. Singleton. il J Ag New Zealand 14:274-7 Ap '17  
 Dairying in New Zealand. G: Osborne. Hoard's D 56:664 D 6 '18  
 New Zealand dairy cows. W. M. Singleton. J Ag New Zealand 16:132-5 Mr '18  
 New Zealand season. N Y Prod R 46:478 J1 24 '18

**North Carolina**

North Carolina—a state of great opportunities. W. Macmonnies. Jersey B 36:842 My 30 '17

**North Dakota**

Holstein breeding center. U. J. Downey. Breeder's Gaz 72:668 O 18 '17

**Ohio**

Dairy notes from northern Ohio. J: Gould. Rural N Y 77:168 F 2 '18  
 Dairying in Ohio. O. Erf. il Ohio Ag Dept B v 9:4-9 My '18  
 Ohio ranks high as dairy state. L. L. Rummell. il Hoard's D 54:575 N 16 '17  
 Time for a level head. W: A. Martin. Ohio F 141:389 Mr 16 '18  
*See also* Northern Ohio dairymen's protective league; Ohio state dairymen's association

**Oklahoma**

Dairying in Oklahoma. Hoard's D 51:92 F 11 '16; Excerpt. Jersey B 35:313 Mr 1 '16  
 Dairying in Oklahoma. R. L. Peebly. Jersey B 35:238 F 16 '16

*See also* Oklahoma dairy association

**Oregon**

Dairying in Oregon. R. Robinson. Hoard's D 51:188 F 25 '16  
 Dairying in the Fort Rock valley. R. W. Pease. Hoard's D 55:477 Ap 5 '18  
*See also* Oregon cooperative dairy exchange; Oregon dairy council; Tillamook county creamery association

**Pennsylvania**

Community that found itself. Grove City, Pa. L. L. Rummell. il Ohio F 142:320-1 O 5 '18  
 Dairy conditions in northwestern Pennsylvania. E. Brown. Ohio F 140:289 O 6 '17  
 Dairy progress in Pennsylvania. F. Rasmussen. Nat Stock & F 42:853 D 21 '18  
 Fairfield farm dairy notes. W. F. McSparran. Ohio F 140:504 D 1 '17  
 Open air dairying at River Ridge. E. A. Grombacher. il Field 11 26:239-41 Mr '16  
 Pennsylvania as a dairy state. F. Rasmussen. Penn State F 10:92-3+ My '17  
 Review of dairying in Pennsylvania. M. E. Conard. Prac F 114:57 F 1 '18

**South Africa**

Dairying in South Africa. Kimball's D F 14:52 F 1 '16  
 Dairying industry in South Africa. J. Baynes. Int R Sci & Prac Ag 9,no 2:245-6 F '18

**Southern states**

Cheesemaking brings prosperity to farmers of southern mountains. C. F. Doane. il map U S Ag Yearbook 1917:147-52  
 Dairy industry in the South; what's holding it back. R. G. Miller. Hoard's D 55:374-5 Mr 22 '18  
 Don't blame it on the cows. R. G. Miller. il Kimball's D F 16:657 S 1 '18  
 Place of dairying in southern agriculture. T. Butler. Prog F 33:512 Ap 20 '18  
 Some war-time factors in southern dairying. C: A. Whittle. Hoard's D 56:713 D 13 '18  
 South as the coming stock land of America. J: E. Pickett. il Country Gent 83:6+ N 9 '18  
 Southern expansion in the dairy and creamery industries. N Y Prod R 41:738 Mr 1 '16  
 Southern milk situation. H. F. Auten. Prog F 32:1306 D 15 '17

**Southwestern states**

Southwestern dairy notes. S. Sosland. Hoard's D 56:440 O 25 '18

**Switzerland**

Dairying in Switzerland. Wallaces' F 42:543 Mr 23 '17  
 Organization of the production and distribution of milk, butter and cheese and the work of the Federation of the dairies of Geneva united in 1917. Int R Ag Econ 9,no 2:128-30 F '18

**Tennessee**

\$813 from fourteen cows. D. B. Jacks. Prog F 31:498 Ap 8 '16



**Dairying—Continued**

**Texas**

Dairy in the Panhandle. Z. E. Black. il Kimball's D F 15:341 My 15 '17  
Dairy industry in Kleberg county, Texas. J. M. Levin. Hoard's D 54:547 N 9 '17  
Dairying in the cactus country. H. W. Col-lingwood. il Country Life 29:36-7 Ja '16  
Dairying on a large scale. W. D. Hornaday. il Hoard's D 51:773 Je 2 '16  
Promoting the dairy industry in Texas. W. D. Hornaday. Hoard's D 53:228 Mr 2 '17

**United States**

Address at the dedication of the new dairy building at the University of Nebraska. R. A. Pearson. J Dairy Sci 1:4-18 My '17; Excerpts. Wallaces' F 42:363 F 23 '17  
Agricultural situation for 1918; dairy production should be maintained. U S Ag C 85: 1-24 '18  
American dairy farmer's task. E. W. Gage. il Kimball's D F 16:588+ Ag 1 '18  
Billion dollar industry. Kimball's D F 14:557-60+, 626+ S 15-O 1 '16  
Conference of creamery interests called by Bureau of animal industry. A. D. Melvin. N Y Prod R 42:1 Ap 26 '16  
Dairy extension conference. W. Macmonnies. Jersey B 36:511 Ap 4 '17  
Dairying along the Illinois Central. il Cream-ery 5:15-18 Mr '17  
Dairymen bear heavy war burdens. Kimball's D F 15:615 S 15 '17  
Dairymen's message to Hoover. Wallaces' F 42:1115 Ag 10 '17  
Development of dairying in the United States. Purdue Ag 11:26-7 O '16  
Effect of the war on dairy conditions. O. F. Hunziker. Jersey B 36:425 Mr 21 '17  
Great changes in dairying. F. H. Higgins. il O Judd Farmer 63:1+ Ag 4 '17  
Kind of cows that are being sold. L. W. Lighty. Nat Stock & F 41:464 Ag 11 '17  
Our irrigated lands and the dairy industry. C. F. Doane. il Hoard's D 51:33 F 11 '16  
Report of the federal milk commission. Prac F 114:107 Mr 1 '18  
Request for Wisconsin trained men. E. H. Harrington. Breeder's Gaz 72:242 Ag 23 '17; Same. Hoard's D 54:133 Ag 24 '17  
Role of the dairy industry in a system of national agricultural development. B. H. Rawl. (In Pan American scientific congress Pro., 1915, v. 3, p. 585-90) '17  
Some phases of work of the dairy division. H. Rabild. Creamery 7:20-3 D '18 (to be cont)

See also American dairy record association; Dairy conference; National creamery buttermakers' association; National dairy council

**Uruguay**

Dairying in Uruguay. A. Abella. Int R Sci & Prac Ag 7,no 5:629-37 My '16

**Venezuela**

Dairy products in Venezuela. Kimball's D F 16:559 Jl 1 '18  
Venezuela dairying. H. Brett. N Y Prod R 46:179 My 29 '18

**Vermont**

Dairying in Vermont. Kimball's D F 16:401 My 15 '18  
Vermont—a great dairy state. M. R. Tolstrup. N Y Prod R 45:938 Ap 24 '18; Same. Hoard's D 55:884 Je 14 '18

See also Vermont dairymen's association

**Virginia**

Dairying in Virginia. A. W. Burhman. Kimball's D F 16:398 F 1 '18

**Washington**

Are dairymen prosperous? W. A. Linklater. Western Wash Ag Exp B v 6:90-2 O '18  
\* Dairying, poultry and stock raising in the State of Washington. H. F. Giles. 96p il maps '16 Washington State Bur. of statistics and immigration, Olympia

Puget Sound dairymen. P. E. Triem. Kimball's D F 15:857 D 1 '17

**Western states**

Dairying in the West. J. B. Fitch. Ohio F 141:564 Ap 20 '18  
Future of dairying in the West. C. F. Doane. il Hoard's D 51:660 My 12 '16

**Wisconsin**

Arkansas and the cow; what dairying did for Wisconsin. Banker-F 5:15-16 Je '18  
Badger cows go over the top. N. Negley. Kimball's D F 16:40 Ja 15 '18  
Butter factories and cheese factories operated in 1916; dairy statistics for 1915 as reported by the operators of butter and cheese factories. 81p '17 Dairy and food commissioner, Madison, Wis.  
County made wealthy by cows. R. M. Wilson. Hoard's D 51:778 Je 2 '16  
County passes million dollar mark. T. J. Delohery. Hoard's D 55:516 Ap 12 '18  
Dairy farmers at college. E. B. Gunn. il map Kimball's D F 15:271 Ap 15 '17  
Dairy work at Madison; investigation undertaken by Wisconsin experiment station. H. L. Russell. N Y Prod R 42:510 Jl 19 '16  
Local dairy team-work in Wisconsin and Waukesha county. il Ohio F 139:481 Mr 31 '17  
Marinette county picnic. H. I. Wood. il Kimball's D F 14:666 O 15 '16  
Market milk situation in Wisconsin. Hoard's D 54:587 N 16 '17  
One-crop farming versus dairying in Wisconsin. Int R Sci & Prac Ag 7,no 1:125-6 Ja '16  
Pilgrimage from Egypt. L. F. Graber. il Hoard's D 54:535 N 9 '17  
Pioneer dairying in Wisconsin. C. P. Goodrich. Hoard's D 52:685, 807, 829, 870, 910; 53: 1, 46, 94, 129 D 8, 29, '16-F 16 '17  
Resources of Wisconsin. W. G. Bissel. Am Sheep B & W 38:139 F '18  
Trip to successful Wisconsin farms. Hoard's D 51:934 Jl 7 '16  
Wisconsin dairy statistics. G. T. Weigle. N Y Prod R 46:218 Je 5 '18; Same. Hoard's D 55:939 Je 21 '18  
Wisconsin dairymen Hooverizing. N. Negley. Jersey B 36:1852 N 21 '17  
Wisconsin dairymen talk business. E. B. Gunn. il Kimball's D F 14:819-20 Ja 1 '17  
Wisconsin—the different dairy state. E. B. Gunn. il Kimball's D F 15:579 S 1 '17  
Wisconsin winter dairy course lessons. Kimball's D F 15:184 Mr 15 '17

See also Waukesha county Guernsey breeders' association; Wisconsin—Dairy and food commissioner; Wisconsin buttermakers' association; Wisconsin cheesemakers' association; Wisconsin dairy council; Wisconsin dairymen's association; Wisconsin Holstein breeders' association; Wisconsin Jersey breeders' association

**Wyoming**

Long-distance dairying. T. S. Parsons. Kimball's D F 16:323 Ap 15 '18  
Wyoming butter and cheese. T. S. Parsons. Country Gent 81:2158 D 16 '16

**Dairying, Cooperative**

Co-operation and advertising. G. S. Taylor. Jersey B 37:267 F 20 '18  
Cooperative dairy of the Casa de Ganaderos of Saragossa. Int R Ag Econ 79:26-7 Jl '17  
Co-operative dairying. E. L. Brigham. Mass Ag Bd Yearbook 1916, pt 2:152-61 '17; Same. Mass Ag Bd C 69:1-12 '17  
Co-operative dairying in Texas. W. D. Hornaday. Hoard's D 54:502 N 2 '17  
Co-operative milk delivery. N Y Prod R 47: 224 D 18 '18  
Dairy industry in Holland and co-operative organization. H. M. R. Leopold. Int R Ag Econ 9,no 1:1-8 Ja '18  
Experiment in community dairying. R. R. Welch. il U S Ag Yearbook 1916:209-16; Same. Separate 707  
Milk producer and co-operation. E. S. Brigham. Hoard's D 54:767+ D 21 '17

**Dairying, Cooperative—Continued**

Organization of the production and distribution of milk, butter and cheese and the work of the Federation of the dairies of Geneva united in 1917. *Int R Ag Econ* 9, no 2:128-30 F '18

Some of the advantages of community dairying. *Ohio F* 139:640 My 5 '17

*See also* Dairymen's associations; Milk depots, Cooperative; also Unione nazionale delle latterie sociali

**Dairymen's association of eastern Ontario**

40th annual convention, Napanee, Jan. 4-5.

(*In* Report, Dairymen's assns., 1916, p. 7-77)

'17 Ontario ag. dept., Toronto

- \* 41st annual convention, Perth, Jan. 10-11. (*In* Report, Dairymen's assns., 1917, p. 7-69) '18 Ontario ag. dept., Toronto

**Dairymen's association of western Ontario**

50th annual convention, Woodstock, Jan. 10-11. (*In* Report, Dairymen's assns., 1916, p.

78-139) '17 Ontario ag. dept., Toronto

- \* 51st annual convention, Stratford, Jan. 16-17. (*In* Report, Dairymen's assns., 1917, p. 70-128) '18 Ontario ag. dept., Toronto

**Dairymen's associations**

Administration of affairs of a record association. M. D. Munn. *il Breeder's Gaz* 72:239 Ag 23 '17

Annual reports of the dairymen's associations of the province of Ontario, 1916. 142p '17 Ontario ag. dept., Toronto

- \* Annual reports of the dairymen's associations of the province of Ontario, 1917. 128p '18 Ontario ag. dept., Toronto

Dairy association plans in Illinois. *O Judd Farmer* 62:13 F 17 '17

How we conduct our milk producers' association. J. D. Hervey. *Ohio F* 140:80 Ag 4 '17

Milk making pays these farmers; Twin City milk producers' exchange. A. E. Richter. *il Country Gent* 82:1379 S 8 '17

Milk producers' associations. Wallaces' F 43: 823 My 17 '18

Milk producers' associations. L. B. Dunham. *Ohio F* 139:113 Ja 27 '17

Need for medical inspection of employees who are engaged in the production and handling of milk. E. Kelly. *Int Assn Dairy & Milk Inspec Rep* 1915:80-6

Organization puts new life in dairying. F. P. Willits. *Prac F* 113:313 S 15 '17

Organizing local milk producers' associations. Hoard's D 52:153 Ag 25 '16

Penn'a dairymen organize. *Nat Stock & F* 40: 746 O 21 '16

Producers' associations and the law. H. T. Fay. Hoard's D 55:373 Mr 22 '18

Producers should organize. M. D. Campbell. Kimball's D F 16:403 My 15 '18

Value in milk producers' organizations. H. H. Lyon. Hoard's D 56:156 Ag 30 '18

What Michigan dairymen ask. *O Judd Farmer* 60:11 Je 3 '16

What should be the attitude of the cheese manufacturer toward them? *N Y Prod R* 43:176 N 22 '16

*See also* Cattle breeders' societies; Cow testing associations; Live stock breeders' associations; also Associated milk producers; Beauharnois district dairymen's association; British Columbia dairymen's association; Chicago milk producers' association; Cornell dairy students' association; Dairymen's league; Fraser Valley milk producers' association; Interstate milk producers' association; Milwaukee milk and cream shippers' association; Moore cooperative cheese and creamery company; National milk producers' federation; New England milk producers' association; Northern Ohio dairymen's protective league; Saskatchewan dairymen's association; Sheboygan county cheese producers' federation; South Mississippi dairymen's association; Southern Illinois milk producers' association; Twin City milk producers' association; also names of state associations

**Dairymen's league**

Annual meeting, Jersey City, New Jersey, Dec. 10. *Rural N Y* 77:1407 D 21 '18

Annual meeting, Utica, Dec. 8, 1917. *Rural N Y* 75:1576 D 23 '16

Another milk strike won. A. G. Morrell. *Country Gent* 81:2075 D 2 '16

Battle for milk prices goes on. *Rural N Y* 75:1263 S 30 '16

Borden's and the Dairymen's league. C. A. Weiant. *Rural N Y* 77:795 Je 15 '18

Dairymen goes into business. C. E. Gapen. *il Country Gent* 82:1770-1 N 17 '17

Dairymen's league and feed. Wallaces' F 42: 1471 O 26 '17

Dairymen's league and its problem. *Rural N Y* 77:879 J1 13 '18

Dairymen's league and milk prices. *Rural N Y* 76:490 Mr 31 '17

Dairymen's league exempt from prosecution under Donnelly anti-trust law. *N Y Prod R* 46:114 My 15 '18

Dairymen's league fixes prices. *N Y Prod R* 42:785 S 13 '16

Dairymen's league needs new leaders. *Rural N Y* 77:859 J1 6 '18

Dairymen's league officers indicted. *Rural N Y* 77:81 Ja 19 '18

Dealers meet league demands. *N Y Prod R* 44:868 O 3 '17

Federal meeting, Utica, Dec. 4. Hoard's D 54:800 D 28 '17

Fight for better milk prices in the New York dairy district. G. Bush. (*In* Nat. conf. on marketing and farm credits, 1916, p. 409-18) \$2 '17 C. W. Holman, sec., Madison, Wis.

History of its growth as related before Wicks investigating committee. *N Y Prod R* 42: 1002 O 11 '16

Market milk prices. *N Y Prod R* 44:785, 834 S 19-26 '17

Market milk situation. *N Y Prod R* 42:878 S 27 '16

Meeting, Utica, Dec. 4. *Rural N Y* 76:1425 D 15 '17

Memorable week in dairying. *Jersey B* 35: 1688 O 25 '16

Milk conditions in New York. E. W. Gage. Kimball's D F 15:794 N 1 '17

Milk price agitation, 1916. *N Y Prod R* 42:821 S 20 '16

Milk price agitation, 1917. *N Y Prod R* 44: 1014 O 17 '17

Milk price controversy. *N Y Prod R* 44:980 O 10 '17

Milk prices in New York. Creamery 6:36-7 N 17

Milk situation. *Rural N Y* 75:1523 D 9 '16

Milk situation analyzed. *Rural N Y* 76:1353, 1377 N 24, D 1 '17

Milk situation in New York state. M. G. Feint. *Nat Stock & F* 41:306 Je 16 '17

Milk situation; investigations of the League. *Rural N Y* 76:1182 O 13 '17

Milk strike on in New York. *N Y Prod R* 42: 910 O 4 '16

Milk strike progress. *N Y Prod R* 42:994+ O 11 '16

More on the New York milk situation. H. H. Lyon. Hoard's D 53:480 Ap 6 '17

New York dairy farmers in milk advertising campaign. A. H. Kolbe. Hoard's D 53:512 Ap 13 '17

New York dairy farmers take action for better milk prices. A. H. Kolbe. *Jersey B* 35: 1472 S 20 '16

New York dairymen present their case. *Nat Stock & F* 41:912 D 22 '17

New York dairymen suggest a city milk market. A. Kolbe. Hoard's D 54:333 O 5 '17

New York dairymen's league. R. D. Cooper. *Mass Ag Bd Yearbook* 1916, pt 2:168-73 '17

New York dairymen's league. H. H. Lyon. Hoard's D 52:887 Ja 12 '17

New York dairymen's league and feed prices. H. H. Lyon. Hoard's D 53:1010 J1 20 '17

New York league notes. H. H. Lyon. Hoard's D 55:96, 236, 518 F 8, Mr 1, Ap 12 '18

New York milk price. A. R. Eastman. *Nat Stock & F* 42:10 Mr 30 '18

New York milk price investigation. H. H. Lyon. Hoard's D 54:801 D 28 '17

New York milk prices. H. H. Lyon. Hoard's D 51:468; 52:354 Ap 7, O 6 '16

New York milk producers prepare for fight. H. H. Lyon. Hoard's D 52:33 Ag 4 '16



**Dairymen's league—Continued**

- New York milk situation. Rural N Y 76:1241 O 27 '17  
 New York milk situation; dairymen name their prices. Rural N Y 75:1241 S 23 '16  
 New York milk situation reviewed. H. H. Lyon. Hoard's D 52:577 N 17 '16  
 No truce in New York city's milk war. T. J. Murphy. il Country Gent 83:5-6 O 5 '18  
 Notes on the milk situation. Rural N Y 76:1473 D 29 '17  
 Prosecution of Dairymen's league officials. Rural N Y 77:201 F 9 '18  
 Prosecution of Dairymen's league officials. W. P. Belden. Rural N Y 77:140 F 2 '18  
 Protect the co-operative milk creameries. Rural N Y 77:289 F 23 '18  
 Stand back of the Dairymen's league. Rural N Y 77:1119 S 28 '18  
 To members of the Dairymen's league. Rural N Y 77:1167 O 12 '18  
 Tough competition; dairymen's trust and the allied condensed milk contracts. N Y Prod R 45:56 N 14 '17  
 What does Dillon want? a plain statement of policy. J. J. Dillon. Rural N Y 77:923 J1 27 '18  
 What the Dairymen's league is doing. R. D. Cooper. N Y Ag Dept B 92:155-60 F '17  
 Work of the Dairymen's league. F. Sherman. N Y Ag Dept B 93:82-7 Mr '17

**Daisies**

- Michaelmas daisies. Gard Chron Am 20:512 D '16  
 Pink daisy for next summer's bloom. S. R. Duffy. il Gard M 28:53 S '18

**Dakin's solution**

- Report on the use of Dakin's solution. H. E. Kingman. Am Vet M Assn J 52:185-8 N '17

**Daldinia**

- Daldinia vernicosa—a pyroxylophilous fungus. A. S. Rhoads. bibliog il Mycol 10:277-84 N '18

**Dalmatian dogs**

- Spotted dog of Dalmatia. W. A. Dyer. il Country Life 31:76-8 Ap '17

**Damping-off.** See Conifers—Diseases and pests

**Dams**

- Concrete dam. F. H. Carpenter. Country Gent 81:689 Mr 25 '16  
 Construction of reservoir dams in France. P. Levy-Salvador. Int R Sci & Prac Ag 8,no 11:1073-4 N '17  
 Field-stone dam. Country Gent 81:57 Ja 8 '16  
 Hydraulic fill method used to throw a temporary dam across a wide stream. Int R Sci & Prac Ag 7,no 6:868-9 Je '16  
 Soil saving dam. W. H. Baker. il Mo Ag Ext C 14:1-4 '17

**Dancing**

- Morris dance comes to America. H. W. Lanier. il Country Life 33:45-9 D '17

**Dandelions**

- Dandelion as a honey-plant and as a nuisance. E. R. Root. il Gleanings 45:252 Ap '17  
 Dandelion in Colorado. B. O. Longyear. Colo Ag Exp B 236:1-35 '18; Abstract. Rural N Y 77:551 Ap 13 '18  
 Dandelions as a cultivated crop. E. I. Farrington. il Country Gent 81:636-7 Mr 18 '16  
 Dandelions as food. L. Brewer and H. Canon. il Cornell Reading Courses 5,no 105:79-91 My '16; Same. Cornell Ag Exp Rep 1916, v 2: 1047-57 '17  
 Dandelions for greens. D. F. Jones. il Country Gent 81:233 Ja 29 '16  
 Dandelions in your lawn. H. R. Cox. il Country Gent 81:751 Ap 1 '16

**Diseases and pests**

- Notes on an introduced weevil (ceutorhynchus marginatus Payk.). J. A. Hyslop. il J Econ Entom 10:278-82 Ap '17

**Danes in the United States**

- Development of a Danish settlement. il Wal-laces' F 41:207 F 11 '16

- Daniel** Euston; story. H. S. Keeler. See weekly numbers of Ohio farmer, Dec. 1, 1917-Feb. 16, 1918

**Danthonia**

- Danthonia in New Zealand. A. H. Cockayne. il J Ag New Zealand 13:352-5 N '16

**Daphnes**

- Fragrant flowered daphnes. W. H. Judd. Gard M 25:192 Ap '17

**Dark currant fruit flies**

- Dark currant fruit fly in California. H. H. P. Severin. il Cal State Comm Hort B v 6:258-60 Je '17

**Darning**

- Darning as a useful art. Mrs W. N. Hutt. il Prog F 31:1314 N 11 '16

**Darwinism.** See Evolution

**Dasheens**

- Dasheen finds favor. Coop Manager & F 6:62 Ap '17  
 Dasheen finds favor. Weekly N L 4:2 F 7 '17  
 Dasheen; its uses and culture. R. A. Young. il U S Ag Yearbook 1916:199-208  
 Dasheen—our new bearded potatoes. il Country Gent 82:iv S 8 '17  
 Digestibility of the dasheen. C. F. Langworthy and A. D. Holmes. U S Ag B 612:1-11 '17  
 Recipes for the preparation of the dasheen. (F. S. & P. 1-2.) 3p '16 U.S. Bur. of plant industry, Washington, D.C.  
 Vegetable well adapted to cultivation in the southern part of the United States. il J Home Econ 9:81-4 F '17

**Composition**

- Calcium oxalate in the dasheen. O. F. Black. Am J Bot 5:447-51 N '18

**Diseases and pests**

- Storage fermentation of dasheens. O. T. Wilson. il Phyt 8:547-9 O '18  
 Storage-rots of economic aroids. L. L. Harter. il J Ag Research 6:549-72 J1 10 '16; Abstract. Int R Sci & Prac Ag 7,no 12:1852-4 D '16

**Dasyneura ulmea.** See Elm—Diseases and pests

**Datana integerrima.** See Walnut datana

**Datana ministra.** See Yellow-necked apple caterpillars

**Date palm**

- Botanical characters of the leaves of the date palm used in distinguishing cultivated varieties. S. C. Mason. il U S Ag B 223:1-28 '15  
 Some experiments in the improvement of the date-palm sugar industry. H. E. Annett. Ag J of India 12:442-5 J1 '17

**Dates (fruit)**

- Best deglet nur grown in America. W. F. A. McIntyre. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:215 Ap 6 '18  
 Dates, figs and raisins. J. W. Andrews. Kimball's D F 15:401 Je 1 '17  
 Outlook for date growing. M. L. Williams. il Country Gent 81:1790 O 7 '16  
 What to do with dates. E. L. Gilbert. Country Gent 81:770 Ap 1 '16

**Diseases and pests**

- Notes on an ephestia, an insect injurious to stored dates in Khargeh oasis. L. H. Gough. 133-40p il '18 Egypt Ministry of ag., Cairo

**Storage**

- Notes on an ephestia, an insect injurious to stored dates in Khargeh oasis. L. H. Gough. 133-40p il '18 Egypt Ministry of ag., Cairo

**Varieties**

- Dates of Egypt and the Sudan. S. C. Mason. il map U S Ag B 271:1-40 '15

**Daturas**

- Narcotic plants and stimulants of the ancient Americans. W. E. Safford. il Smithsonian Inst Rep (Washington, D.C.) 1916:405-9

See also Jimson weed

**Davey institute of tree surgery**

- Tree surgery investigated. M. C. Ebel. Gard Chron Am 21:163-6 Ap '17

- Davis-Watkins dairymen's manufacturing company**  
Merger of milk machinery manufacturers. *il* Creamery 6:36-7 S '17
- Davison, G. Howard**  
Portrait. *Breeder's Gaz* 70:1279 D 28 '16
- Davison, Henry P.**  
Davison estate in war time. *E. M. Woolley. il por Country Life* 34:39-42 Ag '18
- Dawson, Jackson Thornton, 1841-1916**  
In memoriam. *W. N. Craig; E. T. Mische. por Gard Chron Am* 20:355 Ag '16
- Day nurseries**  
Lincolnshire crèche to release women for farm work. *J Bd Ag* 23:146-7 My '16
- Daylight saving**  
Daylight saving bill in Scotland. *J; Lennox. Field* 11 26:616 JI '16  
Daylight saving on the farm; an inconvenience and loss. *H. R. Talmage. il Rural N Y* 77:935 Ag 3 '18  
Saving daylight. *Rural N Y* 77:671 My 11 '18
- Deadly doorknob; story.** *Rural N Y* 77:461 Mr 23 '18
- Deafness**  
Can your child hear? *Mrs G. T. Strutsman. Fruit-Grower* 27:270 Ap 15 '16
- Death**  
Utility of death; evolution could not take place without it. *F. H. Pike. J Heredity* 8:195-9 My '17
- Death camas**  
Zygadenus, or death camas. *C. D. Marsh and others. bibliog il U S Ag B* 125:1-46 '15
- Death rate.** See Vital statistics
- Decimal classification.** See Classification, Decimal
- Decoration and ornament.** See Animals in art; House decoration; Metal work
- Decoration day.** See Memorial day
- Decorations of honor**  
Orders and war medals conferred by France and Belgium; photographs. *Country Life* 35:30 N '18  
War medals of the United States; illustrations. *Country Life* 35:48-51 D '18
- Deeds.** See Land titles; Torrens system
- Deer**  
My friend the deer. *A. Rutledge. il Country Life* 34:45-8 My '18  
Protect the deer. *Weekly N L* 5:9 S 19 '17  
Who get the deer? *Rural N Y* 75:1537 D 16 '16
- Deerhounds**  
Hounds of Celt and Gael. *il Country Life* 29:48-9 Ja '16
- Defectives**  
Body and mind. *J Heredity* 8:286-7 Je '17  
Indiana survey. *A. H. Estabrook. J Heredity* 8:156-9 Ap '17  
Jukes in 1915. *il J Heredity* 7:469-74 O '16  
Nassau survey; study of mental disorder and social maladjustment in a typical community. *A. J. Rosanoff. J Heredity* 9:108-11 Mr '18  
Testing criminal offenders; laboratory of the N. Y. police department. *il J Heredity* 7:255-61 Je '16  
See also Feeble-minded
- Education**
- What becomes of the special class children? *J Heredity* 7:248 Je '16
- Deformities**  
See also Monsters; Polydactylism
- Delaware**  
See also subhead Delaware under Agriculture, Apple culture and Dairying
- Agriculture, State board of**
- Annual reports of the board for 1915-16. *Del Ag Bd B v* 6 no 2 32p '16
- Delaware agricultural experiment station**  
Annual report of the director for the fiscal year ending June 30, 1916. *Del Ag Exp B* 116:1-31 '17
- Annual report of the director for the fiscal year ending June 30, 1917. *Del Ag Exp B* 119:1-28 '18
- Delaware chief's quest; story.** *F. H. Spring. Ohio F* 142:174-5 Ag 24 '18
- Delaware county (Pa.) poultry association**  
Pennsylvania poultrymen hold highly successful field meet. *il Reliable P J* 25:754+ N '18
- Delphastus catalinæ.** See Ladybirds
- Delphiniums**  
Delphiniums for market. *J. H. Sperry. il Country Gent* 82:502 Mr 10 '17  
Delphiniums—popular perennials. *W. Saville. Gard Chron Am* 20:285 Je '16
- Delta potato growers**  
Delta potato growers. (*In* Report Cal. State market director, 1916, p 40-5) '16 Cal. State market director, Sacramento
- Demand and supply.** See Supply and demand
- Democracy**  
We have got to strip for war. *C. Ousley. Banker-F* 5:5 Ag '18
- Demonstration work in agriculture**  
Demonstration and extension work in the Philippine islands. *E. F. Southwick. Philippine Ag R* 10, no 1:43-50 '17  
Demonstration field, Brandon normal school. *T. J. Harrison. plan Ag Gaz of Canada* 5:616-17 Je '18  
Demonstration papers. *W. H. Barton. S C Ag Ext B* 19:1-51 '16  
Discussions at the semi-annual meeting of South Carolina extension agents, held at Clemson College, Jan. 24-29, 1916  
Demonstration service in agriculture and home economics. *Ill Ag Ext C* 1:1-4 '16  
Establishing demonstration poultry farms in Indiana. *A. G. Phillips and L. L. Jones. Reliable P J* 24:668 O '17  
Farm demonstration work in Alabama. *Prog F* 31:288 F 26 '16  
Farm management demonstration work. *Ag Gaz of Canada* 3:474 My '16  
Farm-management demonstrations in the northern and western states. (*In* Cooperative extension work, 1916, pt. 2, p. 171-3) '17 U S Ag  
Farm management demonstrations in the United States. *E. A. Brown. Ag Gaz of Canada* 3:1008-12 N '16  
Field day at Snowshoe, Pa.; the school of agriculture tackles a new problem. *il Penn State F* 9:457 N '16  
Generalship in county agent work. *V. A. Place. Breeder's Gaz* 71:872 Ap 26 '17  
How the whole county demonstrated; Christian county, Ky. *B. Knapp and J. M. Jones. il maps U S Ag Yearbook* 1915:225-48  
Illustration farms in Canada. *J Bd Ag* 23:1225-31 Mr '17  
Illustration stations; important agencies of increasing crop production. *J Ag (Quebec)* 21:72 N '17  
Laws relating to county or district demonstration farms. *W. E. Hannan, comp. 32p '18 N. Y. (state) Lib. legislative reference section*  
Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew \$1.60)
- Maine demonstrations.** *S. F. Brown. Country Gent* 81:2003 N 18 '16
- Model farm in California.** *il plan House Beautiful (3 Park st., Boston 25c)* 42:36-7 Je '17
- Orchard demonstration work.** *R. H. Bell. Penn State F* 9:294-5 Ja '16
- Report of the state leader in farm demonstration.** *A. L. Clark; J. H. Hankinson. N J Ag Exp Rep* 1916:253-7 '17
- Results of farm demonstration work in Arkansas.** *J. H. Miller. Prog F* 31:418 Mr 18 '16
- Results of farm management demonstration work.** *L. H. Goddard. (In* Am. farm management assn. Record of pro., 1915, p. 26-33) '16 G. A. Billings, sec., Washington, D.C.
- Volunteer cooperators of the U.S. Department of agriculture for the advancement of farming.** *Int R Sci & Prac Ag* 8, no 1:16-18 Ja '17



**Demonstration work in agriculture**—*Continued*  
Work of the extension entomologist in Kansas and Missouri. T. J. Talbert. J Econ Entom 9:287-90 Ap '16

See also Farm home demonstration work

**Demurrage**

Demurrage information for farmers. G. C. White. U S Ag B 191:1-27 '15

**Dendrology.** See Trees

**Dendrometers**

New dendrometer. D. Bruce. Cal Univ Pub Ag Sci v 3, no 4 55-61p '17 (10c)

**Denitrification.** See Nitrification

**Denmark.** See Heather-land association of Denmark; also subhead Denmark under special subjects, e.g. Agriculture—Denmark, Dairying—Denmark

**Denudation.** See Erosion

**Deodar**

Notes on deodar. For Quar 14:128-9 Mr '16

**Dependent classes.** See Defectives

**Depraved appetite.** See Pica (depraved appetite)

**Desert almond.** See Prunus fruits

**Desert corn flea-beetles**

Desert corn flea-beetle. V. L. Wildermuth. il U S Ag B 436:1-21 '17

**Desert land laws**

Statutes and regulations governing entries and proofs under the desert-land laws, together with suggestions to persons desiring to make entries under said laws. (C. 474) 44p '16 U.S. General land office, Washington, D.C.

**Desert lands**

Deserts due to deforestation. M. Wicks. il Am For 22:598-606 O '16

Nitrogen content of the humus of arid soils. F. J. Alway and E. S. Bishop. bibliog J Ag Research 5:909-16 F 14 '16

**Desert of wheat; story.** Z. Grey. il See weekly numbers of Country gentleman May 4-July 20, 1918

**Desert vegetation**

Cryoscopic determination on tissue fluids of plants of Jamaican coastal deserts. J. A. Harris and J. V. Lawrence. Bot Gaz 64:285-305 O '17

Root systems of certain desert plants. M. S. Markle. il Bot Gaz 64:177-205 S '17

Vegetation of Hawaiian lava flow. V. MacCaughy. il diag Bot Gaz 64:386-420 N '17

**Desiccated milk.** See Milk, Desiccated

**Desiccators.** See Drying apparatus

**Design, Decorative**

Americanism the spirit of costume design. E. Miller. J Home Econ 10:207-11 My '18

See also Animals in art

**Desks**

Scrutoires. W. A. Dyer. il Country Life 32:58+ Ag '17

**Desmia funeralis.** See Grape leaf folders

**Desserts**

Caramel dishes for a change. M. H. Neil. il Country Gent 81:1675 S 9 '16

Desserts without sugar. Mrs F. W. Stillman. Rural N Y 77:1361 D 7 '18

Easiest dessert. F. Spring. il Country Gent 81:1528 Ag 12 '16

Foods and food preparation; frozen dishes. F. E. Campbell. J Ag (Quebec) 19:247 My '16

Foods and food preparation; starchy desserts. F. Campbell. il J Ag (Quebec) 19:202 Mr '16

Frozen desserts. Rural N Y 75:1056 Ag 5 '16

Hot weather desserts. R. McNeill. il Purdue Ag Ext B 47:1-11 '16

Ice cream and frozen desserts. Prac F 114:248 Jl 15 '18

Ices, sweets, desserts and their sauces. A. Remsen. Country Life 30:118 Je '16

Reliable dessert. L. U. Adams. il Country Gent 82:83 Ja 13 '17

Some interesting desserts. Ohio F 140:491 N 24 '17

Some Irish potato desserts. R. M. F. Berry. Rural N Y 76:595 Ap 21 '17

Tempting fresh fruit pastries. M. B. Foulks. il Country Gent 81:1457 Jl 29 '16

Wholesome war-time desserts. G. Hadley. Purdue Ag Ext B 70:1-8 '18

Wide-awake girls learn to make desserts. Mrs W. N. Hutt. Prog F 31:478 Ap 1 '16

**Detonators, Electric**

Battery box blasting machine. A. H. Harris. Power F 26:23 My '17

**Detroit, Michigan**

See also Milk supply—Detroit

**Education**

Home economics in the Detroit schools. C. Keen. J Home Econ 8:479-87 S '16

**Detroit milk investigation**

Report of Detroit milk commission. Hoard's D 54:798 D 28 '17

What shall the public pay? Ag Digest 2:793 Ja '18

**Deutzias**

New deutzias better than the old. J. Dunbar. il Gard M 25:228-9 My '17

Origin of some hybrids of deutzia. A. Rehder. Gard M 27:22 F '18

Two Chinese deutzias of merit. J. H. McFarland. il Gard M 27:21-2 F '18

**Development.** See Growth (plants)

**Development commission.** See Great Britain—Development commission

**Devils lake**

Changing diatoms of Devils lake. C. J. Elmore. Bot Gaz 65:186-90 F '18

**Dew measurement**

Eredia dewmeter. F. Eredia. Int R Sci & Prac Ag 7,no 4:516-17 Ap '16

**Dewberries**

Blackberries nd dewberries. O. M. Taylor. il N Y Ag Dept B 79,pt 2:1371-7 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1371-7 '17

Dewberry coöperation. S. R. Winters. il Country Gent 81:499 Mr 4 '16

Dewberry culture. G. M. Darrow. il Farmers' B 728:1-18 '16

How to grow dewberries. Prog F 31:807 Je 24 '16

McDonald berry. L. R. Johnson. il Country Gent 82:876 My 12 '17

McDonald berry. L. R. Johnson. Fruit-Grower 27:57 Ja 15 '16

Raspberries, blackberries and dewberries (C. 33). O. M. Taylor. N Y State Ag Exp Rep 1915:637-46 '16

Self-sterility in dewberries and blackberries. L. R. Detjen. il N C Ag Exp Tech B 11:1-37 '16; Same. N C Ag Exp Rep 1917:1-37

See also Blackberries

**Diabetes**

Cheap homemade soy-bean meal for diabetics. L. J. Roberts and E. W. Miller. J Home Econ 10:64-70 F '18

New dietetic treatment of diabetes mellitus. L. F. Cooper. bibliog J Home Econ 9:19-26 Ja '17

Use of diabetic flours. A. L. Daniels and G. Dulaney. J Home Econ 8:137-43 Mr '16

**Diabroticas**

General discussion of the diabroticas. R. A. Sell. Gard Chron Am 20:365 Ag '16

See also Cucumber beetles, Striped

**Diagnosis, Veterinary.** See Veterinary diagnosis

**Diamond-back moths.** See Cabbage plutella

**Dianthus.** See Pinks

**Diaporthe**

Podblight of the lima bean caused by diaporthe phaseolorum. L. L. Harter. bibliog il J Ag Research 11:473-504 D 3 '17

**Diaries**

Use of a diary for farm accounts. E. H. Thomson. Farmers' B 782:1-18 '17

**Diarrhea, Infectious**

Bacillus enteritidis as the cause of infectious diarrhea in calves. K. F. Meyer and others. Am Vet M Assn J 49:17-35 Ap '16

**Diarrhomyia hypogæa.** See Chrysanthemum gall-flies

**Diastase**

Diastase activity and invertase activity of bacteria. G: P. Koch. bibliog Soil Sci 1: 179-96 F '16

Influence of certain salts and nutrient solutions on the secretion of diastase by penicillium camembertii. W: J. Robbins. bibliog Am J Bot 3:234-60 My '16

Nitrogenous auxoamylases. E. W. Rockwood. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:2745-52 D '17

Simple method for the classification of bacteria as to diastase production. P. W. Allen. il J Bact 3:15-17 Ja '18

**Diatoms**

Changing diatoms of Devils lake. C. J. Elmore. Bot Gaz 65:186-90 F '18

**Diatraea.** See Cornstalk borers; Sugar-cane moth borers

**Dickcissel.** See Buntings

**Dickson, James McCurdy,** 1848-1918

Oregon loses prominent Jerseyman. H. Addis. por Jersey B 37:636 Ap 24 '18

**Didymium**

Cleavage in didymium melanospermum (Pers) Macbr. R. A. Harper. bibliog il Am J Bot 1:127-44 Mr '14

**Diederich, Hunt**

Wrought metal work by Hunt Diederich; photographs. Country Life 32:51-3 S '17

**Diet**

Animal calorimetry: the interrelation between diet and body condition and the energy production during mechanical work. R. J. Anderson and L. Graham. Int R Sci & Prac Ag 9,no 3:345-7 Mr '18

Bearing of recent experiments in animal nutrition on the food value of milk. J. F. Lyman. Creamery 6:19-20; 7:30-2 D '17, Ja '18

Cereals in the diet. M. F. Henry. bibliog il Cornell Reading Course Farm Home 117:27-52 '18

Changing a peace time ration for war time. C. L. Hunt. J Home Econ 10:371-4 Ag '18

Classification of food principles. B. Bell. (In Suggestions for food conservation, p 34-7) '17 Women's central committee on food conservation, St Louis

Contribution to the standardization of conditions in college halls for women. A. Borthwick. J Home Econ 9:139-40 Mr '17

Diet and health. E. Irving. O Judd Farmer 60:27 Ap 15 '16

Diet for school children. G. Hadley. Purdue Ag Ext Leaflet 103:1-5 '18

Diet for the sick. Prog F 31:233 F 12 '16

Diet of children from babyhood to ten years old. Mrs W. N. Hutt. Prog F 31:232 F 12 '16

Dietary habits and their improvement; some results of the work of Phipps institute. H. R. M. Landis. Annals Am Acad (36th st and Woodland av., Philadelphia \$1) 74:103-8 N '17

Dietary study at Vassar college. A. L. Macleod and M. A. Griggs. J Home Econ 10:97-107 Mr '18

Dietetic value of fruits. E. L. Burner. Ill State Hort Soc Trans 1916:179-89 '17

Eat and save money; some simple facts about diet. C: P. Cushing. World's Work (Garden City, N.Y. 25c) 34:219-22 Je '17

Economical ration for the times. C: Bolduan. scientific Am (233 Broadway, N.Y. 10c) 115: 529 D 9 '16

Economy in diet. G. Lusk. Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917:231-40

Economy in food. T. B. Wood. J Ed Ag 23: 17-21 Ap '16

Economy in its relation to the conservation of health. E. B. Rutter. J Ag (Quebec) 21: 48 S '17

Edible fats in war and law. D: Wesson. J Industrial & Eng Chemistry (Am Chemical Soc., Easton, Pa. 60c) 10:71-3 Ja '18

Experiment in teaching food values. I. Bevier. J Home Econ 9:415-18 S '17

Experiments in teaching food values. M. C. deGarmo and M. Freeman. Ill Univ (Urbana) B v 14:1-22 Ag 6 '17

Experts study diet. Weekly N L 5:7 Ja 2 '18

Family balanced ration. C. Vrooman. J Home Econ 9:421-2 S '17

Food and the calorie. 7p '18 Mass. State dept. of health, Boston

Food and work. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:187 Mr 24 '17

\* Food conservation by reduction of rations; abstract. F. G. Benedict. Nature (St Martin's st, London, W.C. 6d) 101:355-7 Jl 4 '18

Food emergency demonstrations; what to eat in war time. N H Ag Ext C 30 4p '18

Food supply in families of limited means; a study of present facts of the food problem in Boston families. M. M. Davis, jr. (Pub. no. 3) 24p '17 League for preventive work, 44 Bromfield st, Boston

Food values. G. Lusk. Science (Science Press, Garrison, N.Y. 15c) n s 45:345-50 Ap 13 '17

Foods and food values; phosphorus, lime and iron in the diet. E. B. Rutter. J Ag (Quebec) 20:42 Ag '16

Fruit and its effect on the war. W. F. Gwin. Better Fruit 12:9 Mr '18

Guide to the nation's dietary needs. H. W. Atwater. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:108-18 N '17

Hints on what to eat during the war. E. V. McCollum. Wis Ag Ext C 100:1-19 '18

Hope farm notes; food economies. H. W. Collingwood. Rural N Y 77:524 Ap 6 '18

Hot weather eating. E. Mellen. O Judd Farmer 63:29 Jl 21 '17

How much shall I eat? (Ser. 3, no 1) 20p '18 Winthrop normal and industrial college, Rock Hill, S. C.

How to live well and wisely. J. R. Arms. Fla State College for Women Leaflet 1 4p '18

Importance of butter fat in human diet. J Dept Ag Victoria 16:176-80 Mr '18

Influence of heat on growth-promoting properties of food. E. V. McCollum. Creamery 7:30-1 Ap '18

Influence of the nature of the diet on the retention of protein. N. Umeda. Int R Sci & Prac Ag 7,no 10:1468-70 O '16

Latest investigations into the connection between diet and work. Current Opinion (63 W. 36th st., N.Y. 25c) 62:333-4 My '17

League of three dishes. Nat Stock & F 41: 120 Ap 21 '17

Lesson in economical buying. G. Gray. J Home Econ 10:177-80 Ap '18

\* Living on twenty-five cents a day. M. S. Rose and others. Teachers Coll Record (525 W. 120th st, N.Y. 40c) 19:269-77 My '18

Making real use of the garden's crops. I. M. K. Allison. Gard M 26:122 N '17

Malnutrition through errors in the combination of foods; with discussion. E. V. McCollum. Assn Dairy Food & Drug Offic Pro 1916:61-8

Meals and their substitutes for war purposes. (In Suggestions for food conservation, p 38-42) '17 Women's central committee on food conservation, St Louis

Milk, a food for everybody. J: H. Kellogg. N Y Ag Dept B 93:19-36 Mr '17

Milk necessary for the nation's welfare. E. B. Hart and H. Steenbock. il Wis Ag Exp B 291:1-20 '18

Mineral nutrients in practical human food. E. B. Forbes. J Home Econ 8:122-30 Mr '16; Same cond. Ohio Ag Exp B v 1:123-8 Ap '16

Misguided appetite and the high cost of living. A. E. Perkins. il Ohio Ag Exp B v 1:363-70 D '16; Summarized by J: Marsh. Ohio F 139: 291 F 24 '17

New dietetic treatment of diabetes mellitus. L. F. Cooper. bibliog J Home Econ 9:19-26 Ja '17

New feeding in the treatment of typhoid fever. A. C. Walton. J Home Econ 9:14-18 Ja '17

Overloaded table. E. C. Morgan. Kimball's D F 15:534 Ag 1 '17

Physiological effect on growth and reproduction of rations balanced from restricted sources. E. B. Hart and others. bibliog il J Ag Research 10:175-98 Jl 23 '17

Points in selecting meals. F. Rose. J Home Econ 10:374-7 Ag '18



**Diet—Continued**

- Practicable ways of increasing the iron-content of the diet. C. L. Hunt. *J Home Econ* 8: 584-7 N '16
- Practical suggestions regarding food values and the proper selection of a nutritious and economical diet. A. M. G. Soule. *Maine Ag Dept B v* 16:1-36 Mr '17
- Problems of human nutrition; discrepancies in current systems of dietetics. A. E. Gibson. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:38-9 Ja 20 '17
- Protein needs of the body. H. Mason. *Ohio F* 139:598 Ap 21 '17
- Putting on weight. *Scientific Am* (233 Broadway, N.Y. 10c) 118:70 Ja 19 '18
- Relation of diet to dental caries and mouth infection. J. H. Kellogg. 30p n. d. J. H. Kellogg. Battle Creek, Mich.
- Relation of food economics to the nutritive value of the diet. L. H. Gillet. (Reprint 98 Pro. 1917) 4p 6c '17 Nat. cont. of social work, 315 Plymouth court, Chicago
- Relation of the dairy industry to the public health. E. V. McCollum. *Hoard's D* 54:756 D 21 '17
- \* Scientific basis of rationing. *Nature* (St Martin's st, London, W. C. 6d) 100:385-7 Ja 17 '18
- Single food diet and nutritional deficiency. E. Weil and G. Mouriquand. *Int R Sci & Prac Ag* 7:no 4:549 Ap '16
- Some essentials to a safe diet. E. V. McCollum. *Annals Am Acad* (36th st. and Woodland av., Philadelphia. \$1) 74:95-102 N '17; Same. *J Home Econ* 10:49-56 r '18
- Some factors in meal planning. M. Sayles. *Mass Ag Ext B for Farm Women* 5:1-18 '16
- Some points to be considered in the planning of a rational diet. S. Usher. *Ill Univ (Urbana) B v* 11:1-16 Ap 6 '14 (3d ed '16)
- Some recent investigations in nutrition at the University of Wisconsin. R. Loughlin. *J Home Econ* 9:546-9 D '17
- \* Statistical studies of dietaries. *Nature* (St Martin's st, London, W. C. 6d) 101:465-6 Ag 15 '18
- Stockman diet primer. *Nat Stock & F* 42: 812, 832 D 7-14 '18
- Suggestions for midsummer. V. C. Lee. *O Judd Farmer* 63:12 Ag 11 '17
- Teaching food values. A. F. Blood. *J Home Econ* 10:302-3 Jl '18
- Teaching food values. C. F. Langworthy. *J Home Econ* 10:295-302 Jl '18
- Teaching of food values in the elementary schools. R. Biery. *J Home Econ* 10:353-7 Ag '18
- Triumph of scientific housekeeping. S. T. Barrows. *J Home Econ* 8:495-8 S '16
- United States food leaflets 1-20. 4p ea '18 U.S. Food administration, Washington, D.C.
- Value of fruits and vegetables in the diet. E. Nickerson. *Minn Hort* 46:61-2 F '18
- War and dietetics. R. Wheeler. *J Home Econ* 8:488-91 S '16
- War time diet and health. P. G. Stiles. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:206 Mr 30 '18
- Well-planned meals. J. Vance. *Neb Ag Ext B* 45:1-20 '17
- What and how much should we eat? T. B. Osborne. *Atlantic M* (41 Mt Vernon st, Boston 35c) 122:332-41 S '18
- When figures are facts. W. S. Gibbs. *Survey* (112 E. 19th st., N.Y. 25c) 38:480-1 S 1 '17
- Why need we be poisoned? M. Drew. *Contemporary Review* (249 W. 13th st., N.Y. 50c) 109:452-61; 111:76-86 Ap '16, Ja '17
- Wide-awake girls learn to balance meals. Mrs W. N. Hutt. *Prog F* 31:122 Ja 22 '16
- Young and old, outdoor workers, etc., require special foods. Mrs W. N. Hutt. *Prog F* 31: 154 Ja 29 '16
- See also Beverages; Children—Care and hygiene; Cookery; Cookery for the sick; Digestion; Food; Infants—Care and hygiene; Menus; Nutrition; Prison diet; School lunches; Vegetarianism; Vitamines

**Bibliography**

- Report of committee to assemble current literature on subject of nutritional disorders, the result of so-called devitalized foods. S. J. Crumrine. *Assn Am Dairy Food & Drug Offic Pro* 1916:80-6
- Diet kitchens**  
Equipping a diet kitchen. R. M. Smith. *J Home Econ* 9:162-6 Ap '17
- Dietitians**  
Work of the dietitian in the Canadian military hospitals. V. M. Ryley. *J Home Econ* 10:108-13 Mr '18
- Digestion**  
Are the "what" and "how much" the all of nutrition? (Ser. 3, no. 3) 15p '18 Winthrop normal and industrial college, Rock Hill, S. C.
- Assumed destruction of trypsin by pepsin and acid; observations on animals. J. H. Long and M. Hull. *Am Chemical Soc J* (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39:162-74 Ja '17
- Biochemical comparisons between mature beef and immature veal. W. N. Berg. *bibliog J Ag Research* 5:667-711 Ja 10 '16
- Comparison of the digestibility of starch in typical batter and dough mixtures. A. L. Daniels and L. Strickler. *J Home Econ* 9: 109-14 Mr '17
- Digestibility of bread; erythrodextrin in starch hydrolysis. J. C. Blake. *Am Chemical Soc J* (Charles L. Parsons, sec., Box 505, Washington, D. C. \$6 per yr) 40:623-36 Ap '18
- Digestibility of bread; salivary digestion in vitro. J. C. Blake. *Am Chemical Soc J* (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 38:1245-60; 39:315-20 Je '16, F '17
- Digestibility of hard palates of cattle. C. F. Langworthy and A. D. Holmes. *J Ag Research* 6:641-8 Jl 24 '16
- Digestibility of protein supplied by soy-bean and peanut press-cake flours. A. D. Holmes. *U S Ag B* 717:1-26 '18
- Digestibility of very young veal. C. F. Langworthy and A. D. Holmes. *bibliog J Ag Research* 6:577-88 Jl 17 '16
- Digestion experiments with sheep. J. B. Lindsey and others. *Mass Ag Exp B* 181:241-335 '17
- Digestion of starch by the young calf. R. H. Shaw and others. *il J Ag Research* 12:575-8 Mr 4 '18
- Effect of time of digestion on the hydrolysis of casein in the presence of starch. J. S. McHargue. *J Ag Research* 12:1-7 Ja 7 '18
- Enzymes—substances which transform food into body constituents. J. Takamine, jr. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:21 Ja 13 '17
- Foods and food values; course of the food through the alimentary canal; human digestion. E. B. Rutter. *il J Ag* (Quebec) 20:83 O '16
- Lesson in foods. Mrs W. N. Hutt. *Prog F* 31:52 Ja 8 '16
- On the so-called specificity of the Abderhalden reaction. W. N. Boldyreff. *Int R Sci & Prac Ag* 9:no 2:208-9 F '18
- Perverse digestion in young ruminants. G. B. Jones. *Am Vet M Assn J* 53:528-31 Jl '18
- Recent advances in our knowledge of digestion and absorption. L. Stanley. *J Home Econ* 9:65-70 F '17
- Study of the physical changes in feed residues which take place in cattle during digestion. P. V. Ewing and L. H. Wright. *J Ag Research* 13:639-46 Je 17 '18
- Study of the rate of passage of food residues through the steer and its influence on digestion coefficients. P. V. Ewing and F. H. Smith. *J Ag Research* 10:55-63 Jl 9 '17
- What every housekeeper should know about the processes of digestion. M. Yackey. (*In* Suggestions for food conservation, p. 52-3) '17 Women's central committee on food conservation, St Louis
- See also Diet; Nutrition

**Digger wasps**

Fossorial wasps that catch flies. W. W. Froggatt. *il Ag Gaz of New South Wales* 28:667-9 S '17

**Dikes.** See Levees**Dilatometers**

Classification and measurement of the different forms of water in the soil by means of the dilatometer method. G. J. Bouyoucos. *il Mich Ag Exp Tech B* 36:1-48 '17

Measurement of the inactive, or unfree, moisture in the soil by means of the dilatometer method. G. J. Bouyoucos. *bibliog J Ag Research* 8:195-217 F 5 '17

**Dill**

Dill. J. T. Rosa, jr. *il Country Gent* 82:652 Mr 31 '17

**Dining rooms**

Dining room must be light and cheery. N. K. Jones. *Country Gent* 81:1135 My 27 '16

Distinction in dining rooms. A. R. Fairman. *il Country Life* 33:44-7 Ja '18

Table service and customs. *il Ohio F* 140:50 J1 21 '17

**Dinner** for six; story. F. Tilden. *il Country Gent* 83:18-19+ F 2 '18

**Dinners**

Alabama chicken dinner. M. A. Parker. *Rural N Y* 75:1012 J1 22 '16

Country dinners for city folks. M. H. Talbott. *Country Gent* 82:1435 S 15 '17

Foods and food values; home dinner. E. B. Rutter. *J Ag (Quebec)* 20:198 Mr '17

Planning the Sunday dinner; symposium. *Prac F* 112:424 N 15 '16

Some New England fish dinners. *Rural N Y* 76:990 Ag 18 '17

Sunday dinner. M. Palmer. *Kimball's D F* 15:566 Ag 15 '17

Wide-awake girls plan and serve a dinner. Mrs W. N. Hutt. *Prog F* 31:572 Ap 22 '16

See also Christmas dinners; Cookery; Thanksgiving dinners

**Dionaea**

Mechanism of movement and the duration of the effect of stimulation in the leaves of *dionaea*. W. H. Brown. *bibliog Am J Bot* 3:68-90 F '16

**Diphtheria**

Comparison of Loeffler's coagulated blood serum and blood serum with the addition of sterile ox gall in the isolation of the diphtheria bacilli. H. R. Odell. *bibliog J Bact* 3:189-91 Mr '18

Diphtheria. Fruit-Grower 27:67 Ja 15 '16

Diphtheria; an epidemic, probably of milk origin, at Newport, Rhode Island, and vicinity. G. W. McCoy and others. (Reprint no. 430 Pub. health reports) 20p map '17 U.S. Public health service, Washington, D.C.

**Diphtheria antitoxin**

Morphology of a strain of b. diphtheriae. P. G. Heinemann. *J Bact* 2:361-3 J1 '17

**Dipladenias**

Dipladenias. G. F. Stewart. *il Gard Chron Am* 21:152 Ap '17

**Diplodia**

Diplodia zeae, the cause of dry rot in maize. P. A. Van Der Bijl. *Int R Sci & Prac Ag* 7, no 9:1377-8 S '16

**Dipping vats, Concrete**

\* Dipping vat for a Texas ranch. Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:198 Je '18

**Dipping vats, Swine.** See Swine dipping vats**Diprion simile.** See Pine sawflies**Dips, Arsenical.** See Arsenical dips**Diptera.** See Flies; Mosquitoes; Piophilidae; Sepsidae**Disabled soldiers.** See Soldiers, Disabled**Disas.** See Orchids**Discina**

Photographs and descriptions of cup-fungi; *discina venosa*. F. J. Seaver. *il Mycol* 9:53-4 Mr '17

**Diseases**

Doctors and medicine. H: Wallace. *Wallaces' F* 42:438 Mr 9 '17

Heredity and disease. C: Herrman. *J Heredity* 9:77-80 F '18

Insects and the national health. C: T. Brues. *il maps Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 6:193-209 Mr '18

Milk sickness to be investigated. Creamery 7:57-8 O '18

On certain relations of the lower animals to human disease. D: J: Davis. *Am Vet M Assn J* 50:387-90 D '16

See also Infectious diseases; also names of diseases, e.g. Cancer, Cold (disease), Diabetes, Infantile paralysis, Malaria, Neuritis, Pneumonia, Typhoid fever

**Diseases of plants.** See Plants—Diseases and pests

**Dishwashers**

Hand vs. mechanical dishwashing. C. Frederick. *il Ohio F* 142:178-9 Ag 24 '18

**Dishwashing**

Chemicals for dishwashing. *Rural N Y* 77:73 Ja 19 '18

Dishwashing in farm homes. E. Owen. *Ohio F* 142:202 Ag 31 '18

Dishwashing made easy. *Country Gent* 81:1387 J1 15 '16

Easier dishwashing. *Rural N Y* 77:458 Mr 23 '18

Sanitary dishwashing. B. Stevenson. *J Home Econ* 8:83-4 F '16

**Dishwashing machines**

Homemade dish washer. *il Rural N Y* 75:468 Mr 18 '16

My kitchen helper. K. C. Blythe. *il Country Gent* 81:372 F 12 '16

**Disinfection and disinfectants**

Bacteriological study of methods for the disinfection of hides infected with anthrax spores. F. W. Tilley. *bibliog J Ag Research* 4:65-92 Ap '15

Benefits derived from disinfectants. M. K. Boyer. *Am P Advocate* 24:137 Ja '16

Chloramine antiseptics and disinfectants. N. S. Mayo. *Am Vet M Assn J* 54:139-44 N '18

Common disinfectants. M. Dorset. *Farmers' B* 345:1-10 '16

Cow and her health. L. R. Himmelberger. *Hoard's D* 52:735 D 15 '16

Disinfectants. J. Vanderleck. *J Ag (Quebec)* 22:31, 83 Ag, N '18

Disinfectants in the dairy stable and their uses. N. E. McEwen. *J Ag (Quebec)* 21:24 Ag '17

Disinfecting the hen house. *Purdue Ag* 10:28 My '16

Disinfection of premises. *Wallaces' F* 43:254 F 8 '18

Disinfection of stables. G: W. Pope. *il Farmers' B* 954:1-12 '18 (B. 480 rev.)

Effect of disinfectants upon bacterium citri. R. A. Jehle. *il Fla State Plant Bd Quar* B 2:112-23 Ja '18

Efficiency of disinfectants. C. H. Higgins. *Am Vet M Assn J* 51:247-55 My '17

Facts about disinfection. W. H. Dalrymple. *Prog F* 31:652 My 13 '16

How to disinfect buildings. *Power F* 25:41 Ja '16

Importance of uniform culture media in the bacteriological examination of disinfectants. J. H. Wright. *J Bact* 2:315-46 J1 '17

Investigations on the prevention of nuisances arising from flies and putrefaction. F. W. Foreman and G. S. Graham-Smith. *Am Vet M Assn J* 52:722-6 F '18

Poultry farm disinfection. J. B. Paige. *Mass Ag Exp C* 66:1-4 '16; Same. *Mass Ag Ext C* 59 4p '18

Preparation of a preservative from cresol. M. Nevin and B. Mann. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39:2752-6 D '17

Some common disinfectants. M. Dorset. *Farmers' B* 926:1-12 '18 (B. 345 rev.)

See also Calcium hypochlorite; Dakin's solution; Fumigation; Hypozone; Seed disinfection; Soil disinfection

**Disinfection of seed.** See Seed disinfection

**Disinfection of soils.** See Soil disinfection



**Distillation**

Method for producing conductivity water suitable for water culture experiments. R. B. Harvey. *Bot Gaz* 63:321-2 Ap '17

See also Liquors; Wood distillation

**Distomatosis**

Experimental control of distomatosis in Hungary. J. March. *Int R Sci & Prac Ag* 7,no 5:700-2 My '16

**Distribution (economics)**

Democracy and distribution; with discussion. W. H. Ingersoll. (*In* Sagamore sociological conference, Proc., 1917, p. 7-15) '17 W; C. Ewing, sec., 985 Washington st, Boston

Prices and distribution. W. W. Swanson. (*In* Report, United farmers of Alberta, 1917, p. 239+) '18

**Distribution of animals and plants, Geographical.** See Geographical distribution of animals and plants

**Distribution of food.** See Food distribution

**District of Columbia**

**District of Columbia.** See Food supply--District of Columbia

**District representatives.** See County agents

**District schools.** See Rural schools

**Ditching machinery.** See Excavating machinery

**Diuretics and diuresis**

Diuresis and milk flow. H. Steenbock. *J Ag Research* 5:561-8 D 27 '15

**Diversified farming**

Diversification in agriculture. W. R. Dodson. (*In* Proceedings, 10th annual meeting, Railway development association, p 68-71) '16 D. C. Welty, sec., St Louis, Iron Mountain & Southern ry., St Louis, Mo.

Diversification means better utilization of labor. *Prog F* 32:514 Ap 21 '17

Diversified crops for the South. *Creamery* 5:32-3 My '17

Diversified farming at Hill Top farm in Alabama. J. C. Travis. *Prog F* 31:790 Je 17 '16

Diversified farming is safe farming. 32p '16 *Int. harvester co., Chicago*

Efficient marketing criticized: a frank discussion of diversified farming. J. E. Ryan. *Farm Eng* 4:45 S '16

Feed yourselves, says Mrs Mathis. H. S. Stabler. *il Country Gent* 81:1895-6 O 28 '16

If the South fed herself. P. G. Holden. *il Wallaces' F* 41:1662 D 22 '16

Importance of diversity in farming. *il Country Life* 30:45 Jl '16

Intensive diversified farm. R. G. Miller. *il Kimball's D F* 15:232 Ap 1 '17

Louisiana hits the trail. J. R. McMahon. *il Country Gent* 83:12-13 Ja 19 '18

Mixed farming. W. J. Colebatch. *J Dept Ag S Australia* 22:88-90 Ag '18

Mixed farming. H. C. Stening. *Ag Gaz of New South Wales* 29:745-7 O '18

Safe farming for the South--the three great F's, food, feed and fertility. B. Knapp. *il Banker-F* 4:5 Ja '17

Winning the fight against the boll weevil. M. Andersen, jr. *Prog F* 31:591 Ap 29 '16

**Dividends.** See Stocks

**Doberman pinschers**

Dog with the human brain. *il Country Life* 29:48-9 Ap '16

**Dock**

Eradicating dock. Wallaces' *F* 41:927 Je 30 '16

**Dock false-worms**

Dock false-worm (ametastegia glabrata Falén) an apple pest. E. J. Newcomer. *il U S Ag B* 265:1-40 '16

**Doctors**

Gave her home for resident doctor. H. H. White. *Rural Manhood* 8:101-3 Mr '17

**Dodder**

Alfalfa dodder costly. *Irr Age* 32:175 S '17

Anatomical determination of the grains of clover dodder. *Int R Sci & Prac Ag* 7,no 1:162-4 Ja '16

Clover dodder. Wallaces' *F* 41:1092 Ag 18 '16

Dodder in clover. G. S. Ellis. *Breeder's Gaz* 70:200 Ag 10 '16

Love vine. J. N. Baskett. *Rural N Y* 75:36 Ja 8 '16

Notes on the distribution and growth of North Dakota cuscuteae. O. A. Stevens. *il Am J Bot* 3:185-8 Ap '16

Wonderful parasite. S. L. Bastin. *il Country Life* 32:112 My '17

**Seed**

Comparative researches on the dimensions of the seeds of clover and dodder. M. Heinrich. *Int R Sci & Prac Ag* 7,no 3:364-5 Mr '16

**Dog racing**

Alaska dog derby. L. L. Lane. *il Country Life* 32:45-7 S '17

Sandy of Alaska. W. A. Dyer. *il Country Life* 33:94 D '17

**Dog shows**

Echoes from the big show. W. A. Dyer. *il Country Life* 30:58-9 Je '16

New York show, 1916. F. F. Dole. *il Country Life* 29:48-9 F '16

**Dogs**

Another view of the dog. J. L. Moore. *Nat Stock & F* 40:1397 Mr 17 '17

Banking and sheep growing. R. S. Curtis. *il Banker-F* 5:12 Ag '18

Buster. S. Gauson. *Country Life* 32:84 O '17

Care of the dog's mouth and teeth. *Country Life* 34:88 My '18

Case against the dog. R. A. Hayne. *Breeder's Gaz* 72:140 Ag 2 '17

Cats and dogs. E. O. Kaserman. *Breeder's Gaz* 72:1290 D 27 '17

Color inheritance in mammals. S. Wright. *J Heredity* 9:87-90 F '18

Comment on the dog question. *Ohio F* 138:354 O 14 '16

Control the dogs. *Weekly N L* 5:8 D 26 '17

Dog and the sheep. L. F. Allen. *Rural N Y* 75:1480 N 25 '16

Dog breeding on the farm. W. A. Dyer. *il Country Gent* 81:1217-18 Je 17 '16

Dog disposition. J. Watson. *Country Life* 29:49 Ap '16

Dog raid. E. L. Freeland. *il Nat Stock & F* 40:1314 Mr 3 '17

Dogs are needed. R. E. Bateman. *Nat Wool Grower* 7:50 S '17

Dogs versus sheep. J. O. Cooper. *Rural N Y* 77:292 F 23 '18

Experience with dogs. E. P. Snyder. *Nat Stock & F* 41:1105 F 2 '18

Good dog is a man's truest friend. H. B. Arbuckle. *Am Sheep B & W* 37:135-6 Mr '17

Hairless dog. *il J Heredity* 8:519-20 N '17

High cost of useless dogs. E. P. Snyder. *Ohio F* 139:38 Ja 13 '17

How to feed and groom your dog. L. E. Eubanks. *J Ag (Quebec)* 20:xi My '17

Just dogs. W. W. Reynolds. *Nat Stock & F* 40:1274 F 24 '17

Laconics of the dog business. R. M. Carrons. *Nat Stock & F* 40:868 N 25 '16

My dog. E. C. A. Smith. *Country Life* 32:46-7 Ag '17

On chicken killing. W. A. Dyer. *Country Life* 39:47 Ag '16

One way to cope with dog menace. G. M. Mashek. *Am Sheep B & W* 36:67 F '16

Raising that puppy. C. Askins. *il Country Gent* 81:1487, 1561 Ag 5, 19 '16

Sheep and dogs again. R. E. Culver. *Breeder's Gaz* 71:920 My 3 '17

Sheep game in New England. *Am Sheep B & W* 37:480 Ag '17

Sheep industry, damage by dogs, and the remedy. D. P. Witter. *il N Y Ag Dept B* 96:32-53 Je '17

Sheep killing dog. C. S. Plumb. *Ohio F* 139:538 Ap 7 '17

Spoiling a dog. W. A. Dyer. *Country Life* 29:65 Mr '16

Training the farm dog. *il Rural N Y* 75:1430, 1458 N 11-18 '16

**Dogs—Continued**

Wool shortage. W. W. Reynolds. Nat Stock & F 41:305 Je 16 '17

See also Airedale terriers; Bird dogs; Bloodhounds; Borzoi; Bull terriers; Chihuahua dogs; Collies; Dachshunds; Dalmatian dogs; Deerhounds; Doberman pinschers; Great Danes; Griffons; Hounds; Irish terriers; Maltese dogs; Manchester terriers; Pekingese (dogs); Pointers (dogs); Police dogs; Pomeranians (dogs); Poodles; St Bernard dogs; Setters; Sheep dogs; Terriers; Whippets; Wolfhounds

**Breeds**

Our own dog show. W. A. Dyer. il Country Life 33:27-40 Ja '18

Some little known breeds. Country Life 33:80 Ja '18

**Diseases and pests**

Anthelmintic treatment for nematode infestations in dogs. M. C. Hall. Am Vet M Assn J 52:342-5 D '17

Bothriocephalid tapeworm from the dog in North America, with notes on cestode parasites of dogs. M. C. Hall and M. Wigdor. bibliog il Am Vet M Assn J 53:355-62 Je '18

Canine coccidiosis, with a note regarding other protozoan parasites from the dog. M. C. Hall and M. Wigdor. bibliog Am Vet M Assn J 53:64-76 Ap '18

Dog as a carrier of parasites and disease. M. C. Hall. il U S Ag B 260:1-27 '15

Dog diseases and some simple means of cure. A. E. Joseph. Country Gent 81:470 F 26 '16

Gastro-intestinal lavage in dogs: its value in removing worms and in other respects. M. C. Hall and M. Wigdor. Am Vet M Assn J 52:443-56 Ja '18

Intestinal obstruction by a stone in a dog. R. W. Ellis. Am Vet M Assn J 48:617-18 F '16

Mammary tumors in the bitch. il Am Vet M Assn J 52:784-8 Mr '18

Mange in dogs. J Dept Ag S Australia 20:350 My '17; Same. J Dept Ag Victoria 16:64 Ja '18

New fluke from the dog. M. Wigdor. il Am Vet M Assn J 54:254-7 D '18

Note on the effect of cold on the degree of parasitic infestation. M. Wigdor. bibliog Am Vet M Assn J 54:251-4 D '18

Notes on the acanthocephalid and anthropod parasites of the dog in North America. M. C. Hall and M. Wigdor. bibliog il Am Vet M Assn J 53:493-500 J1 '18

Parasites of the dog in Michigan. M. C. Hall. bibliog Am Vet M Assn J 51:383-96 Je '17

Physaloptera from the dog, with a note on the nematode parasites of the dog in North America. M. C. Hall and M. Wigdor. bibliog il Am Vet M Assn J 53:733-44 S '18

Ptomaine poisoning in dogs. W. A. Dyer. Country Life 31:160 Ap '17

Round-celled sarcoma in the heart of a dog. W. R. Blair. Am Vet M Assn J 49:520-2 J1 '16

Serum or inula and echinacea in the treatment of canine distemper. A. Slawson. Am Vet M Assn J 53:766-7 S '18

Serum treatment of canine distemper. A. Slawson. Am Vet M Assn J 53:455-65 J1 '18

So-called black-tongue of canines. H. B. F. Jervis. Am Vet M Assn J 48:590-6 F '16

Two new flukes from the dog. M. C. Hall and M. Wigdor. il Am Vet M Assn J 53:616-26 Ag '18

See also Hydrophobia

**Laws**

As to a federal dog tax. Breeder's Gaz 73:656 Mr 28 '18

Dog law needed. W. W. Reynolds. Ohio F 139:142 F 3 '17

Dog law with teeth. Country Gent 83:28 F 9 '18

Dog laws. E. L. Crouch. Am Sheep B & W 36:278 My '16

Dogs and the sheep industry. G: D. Black. Ohio F 138:278 S 23 '16

Enforce the dog law. W. W. Reynolds. Ohio F 140:479 N 24 '17

Federal dog tax. W. W. Reynolds. Am Sheep B & W 38:193 Mr '18

Fight against the cur dog. Field II 27:631 Ag '17

How Maine handles the pestiferous s. k. Am Sheep B & W 37:222 Ap '17

Manual of laws pertaining to the Department of farms and markets; licensing of dogs and protection of domestic animals therefrom. N Y Farms & Markets Dept Ag B 108:119-35 Je '18

Model dog law. Country Gent 82:836 My 5 '17

More about the sheep killing dog. F: J. Has-kin. Irr Age 33:153 J1 '18

New dog law. G: D. Black. Ohio F 141:159 F 2 '18

New York has fine new dog law. C. W. Larmon. Am Sheep B & W 36:235 Ap '16

New York state dog law. Rural N Y 76:1001-2 Ag 25 '17

Ohio's new dog law. C. H. Hooley. Breeder's Gaz 73:730 Ap 4 '18

Pennsylvania dog law; text. Nat Stock & F 41:448+ Ag 4 '17; Summary. Nat Stock & F 41:473 My 5 '17; Summary. Prac F 113:436 D 15 '17

Pennsylvania's new dog law. J. M. McKee. Ohio F 138:466 N 11 '16

Philadelphia campaign for more sheep and better dog laws gathers momentum. Am Sheep B & W 36:359 Je '16

Proposed federal dog tax. Breeder's Gaz 73:108 Ja 17 '18

Proposed New York dog law. Nat Stock & F 40:1201 F 10 '17

Pulling together helps the game in Maryland. Am Sheep B & W 37:461 Ag '17

Read this if you are pestered with dogs; summary of the dog laws of the different states. Am Sheep B & W 37:472-3 Ag '17

Reparation for injury by dogs to sheep in Quebec. Int R Ag Econ 66:73-4 Je '16

Same (in French). Int Yearbook Ag Leg 1916:1248-50 '17; Same abr. Ag Gaz of Canada 3:425-6 My '16

Report relative to the licensing of dogs and the protection of domestic animals. 5p '18

Comr. of ag., Albany, N.Y.

Sentiment or sheep? C: E. Gapen. il Country Gent 83:5-6 Je 15 '18

Sheep and dog law. J Ag (Quebec) 19:144 Ja '16

Sheep for New York state; controlling the dog. Field II 26:248 Mr '16

Sheep-killing dog. J. F. Wilson. il Farmers' B 935:1-32 '18; Abstract. Am Sheep B & W 38:244 Ap '18

Shepherding the sheep. W. A. Dyer. il Country Life 34:42-5 Ag '18

State dog laws; laws of Maryland 1918. Md Ag Ext C 43 5p '18

Uniform dog laws. J Ag (Quebec) 21:xv My '18

Washington county plan of dealing with a dog nuisance. W. W. Hunter. Nat Stock & F 40:471 Ag 5 '16

West Virginia dog law. W Va Ag Dept B 29 4p '17

What will Nebraska legislature do about this? S. W. Hervey. Am Sheep B & W 37:463 Ag '17

Why not restrain them? R. M. Carrons. Nat Stock & F 40:630 S 16 '16

**Dogs, Police.** See Police dogs

**Dogs, Wild**

Destruction of wild dogs. Ag Gaz of New South Wales 27:542 Ag '16

**Dogs as carriers of infection**

Dog as a carrier of disease to stock. Wal-laces' F 43:833 My 17 '18

Dogs carry diseases. J Ag (Quebec) 21:sup7 D '17

**Dogs in art**

Some paintings of dogs. M. Earl. il Country Life 33:57-9 D '17

**Dogs in war**

Bally Shannon—dog of war. W. A. Dyer. il Country Life 35:58 N '18

Dogs in the war. W. A. Dyer. Country Life 30:47 S '16

Training police and war dogs. R. H. Moulton. il Ohio F 141:272 F 23 '18



**Dogs in war—Continued**

War dogs in the U. S. A. W. A. Dyer. Country Life 34:100 Je '18

**Dogwood**

Cornuses in England. Am Flor 51:380 S 7 '18  
Dogwood. R. W. Shufeldt. il Am For 23:217-20 Ap '17

**Dolichos.** See Asparagus beans

**Domestic animals**

Animals on the suburban place. J. R. McMahon. il Country Gent 81:1293-4 Jl 1 '16  
Care and treatment of domestic animals. C. Osias. (Civico-Educ. Lectures no. 13) 11p '17 Philippine Islands Bur. of educ., Manila  
See also Breeding; Cats; Dogs; Live stock, and references under that subject; Pigeons

**Diseases and pests**

Biennial report of the state board of stock commissioners, 1915-1916. 23p '17 Nevada State bd. of stock commissioners, Carson City  
Common parasites of farm animals. W. M. Burson. il Ga Ag Coll (Ext) B 137:1-39 '17  
Manual of laws pertaining to the Department of farms and markets; diseases of domestic animals. N Y Farms & Markets Dept Ag B 108:99-114 Je '18

**Domestic appliances**

See also Kitchen utensils

**Domestic arts.** See Canning and preserving; Cookery; Home economics

**Domestic economy.** See Home economics

**Domestic efficiency.** See Efficiency, Domestic

**Domestic finance**

College students' accounts. S. Macleod. J Home Econ 10:457-60 O '18  
Division of income; budget and expenditures. M. Yackey. (In Suggestions for food conservation, p. 43-51) '17 Women's central committee on food conservation, St Louis  
Family account books. B. R. Andrews. J Home Econ 8:545-51 O '16  
Farm household accounts. W. C. Funk. Farmers' B 964:1-11 '18  
Farm women keep books and know home expenses. Weekly N L 6:1 S 25 '18  
Food and the budget. H. L. Johnson. J Home Econ 9:75-80 F '17  
Four cents a meal. E. S. Brinton. il Country Gent 83:40-1 S 28 '18  
Household accounting. Rural N Y 75:51 Ja 8 '16  
Household accounting. L. Comstock. Mass Ag Bd C 34:1-15 '17  
Household accounts. E. B. Lemon and J. A. Bexell. Ore Ag Ext B 191:1-15 '17  
Household accounts and the family budget. Mrs H. G. Harlan. Ill Farmers Inst Household Sci 1917:77-86 '18  
Household thrift. C. F. Stoddard. J Home Econ 10:181-2 Ap '18  
Money for the house and the children. Prac F 114:310 S 15 '18  
Penn family problem. A. Z. Fish. J Home Econ 9:58-60 F '17  
Thrift by household accounting. E. A. Winslow. J Home Econ 8:532-5 O '16

**Domestic science.** See Home economics

**Domestic science in schools.** See Home economics—Study and teaching

**Dominican Republic.** See subhead Dominican Republic under Agriculture; Bee culture

**Dominion veterinary meat inspectors' association of Canada**

Annual meeting, Toronto, March 16. T. E. H. Fisher. Am Vet M Assn J 53:429-37 Je '18

**Dominiques (poultry)**

American Dominique. W. H. Card. il Country Gent 81:1167 Je 3 '16  
American Dominique—a utility fowl. C. W. Besse. Am P J 48:1022 O '17

**Donald Ban on food production; story.** P. McArthur. Wallaces' F 42:1717 D 21 '17

**Donkeys.** See Asses and mules

**Door pulls**

Lure of the latch. W. P. Eaton. il Country Life 33:41-5 Ap '18

**Doors**

Hanging doors. P. T. Hines. Country Gent 82:1082 Je 30 '17

**Doorways**

Doorways inside the colonial house; photographs. Country Life 31:34-5 D '16  
Old doorways of Annapolis; photographs. Country Life 30:46 O '16

**Dorkings (poultry)**

Beautiful, useful, silver gray dorkings. W. Westfall. il Am P J 47:426-8 Mr '16  
Breeding and judging silver gray dorkings. W. Westfall. il Am P J 49:414-15 Ap '18  
White dorking. R. Davis and L. Davis. il Country Gent 82:271 F 10 '17

**Dormitories, College**

College residence halls. E. J. James. J Home Econ 9:101-8 Mr '17

**Dosoris Park, Long Island**

Country life community, Dosoris Park, L. I. B: Goodrich. il Country Life 29:19-23 Ja '16

**Dothichiza.** See Poplar-canker, European

**Doughnuts**

Fat absorption in frying doughnuts. M. C. McKee. J Home Econ 10:18-20 Ja '18

**Douglas fir**

Canadian Douglas fir; its mechanical and physical properties. J. S. Bates. (Forestry Branch B. 60) 84p bibliog il '18 Canada Dept. of interior, Ottawa  
Chemistry of wood decay paper. R. E. Rose and M. W. Lisse. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:284-7 Mr '17  
Commercial uses of Douglas fir. J. S. Williams. il Am For 22:69-75 F '16  
Douglas fir fiber, with special reference to length. H. N. Lee and E. M. Smith. bibliog il For Quar 14:671-95 D '16  
Douglas fir; identification and characteristics. S: B. Detwiler. il map Am For 22:67-9 F '16  
Douglas fir in Denmark. J For 15:376-80 Mr '17  
Douglas fir; its commercial importance. S: J. Record. il Am Architect (243 W. 39th st, N.Y. 25c) 112:329-33 N 7 '17  
Douglas fir (Oregon pine) shipbuilding. H. B. Oakleaf. Int Marine Eng (Printing Crafts bldg., 461 8th av. N.Y. \$2 per yr.) 22:213-15 My '17  
Fir as a substitute for cedar poles. Electrical Review (515 Monadnock blk., Chicago 15c) 72:1050-1 Je 22 '18  
Miscellaneous conifers of the Rocky Mountain region; Douglas fir; Douglas spruce. G: B. Sudworth. il U S Ag B 680:21-7 '18  
Occurrence of melezitose in a manna from the Douglas fir. C. S. Hudson and S. F. Sherwood. Am Chemical Soc J (Box 505, Washington, D. C. \$6 per yr.) 40:1456-60 S '18  
Oleoresin of Douglas fir. A. W. Schorger. Am Chemistry Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:1040-4 My '17  
Pipe staves creosoted without loss of strength. O. P. M. Goss. Eng News-Record (10th av at 36th st, N.Y. 15c) 79:639-40 O 4 '17  
Strength of nail joints in Douglas fir and western hemlock. H. E. Plummer. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:327-8 O 24 '17; Same cond. Eng News-Record (10th av at 36th st, N.Y. 15c) 79:871-2 N 8 '17  
Teredo destroys improperly treated piles. H. von Schrenk. il Railway Age (Woolworth bldg., N.Y. 15c) 63:657-8 O 12 '17

**Diseases and pests**

Bark-beetles infesting the Douglas fir. W: J. Chamberlin. il Ore Ag Exp B 147:1-40 '18  
Needle blight of Douglas fir. J. R. Weir. il J Ag Research 10:99-104 Jl 9 '17  
Oviposition of megastigmus spermotrophus in the seed of Douglas fir. J. M. Miller. il J Ag Research 6:65-8 Ap 10 '16

See also Douglas fir pitch moths

**Seed**

Choosing the best tree seeds; the influence of parental character and environment upon the progeny of Douglas fir. C: J. Kraebel. il J Heredity 8:483-92 N '17

**Douglas fir—Seed—Continued**

Incidental results of a study of Douglas-fir seed in the Pacific Northwest. C. P. Willis. *J For* 15:991-1002 D '17

**Douglas fir pitch moths**

Douglas fir pitch moth (*sesia novaroensis* Hy. Edw.). J. Brunner. *il U S Ag B* 255:1-23 '15

**Dourine**

Action to enjoin the live stock sanitary board from destroying certain mares infected with dourine as determined by the complement-fixation test; Supreme court of North Dakota. *Am Vet M Assn J* 53:691-2 Ag '18

Changes in the blood count in dourine. N. Popesco. *Am Vet M Assn J* 48:469-70 Ja '16

Diagnosis of dourine by complement fixation. J. R. Mohler, A. Eichhorn, and J. M. Buck. *biolog J Ag Research* 1:99-107 N '13

Dourine. *J Ag (Quebec)* 21:61 O '17

Dourine and its control. W. L. Hawke. *Ag Gaz of Canada* 4:950-3 N '17

Note on dourine in the horse. H. T. Pease. *il Ag J of India* 12:65-78, 230-51 Ja-Apr '17

**Doves. See Pigeons****Drabas**

Perennial scapose drabas of North America. E. B. Payson. *Am J Bot* 4:253-67 My '17

**Drafting, Mechanical. See Mechanical drawing****Drag saws**

Homemade drag saw. *il Rural N Y* 77:666 My 11 '18

**Drain tile**

Austin trenching and back filling machine. *il Irr Age* 31:62+ F '16

Big tile on some Indiana drainage districts. C. D. Kinsman. *Concrete (Telegraph bldg., Detroit, Mich., 20c)* 10:125 Mr '17

Cost of tile drainage on the Trumbull county experiment farm. H. L. Andrew. *il Ohio Ag Exp B v* 1:136-40 My '16

Drain tile situation. *Concrete (Telegraph bldg., Detroit, Mich., 20c)* 11:69-72, 124-5 S-O '17

Drainage in West Virginia. *Nat Stock & F* 40:230 My 27 '16

Durability of concrete drain tile. O. B. Winter. *Mich Ag Exp Spec B* 82:1-12 '17

Experience with tile drainage. C. D. Pierson. *Wallaces' F* 43:626 Ap 5 '18

Experimental work in drainage. plans Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 20-32) '17

How to drain with tile. W. I. Chamberlain. *Nat Stock & F* 42:69 Ap 13 '18

How to select and lay drain tiles. M. E. Sherwin. *Prog F* 32:1089 O 20 '17

Hydrated lime in drain tile. B. Nagy. *Concrete (Telegraph bldg., Detroit, Mich., 20c)* 11:122-3 O '17

Is cement tile durable? *Rural N Y* 75:1416 N 11 '16

Tile drainage on the farm. E. R. Jones and O. R. Zeasman. *il Wis Ag Exp B* 284:1-32 '17

Tile-laying in drainage work. H. E. Cox. *Rural N Y* 77:718 My 25 '18

Underdrainage of farm land. C. G. Elliott. *il Country Gent* 81:732-3+ Ap 1 '16

**Drain tile, Concrete**

Alkali action on cement drain tile and concrete. E. C. Bebb. *Eng and Contracting* (608 S. Dearborn st., Chicago \$3 per yr) 47:249-50 Mr 14 '17

Cement drain tile in New England. R. T. Burdick. *Rural N Y* 76:7 Ja 6 '17

Concrete tile for land drainage. 11p *il* '17

Portland cement assn., Chicago

Durability of concrete drain tile (Spec. B. 275). O. B. Winter and H. H. Musselman. *il Mich Ag Bd Rep* 1916:349-59

Solving land drainage problems with concrete tile. H. C. Campbell. *Nat Stock & F* 42:851 D 21 '18

**Drainage**

Benefits of tile drainage. C. C. Cunningham. *Purdue Ag* 12:232-3 Ja '18

Bet you can't lose. R. V. Newcomb. *Farm Eng* 5:3 O '17

Blasting ditches. H. E. Murdock. *il Mont Ag Exp C* 55:185-92 '16

Choice acres from swamp land. O Judd Farmer 60:4 Ap 8 '16

Cooperation in farm drainage work. *il Power F* 27:53 My '18

Cooperative drainage. H. B. Cobb. *il Nat Stock & F* 41:692 O 20 '17

Cost of farm drainage. *Power F* 25:48 Ap '16

Cost of tile drainage. *Hoard's D* 50:819 Ja 14 '16

Cost of tile drainage on the Trumbull county experiment farm. H. L. Andrew. *il Ohio Ag Exp B v* 1:136-40 My '16

Ditches and drainage. *il Am Coop J* 11:862 Ap '16

Ditching with dynamite. F. F. Rockwell. *il Country Gent* 81:381 F 19 '16

Drain the tractor-operated farm. R. Olney. *il Power F* 26:20 S '17

Drain the wet spots. E. R. Jones. *Wis Ag Ext C* 77 4p '17; *Same. Green's Fruit Grower* 37:9 J1 '17

Drainage and terracing experiences. *Prog F* 32:1091 O 20 '17

Drainage-basin and crop studies aid water-supply estimates. R. E. Horton. *Eng News-Record* (10th av. at 36th st., N.Y. 15c) 79:357-60 Ag 23 '17

Drainage by a siphon. C. O. Ormsbee. *Country Gent* 82:1037 Je 16 '17

Drainage experience this year proves its value. J. A. King. *Farm Eng* 6:11 Ja '18

Drainage for irrigated lands. E. M. Chandler. *Am Soc Ag Eng Trans* 10, no 1:82-4 '17

Drainage for irrigated lands; with discussion. H. E. Murdock. *Am Soc Ag Eng Trans* 10, no 2:72-82 '17

Drainage increased land value. J. C. Randall. *O Judd Farmer* 62:6 Je 16 '17

Drainage; its relation to crop growing. S. H. McCrory. *Prog F* 31:1308 N 11 '16

Drainage; motor-power and horse-power tile ditching machines. H. C. Ramsower. *il Farm Eng* 7:3-5 Ap '18

Drainage of irrigated farms. R. A. Hart. *il Farmers' B* 805:1-31 '17

Drainage of irrigated land. R. A. Hart. *il map plans U S Ag B* 190:1-34 '15

Drainage of irrigated lands. W. L. Powers. *Am Soc Ag Eng Trans* 11:87-92 '18

Drainage of irrigated shale land. D. G. Miller and L. T. Jessup. *il U S Ag B* 502:1-40 '17; *Summary. Irr Age* 32:119 Je '17

Drainage reclamation and dual results. *Country Life* 32:114 Je '17

Draining peaty soil. *Farm Eng* 7:26 Mr '18

Draining with dynamite. N. D. Rand. *il Country Gent* 83:7+ J1 20 '18

Drains to fight wetness or drought; under-drainage. C. G. Elliott. *il Country Gent* 81:495-6, 623+, 732-3 Mr 4, 18, Ap 1 '16

Early tile drainage. I. M. Miller. *Nat Stock & F* 42:485 Ag 24 '18

Effect of drainage on soil texture. J. A. Mosier. *Power F* 26:48 S '17

Effect of pumping from a shallow well on the ground-water table. W. W. Weir. *J Ag Research* 11:339-57 N 12 '17

Efficient farm drainage. *Green's Fruit Grower* 36:1 J1 '16

Engineering methods in constructing tile drainage systems. D. P. Dale. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 49:267-8 Mr 13 '18

Excavating machinery used in land drainage. D. L. Yarnell. *il U S Ag B* 300:1-37 '15

Experimental work in drainage. plans Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 20-32) '17

Farm drainage by tiling. A. Lenox. *Field* 11 26: 753 S '16

Farm drainage methods. W. W. Weir. *il Cal Ag Exp C* 174:1-31 '17

Getting the garden under glass. F. F. Rockwell. *il Gard M* 26:130-1 N '17

Good drainage is necessary. J. S. Underwood. *Green's Fruit Grower* 36:16 Mr '16

Gopher holes for drainage; a power drainage machine that patterns the burrow made by the mole. *Power F* 26:18 Ja '17

Great importance of drainage. F. H. Sweet. *Green's Fruit Grower* 36:4 D '16

Great labor saver. *il O Judd Farmer* 63:9 D 8 '17



**Drainage—Continued**

- Great need of tile drains. W. O. Wing. Ohio F 138:590 D 16 '16
- Hard job of clearing woodland. R. F. Vann. Power F 25:20 O '16
- How to get rich lands; drainage: our heavy rainfall makes it necessary on many southern soils. B. L. Moss. Prog F 32:209 F 17 '17
- Importance of drainage. il Va Ag Dept B 109:48-50 '16
- Improve soils by drainage. E. B. Stookey. il Western Wash Ag Exp B v 4:3-9 N '16
- Increasing acreage and profits by draining waste land. M. P. Brummit. il System on the Farm 1:265-6 S '17
- Increasing crop production by drainage. E. B. Stookey. Western Wash Ag Exp B v 5:132-4 D '17
- Interesting drainage device. il Irr Age 32:135 JI '17
- Internal combustion farm drainage machines. il Int R Sci & Prac Ag 8,no 11:1125-7 N '17
- Irrigation and drainage. F. H. Newell. il (In Pan American scientific congress Proc., 1915, v. 3, p. 260-83) '17
- Land drainage. Prac F 112:380 O 15 '16
- Land-drainage. L. J. B. Grant; A. J. Faulkner. il J Ag New Zealand 15:91-5 Ag '17
- Land drainage by means of pumps. S. M. Woodward. il plans map U S Ag B 304:1-59 '15
- Making land efficient by drainage. F. M. White. O Judd Farmer 65:124 Ag 17 '18
- Mole-ploughs worked by horses. plans J Bd Ag 25:36-40 Ap '18
- New fields for old. R. B. Rushing. Prac F 113:330 O 1 '17
- Note on soil denudation by rainfall and drainage: conservation of soil moisture. G. D. Hope. Ag J of India 11:134-41 Ap '16
- Open ditch drainage. E. O. Fippin. il Country Gent 82:1908+ D 8 '17
- Open ditches versus tile drainage. H. M. Lynde. il Prog F 31:21 Ja 1 '16
- Orchard drainage. T. E. Martin. Rural N Y 75:398, 430 Mr 4-11 '16
- Orchards and orchard work. C. H. Beaumont. J Dept Ag S Australia 20:585-7 F '17
- Outlook for land drainage for the year 1918. A. H. Beitman. Municipal J (243 W. 39th st, N.Y. 10c) 54:205-6 My '18
- Park drainage, driveways and walks. Gard Chron Am 20:400 S '16
- Plane-table surveys advocated for drainage work. L. H. Williams. Eng News-Record (10th av at 36th st, N.Y. 15c) 80:416-17 F 28 '18
- Platting and recording tile drainage systems on Iowa farms. C. B. Platt. Farm Eng 3:196 Mr '16
- Practical hints upon tile drainage. W. O. Wing. il Ohio F 140:185 S 8 '17
- Practical suggestions on irrigation and drainage. D. H. Anderson. Irr Age 33:17-20, 45-9, 82-5, 113-16, 149-52, 192-3, 210-11 Mr-Jl, S-N '18
- Reclaiming the swamp: administration of drainage districts. Weekly N L 5:6 S 26 '17
- Report of the committee on drainage. B. B. Robb. N Y Farms & Markets Dept Ag B 97:70-8 JI '17
- Revival of the mole plow. E. R. Jones and others. Am Soc Ag Eng Trans 11:175-91 '18
- Soil temperature and drainage. A. R. Whitson and H. B. Hendrick. U S Ag B 355:33-40 '16
- Study in farm drainage. C. E. Thorne. Ohio Ag Exp B v 3:107-10 Ap '18
- Subsidence of muck and peat lands subsequent to drainage. C. W. Okey. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:395-6 N 14 '17
- Sweet clover as a drainage plant. R. Stewart. Country Gent 82:1025 Je 16 '17
- Sweetening alkali spots. H. R. Richardson. il Farm Eng 5:6 Ja '17
- Tile drainage. L: A. Jones. Prog F 31:1445 D 16 '16
- Tile drainage. E. W. Lehmann and F. C. Fenton. il Mo Ag Ext C 34:1-16 '17
- Tile drainage. A. H. Leidigh and E. C. Gee. il map Tex Ag Exp B 188:1-26 '16
- Tile drainage a sound investment. H. C. Ramsower. il Ohio F 142:545-6 D 7 '18
- Tile drainage on the farm. E. R. Jones and O. R. Zeasman. il Wis Ag Exp B 284:1-32 '17
- Tile drainage pays. Farm Eng 3:177 F '16
- Tile outlets and bulkheads. H. R. Richardson. il Farm Eng 4:79 N '16
- Treatment of land soured and rendered unproductive by seepage. A. J. Perkins. J Dept Ag S Australia 21:845-50 Je '18
- Underdrainage at Sunny Home. A. L. French. Prog F 32:1106 O 20 '17
- Use of explosives in making ditches. J. R. Mattern. il 70p '17 Inst. of makers of explosives, 103 Park av, N. Y.
- Use your irrigation canals and ditches for drainage during the wet season. il Irr Age 33:187-8 S '18
- Value of drainage. Country Gent 82:1021 Je 16 '17
- Value of tile drainage. G. P. Walker. il Purdue Ag 11:18-20 Ja '17
- Vertical drainage. I. W. Dickerson. Wallaces' F 43:176 F 1 '18
- Water flow down incline. Rural N Y 76:41 Ja 13 '17
- Wooden drains in clay soil. T. E. Martin. Rural N Y 75:519 Mr 25 '16
- See also Drain tile; Irrigation; Marsh lands; Reclamation of land; Soil percolation

**Bibliography**

- \* Irrigation, drainage, and water power (exclusive of Pacific states); list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list, 42—9th ed.) 21p '18 U.S. Supt. of doc., Washington, D.C.

**Arkansas**

- Report upon the Cypress Creek drainage district, Desha and Chicot counties, Arkansas. S. H. McCrory and others. maps U S Ag B 198:1-20 '15

**Australia**

- Practical irrigation-farming in Australia; relation of drainage to irrigation. A. M. Makinson. il Ag Gaz of New South Wales 27:489-504 JI '16

**California**

- Preliminary report on Kearney vineyard experimental drain, Fresno county, California. W. W. Weir. il Cal Ag Exp B 273:103-23 '16; Same. Irr Age 32:151-8 Ag '17

**Canada**

- Drainage and tile making. J. R. Spry. (In Report, Ontario ag. & exp. union, 1917, p. 23-31) '18 Ontario ag. dept., Toronto
- Drainage instruction and demonstration in the provinces. Ag Gaz of Canada 5:630-3 JI '18
- Drainage work for 1916. J. R. Spry. il Ag Gaz of Canada 3:441-2 My '16
- Farm drainage in the provinces. il Ag Gaz of Canada 3:325-32 Ap '16
- Land drainage in Canada. Ag Gaz of Canada 4:186-92 Mr '17
- Memorial to the Quebec provincial government on amendments to the drainage laws and the establishment of a hydro-electric commission. S. A. Woods. J Ag (Quebec) 22:21 Ag '18

**Colorado**

- Colorado demands adequate drainage. A. A. Weiland. Irr Age 31:104 My '16

**Florida**

- Reclaiming the Everglades of Florida. I. Randolph. il maps J Franklin Inst (Franklin Inst., Philadelphia 50c) 184:49-72 JI '17
- Swamp and overflow lands of Florida. R. E. Rose. Fla Ag Dept Quar B v 26:117-39 JI '16

**Georgia**

- Agricultural drainage in Georgia. H. H. Barrows and others. (B. 32) 122p il maps '17 Geological survey of Georgia, Atlanta

**Great Britain**

- Drainage of lands order, 1917. A. Lee. J Bd Ag 24:357-62 Je '17

## Drainage—Continued

## Illinois

Electric pumping plant for drainage district in Illinois. Electrical Review (515 Monadnock blk., Chicago 15c) 72:957-8 Je 8 '18  
 Illinois conference on drainage. Breeder's Gaz 69:676-7 Mr 23 '16

## Indiana

Method of allotting farm drainage ditch maintenance. R. L. Longshore. Eng News-Record (10th av at 36th st, N.Y. 15c) 79:960-1 N 22 '17

## Iowa

Clean old ditches to take run-off from bluffs without silting. il Eng News-Record (10th av at 36th st, N.Y. 15c) 80:1083-4 Je 6 '18  
 Making high-priced Iowa land. E. W. Lehmann. il O Judd Farmer 61:5 Jl 22 '16

## Kansas

Kansas encourages land drainage and irrigation. Eng News-Record (10th av at 36th st, N.Y. 15c) 80:88-9 Ja 10 '18

## Louisiana

Louisiana reclamation project grows to seven thousand acres. A. M. Shaw. il plan map Eng News-Record (10th av at 36th st, N.Y. 15c) 79:603-5 S 27 '17  
 Run-off from the drained prairie lands of southern Louisiana. C: W. Okey. J Ag Research 11:247-79 N 5 '17  
 Wet lands of southern Louisiana and their drainage. C: W. Okey. il maps U S Ag B 71:1-82 '14; Same revised. U S Ag B 652:1-67 '18

## Minnesota

Farm drainage in Minnesota. Country Gent 81:446 F 26 '16

## Mississippi

Report on the methods and cost of reclaiming the overflowed lands along the Big Black river, Mississippi. L. A. Jones and others. maps U S Ag B 181:1-39 '15

## Missouri

Construction features and methods in the Little River drainage district. B. F. Burns. il Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:270-2 Mr 21 '17

## Nebraska

Supreme court of Nebraska decision affecting the rights of water-users. Irr Age 31:90 Ap '16

## New Jersey

Report on the water supply in the cranberry bogs of New Jersey. F. O. Church. N J Ag Exp Rep 1916:343-66 '17

## North Carolina

Big drainage project in North Carolina with rural district plan. il Eng News (10th av. at 36th st., N.Y. 15c) 77:346-8 Mr 1 '17  
 Farm drainage in North Carolina (B. 234). H. M. Lynde. N C Ag Exp Rep 1916 32p il map '17

See also North Carolina drainage association

## Oregon

Drainage of white land and other wet lands in Oregon. W. L. Powers; T. A. H. Teeter. il maps Ore Ag Exp B 137:1-80 '16  
 Harney and Silver Creek projects; irrigation and drainage. J: T. Whistler and J: H. Lewis. 91p il maps '16 Oregon State engineer, Salem  
 Land settlement—irrigation—drainage, Oregon's neglected opportunity. R. Howard. map Oregon Voter (Worcester bldg., Portland, Ore. 10c) 8:120-2+ Ja 27 '17  
 Malheur and Owyhee projects; irrigation and drainage. J: T. Whistler and J: H. Lewis. 201p il maps '16 Oregon State engineer, Salem

## South Carolina

Report upon the black and boggy swamps drainage district, Hampton and Jasper counties, S.C. F. G. Eason. maps U S Ag B 114:1-21 '14

## Southern states

Some factors to be considered in the drainage of the cut-over lands of the South. S. H. McCrory. (In Cut-over land conf. of the South, 1917, p. 78-83) \$2.50 '17 Southern pine assn., New Orleans, La.

## Texas

Drainage of Jefferson county, Texas. H. A. Kipp and others. maps U S Ag B 193:1-40 '15

## United States

Drainage in Gunnison district and Nevada. Irr Age 31:88 Ap '16  
 Reclaiming a thousand acres. R. S. Dunham. Farm Eng 5:7 S '17

## Utah

Irrigation made city drainage system necessary. H. S. Kleinschmidt. plan Eng News-Record (10th av at 36th st, N.Y. 15c) 80:1173-4 Je 20 '18  
 Tile drainage of irrigated land in Utah. J. C. Wheelon. Eng News (10th av. at 36th st., N.Y. 15c) 77:318-19 F 22 '17

## West Virginia

Drainage in West Virginia. Nat Stock & F 40:230 My 27 '16

## Western states

Investigation on irrigation and drainage in the West. O. W. Israelson and H. E. Murdock. Am Soc Ag Eng Trans 11:181-91 '18

## Wisconsin

Drainage conditions in Wisconsin. E. R. Jones. Am Soc Ag Eng Trans 10,no 1:77-82 '17  
 Drainage engineering in southeastern Wisconsin. P. J. Hurtgen. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 15:646-50 D '16  
 Wisconsin drainage men meet. O Judd Farmer 61:3 O 28 '16

## Drainage bonds

Drainage bonds. J. R. Milligan. Ohio F 138:199 S 2 '16  
 Florida drainage bonds and the investor. Econ World (128 Water st, N.Y. 25c) n s 13:271 F 24 '17  
 Reclaiming the swamp; financing drainage districts. Weekly N L 5:6 O 10 '17

## Drainage districts

Concerning the organization of drainage districts. F. W. Rader. Western Wash Ag Exp B v 6:8-11 Ap '18  
 Organization, financing, and administration of drainage districts. H. S. Yohe. Farmers' B 815:1-37 '17

## Drainage laws

Abstract of drainage law in Georgia. H. S. Yohe. (In Agricultural drainage in Georgia. B. 32, p. 108-17) '17 Geological survey of Georgia, Atlanta  
 Acts relating to agriculture; drainage in all its phases. Ag Gaz of Canada 4:989-90, 1097-103 N-D '17  
 Amendment to the North Carolina drainage law. (Press B 153) 11p '16 N. C. Geological and economic survey, Chapel Hill  
 Amendments to the drainage law by the general assembly of 1917. (Press B. 158) 13p '17 N.C. Geological and economic survey, Chapel Hill  
 Iowa drainage law. A. M. Christenson. Wallaces' F 43:589 Mr 29 '18  
 Loi concernant le drainage au Canada. Int Yearbook Ag Leg 1916:621-8 '17

## Drama

See also Pageants; Theater, Community

## Draperies. See Curtains

## Draughting, Mechanical. See Mechanical drawing



**Drawing**

*See also* Mechanical drawing

**Dreadful river cave;** Chief Black Elk's story. J. W. Shultz. *See* weekly numbers of National stockman and farmer beginning Nov. 23, 1918

**Dress.** *See* Clothing

**Dressed poultry.** *See* Poultry, Dressed

**Dressing glasses**

Dressing glasses and fire screens. W. A. Dyer. *il* Country Life 31:72+ Mr '17

**Dressmaking**

Children's clothing. M. J. Newcomb. *il* Pa Ag Ext C 48:1-20 '16

Dress and dressmaking. A. M. Zollman. *il* J Ag (Quebec) 21:159, 175, 189; 22:14 Ap-Jl '18

Dressmaking at home. M. J. Newcomb. *il* Pa Ag Ext C 70:1-24 '17; Excerpt. Prac F 114:129 Mr 15 '18

Girls' sewing club. C. E. Carpenter and M. E. Sheridan. *il* Colo Ag Ext B 132:1-32 '18

Home dressmaker. *See* weekly numbers of Rural New-Yorker

Suggestions for garment making. G. E. Fleming. *il* Ill Ag Ext C 14:1-61 '17

**Dried apples.** *See* Apples, Dried

**Dried food.** *See* Food, Dried

**Dried fruit.** *See* Fruit, Dried

**Dried milk.** *See* Milk, Desiccated

**Dried vegetables.** *See* Vegetables, Dried

**Drilling and boring machinery**

Breast and wall drill. C. E. Richardson. *il* Country Gent 83:34 F 23 '18

Use of hand tools on the farm. J. R. Stone. Power F 26:44 Ap '17

**Drinking cups**

How the school dipper spreads disease. Prog F 31:819 Je 24 '16

Individual drinking cup. Rural N Y 75:921 Je 24 '16

**Drinking fountains**

Bacteriology of the bubble fountain. D. F. Pettibone and others. J Bact 1:471-80 S '16

**Drinking troughs**

Automatic stock watering system. J. L. Ahart. Wallaces' F 42:354 F 23 '17

Profit in the tank heater. Ohio F 141:10 Ja 5 '18

Waterer that won't freeze. J. L. Ahart. Country Gent 81:263 F 5 '16

Watering devices for chickens. V. A. Place. *il* Nat Stock & F 41:390 Jl 14 '17

Watering trough for hogs. plan Farm Eng 5: 14 Ja '17

**Drinking troughs, Concrete**

Concrete trough for your pet stock. H. C. Campbell. *il* Hoard's D 51:116 F 11 '16

Concrete watering tanks. Wallaces' F 43:1478 O 11 '18

Concrete watering trough. H. A. Roberts. Country Gent 81:945 Ap 29 '16

Concrete watering troughs. H. C. Campbell. Hoard's D 52:275 S 22 '16

Making a concrete watering trough. G. W. Childs. plan Bldg Age (243 W. 39th st, N.Y. 25c) 40:207 Ap '18

**Drinks.** *See* Beverages; Liquors

**Drivers, Milk-wagon.** *See* Milk-wagon drivers

**Driveways**

Driveway in its relation to the country house. *il* Country Life 33:48 N '17

Driveways for country clubs. D. T. Pierce. *il* Country Life 31:100 Ap '17

Park drainage, driveways and walks. Gard Chron Am 20:400 S '16

**Driving**

*See also* Coaching

**Drosera**

Further observations on chloranth in drosera intermedia. M. Levine. bibliog *il* Bot Gaz 62:389-99 N '16

**Drosophila**

Parallel mutation in drosophila funebris. A. H. Sturtevant. Science (Science Press, Garrison, N.Y. 15c) n s 48:72-3 Jl 19 '18

\* Three mutations in previously known loci. D. E. Lancefield. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:264-9 Ap '18

**Drought-resistant plants.** *See* Water requirements of crops

**Drouth spot.** *See* Apples—Diseases and pests

**Drug farming**

Cultivation and collection of medicinal plants in Ireland. G. N. Keller. J Dept Ag Ireland 18, no 2:151-7 '18

Cultivation of drug plants; with special reference to those rendered scarce by the war. J. H. Maiden. Ag Gaz of New South Wales 27:314-24 My '16

Drug farming is not a short cut. E. C. A. Smith. Country Life 32:62 S '17

Growing medicinal herbs. Review of Reviews (30 Irving Place, N.Y. 25c) 57:98 Ja '18

Growing medicinal plants in America. A. S. Cushman. *il* J Franklin Inst (Franklin Inst., Philadelphia 50c) 186:267-78 S '18

Is drug plant growing practical? L. W. Arny. Gard M 26:160-1 D '17

Production of drug-plant crops in the United States. W. W. Stockberger. *il* U S Ag Year-book 1917:169-76

Reducing drug plant cultivation to a science. R. P. Crawford. *il* Scientific Am Sup (233 Broadway, N.Y. 10c) 84:152 S 8 '17

Some effects of selection on the production of alkaloids in belladonna. A. F. Sievers. U S Ag B 306:1-20 '15

**Drug laws**

Food and drug laws of the state of Rhode Island. 32p '17 R. I. Food and drug comm., Providence

Rules and regulations issued under the sanitary food law, together with copy of this law. 15p '16 S. D. State food and drug dept., Vermilion

**Drug plants.** *See* Drug farming

**Drugs**

Manganese content of the ash of certain drugs. L. E. Westman and R. M. Rowat. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D. C. \$6 per yr.) 40:558-61 Mr '18

Mode of action of drugs with pharmacological demonstrations. H. D. Bergman. Ia Ag Coll Offic Pub v 14,no 36:181-9 '16

*See also* Botany, Medical; Drug farming; Drug laws; also names of drugs, e.g. Iodine; also Association of American druggists, food and drug officials

**Analysis**

Drugs. bibliog Assn Offic Ag Chem J 2,no 3, pt 2:351-66 N '16

Miscellaneous drug preparations. C. D. Woods. Maine Ag Exp Offic Inspec 82:29-36 '17

Report of food products and drugs, 1917. J. P. Street. Conn State Ag Exp B 200:101-98 '17

Report on medicinal plants and drugs. W. O. Emery. Assn Offic Ag Chem J 2,no 1,pt 1: 59-75 My '16

Report on synthetic products. W. O. Emery. Assn Offic Ag Chem J 2,no 1,pt 1:75-9 My '16

**Inspection**

*Directories*

Directory of federal and state dairy, food, drug, and feeding stuffs officials. 10p '18 U.S. Bur. of chemistry, Washington, D.C.

**Standards**

New pharmacopeia. H. J. Milks. Am Vet M Assn J 51:544-7 Jl '17

Pharmaceutical standards: past and present and future; with discussion. E. Kremers. Assn Am Dairy Food & Drug Offic Pro 1918:76-90

**Dry farming**

Barley in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 222:1-32 '15

Cereal experiments at Dickinson, N. Dak. J. A. Clark. *il* U S Ag B 33:1-44 '14

**Dry farming—Continued**

- Cereal investigations at the Nephi substation. P. V. Cardon. *il U S Ag B* 30:1-50 '13
- Cereal investigations on the Belle Fourche experiment farm. C. Salmon. *il U S Ag B* 297:1-41 '15
- Corn in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map *U S Ag B* 219:1-31 '15
- Corn planting and cultivation in Montana. A. Atkinson and M. L. Wilson. *il Mont Ag Exp C* 67:107-28 '17
- Cost of growing wheat on typical non-irrigated areas in Montana. E. L. Currier. *Mont Ag Exp B* 122:142-61 '18
- Dry farm crop rotations and cultural methods. A. Atkinson and others. *Mont Ag Exp B* 116:1-54 '17
- Dry farm grain tests in Montana. A. Atkinson and N. C. Donaldson. *il map Mont Ag Exp B* 110:167-218 '16
- Dry-farmed and irrigated wheat. J. S. Jones and C. W. Colver. *Idaho Ag Exp B* 88:1-18 '16
- Dry farmer's fight with the weather. J. C. Alter. map *Nat Wool Grower* 7:7-10 O '17
- Dry-farming and its possibilities in India. C. V. Sane. *Ag J of India* 11:263-87 *Jl* '16
- Dry farming in Colorado. A. Kezer. *il Colo Ag Exp B* 227:1-40 '17; Same (pt. 1). 18p n.d. Colorado state board of immigration, Capitol bldg., Denver
- Dry farming in eastern New Mexico. J. E. Mundell and H. G. Smith. *il N M Ag Exp B* 104:1-61 '17
- Dry farming in the plains region. *il Colo Ag Ext Ser* 104:1-16 n.d.
- Dry-farming in Utah. F. S. Harris and A. D. Ellison. *il map Utah Ag Exp C* 21:1-35 '16
- Dry farming investigations at the Harney branch station. L. R. Breithaupt. *il Ore Ag Exp B* 150:1-46 '18
- Dry farming investigations at the Sherman county branch experiment station. D. E. Stephens and C. E. Hill. *il Ore Ag Exp B* 144:1-47 '17
- Dry farming methods. Wallaces' *F* 41:766 *My* 19 '16
- Dry-farming methods in Mysore. A. K. Yegna Narayan Aiyer. *Ag J of India* 12:425-35 *Jl* '17
- Dry farming to produce more food. W. F. Wilcox. *Ag Digest* 3:13-14 *Jl* '18
- Dry land farming. J. W. Neill. *Tex Ag Dept B* 52:103-111 '16
- Experiments in crop production on fallow land at San Antonio. C. R. Letteer. *U S Ag B* 151:1-10 '14
- Experiments with spring cereals at the eastern Oregon dry-farming substation, Moro, Oreg. D. E. Stephens. *il maps U S Ag B* 498:1-37 '17; Abstract. *Int R Sci & Prac Ag* 8,no 6: 860-3 *Je* '17
- Forage crops in central Washington. M. A. McCall. *il Wash Ag Exp B* 128:1-11 '16
- Grains for the dry lands of central Oregon. L. R. Breithaupt. *il map Farmers' B* 809: 1-22 '17
- Grains for the Montana dry lands. N. C. Donaldson. *il map Farmers' B* 749:1-22 '16
- Grains for the Utah dry lands. J. W. Jones and A. F. Bracken. *il Farmers' B* 883:1-21 '17
- Growing grain on southern Idaho dry farms. L. C. Aicher. *il map Farmers' B* 769:1-23 '16
- Horses for the dry-farming country. R. H. Williams. *Breeder's Gaz* 71:827 *Ap* 19 '17
- Increasing the production of wheat on Washington dry farms by better cultural methods. B. Hunter. *il Wash Ag Ext Ser* 1, no 40:1-16 '18
- New experiments in dry farming in Italy. G. de Angelis d'Ossat. *Int R Sci & Prac Ag* 9, no 5:541-2 *My* '18
- Oats in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map *U S Ag B* 218:1-42 '15
- Our dry lands. *il Ag Digest* 1:133-4 O '16
- Relation of weather to crops and varieties adapted to Arizona conditions. A. J. McClatchie and others. *il Ariz Ag Exp B* 78: 45-118 '16
- Soil moisture studies under dry-farming. F. S. Harris and J. W. Jones. *Utah Ag Exp B* 158:1-51 '17
- Solving the sagebrush problems. N. E. Hansen. *il map Ag Digest* 1:134-6 O '16
- Spring wheat in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map *U S Ag B* 214:1-43 '15
- Story of a dry farm pioneer; dry farming under great difficulties that can be overcome by a tractor. J. R. Stone. *Power F* 26:33 O '17
- Tillage and rotation experiments at Nephi, Utah. P. V. Cardon. *U S Ag B* 157:1-45 '15
- 27th annual report of the Arizona agricultural experiment station for the year ending June 30, 1916. *il Ariz Ag Exp Rep* 1916:239-320 '16
- What dry farming means to us. E. H. Talbot. *il Ag Digest* 1:136-8 O '16
- Wheat. R. L. Stewart. *il N M Ag Exp B* 109: 1-29 '18
- Winter wheat in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map *U S Ag B* 595:1-35 '17
- Work of the Huntley reclamation project experiment farm in 1917. D. Hansen. (W. I. A. C. 22) 29p '18 *U S Ag*
- See also Water requirements of crops
- Dry farming congress.** See International farm congress
- Dry goods.** See Textile industry and fabrics
- Dry rot**
- Dry rot. P. Groom. *J Bd Ag* 23:465-74 *Ag* '16
- Dry rot from the architect's point of view. H. Hutt. *il J Bd Ag* 25:166-76 *My* '18
- Dry rot in timber. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 28:463-6 *Jl* '17
- See also Powdery dryrot
- Drying (fruits and vegetables)**
- Apple drying. J. Farrell. *il plans J Dept Ag Victoria* 14:196-211 *Ap* '16
- Arsenic in sulfured food products. W. D. Collins. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:360-4 *My* '18
- By-products and principal products of fruit business. L. D. Batchelor. *Better Fruit* 11: 18+ *Jl* '16
- By-products investigations—need of evaporators. C. C. Vincent. *Better Fruit* 12:6+ *My* '18
- Can and cannon; drier and dreadnaught. N. C. McCloud. *il Am For* 23:389-95 *Jl* '17
- Cheaper and better food by novel use of hot air. *il Current Opinion* (63 W. 36th st., N.Y. 25c) 62:217 *Mr* '17
- Commercial evaporation and drying of fruits. J. H. Beattie and H. P. Gould. *il plans Farmers' B* 903:1-60 '17
- Commercial evaporation of apples. *Nat Stock & F* 42:226 *My* 25 '18
- Community food driers. *il Country Gent* 82: 1392 *S* 8 '17
- Comparison between canning and drying. E. Allen and J. Short. *J Home Econ* 10:223-5 *My* '18
- Conserving of fruits by scientific dehydration. F. Baltes. *il Better Fruit* 13:5-6 *Ag* '18
- Conversion of fruits and vegetables into dried products; experiments at the royal school of horticulture and pomology of Florence, Italy. V. Valvassori. *Int R Sci & Prac Ag* 7,no 9:1353-4 *S* '16
- Cost of an evaporating outfit. A. H. Pulver. *Rural N Y* 75:33 *Ja* 8 '16
- Cost of operation and returns from evaporated fruits. J. S. Caldwell. *Better Fruit* 11: 7+ *Mr* '17; Discussion. 11:10+ *Ap* '17
- Dehydrating fruits and vegetables. F. R. Still. *Am Soc Heating & Ventilating Eng* (29 W. 39th st, N.Y. 10c) 23:529-36 '17
- Dehydration. H. C. Gore. *Am Soc Heating & Ventilating Eng* (29 W. 39th st, N.Y. 10c) 23: 511-14; Discussion. 514-28 '17
- Dehydration industry in America. E. C. Horst. *il Sci Am* (233 Broadway, N. Y. 10c) 119:291 O 12 '18



**Drying (fruits and vegetables)—Continued**

- Desiccation of potatoes in Germany. *Int R Sci & Prac Ag* 7:11:1685-6 N '16
- Development of vegetable-drying in Germany. (Commerce Reports no. 213) p 954-6 (S 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Dipping and drying the sultana. H. Showell. *J Dept Ag S Australia* 20:667-71 Mr '17
- Discussion of proposed appropriation to enable the Secretary of agriculture to establish and operate plants for the drying or dehydration of vegetables, fruits, and other edible products. G. W. Norris and others. *Congressional Record* (Washington, D.C.) 56:3707-11 Mr 13 '18
- Dried fruit for market. S. Fraser. *plan Country Gent* 82:1210 Jl 28 '17
- Dried fruits and vegetables. *Prog F* 33:986 S 7 '18
- Dry pumpkins and squash which may not keep in storage. E. L. Kirkpatrick. *il Rural N Y* 76:1439 D 22 '17
- Dry surplus fruits and vegetables. *Wis Ag Ext C* 86:1-7 '17
- Dry vegetables and fruits. Mrs H. M. Woodward. *Ohio F* 141:758 Je 8 '18
- Dry what isn't canned. E. S. Brinton. *Country Gent* 82:983 Je 2 '17
- Dry what you cannot can. W. H. Dean. *il Country Gent* 82:1073 Je 23 '17
- Dry what you cannot can. E. L. Kirkpatrick. *il Gard M* 27:234-5 Je '18
- Drying. M. Hepworth. *il W Va Ag Ext C* 212:1-4 '18
- Drying and evaporating. E. I. Farrington. *O Judd Farmer* 63:12 Ag 11 '17
- Drying and evaporation. *O Judd Farmer* 63:28 Jl 21 '17
- Drying and serving fruits and vegetables in the home. C. C. Vincent and J. M. Hoover. *il Idaho Ag Exp B* 110:1-28 '18
- Drying apparatus for fruits and vegetables. *Bldg Ag* (243 W. 39th st, N.Y. 25c) 39:565-6 O '17
- Drying corn. *Nat Stock & F* 41:446 Ag 4 '17
- Drying fruits and vegetables. *Green's Am Fruit Grower* 38:4 Jl '18
- Drying fruits and vegetables. *Prog F* 32:951 S 8 '17
- Drying fruits and vegetables. *Rural N Y* 76:798 Je 16 '17
- Drying fruits and vegetables; symposium. *Prac F* 114:195 My 15 '18
- Drying fruits and vegetables. C. K. Graham. *Hampton Leaflets v* 5:11:sup6 n.d.
- Drying fruits and vegetables. A. D. Root. *il Mo Ag Ext C* 23 4p '17
- Drying fruits and vegetables in New York state. E. L. Kirkpatrick. *bibliog il Cornell Reading Course* 132:187-212 '18
- Drying fruits and vegetables in the home. *Ag Digest* 2:561 Ag '17
- Drying fruits and vegetables in the home. *il Farmers' B* 841:1-29 '17; Summary. *Wallaces' F* 42:1219 S 7 '17
- Drying of food products or the dehydration system. B. C. Coons. (B. 5) 32p il (Ag 15) '17 New York State food supply commission, Albany
- Drying of fruit. W. R. Lewis. *J Dept Ag S Australia* 20:887-93 Je '17
- Drying of fruits and vegetables. W. M. Schwartz. *Am Soc Heating & Ventilating Eng* (29 W. 39th st, N.Y. 10c) 23:545-8 '17
- Drying of fruits and vegetables and preservation of vegetables by fermentation and salting. *il Ontario Ag Dept C* 12:1-23 '18
- Drying of vegetables and fruits. M. A. Hauser. *N J Ag Dept C* 13:1-8 n.d.
- Drying of vegetables and fruits for home use. M. J. Reese. *il Prog F* 32:763, 785 Jl 7-14 '17
- Drying, packing and storing of fruits and vegetables. E. F. Shilling. *il Purdue Ag* 12:35-6 O '17
- Drying plums and damsons. *Gard Chron* (Lond) 62:107 S 15 '17
- Drying stone fruits. J. J. Odgers. *J Dept Ag S Australia* 21:924-6 Je '18
- Drying vegetables and fruits by the sun's heat. W. G. Merritt. *il Gard Chron Am* 22:171 Je '18
- Drying vegetables and fruits for home use. (B. 36) p 18-24 '17 Warehouse and marketing dept., Austin, Texas
- Evaporated and dehydrated food. E. L. Kirkpatrick. *il Rural N Y* 77:581, 613 Ap 20-27 '18
- Evaporated apples. C. S. McGillivray. 38p il plans '17 Canada Ag
- Evaporated apples. L. A. Munger. *W Va Ag Dept B* 13:31-4 Ja '16
- Evaporated fruit industry in New York state. E. W. Catchpole. *il N Y Ag Dept B* 79, pt 1: 937-53 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 2:937-53 '17; Same. *N Y State Fruit Growers Assn Pro* 1916:290-8
- Evaporating or canning apples. A. H. Pulver. *Rural N Y* 75:612 Ap 15 '16
- Evaporating sweet corn in a greenhouse. E. J. Weaver. *Rural N Y* 77:611 Ap 27 '18
- Evaporating or canning apples. A. H. Pulver. *Fruit* 13:9+ S '18
- Evaporation of apples. J. S. Caldwell. *il plans Wash Ag Exp B* 131:1-110 '16; Excerpts. *J Dept Ag Victoria* 15:589-607, 671-84, 734-48 O-D '17
- Evaporation of fruit for commercial use. G. W. Beverley. *J Dept Ag S Australia* 21:955-8 Jl '18
- Evaporation of fruits and vegetables. J. S. Caldwell. *il plans Wash Ag Exp B* 148:1-111 '17
- Evaporation of fruits and vegetables in the home. A. F. Barss. *il Ore Ag Ext B* 296:1-12 '18
- Evaporation of prunes. C. I. Lewis and others. *il Ore Ag Exp B* 145:1-36 '17
- Evaporation of prunes and economical suggestions. A. F. Barss. *Better Fruit* 13:7 Ag '18
- Evaporator for potatoes. *Rural N Y* 75:1307 O 14 '16
- Farm and home drying of fruits and vegetables. J. S. Caldwell. *il Farmers' B* 984:1-61 '18
- Farm dry house. F. W. Clark. *il Green's Fruit Grower* 37:25 Mr '17
- Feeding the nation; a new drying process that promises an economic revolution. R. G. Skerrett. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:262+ Mr 10 '17
- Food conservation: home canning and drying: how to organize groups for the work. *il Touchstone* (118 E. 30th st, N.Y. 35c) 3:358-61 Jl '18
- Fruit and vegetable dehydration from a technical standpoint. C. V. Ekroth. *Am Pub Health J* (126 Massachusetts av, Boston, Mass. 50c) 8:205-7 Mr '18
- Fruit and vegetable drying. *J Bd Ag* 24:547-50 Ag '17
- Fruit-drying. W. J. Allen. *il Ag Gaz of New South Wales* 28:13-29, 95-106 Ja-F '17
- Going back to grandmother's way. *il Am Coop J* 13:471 Ag '18
- Handy fruit evaporator. M. Caldwell. *il Green's Fruit Grower* 36:15 Je '16
- Home canning and drying of vegetables and fruits. *Okla Ag Ext C* 77:1-8 '18
- Home canning and drying of vegetables and fruits with directions for making jellies and fruit butters and for fermentation, salting and pickling. 31p il '18 National war garden comm., Maryland bldg., Washington, D.C.
- Home drying. *Weekly N L* 4:4 Je 13 '17; Same. *Better Fruit* 12:8 Ag '17
- Home drying of fruits and vegetables. A. L. Andrea. *il Gard M* 28:54 S '18
- Home drying of fruits and vegetables. L. Kirby. *il J Ag* (Quebec) 22:29 Ag '18
- Home drying of fruits and vegetables: brining; home-made vinegar; recipes. B. S. Wood. *Ga Ag Coll* (Ext) C 57:1-8 '17
- Home drying of vegetables. S. W. Partridge. *Fla State College for Women B* 14:1-16 '17
- Home drying of vegetables and fruits. L. R. Gaddis. *il Purdue Ag Ext Leaflet* 75:1-4 '17
- Home fruit and vegetable drying. *il Ia Ag Ext B* 65:1-4 '18
- Home-made apparatus for drying fruits and vegetables. G. E. Bray. *il plans Kan Ag Ext B* 13:1-14 '17; Same. (C. 4) '17 Kan. State council of defense, Topeka
- How to dry figs. *Prog F* 32:846 Ag 4 '17

**Drying (fruits and vegetables)—Continued**

- How to dry fruits and vegetables. E. Allen. 19p il 15c '17 Ladies' home journal, Independence sq., Philadelphia
- How to dry fruits and vegetables. G. W. Carver. 4p '17 Tuskegee institute, Tuskegee, Ala.
- Humble dried apple. E. H. Favor. il Fruit-Grower 28:234 Ap 15 '17
- If you can't can—dry! M. R. Warren. il Country Gent 83:2+ Ag 3 '18
- Indications are that the dried products will figure more and more prominently in the army ration on the western front. It may be noted that there is now a bill before Congress to appropriate \$250,000 to enable the Secretary of agriculture to establish plants for the drying or dehydration of vegetables, fruits and other edible products in connection with the land-grant colleges in several states. E. Clemens Horst, one of the pioneers in the dehydration industry, says it would cost \$5,000,000 to develop a dried fruit and vegetable market within two or three years; but if our Government advertise it along the line that the product is good every housewife will want the product.—Business Digest
- Inexpensive dry house. E. Spurrier. Fruit-Grower 28:295 Je 15 '17
- Kiln-drying onions. Rural N Y 77:832 Je 29 '18
- Making dried fruits. E. Garibaldi. Country Gent 81:1232 Je 17 '16
- Ninety per cent of water. il Scientific Am (233 Broadway, N.Y. 10c) 117:176-7 S 8 '17
- Now for dried fruit. il Fruit-Grower 28:293+ Je 15 '17
- Old-time southern recipes. J. M. Patterson. Gard M 26:26, 62 Ag-S '17
- Plan for dehydrating food by using heating and ventilation plants of schools. A. W. McCann. Heating & Ventilation (1123 Broadway, N.Y. 10c) 14:55 S '17
- Possibilities for the utilization of low grade and surplus fruit. J. S. Caldwell. Wash Ag Exp Pop B 102:1-4 '16
- Practical demonstration on home drying of foods; practical demonstration on packing of eggs. M. Yackey. (In Suggestions for food conservation, p. 73-7) '17 Women's central committee on food conservation, St Louis
- Practical home drying. M. R. Warren. il Country Gent 83:32 Jl 13 '18
- Preservation of food; canning, preserving, drying; and preserving of eggs. 16p n.d. Council of national defense, Ohio branch, State house, Columbus
- Preservation of food products by drying. G. C. Shadwell. il Am Soc Heating & Ventilating Eng (29 W. 39th st, N.Y.) 23:537-44 '17
- Preservation of fruits and vegetables. C. I. Lewis and A. F. Barss. il Ore Ag Ext B 187:1-24 '17
- Prune evaporation. F. R. Brown. Better Fruit 12:21 Mr '18
- Put the sun to work. C. L. Pack. il Am For 24:464-9 Ag '18
- Real experience in drying garden produce. W. L. French. il Gard M 28:79-81 O '18
- Reasons for drying fruits and vegetables. il Nat Stock & F 41:566 S 8 '17
- Report on the possibility of conserving surplus plums by drying. J. V. Eyre and S. T. Parkinson. J Bd Ag 24:275-87 Je '17
- Saving the cull. S. Fraser. plans Country Gent 81:1401 Jl 22 '16
- Saving the food increase for later use. P. MacDonald. il Prac F 113:227 Je 15 '17
- Successful community drying plant. C. W. Pugsley. il Farmers' B 916:1-12 '17
- Sun-drying of vegetables. G. L. C. Howard. Ag J of India 13:616-19 O '18
- Taking water out of apples. il O Judd Farmer 65:441 N 9 '18
- To dry vegetables. Nat Stock & F 42:454 Ag 10 '18
- Uncle Sam's drying recipes. il Country Gent 82:1100 Je 30 '17
- Vegetable drying demonstration at Williamson. E. L. Kirkpatrick. Market Growers J 22:395 Je 1 '18
- Vegetables for the trenches. Country Gent 81:1374 Jl 15 '16
- Watch your step in drying. M. R. Warren. il Country Gent 83:30-1 Je 22 '18
- \* When the breweries go dry. Literary Digest (354 4th av, N.Y. 10c) 59:25 N 23 '18
- Wherewithals for canning and drying. A. G. Vestal. il Power F 27:30 Jl '18
- See also Evaporators

**Bibliography**

Annotated list of references on dehydrated foods. Technology dept., N.Y. Public library. 6p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 30c)

Dehydrated foods; a list of references to material in the N.Y. public library. P. Jones. (Reprinted from the Bul. of the N.Y. public library, Oct. 1917) 13p 5c '17 New York public library, N.Y. city

**Drying (milk).** See Milk, Desiccated

**Drying apparatus**

Agricultural desiccating installations. Int R Sci & Prac Ag 7, no 2:270-3 F '16

See also Evaporators; Grain drying machines; Hay drying machines

**Drying of lumber.** See Lumber—Drying

**Duck flowers.** See Pelican flowers

**Ducks**

About Indian runner ducks. E. A. Gaebel. Reliable P J 24:292 My '17

Bred-to-lay runner ducks. Country Gent 81:1036 My 13 '16

Broiler duck raising. Ag Digest 1:76 Je '16

Brome lake duck farm. il J Ag (Quebec) 22:46 S '18

Care of ducks. Ag Digest 1:76 Je '16

Commercial duck. Am P Advocate 26:305 Mr '18

Degraded runner standard. C. S. Valentine. Reliable P J 23:262 Ap '16

Duck farming a profitable occupation. E. W. Gage. il Am P J 47:991-4 Ag '16

Duck raising. M. A. Jull. il J Ag (Quebec) 20:213 Ap '17

Duck-rearing. F. C. Brown. J Ag New Zealand 17:174-6 S '18

Ducks and ducklings. M. K. Boyer. Am P Advocate 25:383 Ap '17

Ducks for market. Am P Advocate 24:172 Ja '16; Same. N Y Prod R 41:554 Ja 26 '16

Ducks on the farm. M. G. Feint. il Prac F 112:189 My 1 '16

Ducks, plural. F. H. Valentine. il Country Life 31:46-7 N '16

Eggs in several baskets insure poultry success. M. A. Herold. il Prac F 112:71+ F 15 '16

Facts about runner ducks. F. H. Valentine. Country Gent 81:400 F 19 '16

Fine fat ducks. F. H. Valentine. il Country Gent 82:267 F 10 '17

Getting a start with ducks. F. H. Valentine. il Country Gent 81:582 Mr 11 '16

Indian runner a farmer's duck. Mrs A. Brooks. O Judd Farmer 61:12 S 9 '16

Indian runner ducks. Fla Ag Dept Quar B v 28:26-8 Jl '18

Indian runner ducks. Wallaces' F 41:129 Ja 28 '16

Indian runner experience. Nat Stock & F 40:188 My 13 '16

Indian runners. E. A. Gaebel. Am P J 47:793 My '16

Keep some runners for revenue. Mrs M. G. Feint. Prac F 113:199 My 15 '17

Management of ducks. M. A. Jull. il J Ag (Quebec) 20:40 Ag '16

Money in duck raising. R. H. Byrd. Wallaces' F 41:956 Jl 7 '16

Money in Pekin ducks. S: D. Buchanan. Am P Advocate 24:102 Ja '16

Must the fat duck go? H. A. Roberts. il Country Gent 83:43 F 2 '18

Raise ducks for quickly grown meat. Mrs H. E. Hoak. Am P J 49:20-1 Ja '18

Raising ducks. Rural N Y 75:313 F 19 '16

Raising ducks, geese, and turkeys; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 57) 10p '17 U.S. States relations service, Washington, D.C.



**Ducks—Continued**

- Raising runner ducks. F. H. Valentine. Country Gent 82:973 Je 2 '17  
 Rearing ducklings. Am P Advocate 26:346 Ap '18  
 Rouen ducks. J: D. Bowman. Reliable P J 24: 95 Mr '17  
 Runner ducks as farm layers. J Bd Ag 24: 748-50 O '17  
 Self-starter in ducks. F. H. Valentine. Country Gent 81:1593 Ag 26 '16  
 Spring duck. T. Edwards. Country Gent 81: 124 Ja 15 '16  
 Success with ducklings. Nat Stock & F 42:132 Ap 27 '18  
 3000 ducklings a year. O Judd Farmer 62:26 Mr 3 '17  
 What four ducks did on a city lot. M. G. Feint. Am P Advocate 25:52 D '16

**Diseases and pests**

- Duck sickness in Utah. A. Wetmore. il U S Ag B 672:1-25 '18

**Feeding**

- Ducks. A. M. A. Gillett. Am P J 48:568 Ap '17  
 Use of charcoal in fattening ducks and geese. J Ag (Quebec) 22:12 Jl '18

**Ducks, Wild**

- Eleven important wild-duck foods. W. L. McAtee. il maps U S Ag B 205:1-25 '15  
 Five important wild-duck foods. W. L. McAtee. il maps U S Ag B 58:1-19 '14  
 Propagation of wild-duck foods. W. L. McAtee. il maps U S Ag B 465:1-40 '17  
 Raising wild mallards in brooders. E. I. Farrington. il Country Life 33:94 N '17  
 Raising wild mallards on the farm. C. A. LeClair. il Country Life 29:50-1 Ja '16  
 Wild mallard ducks for the farm. F. H. Valentine. Country Gent 81:802 Ap 8 '16

**Dumb-waiters**

- Cool-dumb waiter. S. F. Aaron. Country Gent 81:991 My 6 '16  
 Home-built dumb waiter. C. A. Browne. O Judd Farmer 63:25 O 13 '17  
 Installing a dumb-waiter. F: W. Ives. plans Ohio F 141:806 Je 22 '18

**Dumontia filiformis**

- Development of dumontia filiformis; development of sexual plants and general discussion of results. G. A. Dunn. bibliog il Bot Gaz 63: 425-67 Je '17

**Dung flies**

- Dipterous family scaptosidae. A. L. Melander. il Wash Ag Exp B 130:1-21 '16

**Durhams, Polled.** See Polled Durhams

**Duroc Jerseys**

- Duroc as a profitable hog. R. J. Evans. Swine World 5:20+ Je '18  
 Duroc associations will consolidate. Swine World 5:8 F '18  
 Duroc-Jersey. C: V. Truax. il Country Gent 82:484 Mr 10 '17  
 Duroc-Jersey boar. R. L. Comer. Breeder's Gaz 73:1032 My 16 '18  
 Duroc Jerseys at the National. il Swine World 5:7+ N '17  
 Hogging new territory. R. L. Hill. il Breeder's Gaz 72:1157 D 20 '17  
 Points of a Duroc Jersey. Wallaces' F 41: 196 F 4 '16  
 Why I breed Duroc-Jerseys. R. A. Fairbairn. il Field 11 29:499 Jl '18

See also National Duroc-Jersey record association

**Durum wheat.** See Wheat—Varieties

**Dust prevention**

- Dust problems in fertilizer plants. W. G. Clark. Am Fert 48:30-1 Ap 13 '18  
 Progress reports of experiments in dust prevention and road preservation, 1913. U S Ag B 105:1-46 '14  
 Progress reports of experiments in dust prevention and road preservation, 1914. U S Ag B 257:1-44 '15  
 Progress reports of experiments in dust prevention and road preservation, 1915. U S Ag B 407:1-71 '16

- Progress reports of experiments in dust prevention and road preservation, 1916. U S Ag B 586:1-78 '18

See also Roads, Oiled

**Bibliography**

- Road dust preventives; references to books and magazine articles. 39p 5c '16 Carnegie library of Pittsburgh, Pittsburgh, Pa.

**Dusting (fruit culture).** See Spraying and dusting

**Dutch East Indies.** See Agricultural credit—Dutch East Indies

**Dwarf trees.** See Fruit trees, Dwarf; Trees, Dwarf

**Dyes and dyeing**

- American sumac; a valuable tanning material and dyestuff. F. P. Veitch and J. S. Rogers. il U S Ag B 706:1-12 '18  
 Building up dye stuffs industry. O Judd Farmer 60:20 Mr 25 '16  
 Dyeing values of some indigenous dye-stuffs. J. P. Srivastava. Ag J of India Sci Congress No 1916:53-64 '16; Abstract. Int R Sci & Prac Ag 7,no 10:1456-9 O '16  
 Home industries before the war. Rural N Y 75:595 Ap 8 '16  
 Indigenous tans and vegetable dyestuffs of New Zealand. B. C. Aston. J Ag New Zealand 15:55-62, 117-28; 16:358-65; 17:136-9 Ag-S '17, Je, S '18  
 Manufacture of dyes. Am Coop J 11:532 Ja '16  
 New indigo substitute. Ag J of India 12:673-5 O '17  
 Setting colors with household mordants. M. Kendall. Purdue Ag 10:45-6 Je '16  
 Use of herbs and barks in dyeing. J Ag (Quebec) 20:44 Ag '16  
 Utilization of the red dye obtained from the leaf sheaths and stalks of certain varieties of sorghum. C. G. Dudgeon. Int R Sci & Prac Ag 9,no 4:506-7 Ap '18

See also Coloring matter; Henna; Indigo; Osage orange

**Dykes.** See Levees

**Dynamite**

- Safe way of handling dynamite. G. F. DeLa-Mater. Breeder's Gaz 72:1077 D 13 '17  
 Wood flour and the manufacture of dynamite and linoleum. Power F 25:24 S '16

**Dynamite in agriculture**

- Abandoned farm reclaimed. O. Nelson. Prac F 112:380 O 15 '16  
 Agricultural and miscellaneous uses of Du Pont explosives. 149p il '17 E. I. Du Pont de Nemours & co., Wilmington, Del.  
 Apple tree planting with dynamite. H. M. Magie. il Am Fruit Grower 38:5 N '18  
 Battery box blasting machine. A. H. Harris. Power F 26:23 My '17  
 Blasting ditches. H. E. Murdock. il Mont Ag Exp C 55:185-92 '16  
 Blasting for a road. G. G. Means. Farm Eng 7:9 Ap '18  
 Blasting stumps. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:69-70 Ja 17 '17  
 Blasting stumps in dry soil. G. F. Delamater. O Judd Farmer 61:12 S 23 '16  
 Blasting stumps with dynamite. J. M. Fields. Power F 26:23 Ap '17  
 Blasting sycamore stumps. F. G. Thomas. Prac F 114:70 F 15 '18  
 Blowing up the land; its effect on plant growth by making a storage reservoir. F. A. Kuhn. Power F 25:28 Ag '16  
 Boulders on farms. T: Stephens. Prac F 112: 400 N 1 '16  
 Clearing land of rocks for agricultural and other purposes. J. R. Mattern. 68p il '18 Inst. of makers of explosives, 103 Park av, N. Y.  
 Clearing land of stumps. 75p il '17 Inst. of makers of explosives, 103 Park av, N.Y.  
 Clearing the land. Farm Eng 5:4 Je '17  
 Costs of blasting drainage ditches. Eng Record (10th av. at 36th st., N.Y. 15c) 75:511 Mr 31 '17

**Dynamite in agriculture—Continued**

- Developing logged-off lands of the Northwest with Du Pont explosives. 114p il '16 E. I. Du Pont de Nemours & co., Wilmington, Del.
- Digging ditches with dynamite. R. F. Vann. *Country Life* 29:72 Ap '16
- Digging ditches with dynamite. M. T. Walls. *il Farm Eng* 4:93 D '16
- Ditching with dynamite. F. F. Rockwell. *il Country Gent* 81:381 F 19 '16
- Ditching with dynamite in wet soil. Municipal J (243 W. 39th st, N.Y. 25c) 44:264 Mr 30 '18
- Draining with dynamite. N. D. Rand. *il Country Gent* 83:7+ J1 20 '18
- Du Pont explosives handbook; instructions in the use of high explosives for clearing land, planting and cultivating trees, drainage, ditching, subsoiling and general work. 196p il '16 E. I. Du Pont de Nemours & co., Wilmington, Del.
- Dynamite as an agent in agriculture. R. F. Vann. *Kimball's D F* 14:16 Ja 15 '16
- Dynamite as an aid to intensive cultivation. A. H. Harris. *Green's Am Fruit Grower* 36:2 J1 '16
- Dynamite for drainage. C. B. McGee. *Farm Eng* 3:261 My '16
- Dynamite for reclamation and drainage. A. H. Harris. *Hoard's D* 51:803 Je 9 '16
- Dynamite for soils. *il Gard Chron Am* 20: 405 S '16
- Dynamite on the farm. A. H. Nellenbogen. *Penn State F* 9:474-5 D '16
- Dynamite on the farm. N. D. Rand. *il Country Gent* 83:9-10+ Mr 16 '18
- Economical stump blasting. A. H. Harris. *Power F* 25:38 Mr '16
- Explosives for loosening soil. Municipal J (243 W. 39th st, N.Y. 10c) 43:101 Ag 2 '17
- Hard job of clearing woodland. R. F. Vann. *Power F* 25:20 O '16
- Investigations in cost and methods of clearing land. M. J. Thompson. *il Minn Ag Exp B* 163:1-31 '16
- Land clearing practice. *Power F* 26:27 Ap '17
- Land clearing special. *il Hoard's D* 51:803 Je 9 '16
- Lasting benefits of soil blasting. *Sci Am* (233 Broadway, N. Y. 10c) 119:253 S 28 '18
- Licenses to use dynamite for all farm purposes. *Green's Am Fruit Grower* 38:21 My '18
- Methods of clearing logged-off land. C. H. Shattuck. *il Idaho Ag Exp B* 91:1-59 '16
- Mistakes of fruit growers; stump and boulder-strewn ground. C. F. Higgs. *Green's Fruit Grower* 36:4 Je '16
- One way to stop soil washing. *Power F* 27: 43 F '18
- Planting trees with dynamite. *Ohio F* 140:482 N 24 '17
- Planting trees with dynamite. N. D. Rand. *il Country Gent* 83:9 Ag 17 '18
- Rapid method of tree planting. H. Gough. *Better Fruit* 12:17 Mr '18
- Ready money for young farmer. C. R. Brome. *il Farm Eng* 3:193 Mr '16
- Some field notes on making ditches with explosives. J. R. Mattern. *Better Fruit* 11: 23 N '16
- Some uses of dynamite on the farm. *il Ariz Ag Exp Timely Hints* 124:1-8 '17
- Stump blasting by an expert. N. D. Rand. *Wallaces' F* 43:248 F 8 '18
- Subsoiling, deep tilling, and soil dynamiting in the great plains. E. C. Chilcott and J. S. Cole. *bibliog map J Ag Research* 14:481-521 S 9 '18
- Subsoiling with dynamite; effects on Connecticut tobacco lands. G. D. Bartlett. *il Farm Eng* 4:4 J1 '16
- Three grades of dynamite. A. H. Harris. *Nat Stock & F* 40:814 N 11 '16
- Transplanting trees by the use of dynamite. T. E. Chase. *Maine Ag Dept B v* 17:27-35 S '18
- Tree growth in blasted ground. J. R. Mattern. *Better Fruit* 10:17 Je '16
- Tree holes or tree beds? *Green's Am Fruit Grower* 38:26 Mr '18

- Tree planting with dynamite. J. M. Field. *Prog F* 31:9 Ja 1 '16
- Use of dynamite in clearing land. E. Secrest. *Ohio Ag Exp B v* 1:236-9 Ag '16; Same. *Power F* 25:35 N '16
- Use of explosives in making ditches. J. R. Mattern. *il 70p '17* Inst. of makers of explosives, 103 Park av, N. Y.
- Use of explosives in the tillage of trees. J. R. Mattern. 78p il '18 Inst. of makers of explosives, 103 Park av, N. Y.
- Wrong way to plant trees in blasted holes. F. N. Supplee. *Green's Am Fruit Grower* 37:9 O '17
- See also* Clearing of land

**Dysentery**

- Endo medium for the isolation of b. dysenteriae and a double sugar medium for the differentiation of b. dysenteriae Shiga and Flexner. I. J. Kligler and J. Defandorfer. *bibliog J Bact* 3:437-40 S '18

**Dysmorphococcus variabilis.** *See* Algae

**E****Eagles**

- Diurnal birds of prey—hawks, eagles and vultures. A. A. Allen. *il Am For* 24:281-4 My '18
- Our big colonial eagle—terror of the wild monkeys of the Philippines. *il Am For* 24: 555-7 S '18

**Ear**

- Inheritance of a bi-lobed ear. R. Schofield. *il J Heredity* 8:517-18 N '17
- See also* Deafness

**Early bird; story.** E. E. Peake. *il Country Gent* 82:1918-19+ D 8 '17

**Earning a new bicycle; story.** *Hoard's D* 55:784 My 24 '18

**Earth pea.** *See* Peanuts

**Earth roads.** *See* Roads, Earth

**Earwigs**

- Earwig. *Gard Chron (Lond)* 62:90 S 1 '17
- European earwig and its control. D. W. Jones. *il U S Ag B* 566:1-12 '17

**Easter eggs**

- Easter egg. *Hoard's* 51:578 Ap 28 '16

**Easter lilies**

- Easter lilies. W. C. Hall. *Am Flor* 51:436-7 S 21 '18
- Lilies for Easter. *il Am Flor* 50:50 Ja 26 '18
- Lilium formosum. T. Wilson. *il Gard Chron Am* 21:373 O '17
- Lilium giganteum. *il Am Flor* 50:296 Mr 2 '18
- Lily bulb production. D. Griffiths. *Am Flor* 51:4 J1 20 '18
- Striking reproductive habit. A. A. Hansen. *il J Heredity* 9:85-6 F '18

**Easter plants.** *See* Florists' plants

**Eastern states.** *See* subhead Eastern states under special subjects

**Eastern states agricultural and industrial exposition**

- Eastern states exposition. H. G. Gulliver. *il Field II* 27:942-3+ D '17

- Eastern states exposition, Springfield, Mass., Oct. 12-19. *Market Growers J* 21:144 O 1 '17; *Jersey B* 36:1661 O 24 '17; *Breeder's Gaz* 72: 737-8 O 25 '17; *Hoard's D* 54:496-7 N 2 '17

**Eating**

- Rules for eating. I. Fisher. *Prog F* 31:791 Je 17 '16

*See also* Diet

**Eccoptogaster quadrispinosa.** *See* Hickory bark beetles

**Echinocactus.** *See* Cactus

**Eclipses**

- Total eclipse of the sun on June eighth. R. H. Moulton. *il map Ohio F* 141:628 My 4 '18

**Ecology.** *See* Botany—Ecology; Forest ecology



**Economic entomologists, American association of.** See American association of economic entomologists

**Economic entomology.** See Insects, Injurious and beneficial

**Economics**

See also Agricultural credit; Agriculture—Economic aspects; Agriculture, Cooperative; Banks and banking; Capital; Cooperation; Credit unions; Farm labor; Food supply; Farm tenancy; Home economics; Income; Investments; Land; Prices; Single tax; Speculation; Stocks; Taxation; Value; Wages

**Study and teaching**

Economic science in agricultural and mechanical colleges. C. A. Duniway. Assn Am Ag Coll & Exp Pro 1915:94-6

**Economy.** See Domestic finance

**Eczema**

Treatment of eczema. E. Mellen. O Judd Farmer 64:34 Mr 2 '18

**Edible greens.** See Greens, Edible

**Edison, Thomas Alva, 1847-**

Constitutional vigor in the ancestry of Thomas A. Edison. J Heredity 7:414-15 S '16

**Editing.** See Journalism

**Education**

Corn and education. A. F. Blakeslee. il J Heredity 8:51-7 F '17  
Cutting the cost of an education. J. Cook. Prog F 31:816 Je 24 '16  
Get ready for your turn. S. Coulter. Purdue Ag 12:531-2 Je '18

National system of education. E. A. Bryan. Assn Am Ag Coll & Exp Pro 1915:72-82  
Success talk for farm boys; Grundtvig and his folk high schools. C. Poe. Prog F 32:361 Mr 17 '17

See also Agricultural colleges; Agricultural education; Agricultural extension work; Agricultural high schools; Books and reading; Colleges and universities; Colleges for women; Education of children; Educational law; Extension education; Forestry schools and education; High schools; Illiteracy; Kindergarten; Libraries; Nature study; Rural schools; Soldiers, Disabled—Reeducation; Teachers; Text-books; Vocational education

**Denmark**

Denmark's remedies: education and co-operation. (Farm life conditions in the South, ch. 4) 10p n.d. Georgia State normal school, Athens

**Wisconsin**

Bennett law in Wisconsin. L. P. Kellogg. Hoard's D 56:654 D 6 '18

Economic factors which influence rural education in Wisconsin. E. Merritt and K. L. Hatch. maps Wis Ag Exp Research B 40:1-51 '16

**Education, Elementary**

New course of study for the rural elementary public schools of Nevada. 125p '16 Nev. State bd. of educ., Carson City  
Subject matter for 1917-1918 in natural history, agriculture, and home making, based on the New York state syllabus for elementary schools. il Cornell Rural School Leaflet v 11,no 1:1-320 '17

**Education of children**

For the gifted child. J Heredity 8:366-7 Ag '17

Going to school at home. E. F. Lynch. Country Gent 81:305, 548, 769, 953 F 5, Mr 4, Ap 1, 29 '16

Kitchen culture; the best way of answering children's incessant questions. M. Fehr-Telfer. il Country Gent 82:353 F 17 '17

Training little children; articles written by mothers who were formerly kindergarten teachers. U.S. Bur. of educ., Washington, D.C.

A series of 55 articles which are intended to run at weekly intervals for a little over a year

True mother teaching; how I am preparing my little girl for school. M. T. Harkness. Country Gent 82:226 F 3 '17  
What home teaching did. E. F. Lynch. Country Gent 81:1245 Je 17 '16

**Education of women**

Agricultural and horticultural courses for women in the Middle Atlantic states; tables. 2p '17 Woman's nat. farm and garden assn., 600 Lexington av., N.Y.  
Highest education for women. J. C. Lathrop. J Home Econ 8:1-8 Ja '16

**Educational law**

Agricultural education, organization and administration. (B. 13, Agric. Series no. 1) 42p '18 Federal bd. for vocational educ., Washington, D.C.

Fair review of the N. Y. school law. R. Hall. il Rural N Y 77:105-6 Ja 26 '18

Federal laws, regulations, and rulings affecting the land-grant colleges of agriculture and mechanic arts. 19p '16 U.S. Bureau of educ.; 5c Supt. of doc., Washington, D. C.  
New York (state)—Gov. Whitman discusses the widespread discontent among the rural communities due to the passage of the so-called township law which provides for the consolidation of certain rural schools. He recommends an amendment to the law, which will still allow the citizens of a district to vote on the amount of money to be expended for school purposes, instead of leaving the financial question to be decided by the town board of education. He considers that the law has failed to accomplish properly the purpose for which it was enacted  
New York school law. Rural N Y 76:1473 D 29 '17

New York school law. E. M. Bacon. Rural N Y 76:1365 D 1 '17  
New York school law. R. C. Hitchings. Rural N Y 77:146 F 2 '18

New York school law; a critical study of it. Rural N Y 77:3 Ja 5 '18

New York school law; the article referring to bonds. Rural N Y 77:6 Ja 5 '18

Plea for the school law. J. Van Wagenen, jr. Rural N Y 77:212 F 9 '18

State rural school manual giving laws and regulations for standardization as state rural, graded, and consolidated graded schools. 13p '17 N. D. State bd. of educ., Bismarck

**Educational tours**

Educational trip. E. H. Carpenter. Rural Manhood 7:58-9 Ap '16

**Edwards, George B., 1835-**

George B. Edwards of Covey Hill. il por J Ag (Quebec) 22:88 D '18

**Eelgrass.** See Vallisneria

**Eelworms.** See Nematodes

**Efficiency**

Efficiency is the foundation of success in every business. C. McAlister. Reliable P J 23:487+ Je '16

Efficiency tests for boys. Rural Manhood 7:66-8 Ap '16

Food and efficiency. H. W. Wiley. (In Pan American scientific congress Pro., 1915, v. 8, p. 84-91) '17

**Efficiency, Agricultural**

Cost of living and the remedy. City Club B (City Club of Chicago, 315 Plymouth Court, Chicago, Ill.) 10:5-8 Ja 15 '17; Same. (In Nat. conf. on marketing and farm credits, 1916, p. 435-44) \$2 '17 C. W. Holman, sec., Madison, Wis.

Efficiency as applied to farming. J. Francis. Power F 27:40 Jl '18

Efficiency in farm practice. H. Barton. J Ag (Quebec) 22:21 Ag '18

Farm efficiency. C. D. Kirkpatrick. Wallaces' F 43:1045 Jl 12 '18

Farm efficiency; how it depends on efficient equipment for living. X. Caverno. 48p '16 Xenophon Caverno, Kewanee, Ill.; Same. Am Soc Ag Eng Trans 9:12-29 '16

Increasing man efficiency on the farm. I. J. Mathews. il Ohio F 142:453-4 N 9 '18

**Efficiency, Agricultural—Continued**

Must we Prussianize production? H: L. Staples, il Country Gent 83:12-13+ My 4 '18

**Efficiency, Domestic**

Efficient kitchen. E. M. Jones, il plans Country Life 31:52-3 Ja '17  
Home efficiency. M. E. DeTurk, il Purdue Ag 10:46-7+ Mr '16  
Time required for housework in a family of five with small children. M. Woodbury, J Home Econ 10:226-30 My '18

**Efficiency contests**

Boys' group efficiency contest. H. D. Maydole, Rural Manhood 8:154-6 Ap '17

**Egg breaking establishments**

Chinese egg plant. T: Sammons, N Y Prod R 42:546 S 20 '16  
Egg breaking plants. N Y Prod R 46:842 O 2 '18  
Egg upside down in China. Am P Advocate 26:168 F '18  
Illinois egg regulations affecting egg breaking establishments. W. S. Matthews, N Y Prod R 41:442 Ja 5 '16  
Installation and equipment of an egg-breaking plant. M. K. Jenkins, il U S Ag B 663:1-25 '18  
Interesting plant; up-to-date facilities for egg packing, canning and freezing recently established at Kansas City. N Y Prod R 45:820 Ap 3 '18

**Egg candlers**

Home-made electric egg-tester. R. A. Jeffers, Electrical Review (515 Monadnock Bldg., Chicago 15c) 73:27 JI 6 '18  
Practical egg candler. W. E. Wiecking, Farm Eng 4:35 Ag '16  
Wisconsin university man perfects handy daylight candler. F. E. Mussehl, il Reliable P J 24:454 JI '17

**Egg candling. See Eggs—Testing****Egg cases**

Egg case outlook bad. N Y Prod R 45:527 F 20 '18  
Promising package with novel features devised by Elmer Arminger of Chicago. N Y Prod R 42:862 S 27 '16  
Saving on egg cases. H. A. Roberts, Country Gent 81:518 Mr 4 '16  
Smiths' improved egg case. N Y Prod R 42:815 S 13 '16  
Use for damaged egg fillers. H. A. Roberts, Country Gent 81:406 F 19 '16

**Egg handling**

Care, candling and grading of market eggs. il Ia Ag Ext B 25:1-15 '17 (rev.)  
Efforts to save egg waste. N Y Prod R 46:98 My 15 '18  
Many bad eggs produced on farms. M. A. Jull, il J Ag (Quebec) 20:18 JI '16

**Egg inspection**

Egg inspection rules. N Y Prod R 42:892 S 27 '16

**Egg laying contests**

American egg laying contest. R. F. Palmer, Am P J 49:700 JI '18  
American egg laying contest. T. E. Quisenberry, Am P Advocate 26:646 N '18  
Amount of food or number of shells? A. Melten, Am P J 48:259 F '17  
Announcement regarding the egg-laying contest. J. J. Hooper and R. H. Wilkins, il Ky Ag Exp C 12:27-38 '16  
Australia leads in high egg records. E. J. Hardy, Am P J 49:691+ JI '18  
Contest for egg values. J. R. Martin, Country Gent 81:459 F 26 '16  
Egg contests should assume initiative. R. H. Henderson, Am P J 48:107 Ja '17  
Egg-laying competition in Australia. A. Hart; D. S. Thompson, Int R Sci & Prac Ag 7,no 9:1321-3 S '16  
Egg-laying competition, 1916-17. J Dept Ag Ireland 17,no 3:511-16 '17  
Egg laying competitions. Ag Gaz of Canada 5:37-40 Ja '18  
Egg-laying contest. G: A. Cosgrove. See weekly numbers of Rural New-Yorker

Egg-laying tests at Hawkesbury agricultural college. J. Haddington, il Ag Gaz of New South Wales 28:337-55 My '17  
Egg-laying tests at Hawkesbury agricultural college. E. F. Whitbread, il Ag Gaz of New South Wales 29:348-69 My '18  
Egg-laying tests at Hawkesbury agricultural college, fourteenth year's results, 1915-16. G. D. Ross, il Ag Gaz of New South Wales 27:349-64 My '16  
Fifth annual international egg laying contest. W: F. Kirkpatrick and L. E. Card, il Conn Storrs Ag Exp B 89:257-301 '17  
5th Irish egg-laying competition. J Dept Ag Ireland 17,no 2:273-9 '17; 18,no 1:33-59 '18  
Fifth Missouri national egg laying contest. Reliable P J 23:522 Je '16  
5th national egg laying contest. See monthly numbers of American poultry advocate for 1916  
Fifth national egg-laying contest ends. C. J. Patterson, Fruit-Grower 27:513 D 1 '16  
5th Victorian egg-laying competition, 1915-1916. J Dept Ag Victoria 14:59-60, 124-5, 188-9, 251-2, 312-13 Ja-My '16  
5th-6th Storrs Ag egg laying contests, November, 1916. N. W. Sanborn, il Am P Advocate 25:20 D '16  
Final report of American egg laying contest. T. E. Quisenberry, Am P Advocate 26:32 D '17  
First Missoula public schools egg-laying contest. L. E. Harris, Am P J 49:467 Ap '18  
Fourth annual international egg laying contest. W: F. Kirkpatrick and L. E. Card, il Conn Storrs Ag Exp B 87:197-243 '16  
4th Irish egg-laying competition. J Dept Ag Ireland 17,no 1:88-123 '16; 17,no 2:280-9 '17  
Fourth North Coast egg-laying competition. D. S. Thompson, Ag Gaz of New South Wales 27:433-7 Je '16  
Fowl efficiency deductions from the egg-laying contests. M. C. Kilpatrick, Country Gent 81:854-5 Ap 15 '16  
Late news from widely separated egg laying contests. Mrs G. M. Curtis, Reliable P J 25:80-80a, 261, 394-5, 465-6+, 566-7+, 646-7+, 723-4+, 806 Mr-Ap, Je-N '18  
Laying competition at Harper Adams agricultural college. J Bd Ag 23:1002-5 Ja '17  
Lessons from egg laying contests. L. E. Card, Cornell Countryman 14:475-8 Mr '17  
Lessons from the egg laying contests. C. T. Patterson, (B 12) p 18-79 il '16 Missouri state poultry board, Mountain Grove  
Lessons from the laying contests. G: D. Black, Ohio F 137:443 Mr 18 '16  
Methods used should increase efficiency. G: D. Lantz, Am P J 48:177 F '17  
National egg laying contest. C. T. Patterson, Am P Advocate 24:848; 25:46 N-D '16  
New and good feature in egg laying contests. G. M. Curtis, Reliable P J 24:586 S '17  
New egg laying and breeding contest. il J Ag (Quebec) 19:267 Je '16  
Prize winners at the egg-laying contest; some of the results, il Rural N Y 75:1513, 1555 D 9-16 '16  
Progress in poultry; features of the Vineland international egg laying and breeding contest. N Y Prod R 44:396 JI 4 '17  
Report on the egg-laying competitions for 1916-17, held at Burnley school of primary agriculture and horticulture. A. Hart, il J Dept Ag Victoria 15:321-32 Je '17  
Report on the fifth Victorian egg-laying competition, 1915-16. A. Hart, il J Dept Ag Victoria 14:329-40 Je '16  
Report on the seventh Victorian egg-laying competition, 1917-18. A. Hart, il J Dept Ag Victoria 16:321-38 Je '18  
Rules and regulations for the eighth annual egg laying contest, Missouri. 7p il '18 Mo. State poultry experiment station, Mountain Grove  
7th annual international egg-laying contest. Am P J 49:97 Ja '18  
Seventh Missouri national egg laying contest. Reliable P J 24:398 Je '17  
7th national egg laying contest at Mountain Grove, Mo. Am P Advocate 26:424 My '18



**Egg laying contests—Continued**

- 7th national egg laying contest at Mountain Grove, Mo.; hints on incubation and brooding. *Am P Advocate* 26:356 Ap '18
- Single-hen testing at the Hawkesbury agricultural college. *J. Hadlington. il Ag Gaz of New South Wales* 27:586-8 Ag '16
- 6th Irish egg-laying competition, Oct. 1—Dec. 31, 1917. *J Dept Ag Ireland* 18, no 2:169-70 '18
- Sixth national egg laying contest. See monthly numbers of American poultry advocate for 1917
- 6th Victorian egg-laying competition, 1916-1917. A. Hart. *J Dept Ag Victoria* 14:379-81, 443-5, 571-3, 635-7, 699-701, 763-5 Je-Jl, S-D '16
- Those college hens. H. W. Collingwood. *Rural N Y* 75:1472 N 25 '16
- Value of egg laying contests. C. McAlister. *Reliable P J* 23:669 Ag '16
- Vineland contest winnings; with tabulation. *Am P Advocate* 26:106-9 Ja '18; Same (without tabulation). *Am P J* 49:8-9 Ja '18
- Vineland egg laying and breeding contest. *N J Ag Exp Rep* 1916:177-87 '17
- Vineland international egg laying and breeding contest. *il Am P Advocate* 24:680-1 Ag '16
- Vineland international egg laying and breeding contest. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 5, no 2 4p N '16
- Vineland international egg laying and breeding contest. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 6 4p Ja '18
- What Australia has done in production of record layers. Mrs G. M. Curtiss. *il Reliable P J* 25:685+ O '18
- What the American school of poultry husbandry is and what is being done there. *il Reliable P J* 24:1114-15+ F '18
- Egg marketing associations**
- Community egg circle. C. E. Bassett and W. H. Kerr. *Farmers' B* 656:1-8 '17
- Co-operation in the egg industry. *Ag Gaz of Canada* 5:1033-6 N '18
- Coöperative associations for marketing poultry products formed by farm women. *Prog F* 31:305 F 26 '16
- Co-operative egg and poultry society in East Anglia. *Int R Ag Econ* 9, no 2:113-14 F '18
- Co-operative egg circles. *Va Ag Dept B* 126:114-18 '18
- Co-operative egg marketing. O Judd Farmer 62:5 Ja 6 '17
- Co-operative egg marketing in France. *Ag Digest* 2:714 N '17
- Co-operative egg selling. *N Y Prod R* 41:966 Mr 29 '16
- Co-operative egg-selling associations. E. P. Clayton; H. A. Bittenbender. *Wallaces' F* 42:56 Ja 12 '17; Same cond. E. P. Clayton. *Ag Digest* 1:314 F '17
- Co-operative marketing of eggs in the provinces. *Ag Gaz of Canada* 5:1057-63 N '18
- Danish co-operative societies for the export of eggs. *Int R Ag Econ* 72:11-29 D '16
- Egg circle; a method of conserving eggs. H. M. Eliot. *Tex Ag Ext Farm News v* 3:1-4 Je 14 '18
- Egg circles and their operation. G. A. Adams. *Hoards' D* 53:859 Je 15 '17
- Egg-selling groups. *Reliable P J* 23:409 My '16
- Five thousand hens with a single thought. *Prog F* 31:890 Jl 15 '16
- How Texas is improving egg marketing. H. M. Eliot. *Prog F* 33:24 Ja 5 '18
- How to form cooperative egg and poultry associations. G. A. Adams. (C. 5) 13p n.d. National agricultural organization society, Madison, Wis.
- Lessons in egg marketing from Denmark. *Purdue Ag* 10:23 Ja '16
- Some results of co-operative marketing of eggs and poultry in the province of Quebec. J. W. Marcellus. *J Ag (Quebec)* 21:14 Jl '17
- Successful coöperative egg marketing association. E. P. Clayton. *Prog F* 31:145 Ja 29 '16
- Value of co-operation. M. K. Boyer. *Am P Advocate* 25:512 Je '17

Women's egg club. M. E. Bacon. *il Country Gent* 82:335 F 17 '17

**Egg production.** See Poultry—Egg production

**Egg shows**

- Blue ribbon eggs—a proud distinction and how it is won. L. L. Jones. *il Reliable P J* 24:143 Ap '17
- Boost for better eggs; 8th annual Purdue egg show. W. R. Offutt. *Country Gent* 81:1343 Jl 8 '16
- Egg exhibit at Calgary. *il Ag Gaz of Canada* 3:695-6 Ag '16
- Egg exhibit of the Live stock branch. E. Rhoades. *il Ag Gaz of Canada* 4:1035-6 D '17
- High-class poultry work being done in North Carolina. B. F. Kaupp and G. M. Curtis. *Reliable P J* 24:827+ D '17
- Ninth annual exclusive egg show at Purdue university. F. L. Sewell. *Reliable P J* 24:451+ Jl '17
- Pioneer egg show of America. R. K. Kyle. *Purdue Ag* 11:47-8 Je '17
- Purdue egg show. *N Y Prod R* 41:1017 Ap 5 '16; *Breeder's Gaz* 69:1119 My 25 '16
- Purdue egg show. H. W. King. *Purdue Ag* 10:29 Ap '16
- Purdue egg show. A. G. Phillips. *il Am P J* 48:564 Ap '17
- 10th annual Purdue egg show. R. F. Mead. *il Purdue Ag* 12:418, 499 Ap-My '18

**Egg substitutes.** See Eggs, Substitutes for

**Egg testing.** See Eggs—Testing

**Egg trade**

- California egg industry. *N Y Prod R* 47:65 N 20 '18
- California's new egg business. F. D. Cornell. *il Country Gent* 83:7 D 14 '18
- City selling storage eggs. *N Y Prod R* 47:129 D 4 '18
- Commissioner Day's position as to sale of cold storage eggs in cartons labelled fresh. F. G. Urner. *N Y Prod R* 47:186 D 11 '18
- Egg damage hearings finished. *N Y Prod R* 46:2+ My 1 '18
- Egg market. See weekly numbers of New York produce review and American creamery
- Egg marketing. F. G. Urner. *N Y Prod R* 42:954+ O 4 '16
- Egg situation. J. H. Hare. *Ag Gaz of Canada* 3:867-8 O '16
- Egg trade and co-operation in Russia. *Int R Ag Econ* 81:7-11 S '17
- Egg year of 1916-17. *N Y Prod R* 43:774+ Mr 7 '17
- Egg year of 1917-18; an unprecedented price level maintained. F. G. Urner. *N Y Prod R* 45:666+ Mr 6 '18
- Eggs case count or graded. W. A. Lippincott. *N Y Prod R* 41:926 Mr 22 '16
- Eggs to the front. *J Ag (Quebec)* 19:201 Mr '16
- Encouraging the southern hen. *Prog F* 33:1014 S 14 '18
- Export eggs and poultry. *N Y Prod R* 44:624 Ag 15 '17
- Fight against bad eggs. M. K. Boyer. *Am P Advocate* 24:836 N '16
- Hankow egg trade. E. S. Cunningham. *N Y Prod R* 43:178 N 22 '16
- Improving the Ohio egg. M. C. Kilpatrick. *N Y Prod R* 41:882 Mr 15 '16
- Looking to the winter egg supply. F. V. L. Turner. *Prac F* 113:279 Ag 1 '17
- Missouri association's annual convention at Kansas City. *N Y Prod R* 41:833+ Mr 15 '16
- More about eggs. T. F. McGrew. *Am P Advocate* 26:519-20 Ag '18
- Newspaper egg business. *N Y Prod R* 41:601+ F 9 '16
- Observations by the egg man. See weekly numbers of New York produce review
- Our two billion egg waste. H. A. Roberts. *il Country Gent* 82:2003 D 22 '17
- Perplexing decision; findings in case of Franz against Read & Garrison of much importance to wholesale receivers. *N Y Prod R* 46:355 Jl 3 '18
- Sound conclusion; New York department of health places responsibility for egg condition. *N Y Prod R* 42:330 Je 14 '16

**Egg trade—Continued**

- Spring egg meetings. N Y Prod R 41:785+ Mr 8 '16  
 Storage egg situation. F. G. Urner. N Y Prod R 46:846 O 2 '18  
 Storage eggs in 1917. N Y Prod R 45:725 Mr 13 '18  
 Trick of the city egg trade. Rural N Y 75: 999 JI 22 '16  
 War egg. Country Gent 82:1331 Ag 25 '17  
*See also* Egg breaking establishments; Eggs—Grading; Eggs—Prices; Poultry and egg trade conference

**Regulation**

- Arrêté n. 5155 concernant l'importation des œufs en Allemagne. Int Yearbook Ag Leg 1916:324-6 '17  
 As to branding storage eggs. N Y Prod R 47: 165 D 11 '18  
 Attitude of government officials as to enforcement of ruling. W. P. Jones. N Y Prod R 41:897 Mr 22 '16  
 Bad egg crusade. N Y Prod R 42:634 Ag 9 '16  
 Baff licenses revoked. N Y Prod R 45:527 F 20 '18  
 Branding of storage eggs. N Y Prod R 47:97 N 27 '18  
 Branding order relative to cold storage eggs suspended. N Y Prod R 42:749 S 6 '16  
 Case of Read & Garrison; called before the Federal food board to explain transaction in eggs. N Y Prod R 46:73 My 15 '18  
 Changes in New York egg grades. N Y Prod R 41:969 Mr 29 '16  
 Chicago dealers indicted; charge violation of Sherman law in egg deal. N Y Prod R 44: 217 Je 6 '17  
 Chinese egg regulation. N Y Prod R 43:30 N 1 '16  
 Classification as provided by the N. Y. butter and egg exchange. N Y Prod R 41:1098-9 Ap 19 '16  
 Committee appointed to confer about egg branding. N Y Prod R 42:677 Ag 23 '16  
 Egg inspection rules. N Y Prod R 42:892 S 27 '16  
 Egg stamping question; federal food board will not enforce the local regulation. N Y Prod R 46:434 JI 17 '18  
 Illinois bad egg case. N Y Prod R 41:1014-15 Ap 5 '16  
 Illinois egg regulations. N Y Prod R 41:888 Mr 15 '16  
 Important egg rulings by Food administration. N Y Prod R 45:843 Ap 10 '18  
 Important rulings requested. N Y Prod R 45:883 Ap 17 '18  
 Look out for re-sales; regulations as to cold storage eggs different from those applying to fresh eggs. N Y Prod R 46:431 JI 17 '18  
 Louisiana regulates the sale of eggs. Pa Ag Dept Dairy B v 16:13-14 Ag '18  
 Manager Seibels replies to criticism from Food administration of statements in regard to minimum car-lot loading of eggs. N Y Prod R 45:856 Ap 10 '18  
 Must stamp storage eggs. N Y Prod R 44:609 Ag 15 '17  
 New egg rules adopted. N Y Prod R 42:381+ Je 28 '16  
 New profit regulations. N Y Prod R 47:6 N 6 '18  
 New rules governing dealers in cold storage eggs and frozen poultry as amended and formally adopted by Food administration. H. Hoover. N Y Prod R 45:631+ Mr 6 '18  
 Profits on cold storage eggs. N Y Prod R 46: 566 Ag 14 '18  
 Report of special committee on eggs and egg products. J. B. Newman. Assn Am Dairy Food & Drug Offic Pro 1916:144-9  
 Requiring egg buyers to deal honestly with producers. Reliable P J 25:870+ D '18  
 Rules governing transactions in eggs on the New York butter and egg exchange, inc. 37p '17 New York butter & egg exchange, New York city  
 Some important answers to questions arising under the regulations affecting the sale of eggs between dealers of the same class. N Y Prod R 45:923 Ap 24 '18

- Special rules and regulations governing wholesalers, retailers and all other dealers in cold storage eggs. Market News & Exchange B (Ohio Dept. of ag., Columbus) 1: 1-2 Ag 24 '18  
 Stamping order upheld. N Y Prod R 43:373+ Ja 3 '17  
 Standardization of eggs. F. G. Urner. N Y Prod R 42:1+ Ap 26 '16  
 Storage egg swindle. Rural N Y 75:1545 D 16 '16  
 To brand each egg! N Y Prod R 42:533 JI 26 '16  
 Trouble over egg contracts. N Y Prod R 45: 260 D 26 '17  
 White eggs classified. N Y Prod R 42:74 My 3 '16  
 Wicks committee hearings continuing in New York city. N Y Prod R 43:189 N 29 '16

**Statistics**

- Commercial stocks of dried eggs. U S Food Surveys 2:8-9 Ag 31 '18  
 Commercial stocks of eggs. U S Food Surveys 2:6-8 Ag 31 '18  
 Commercial stocks of eggs, including frozen and dried eggs. U S Food Surveys 1:9-14 Je 22 '18  
 Exports from and imports into U. S. for years 1910-1915. Wallaces' F 41:290 F 18 '16  
 Statistics of butter and eggs. See United States Department of agriculture Yearbooks  
**Egg trade conference.** See Poultry and egg trade conference  
**Eggplant lace bugs**  
 Eggplant lace-bug. D: E. Fink. il U S Ag B 239:1-7 '15  
 Eggplant lace-bugs in Porto Rico. R. T. Cotton. J Dept Ag Porto Rico 1:170-3 JI '17  
**Eggplant tortoise beetles**  
 Eggplant tortoise beetle. T: H. Jones. il U S Ag B 422:1-8 '16  
**Eggplants**  
 Eggplant in the North. E. I. Farrington. il Country Gent 83:49 F 23 '18  
 Eggplants as an amateur's crop. Gard M 27: 90 Mr '18  
 Egg plants in Florida. Fla Ag Dept Quar B v 27:14-16 JI '17  
 Experiences with eggplants and peppers; symposium. Market Growers J 20:320-1+ Ap 1 '17  
 Growing eggplants. Prac F 112:170 Ap 15 '16  
 Growing egg plants. M. K. Boyer. Am P Advocate 25:138 Ja '17  
 Home garden; growing eggplants and peppers of quality. il Country Gent 83:42 Ap 20 '18  
 Jersey methods of growing eggplants. F. J. Moreau. Market Growers J 18:251 Ap 1 '16  
 New Jersey methods in growing eggplants. J. C. Hendrickson. Market Growers J 23:3-4 JI 1 '18  
 Of aubergines. H. E. Durham. Gard Chron (Lond) 59:318 Je 17 '16  
 Tomatoes, peppers, eggplant. il Country Gent 82:842 My 5 '17

**Diseases and pests**

- Fruit-rot, leaf-spot, and stem-blight of the eggplant caused by phomopsis vexans. L. L. Harter. bibliog il J Ag Research 2:331-8 Ag '14  
*See also* Eggplant lace bugs; Eggplant tortoise beetles  
**Eggs**  
 About eggs. Wallaces' F 41:880 Je 16 '16  
 As to white eggs and brown eggs. A. F. Hunter. Reliable P J 22:1467-8 F '16  
 Beating the egg market. Outlook (381 4th av., N.Y. 10c) 114:786 D 13 '16  
 Bright prospects for poultry raisers. R. F. Palmer. Fruit-Grower 28:314 JI 1 '17  
 Candling and grading eggs for market. F. W. Kazmeier. il Tex Ag Ext B 10:61-5 '16  
 Certain characteristics of hen eggs. H. Atwood and C. E. Weakley, Jr. W Va Ag Exp B 166:1-35 S '17  
 Digestibility and utilization of egg proteins. W. G. Bateman. Int R Sci & Prac Ag 9,no 5:538-9 My '18



**Eggs—Continued**

Dollar eggs and the farmer's opportunity. F. V. L. Turner. *il* *Prac F* 112:435 D 1 '16  
 Egg production and waste. *Ill Ag Dept B* 266 4p '18  
 Eggs and egg contests. *Fruit-Grower* 27:70 Ja 15 '16  
 Eggs and poultry. *Am P J* 48:789 J1 '17  
 Eggs and their uses as food. *Nat Stock & F* 40:264 Je 3 '16  
 Eggs and their value as food. C. F. Langworthy. *U S Ag B* 471:1-29 '17; *Summaries. Am P Advocate* 25:274 Mr '17; *Am P J* 48:430 Mr '17  
 Eggs as food. *Am P J* 48:638 My '17  
 Eggs as food. J. Ag (Quebec) 20:199 Mr '17  
 Eggs from incubators. *N Y Prod R* 42:118 My 10 '16  
 Eggs in the diet. *Pa Ag Dept Dairy B v* 15:11-14 Ag '17  
 Food value of eggs. T. F. McGrew. *Am P Advocate* 26:564 S '18  
 Fresh eggs. R. C. Rogers. *Ohio F* 139:46 Ja 13 '17  
 Good eggs—and others. E. Rogers. *Nat Stock & F* 42:204 My 18 '18  
 Great importance of drinking water for laying hens. D. F. Laurie. *J Dept Ag S Australia* 20:613-22 Mr '17  
 Help save a million dollars. H. H. Steup. *Purdue Ag* 12:555-6 Je '18  
 Keeping quality of eggs. J. Vanderleck. *J Ag (Quebec)* 21:28 Ag '17  
 Latest advice on proper care of eggs for market. *il* *Reliable P J* 25:328 My '18  
 Making of an egg. *J Ag (Quebec)* 20:ix D '16  
 Manufacture of an egg. I. J. Mathews. *il* *Ohio F* 137:234 F 12 '16  
 Market eggs. M. A. Jull. *il* *J Ag (Quebec)* 20:82-3 O '16  
 Milk versus eggs. *il* *Ohio F* 140:332 O 13 '17  
 More eggs and pork. *Weekly N L* 5:6 Ag 22 '17  
 Nutritive value of eggs. H. D. Pease. *N Y Prod R* 43:1018, 1062; 44:22 Ap 18-My 2 '17  
 Our two billion egg waste. H. A. Roberts. *il* *Country Gent* 83:11+ Ja 19 '18  
 Producing guaranteed eggs. R. H. Williams. *Ariz Ag Exp Timely Hints* no 114:1-8 '16  
 Relation of simultaneous ovulation to the production of double-yolked eggs. M. R. Curtis. *il* *J Ag Research* 3:375-86 F '15  
 Report of special committee on eggs and egg products. J. B. Newman. *Assn Am Dairy Food & Drug Offic Pro* 1916:144-9  
 Southern egg. J. K. Morrison. *Country Gent* 81:1593 Ag 26 '16  
 Success in the production of winter eggs means good profits. J. B. Morman. *Reliable P J* 22:1235+ Ja '16  
 Telling the age of eggs. S. L. Bastin. *il* *St Nicholas* (353 4th av., N.Y. 25c) 44:458 Mr '17  
 To tell the age of an egg. S. L. Bastin. *il* *Field* 11 26:674 Ag '16  
 Weed out the male birds. *J Ag (Quebec)* 21:29 Ag '17  
 Weigh the eggs. F. S. Dickerson. *Am P J* 48:557 Ap '17  
 What about the dirty and cracked eggs. F. S. Jacoby. *il* *Ohio F* 141:693 My 25 '18  
 What the size of an egg means. D. E. Warner and W. F. Kirkpatrick. *il* *J Heredity* 7:128-31 Mr '16  
 Wide-awake girls learn about eggs. Mrs W. N. Hutt. *Prog F* 31:446 Mr 25 '16

See also Bird's eggs; Cookery—Eggs; Embryology; Ostrich eggs; Poultry; also headings beginning Egg and Eggs

**Bacteriology**

Bacteria in fresh and preserved eggs. W. D. Caldwell; O. M. Mason. *Int R Sci & Prac Ag* 7,no 3:434-5 Mr '16  
 Bacterial infection of fresh eggs. P. B. Hadley and D. W. Caldwell. *bibliog R I Ag Exp B* 164:1-70 '16  
 Bacteriological and chemical study of commercial eggs in the producing districts of the Central West. M. E. Pennington and others. *il* *U S Ag B* 51:1-77 '14

Investigations into the changes undergone by eggs. *Int R Sci & Prac Ag* 8,no 6:937-9 Je '17

**Composition**

\* Determination of loosely bound nitrogen as ammonia in eggs. N. Hendrickson and G. C. Swan. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:614-17 Ag '18  
 Nutrients in feed and egg. W. A. Lippincott. *Country Gent* 81:520 Mr 4 '16

**Costs**

California egg production costs. *N Y Prod R* 45:341 Ja 9 '18  
 Cost of egg production. D. F. Laurie. *J Dept Ag S Australia* 21:583-5 F '18  
 Feed cost of egg production; results of three years' experiments at the Government poultry farm. H. M. Lamon and A. R. Lee. *il* *U S Ag B* 561:1-42 '17  
 Feed cost of producing eggs. *N Y Prod R* 44:728 S 5 '17; Same. *Nat Stock & F* 41:590 S 15 '17; Same. *Weekly N L* 5:10 S 19 '17; *Jersey B* 36:1731 O 31 '17  
 Feeding for egg production. *Prog F* 33:7 Ja 5 '18  
 Fifty-two cents a dozen. H. A. Roberts. *il* *Country Gent* 83:10+ My 4 '18  
 Interesting studies in egg-production costs and profits. J. Dryden. *Reliable P J* 25:608+ S '18  
 Know the cost of egg production. *Wallaces' F* 43:761 My 3 '18  
 Net cost of producing a dozen eggs. A. C. Drury; A. J. Myers. *Am P J* 47:853-5 Je '16  
 Present cost of egg production. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 6, no 2:1-5 N '17  
 Production cost of a dozen eggs. J. F. Robinson. *Am P J* 47:34-5 Ja '16  
 Production cost of a dozen eggs—a reply. G. A. Hill. *Am P Advocate* 24:318+ Mr '16  
 Test compares cost of egg producing feeds. *Am P Advocate* 25:706 N '17  
 See also Poultry—Costs

**Grading**

Canadian egg grades. *Ag Gaz of Canada* 5:455-6 My '18; Same. *N Y Prod R* 46:18 My 1 '18; Same cond. *J Ag (Quebec)* 22:12 J1 '18  
 Egg case plan and its use in connection with the establishment of a system of quality payment. J. H. Hare. 15p *il* '16 *Canada Ag Live stock and live stock products act; the grading and marking of eggs. Ag Gaz of Canada* 5:758-9 Ag '18  
 Marketing the surplus eggs. P. T. Hines. *Prog F* 33:23 Ja 5 '18  
 Rules governing transactions in eggs on the New York butter and egg exchange, inc. 37p '17 *New York butter & egg exchange, New York city*  
 Standardizing eggs. Mr and Mrs. G. R. Shoup. *il* *Western Wash Ag Exp B v* 5:102-5 O '17  
 To grade candled eggs. *N Y Prod R* 44:754 S 12 '17  
 Uniform grades for butter and eggs. *N Y Prod R* 44:257+ Je 13 '17

**Marketing**

Bad eggs banned. M. Purvis. *Breeder's Gaz* 69:671 Mr 23 '16  
 Break the silence and boost for eggs. P. T. Woods. *Am P J* 48:842-3 Ag '17  
 Care of eggs for market. M. C. Kilpatrick. *il* *Ohio Ag Ext B v* 12,no 1 20p '16-'17  
 Confessions of an egg middleman. *Rural N Y* 75:625 Ap 15 '16  
 Creamery utilized as egg market. E. H. Farrington. *O Judd Farmer* 60:6 Ja 8 '16  
 Egg case plan and its use in connection with the establishment of a system of quality payment. J. H. Hare. 15p *il* '16 *Canada Ag Egg marketing. F. G. Urner. N Y Prod R* 42:954 O 4 '16  
 Egg marketing conditions. P. G. Riley. *Purdue Ag* 11:21 F '17  
 Egg marketing costs vary. *O Judd Farmer* 64:9 Ja 12 '18

**Eggs—Marketing—Continued**

Egg producers annually lose millions of dollars. A. J. Ward. Reliable P J 24:772 N '17  
 Egg situation today. H; F. Thurston. il Am Coop J 13:277-8 Mr '18  
 Egg trade and co-operation in Russia. Int R Ag Econ 81:7-11 S '17  
 Eggs by parcel post. G; H. Dacy. il Country Gent 82:1069 Je 23 '17  
 Eggs by parcel post. Mrs. G; L. Russell. il Fruit-Grower 28:79 F 1 '17  
 Eggs by weight. L. A. Congdon. il Country Gent 81:1274 Je 24 '16  
 Eggs command stiff premium. O Judd Farmer 60:26 Ja 8 '16  
 Eggs direct to market. A. M. Kimball. il Country Gent 83:9 F 16 '18  
 Eggs on a quality basis. L. A. Congdon. il Country Gent 81:898 Ap 22 '16  
 Eggs—past, present, and future. J Ag (Quebec) 20:200 Mr '17  
 Eggs—selling them to advantage. F. V. L. Turner. Prac F 113:366 N 1 '17  
 Eggs with a trade-mark. A. M. Latham. Country Gent 81:1452 Jl 29 '16  
 Farm wife's hens. Mrs. G; L. Russell. il Country Gent 81:213 Ja 29 '16  
 Fighting the egg speculator. W. V. Woehlke. il Country Gent 83:9 F 2 '18  
 Getting the most for market eggs. B. Sando. Field II 27:632 Ag '17  
 Great egg-buying reform brought on by war conditions. map Reliable P J 25:545+ Ag '18  
 Great leaks in egg marketing. O Judd Farmer 64:8 F 2 '18  
 Handling eggs. N Y Prod R 42:542 Jl 26 '16  
 How an egg gets to market. J. L. Lovett. Kimball's D F 15:582 S 1 '17  
 How I developed a parcel post egg trade. W. A. Bickel. System on the Farm 1:77 Ap '17  
 How I get more for eggs. A. Maloney. il System on the Farm 1:336 N '17  
 Iowa eggs. W. B. Barney. N Y Prod R 44:910 O 3 '17  
 Marketing eggs. F. T. Evans. Purdue Ag 10:27 F '16  
 Marketing eggs. B. F. Kaupp. Prog F 31:595 Ap 29 '16  
 Marketing eggs by parcel post. L; B. Flohr. il Farmers' B 830:1-22 '17; Excerpts. Ag Digest 2:758 D '17  
 Marketing eggs by parcel post. L. A. Richardson. Am P J 47:342 F '16  
 Marketing eggs for profit. A. E. Vandervort. Am P Advocate 25:380 Ap '17; Same. Am P Advocate 25:716 N '17  
 Marketing farm eggs. G. Shockey. Rural N Y 77:825 Je 22 '18  
 Not how many, but what food value. H. W. Ashby. Am P J 48:30 Ja '17  
 Parcel post egg shipments. J. C. Wickham. Rural N Y 75:313 F 19 '16  
 Poultryman's complaint; do as the middleman does and put eggs into storage. H. A. Roberts. il Country Gent 82:1677-8 N 3 '17  
 Private customer; some hints to the egg man who is cultivating city-home trade. H. G. Forst. il Country Gent 83:26 Ag 31 '18  
 Producing and marketing eggs. O Judd Farmer 60:10 F 5 '16  
 Quality payment and uniform system of inspection. H. R. Gray. J Ag (Quebec) 20:136 D '16  
 Sanitary marketing of eggs. Mrs. W. P. Henry. Am P J 49:714-15 Ag '18  
 Size of eggs of vital importance to producer. T. F. McGrew. Am P Advocate 26:483 Jl '18  
 Strictly fresh eggs. I. H. Motes. il Ohio F 137:402 Mr 11 '16  
 To the last egg. H. A. Roberts. il Country Gent 83:8-9+ Jl 13 '18  
 Trail of an Indiana egg. A. G. Philips. Country Gent 82:450 Mr 3 '17

See also Egg marketing associations

**Packing**

Attention to egg packing. O Judd Farmer 60:15 Ap 1 '16  
 Egg damage hearings finished. N Y Prod R 46:2+ My 1 '18  
 Eggs in cases; proper packing. J. K. Morrison. il Country Gent 81:1237 Je 17 '16

How shall we pack eggs for hatching? E. Sweet. Am P J 47:497 Mr '16  
 Our two billion egg waste. H. A. Roberts. Country Gent 83:32 F 9 '18  
 Packing eggs for shipment by parcel post. C. E. Abbott. il Reliable P J 23:595 Jl '16  
 Prevention of breakage of eggs in transit when shipped in cartons. M. E. Pennington and others. il U S Ag B 664:1-31 '18  
 Requirements for packing and weight of eggs. N Y Prod R 41:1058 Ap 12 '16  
 Stipulations for egg packing; Food administration issues regulations as to cases and fillers. H. Hoover. N Y Prod R 47:62 N 13 '18  
 Storage egg. Wallaces' F 42:581 Mr 30 '17  
 See also Egg cases

**Preservation**

Colytic process for preserving eggs and removing taint from stale eggs. N Y Prod R 45:158 D 5 '17  
 Eggs for preserving use must be beyond suspicion. Weekly N L 6:4 Ag 14 '18  
 Eggs for winter use. C; J. Jones. Nat Stock & F 42:353 Jl 6 '18  
 Eggs valuable food. Green's Fruit Grower 36:14 Ag '16  
 Experiments in preserving broken eggs. G. Eichelbaum. Int R Sci & Prac Ag 7,no 8:1187-8 Ag '16  
 Home preservation of eggs. Purdue Ag 11:46-7 Je '17  
 Home preservation of eggs. R. B. Hannas. Rural N Y 77:512, 548 Ap 6-13 '18  
 Home preserving of eggs by waterglass solution. H. Embleton. Okla Ag Ext C 51 4p '17; Same. Kimball's D F 15:730 O 1 '17  
 How long will Easter eggs keep? Scientific Am (233 Broadway, N.Y. 10c) 116:256 Mr 10 '17  
 How to preserve eggs. Weekly N L 5:8 F 20 '18  
 Keep eggs for use next winter. Prog F 31:452 Mr 25 '16  
 More about keeping eggs in water glass. Prog F 31:659 My 13 '16  
 More about preserving eggs for winter use. G; H. Lee. il Reliable P J 25:641-2 S '18  
 More egg money. C. Pettit. Rural N Y 75:789 My 20 '16  
 Poultry yard in wartime. H. R. Lewis. Country Gent 82:1006 Je 9 '17  
 Preservation of eggs. J Ag (Quebec) 19:246 My '16  
 Preservation of eggs. F. C. Hare. Am P J 48:752 Je '17  
 Preservation of eggs. J. Vanderleek. J Ag (Quebec) 21:157 Ap '18  
 Preservation of eggs in water glass. Prog F 33:219 F 16 '18  
 Preserve eggs. Weekly N L 4:11 Ap 18 '17  
 Preserve eggs for better prices. Prog F 32:567 My 5 '17  
 Preserve eggs for winter use. J. B. Hayes and F. E. Mussehl. il Wis Ag Ext C 74 4p '17  
 Preserve the surplus eggs during April, May and June. Reliable P J 25:216 Ap '18  
 Preserving eggs. Wallaces' F 43:858 My 24 '18  
 Preserving eggs. T. D. Beckwith. Ore Ag Ext B 190:1-4 '17  
 Preserving eggs. A. E. Vandervort. Am P Advocate 25:463 My '17  
 Preserving eggs for home use. G; S. Templeton. Ala Ag Exp C 36:39-42 '17; Same. Prog F 33:24 Ja 5 '18  
 Preserving eggs for the home. B. Adler. Utah Ag Exp C 25:1-8 '17  
 Putting down eggs. Green's Fruit Grower 36:14 Jl '16  
 Spring eggs at fall prices. F. V. L. Turner. Prac F 112:142 Ap 1 '16  
 Sterilized fresh eggs. H. Blin. Int R Sci & Prac Ag 7,no 12:1844-6 D '16  
 Study of the preparation of frozen and dried eggs in the producing section. M. E. Pennington and others. il U S Ag B 224:1-99 '16; Excerpts. Int R Sci & Prac Ag 7,no 11:1699-703 N '16  
 Two methods of preserving eggs. G; A. Olson. Wash Ag Exp Pop B 114 4p '18  
 See also Eggs, Canned



Eggs—Continued

Prices

Annual slump in egg prices. O Judd Farmer 64:17 Mr 9 '18  
 Discuss price fixing; egg merchants meet with food administrator. N Y Prod R 45:325 Ja 9 '18  
 Egg boycotting. Ohio F 138:628 D 23 '16  
 Egg prices should be governed by weight. H. B. Cronkhite. Am P J 48:822 Jl '17  
 Egg prices will be regulated by weight. E. J. Stoddard. Am P J 47:1295 D '16  
 Egg year of 1917-'18; an unprecedented price level maintained. F. G. Urner. N Y Prod R 45:666+ Mr 6 '18  
 Excellent promise in egg market. O Judd Farmer 63:4 S 22 '17  
 Fifty-two cents a dozen. H. A. Roberts. il Country Gent 83:10+ My 4 '18  
 Just understanding and a square deal. P. T. Woods. Am P J 48:22-6 Ja '17  
 Popular illusions regarding the price of eggs. L. D. H. Weld. Coop Manager & F 6:32-4 Ja '17  
 Poultryman's complaint. H. A. Roberts. il Country Gent 82:1553+ O 13 '17  
 Present high prices for market poultry and eggs. G. M. Curtis. Reliable P J 23:880-1 N '16  
 Reasons for higher prices. W. S. Moore. N Y Prod R 44:318+ Je 20 '17  
 Right way to increase production. P. T. Woods. Am P J 48:909-10 S '17  
 Storage egg prices. N Y Prod R 45:391 Ja 23 '18  
 Storage egg regulation. N Y Prod R 45:357 Ja 16 '18  
 Weight, not numbers, egg value standard. T. H. Boughton. Am P J 47:1194 N '16  
 What is wrong with the egg producer? Mrs H. A. Daniels. Am P J 48:910+ S '17  
 Why eggs are dear. Am P Advocate 25:340 Mr '17  
 Wide range of egg prices. O Judd Farmer 60: 8 My 13 '16

Production

See Poultry—Egg production

Standards

Classification of eggs. N Y Prod R 42:208 My 24 '16  
 Standardizing Canadian eggs. J Ag (Quebec) 19:157 Ja '16

Storage

Avoiding mold in storage eggs. Country Gent 81:1306 Jl 1 '16  
 New reason for bad eggs. Country Gent 81: 68 Ja 8 '16  
 Penn. storage law suspended in respect to provisions regarding cold stored eggs. N Y Prod R 45:185 D 12 '17  
 Poultryman's complaint; do as the middleman does and put eggs into storage. H. A. Roberts. il Country Gent 82:1677-8 N 3 '17  
 Sealed-shell egg machine and process. N Y Prod R 41:824 Mr 8 '16

Testing

Candling eggs. D. J. Frazier. N Y Prod R 43: 86 N 8 '16  
 Candling eggs, easy to do—best way to grade product. Am P Advocate 26:495 Jl '18  
 Candling eggs increases their market value. H. B. Potter. Prog F 31:1317 N 11 '16  
 Determining the freshness of eggs by photography. G. A. Le Roy. J Franklin Inst (Franklin Inst., Philadelphia 50c) 186:278 S '18  
 Discussion of means of enforcing egg laws and regulations with special reference to egg candling. Assn Am Dairy Food & Drug Offic Pro 1918:171-4  
 Efficiency of commercial egg candling. M. K. Jenkins and C. A. Bengston. U S Ag B 702:1-21 '18  
 Great need to conserve this season's egg crop. W. A. Brown and W. H. Ault. il Reliable P J 25:324-5 My '18  
 How to candle eggs. M. E. Pennington and others. il U S Ag B 565:1-20, pl 1-12 '18

New and quick method of determining the age of eggs. Int R Sci & Prac Ag 7,no 11: 1698 N '16

Testing eggs. Wallaces' F 41:130 Ja 28 '16  
 Testing eggs by photography. J. Boyer. il Scientific Am (233 Broadway, N.Y. 10c) 118:362 Ap 20 '18

See also Egg candlers

Transportation

Commissioner Dillon protests against regulation of express companies. N Y Prod R 44: 502 Jl 25 '17  
 Damage claims hearings; complaint of National association taken up by Interstate commerce commission at Chicago. N Y Prod R 45:679 Mr 13 '18  
 Effective safeguard against breakage of eggs in transit; description of the Cutler-Mone-smith shock-absorbing device. N Y Prod R 44:1010 O 17 '17  
 Egg damage claim matters. N Y Prod R 44: 609 Ag 15 '17  
 Egg damage conference. N Y Prod R 42:713+ Ag 30 '16  
 Egg damage hearing resumed; railroad rules governing inspections and exemption up to five per cent again under fire. N Y Prod R 45:923 Ap 24 '18  
 Egg damage hearings finished. N Y Prod R 46:2+ My 1 '18  
 Egg damage rules. N Y Prod R 43:337 D 27 '16  
 Egg trade wins; justice of their contentions in complaint against egg damage rules upheld by Examiner Thurtell. N Y Prod R 46: 723 S 18 '18  
 Express companies lose. N Y Prod R 45:73 N 21 '17  
 Express companies yield. N Y Prod R 45:221 D 19 '17  
 First essential; refrigerator cars for egg shipment. N Y Prod R 42:851 S 20 '16  
 Hearing on egg damage. N Y Prod R 44:921 O 10 '17  
 Heavy tax on egg trade; waste by breakage in transit. N Y Prod R 44:534 Ag 1 '17  
 How shall we pack eggs for hatching? E. Sweet. Am P J 47:497 Mr '16  
 Loading egg cars. N Y Prod R 46:898 O 9 '18  
 New effect of railroad breakage. N Y Prod R 42:594 Ag 2 '16  
 One way to send butter and eggs to market. E. D. Abernethy. Hoard's D 53:972 Jl 13 '17  
 Packing hatching eggs for safe transportation. F. L. Sewell. il Reliable P J 24:968 Ja '13  
 Prevent egg losses by proper handling and shipping. Weekly N L 5:6 Je 5 '18  
 Preventing egg breakage. N Y Prod R 42:450 Jl 5 '16  
 Prevention of breakage of eggs in transit when shipped in carlots. M. E. Pennington and others. il U S Ag B 664:1-31 '18  
 Protest on egg weight change. N Y Prod R 41:559 Ja 26 '16  
 Question of cartons; majority of egg dealers regard them as a necessity and a means of conservation. N Y Prod R 46:715 S 11 '18  
 Ruined by careless express handling. Rural N Y 75:909 Je 24 '16  
 Shipping eggs by parcel post. Rural N Y 76: 424 Mr 17 '17  
 Shipping eggs for hatching by parcel post. F. L. Sewell. il Reliable P J 25:683 O '18  
 Shipping fertile eggs. Country Gent 82:264 F 10 '17  
 Working for conference with rail road freight carriers. N Y Prod R 42:558 Jl 26 '16

Eggs, Canned

New kind of canned eggs. N Y Prod R 42:330 Je 14 '16

Eggs, Dried

Photographic analysis of dried or fresh eggs; Dried eggs. Int R Sci & Prac Ag 9,no 2: 246-7 F '18

Eggs, Duck

Marketing Indian runner eggs. Country Gent 81:517 Mr 4 '16

Eggs, Hatching

Candling eggs for incubation. O Judd Farmer 62:27 Mr 3 '17

**Eggs—Hatching—Continued**

- Care of sitting hen. Weekly N L 4:1 Mr 21 '17; Same. Am P Advocate 25:386 Ap '17
- Cold-weather hatching eggs. Country Gent 81:336 F 12 '16
- Distribution of eggs to the school pupils. Ag Gaz of Canada 4:674-80 Ag '17
- Eggs for hatching. F. F. Hunstock. Kimball's D F 15:69 F 1 '17
- Eggs for incubators. L. H. Cobb. Nat Stock & F 41:978 Ja 5 '18
- Gathering hatching eggs. Country Gent 81:215 Ja 29 '16
- Hatching and raising chickens. R. B. Sando. il Field 11 27:206 Mr '17
- Hatching and rearing chicks. F. C. Hare. Am P J 48:511+ Ap '17
- Hatching egg. L. E. Keyser. Am P Advocate 24:338 Mr '16
- Hatching season. M. K. Boyer. Am P Advocate 26:244-5 Mr '18
- Hen power—the good old way. M. K. Boyer. Am P Advocate 25:176 F '17
- How shall we pack eggs for hatching? E. Sweet. Am P J 47:497 Mr '16
- Incubation of hen eggs. H. Atwood. bibliog W Va Ag Exp C 25:1-24 '17
- Methods used in producing hatching eggs on one of the Pittsfield poultry farms company branch farms. il Am P Advocate 26:246-7 Mr '18
- Nature's hatching season. G. H. Barnes. Reliable P J 23:421 My '16
- Packing hatching eggs for safe transportation. F. L. Sewell. il Reliable P J 24:368 Ja '18
- Problem of producing hatchable eggs. M. H. Decker. Am P J 48:576+ Ap '17
- Production of eggs for hatching. H. Atwood. bibliog W Va Ag Exp C 24:1-15 '16
- Rack for turning eggs. Country Gent 81:752 Ap 1 '16
- Scheme for the increase of poultry production. J Bd Ag 23:71-3 Ap '16
- Selecting and shipping eggs for hatching. A. E. Vandervort. Am P Advocate 26:204-5 F '18
- Selecting eggs for hatching. Kimball's D F 16:181 Mr 1 '18
- Selecting eggs for hatching. M. Purvis. Breeder's Gaz 73:427 F 28 '18
- Selecting eggs for hatching. H. D. White. Am P Advocate 26:174 F '18
- Selection and care of hatching eggs. L. E. Card. Am P Advocate 24:351 Mr '16
- Shipping eggs for hatching by parcel post. F. L. Sewell. il Reliable P J 25:683 O '18
- Some of the advantages of buying eggs for hatching. Reliable P J 25:205 Ap '18
- Spring hatch. Hoard's D 53:396 Mr 23 '17
- Storing eggs for hatching. C. H. Chesley. Ohio F 141:202 F 9 '13
- Successful incubation. J Ag (Quebec) 20:190-1 Mr '17
- Test hatching eggs. Weekly N L 5:2 Mr 13 '18
- What is the real value of eggs for hatching? J. S. Williamson. Am P Advocate 24:584 Je '16

**Eggs, Ostrich.** See Ostrich eggs

**Eggs, Size of**

- Fecundity of hens in relation to size of egg. E. Brown. J Bd Ag 23:230-3 Je '16
- Studies in the physiology of reproduction in the domestic fowl; dwarf eggs. R. Pearl and M. R. Curtis. bibliog il J Ag Research 6:977-1042 S 18 '16; Same cond. il Maine Ag Exp B 255:289-328 '16; Summary. Int R Sci & Prac Ag 8,no 1:119-22 Ja '17

**Eggs, Substitutes for**

- Egg savers now looting New York, have been driven from Pennsylvania. A. W. McCann. Pa Ag Dept Dairy B v 16:21-5 Ag '18
- Egg substitutes and so-called egg savers. C. H. LaWall. Pa Ag Dept B v 1 (Gen. B. 314):1-19 Je '18
- Egg substitutes in Ohio; rules relating to sale. N Y Prod R 45:554 F 20 '18
- Egg-substitutes shown to be comparatively worthless. il Reliable P J 25:771+ N '18
- Fraudulent egg substitutes. N Y Prod R 45:866 Ap 10 '18

Fraudulent egg substitutes and egg savers. C. H. LaWall. Pa Ag Dept Dairy B v 15:3-7 Je '17

**Egypt.** See subhead Egypt under special subjects, e.g. Agriculture—Egypt

**Egyptian clover.** See Berseem

**Egyptian cotton.** See Cotton—Varieties

**Egyptian horticultural society**

Exhibit, Cairo, Nov. 9, 1917. C: Shaw. Gard Chron (Lond) 63:2 Ja 5 '18

**Egyptian sycamore.** See Sycamore figs

**Egyptian wheat.** See Sorghum; Wheat

**Eight-hour law, Railroad**

Other side. Hoard's D 52:582 N 17 '16

**Eight-party line; story.** F. Carroll. il Country Gent 83:20 D 14 '18

**Eight-spotted foresters (insects)**

Outbreak of the eight-spotted forester, alypia octomaculata fabr., in New Haven, Conn. Q. S. Lowry. J Econ Entom 10:47-8 F '17; Conn State Ag Exp Rep 1916,pt 2:118-22 '17

**Elæagnus hortensis.** See Oleasters

**Elaphidion villosum.** See Twig pruners

**Elections****United States**

What ailed the western states. Rural N Y 75:1514, 1537, 1575 D 9-23 '16

**Electric batteries.** See Storage batteries

**Electric conductivity**

Simplified apparatus for measuring the conductivity of electrolytes. R. P. Hibbard and C. W. Chapman. bibliog il Mich Ag Bd Rep 1916:556-91

**Electric cooking**

Electric cooking appliances. R. G. Kloeffer. il Kan Ag Coll (Manhattan) B v 1,no 20:1-70 D 1 '18

Utilitarian decorations. il Country Life 29:94 F '16

**Electric lighting**

Care of electric light plant. C. M. Adams. Ohio F 139:773 Je 9 '17

Electric light plant driven by small water power. il Rural N Y 76:611 Ap 28 '17

Electric lighting systems for farm use. C. H. Roth. Am Soc Ag Eng Trans 9:34-40 '16

Electric lights from water power. G. H. Zouck. il Country Gent 81:511 Mr 4 '16

Farm electric lighting. P. L. Edinger. il Penn State F 10:4-5+ Ja '17

Farm electric lighting equipment. X. Caverno. il Field 11 26:841-2 O '16

Farm-lighting plants. S. Miller. Electrical Review (515 Monadnock blk., Chicago 15c) 73:182-3 Ag 3 '18

Farm lighting plants being sold by electrical contractors. il Electrical Review (515 Monadnock blk., Chicago 15c) 73:187-8 Ag 3 '18

Home electric light plant. Fruit-Grower 27:320 Je 1 '16

Home electric light plants. F. J. St John. il Am Fruit Grower 38:3 O '18

Locating the light plant. C. M. Adams. Ohio F 141:299 Mr 2 '18

Mayhew farm-lighting plants. Electrical Review (515 Monadnock blk., Chicago 15c) 72:535 Mr 23 '18

Practical farm electric light. G. W. Iverson. O Judd Farmer 61:16 N 4 '16

Rural lighting plants. C. C. Stedman. N Y Prod R 41:430-1 Ja 5 '16

Ruralite farm-lighting plant. il Electrical Review (515 Monadnock blk., Chicago 15c) 72:128-9 Ja 19 '18

Safest and best of all farm lights. J. R. Stone. il Power F 25:8 D '16

Standard ratings and specifications for low voltage electric lighting plants; with discussion. Am Soc Ag Eng Trans 10,no 1:90-7 '17

Western electric farm lighting equipment. il Electrical Review (515 Monadnock blk., Chicago 15c) 73:591-2 O 12 '18

Why electric light for the farm? J. R. Stone. Power F 26:24 D '17

Wiring for electricity. C. M. Adams. il Ohio F 139:624 Ap 28 '17

See also Electricity on the farm



**Electric plants**

Central station versus isolated plants; electricity on the farm. H. F. Good. *Am Soc Ag Eng Trans* 11:55-67 '18  
Electric power for \$36 a year. F. M. White. *il O Judd Farmer* 65:523 D 7 '18

**Electric power**

Electric power for farm field work. J. B. Davidson and F. E. Boyd. *Power F* 27:49 My '18  
Electric power saves labor. F. M. White. *il O Judd Farmer* 64:619 Je 15 '18  
Some experiments in the use of electric power for field work. J. B. Davidson. *il Am Soc Ag Eng Trans* 11:109-13 '18; Same. *Power F* 27:49 My '18  
Use of electric power in dairy products plants. *il Creamery* 5:17-19 D '16

**Electric service, Rural**

Linking up rural communities in Iowa. *il map Electrical Review* (515 Monadnock blk., Chicago 15c) 72:583-6 Ap 6 '18  
Serving the country customer in war-times. *Electrical World* (10th av at 36th st, N.Y. 10c) 72:558-9 S 21 '18  
Status of rural service in Wisconsin. *Electrical Review* (515 Monadnock blk., Chicago 15c) 72:601-3 Ap 6 '18; Same cond. *Electrical World* (10th av at 36th st, N.Y. 10c) 71:985-7 My 11 '18

**Electric switches**

Three point switch for a dynamo and storage battery system. L. B. Robbins. *plan Country Life* 33:106 Mr '18

**Electric tractors. See Tractors, Electric**

**Electricity. See Electric conductivity; Electric cookery; Electric lighting; Electric power; Electric service, Rural; Electric switches; Electricity on the farm; Electrohorticulture; Electrolytes; Electrotherapeutics; X rays**

**Electricity, Static**

Ignition of gasoline by electricity. *Power F* 25:22-3 S '16

**Electricity on the farm**

About electric lighting. *Power F* 26:21 My '17  
Application of electricity to agriculture in France. *Int R Sci & Prac Ag* 9,no 4:485-8 Ap '18  
Bringing electricity to the farm. C. M. Harger. *il Country Gent* 83:11 Ap 27 '18  
Central station versus isolated plant: electricity on the farm. H. F. Good. *Am Soc Ag Eng Trans* 11:55-67 '18  
Co-operative thrashing in Kansas; electricity becomes a servant. M. B. Taylor. *il Rural N Y* 75:1199 S 16 '16

**\* Cutting power bills on the irrigated farm. *il Sci Am* (233 Broadway, N.Y. 10c) 119:471 D 14 '18**

Electric equipment for the farm: with discussion. W. K. Freudenburg. *il Am Soc Ag Eng Trans* 10,no 2:83-93 '17; Same. *Power F* 26:24+ Mr '17

Electric farm. J. T. Kelly. *il Country Gent* 81:1441 Jl 29 '16

Electric light and power for the farmer. *il Sci Am* (233 Broadway, N.Y. 10c) 119:11 Jl 6 '18

Electric-lighted henhouses. C. A. Lyman. *Country Gent* 83:23 Ja 19 '18

Electric power for \$36 a year. F. M. White. *il O Judd Farmer* 65:523 D 7 '18

Electrical chicken farm. *il Sci Am* (233 Broadway, N.Y. 10c) 119:153 Ag 24 '18

Electricity—a real farm power. *il Field* 11 27: 27 Ja '17

Electricity an aid in farming. A. Marple. *Farm Eng* 3:281 Je '16

Electricity and agriculture; abstract. H. Cahen. *Electrical World* (10th av at 36th st, N.Y. 10c) 70:1204 D 22 '17

Electricity and electric lighting on the farm. A. E. Waller. *il Fruit-Grower* 27:383, 415, 447 Ag 1, S 1, O 1 '16; Same. *Prac F* 112: 293, 323, 357 Ag 1, S 1, O 1 '16; Same. *Kimball's D F* 14:499, 525, 622 Ag 15, S 1, O 1 '16

Electricity and the farmer. H. R. Beyer. *il Purdue Ag* 11:35-6 Mr '17

Electricity appeals to the farm hand. *il Prac F* 113:406 D 1 '17  
Electricity betters dairy farms. A. H. Kolbe. *il Jersey B* 35:1273 Ag 16 '16  
Electricity for farm homes. H. C. Ramsower. *Ohio F* 139:596 Ap 21 '17  
Electricity for farm power. *il Kimball's D F* 16:204 Mr 15 '18  
Electricity for the farm home. *il Am Coop J* 14:75 N '18  
Electricity for the farm home. *Farm Eng* 4:50 S '16  
Electricity for the farmer. *Power F* 25:40 My '16  
Electricity for the home. M. B. Taylor. *Rural N Y* 75:1578 D 23 '16  
\* Electricity in the farm home. E. E. White-horne. *il House Beautiful* (41 Mt Vernon st, Boston 25c) 44:338 N '18  
Electricity on the farm. M. Creese. *il Md Ag Ext B* 9:147-76 '17  
Electricity on the farm. D; R. Shearer. *Farm Eng* 7:8-9 Ap '18  
Electricity raises rice to save wheat. *Electrical World* (10th av at 36th st, N.Y. 10c) 72:449-50 S 7 '18  
Electricity reduces labor. Mrs H. Denlinger. *il Nat Stock & F* 41:870 D 8 '17  
Experiments in the use of electric power for field work on the farm. J. H. Davidson and F. E. Boyd. *il Gen Electrical Review* (Schenectady, N.Y. 20c) 21:130-3 F '18  
Extending daylight for the hen. M. B. Dean. *Rural N Y* 77:513 Ap 6 '18  
Farm electric lighting equipment. X. Caverno. *il Field* 11 26:841-2 O '16  
Farm power from farm streams. S; O. Rice. *il Country Gent* 83:13 Mr 23 '18  
Farmer's electrical hand book. (2d ed.) 160p *il* 50c '17 Western electric co., 500 S. Clinton st., Chicago  
Farming by electricity. F. Koester. *il Field* 11 28:235-6 Ap '18  
How electricity cuts out farm waste. F. J. St John. *il Power F* 27:7-8 F '18  
How we make use of electricity on our farm. W. F. Black. *il Power F* 27:9 S '18  
Hydro-electric power on the farm. J. W. Purcell. *il Ag Gaz of Canada* 5:292-8 Mr '18  
Inexpensive installation for farmers' local power lines. *il Electrical Review* (515 Monadnock blk., Chicago 15c) 71:559 S 29 '17  
Installation of farm lighting plants. G; W. Hill. *Electrical Review and Western Elec* (608 S. Dearborn st., Chicago 10c) 69:975-6 D 2 '16  
Let there be light. P. S. Rose. *il Country Gent* 83:1+ Ag 10 '18  
Light and milker combination. *il Kimball's D F* 16:491 Je 15 '18  
Light from a windmill. N. D. Rand. *il Country Gent* 83:17 Mr 30 '18  
Light where and when you want it. L. W. Lighty. *il Nat Stock & F* 40:546 Ag 26 '16  
Longer day for hens. *Nat Stock & F* 41:730 O 27 '17  
Milker and electric power. *il Kimball's D F* 16:498 Je 15 '18  
More eggs by lighting chicken coops. G. A. Lowther. *Electrical Review and Western Elec* (608 S. Dearborn st., Chicago 10c) 70: 76 Ja 13 '17  
More evidence of egg-yield value of lighting system. M. E. Atkinson; E. E. Emerson. *il Reliable P J* 25:541+ Ag '18  
Rural lighting plants. C. C. Stedman. *N Y Prod R* 21:430-1 Ja 5 '16  
Safe and convenient light. J. R. Stone. *Power F* 25:31 Ap '16  
Some experiments in the use of electric power for field work. J. B. Davidson. *il Am Soc Ag Eng Trans* 11:109-13 '18; Same. *Power F* 27:49 My '18  
Some facts about a new farm power. F. J. St John. *il Hoard's D* 55:723 My 17 '18  
Thrashing by electricity. *il Illustrated World* (Drexel av. and 53th st., Chicago 15c) 26:536 D '16  
What electricity does for us. I. Sheets. *il Nat Stock & F* 42:496 Ag 24 '18  
Wiring of farm buildings for lighting. chart *Electrical Review* (515 Monadnock blk., Chicago 15c) 73:67-8 Jl 13 '18

**Electricity on the farm—Continued**

Works the hens day and night; electricity in the pens. J. P. Jordan. *Cornell Countryman* 15:199-201 Ja '18

**Electricity societies, Cooperative.** See Cooperative electricity societies

**Electroculture of plants.** See Electrohorticulture

**Electrocution of animals**

Autopsies showing effects of electricity. J. F. Winchester. *Am Vet M Assn J* 48:705-9 Mr '16

**Electrohorticulture**

Cultivating vegetables by electricity. *Ag Digest* 2:583 Ag '17

Effect of electricity on plants. *Gard Chron* Am 22:279 N '18

Electric discharge and crop production. bibliog il *Engineer* (33 Norfolk st., Strand, London, W. C. 2) 124:74-6 J1 27 '17

Electric farming. R. H. Moulton. il *Hoard's D* 54:797 D 28 '17; Abstract. *Int R Sci & Prac* Ag 9, no 4:412-14 Ap '18

Electrical stimulation of crops. L. Birks and O'D. Davis. il *J Ag New Zealand* 15:185-90 O '17

Electricity and crops. *Engineer* (33 Norfolk st., Strand, London, W. C. 2) 123:450 My 18 '17

Electricity and plant growth. *Am Flor* 47:1149 D 16 '16

Electrification of agricultural seed. *Gard Chron* (Lond) 62:223 D 1 '17

Electrocultural experiments in Great Britain and France. *Int R Sci & Prac* Ag 9, no 1:32-6 Ja '18

✓ **Electro-culture as a central-station possibility.** F. S. Fletcher. *Electrical Review* (515 Monadnock blk., Chicago 10c) 70:705 Ap 28 '17

Electroculture at Chester, England; abstract. S. E. Britton. *Electrical World* (10th av at 36th st. N.Y. 10c) 71:783 Ap 13 '18

✓ **Nitrification of the soil by electricity.** R. D. McCreery. *J Franklin Inst* (Franklin Inst., Philadelphia 50c) 185:647-8 My '18; *Electrical Review* (515 Monadnock blk., Chicago 15c) 72:932 Je 1 '18

Overhead electric discharge and crop production. V. H. Blackman and I. Jørgensen. il *J Bd Ag* 24:45-9 Ap '17

Position of electro-culture. *Engineer* (33 Norfolk st. Strand, London, W.C. 2) 125:144, 177 F 15, Mr 1 '18

**Electrolytes**

Influence of immersion in certain electrolytic solutions upon permeability of plant cells. M. Williams. *Ann Bot* 32:591-9 O '18

Simplified apparatus for measuring the conductivity of electrolytes. R. P. Hibbard and C. W. Chapman. bibliog il *Mich Ag Bd Rep* 1916:556-91

Use of the vibration galvanometer with a 60-cycle alternating current in the measurement of the conductivity of electrolytes. N. B. Green. bibliog *Am J Bot* 4:411-16 J1 '17

**Electrotherapeutics**

Violet ray in veterinary medicine. W. L. Clark. *Am Vet M Assn J* 53:774-7 S '18

**Elephant Butte dam**

Review of the work on the Rio Grande irrigation project. *Irr Age* 31:72 Mr '16

Story of Elephant Butte dam. H. Waugh. *Ohio F* 138:393 O 21 '16

**Elephant fodder grass.** See Napier's fodder grass

**Elephant grass.** See Napier's fodder grass

**Elevators**

See also Hoisting machinery

**Elevators, Grain.** See Grain elevators

**Eik**

Wild game as a weapon; neglected means of increasing and conserving our meat supplies. E. C. MacMechen. il *Scientific Am* (233 Broadway, N.Y. 10c) 118:88-9 Ja 26 '18

**Elm**

American elm. S. B. Detwiler. il *map Am For* 22:259-62 My '16

Commercial uses of the white elm. il *Am For* 22:262-7 My '16

Elm roots in flower beds. *Rural N Y* 75:34 Ja 8 '16

Trees of Vermont; the elms. G. P. Burns and C. H. Otis. il *Vt Ag Exp B* 194:128-35 '16

Utilization of elm. W. D. Brush. il *map U S Ag B* 683:1-43 '18

**Diseases and pests**

*Dasyneura ulmea* felt—a new elm pest. J. S. Houser. il *J Econ Entom* 9:82-3 F '16

Two destructive insect pests of plane and elm trees in Victoria. C. French. il *J Dept Ag Victoria* 15:308-10 My '17

See also Elm bark lice; Elm borers; Elm leaf beetles; Elm leaf miners; Elm leaf rosette

**Elm bark lice**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B v* 16, no 26:102-7 '16

**Elm borers**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B v* 16, no 26:52-4 '16

**Elm leaf beetles**

Elm leaf-beetle. A. L. Lovett. il *Ore Ag Ext Coll B* 226 (ser 2, no. 47):1-4 n.d.

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B v* 16, no 26:37-41 '16

**Elm leaf miners**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B v* 16, no 26:42-4 '16

**Elm leaf rosette**

Elm leaf rosette and woolly aphid of the apple. E. M. Patch. il *Maine Ag Exp B* 256:329-44 '16

**Embargo**

Canadian embargo on vegetables from U.S. *Market Growers J* 23:70 Ag 15 '18

Canadian embargo placed on food-products exports. *Official B* 1:3 D 10 '17

Cotton embargo. *Weekly N L* 5:3-4 S 19 '17

Embargo on foodstuffs. *Wallaces' F* 42:1034 J1 20 '17

Embargo on nursery stock, bulbs, etc. *Am Flor* 50:852 My 11 '18

\* Embargoes and permits. (*In* Official statement no. 5, p. 7) '18 U.S. Food administration, Washington, D.C.

Embargoes on live freight. *Wallaces' F* 43:568 Mr 29 '18

Grain embargo. *Coop Manager & F* 8:32 O '18

Import embargo on agricultural products. *Am Flor* 50:605 Ap 6 '18

Switzerland and the American food supply. W. E. Rappard. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:66-74 N '17

See also Apples—Embargo

**Embroidery**

Borders for the curtains. F. A. Harris. il *Country Gent* 81:722 Mr 25 '16

**Embryology**

\* Abnormalities in the chick embryo. M. T. Heaman. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:476 N 8 '18

Changes which occur in the egg of the honey-bee. J. A. Nelson. il *Gleanings* 44:447-50 Je 1 '16

Further studies of the embryology of *toxoptera graminum*. W. J. Phillips. il *J Ag Research* 4:403-4 Ag '15

Is twinning hereditary? C. H. Danforth. il *J Heredity* 7:194-202 My '16

Making of an egg; marvelous manufactory of the hen. M. A. Jull. il *Rural N Y* 76:139 F 3 '17

Studies of free-martins. F. R. Lillie and C. L. Chapin. *Int R Sci & Prac* Ag 8, no 10:1380-2 O '17



**Embryology—Continued**

Studies on the physiology of reproduction in the domestic fowl; dwarf eggs. R. Pearl and M. R. Curtis. *bibliog il J Ag Research* 6:977-1042 S 18 '16; Same cond. *il Maine Ag Exp B* 255:289-328 '16; Summary. *Int R Sci & Prac Ag* 8,no 1:119-22 Ja '17

*See also* Botany—Embryology

**Emergencies.** *See* First aid in illness and injury

**Emmer**

Emmer in South Dakota. M. Champlin and J. D. Morrison. *S D Ag Exp B* 179:814-22 '18  
Emmer—some misinformation. T. Butler. *Prog F* 33:555 My 4 '18

**Emmer flour**

Emmer flour; a substitute for wheat flour. W. P. Headden. *Colo Ag Ext B* 143 4p '18

**Emotions**

Laughing and crying. *il J Heredity* 7:281-5 Je '16

**Employment agencies**

Need of juvenile placement departments. J. Home Econ 8:318-19 Je '16  
Towards the establishment of labour exchanges in Italy. *Int R Ag Econ* 68:123-3 Ag '16

**Empoasca australis.** *See* Apple leaf hoppers

**Enameled ware**

Solution of antimony from enameled cooking utensils. E. W. Miller. *J Home Econ* 8:361-7 J1 '16

**Endive**

Endive in midsummer. *Country Gent* 81:849 Ap 15 '16  
Greenhouse-grown endive. S. N. Green. *il Ohio Ag Exp B v* 3:247-50 Ag '18

*See also* Chicory

**Endophagous insects.** *See* Parasites—Insects

**Endosperm**

Fecundation and formation of the primary endosperm nucleus in certain liliaceae. M. Nothnagel. *bibliog il Bot Gaz* 66:143-61 Ag '18

**Endothia**

*Endothia parasitica* and related species. C. L. Shear and others. *bibliog il maps U S Ag B* 330:1-82 '17  
*Endothia* pigments. L. A. Hawkins and N. E. Stevens. *il Am J Bot* 4:336-53 Je '17  
Laboratory notes on cultures of *endothia parasitica*, A. & A.; notes on the color reactions of reproductive and vegetative hyphae of *e. parasitica* when treated with chemicals. C. Rumbold. *Phyt* 8:495-9 S '18  
New species of *endothia*. S. C. Bruner. *il Mycol* 8:239-42 S '16  
Notes on effect of dyes on *endothia parasitica*. C. Rumbold. *Bot Gaz* 64:250-2 S '17

*See also* Chestnut blight

**Engelmann spruce.** *See* Spruce

**Engineering**

Duplication in engineering between landgrant institutions and state universities; with discussion. A. Marston. *Assn Am Ag Coll & Exp Pro* 1915:171-8

Place of mechanic arts in land-grant institutions. R. A. Pearson. *Assn Am Ag Coll & Exp Pro* 1915:135-40

*See also* Agricultural engineering; Architecture; Bridges; Dams; Drainage; Farm engineering; Irrigation; Levees; Mechanical drawing; Surveying

**Study and teaching**

Changes in engineering curricula to meet war conditions; with discussion. *Assn Am Ag Coll & Exp Pro* 1917:210-29 '18

**Engineering experiment stations**

Engineering experiment station legislation; with discussion. W. O. Thompson; R. A. Pearson. *Assn Am Ag Coll & Exp Pro* 1917:229-40 '18

Proposed legislation to establish engineering experiment stations; with discussion. A. Marston. *Assn Am Ag Coll & Exp Pro* 1916:26-44 '17

**Engineering experimentation**

Field of engineering experimentation, by R. L. Sackett; Control of engineering experimentation in the land-grant colleges, by H. S. Boardman. *Assn Am Ag Coll & Exp Pro* 1916:224-30, 232-9 '17

**Engineering extension work**

Appropriate field in engineering extension for the separate land-grant college and the state university; with discussion. D. W. Spence; C. H. Benjamin. *Assn Am Ag Coll & Exp Pro* 1916:200-7, 207-11 '17

**Engines**

Auto motors for stationary purposes. I. W. Dickerson. *Wallaces' F* 43:296 F 15 '18  
Get acquainted with your engines. J. F. Hobart. *Power F* 26:35 Ap '17  
Pumping water efficiently. *il Irr Age* 31:138 J1 '16  
Slow-speed and high-speed motors. M. Ringelmann. *Int R Sci & Prac Ag* 7,no 6:863-4 Je '16  
Spraying engine troubles. *Fruit-Grower* 28:48 Ja 15 '17  
When the engine balks, investigate. J. S. Holmes. *Power F* 26:16 F '17  
*See also* Automobile engines; Boilers; Cylinders (engines); Farm engines; Gas and oil engines; Pistons; Steam engines; Tractors

**England**

*See also* subhead England under Apple culture, Crops, Gardens, Potatoes, Rural schools, and Trees

**History**

*Middle ages*

War horses in mediaeval England. J. W. Thompson. *Breeder's Gaz* 70:167-8 Ag 3 '16

**Politics and government**

Truth about our ally, England. C. Poe. *Prog F* 33:1343 D 7 '18

**English grain aphid**

*Macrosiphum granarium*, the English grain aphid. W. J. Phillips. *bibliog il J Ag Research* 7:463-80 D 11 '16

**English language**

**Composition**

*See also* Oral composition

**English sparrows**

English sparrow an Ishmael. H. Whipple. *il Country Life* 30:122 My '16  
English sparrow as a pest. N. Dearborn. *il Farmers' B* 493:1-22 '17  
English sparrows as meat food. R. C. Brandt. *Am P J* 48:225 F '17  
New sparrow trap. *Am P Advocate* 25:370 Ap '17  
Prussianizing the campaign against sparrows. N. Blanchan. *Country Life* 32:82 S '17  
Word for the English sparrow. *il Country Life* 30:43 O '16

**Engravings**

Prints for the country home. F. Weitenkamp. *il Country Life* 33:27-40 D '17

**Ensilage.** *See* Silage

**Enteric fever.** *See* Typhoid fever

**Enterohepatitis in turkeys.** *See* Turkeys—Diseases and pests

**Entertainments**

Animated Thanksgiving dinner. A. Wurzbach. *il Rural N Y* 76:1335 N 17 '17  
Celebrating on Independence day. R. Lampman. *Rural N Y* 76:840 Je 30 '17  
Country church makes a fine social center. *Country Gent* 81:1348 J1 8 '16  
Country church social and sale. G. Shull. *Fruit-Grower* 27:481 N 1 '16  
Good times on the farm. *Country Gent* 81:1137 My 27 '16  
May-day entertainment for the children. R. Lampman. *il Rural N Y* 76:559 Ap 14 '17  
Our successful Easter party. N. Tachau. *Country Gent* 81:869 Ap 15 '16  
Pleasant evening. *Wallaces' F* 41:226 F 11 '16  
Saint Patrick's day. E. Paige-Loomis. *il Country Gent* 82:518 Mr 10 '17

**Entertainments—Continued**

- Some Hallowe'en stunts. Mrs E. H. Ervin. Ohio F 140:382 O 27 '17  
 What to do at parties. Ohio F 138:504 N 18 '16  
*See also* Amusements; Corn festivals; Hallowe'en; Pageants; Picnics; Theater, Community

**Entomogenous fungi.** *See* Entomophthora**Entomological exhibits**

- New way of preparing entomological exhibits. D. B. Mackie. Philippine Ag R 10,no 2:116-18 '17

**Entomological society of British Columbia**

- Proceedings, August, 1916. (Econ. ser. no. 9) 88p il '16 British Columbia Dept. of ag., Victoria, B. C.

**Entomological society of Ontario**

- 47th annual report, 1916. 171p il '17 Ontario ag. dept., Toronto  
 48th annual report, 1917. 127p il maps '18 Ontario ag. dept., Toronto

**Entomologists**

- Need of a broad, liberal training for an economic entomologist. G. W. Herrick. J Econ Entom 9:15-23 F '16

**Entomologists, American association of economic.** *See* American association of economic entomologists**Entomology**

- Importance of entomology. B. W. Price. Purdue Ag 10:34 Ja '16  
*\*See also* Insects

**Study and teaching**

- Economic entomology in the service of the nation. R. A. Cooley. J Econ Entom 11:16-27 F '18

- Entomology in the public school. J. A. Hamilton. (In Pro., Entom. Soc. of British Columbia, 1916, p. 60-2) '16

- Planning a state extension project in entomology. T. H. Parks. J Econ Entom 11:157-63 Ap '18

- \* Teaching high school pupils the insects. J. Isenberger. School Sci and Math (2059 E. 72d place, Chicago 30c) 18:195-202 Mr '18

**Entomology, Economic.** *See* Insects, Injurious and beneficial**Entomophagous insects.** *See* Parasites—Insects**Entomophthora**

- Green muscardine fungus in Porto Rico. J. A. Stevenson. bibliog il J Dept Ag Porto Rico 2:19-32 Ja '18

- Observations on a fungus enemy of the walnut aphid in southern California. O. F. Burger and A. F. Swain. il J Econ Entom 11: 278-89 Je '18

- Sporotrichum globuliferum Speg., a natural enemy of the alfalfa weevil. L. P. Rockwood. J Econ Entom 9:493-9 O '16

**Environment**

- Heredity vs. environment. A. H. Estabrook. J Heredity 8:41-2 Ja '17

- Influence of environment on tree growth. A. R. Proschowsky. J Heredity 9:80 F '18

- Significant evidence for mental heredity. F. A. Woods. J Heredity 8:106-11 Mr '17

**Enzymes**

- \* Attempt to filter the enzymes of milk. J. Piccard and M. Rising. il Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr) 40:1275-81 Ag '18

- Cause of mustiness in bread. A. M. Wright. Scientific Am Sup (233 Broadway, N.Y. 10c) 72:403 D 23 '16

- Enzymes of apples and their relation to the ripening process. R. W. Thatcher. bibliog J Ag Research 5:103-16 O 18 '15

- Enzymes of milk and butter. R. W. Thatcher and A. C. Dahlberg. bibliog J Ag Research 11:437-50 N 26 '17

- Enzymes of the tubercle bacillus. H. J. Corper and H. C. Sweany. bibliog J Bact 3: 129-51 Mr '18

- Enzymes—substances which transform food into body constituents. J. Takamine, jr. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:21 Ja 13 '17

- Investigations into the part played by the amylase in potato tubers. J. Bodnár. Int R Sci & Prac Ag 7,no 8:1093-5 Ag '16

- Morphology of the barley grain with reference to its enzym-secreting areas. A. Mann and H. V. Harlan. il U S Ag B 183:1-32 '15  
 Physiological observations on alkaloids, latex and oxidases in papaver somniferum. R. H. True and W. W. Stockberger. Am J Bot 3:1-11 Ja '16

- Relative influence of microorganisms and plant enzymes on the fermentation of corn silage. A. R. Lamb. bibliog J Ag Research 8:361-80 Mr 6 '17

- Some enzymes of germinating red gram (cajanus indicus). B. Viswanath. Ag J of India Sci Congress No 1917:109-16

- Studies in the physiology of parasitism; on the distribution of cytase in cultures of botrytis cinerea. W. Brown. Ann Bot 31: 489-98 Jl '17

- Study of certain ferments with a view to determining a method for the differentiation of pasteurized milk from raw milk. R. E. Lee and M. G. Mellon. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:360-7 Ap '17

- What are enzymes? B. Horowitz. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 6:253-9 Mr '18

- See also* Catalase; Diastase; Invertase; Oxidases; Pepsin; Rennet; Tyrosinase

**Eocronartium**

- Cytology of eocronartium muscicola. H. M. Fitzpatrick. bibliog il Am J Bot 5:397-419 O '18

- Life history and parasitism of eocronartium muscicola. H. M. Fitzpatrick. bibliog il Phyt 8:197-218 My '18

**Epilachna corrupta.** *See* Bean ladybirds**Epochra.** *See* Fruit flies**Equisetum**

- Anatomy of a hybrid equisetum. R. Holden. il Am J Bot 2:225-37 My '15

- Notes on equisetum debile. Roxb. Shiv Ram Kashyap. il Ann Bot 31:439-45 Jl '17

**Equitable cooperative auditing association**

- Auditing association formed at Aberdeen, S. D. Coop Manager & F 6:60 F '17

**Eragrostis**

- Eragrostis of the Argentine and Uruguay: their value as fodder plants. C. D. Girola. Int R Sci & Prac Ag 9,no 2:190-1 F '18

**Eremocitrus.** *See* Kumquats**Ergot**

- Ergot in rye. Hoard's D 54:526 N 2 '17

- Ergot in rye and how to remove it. A. G. Johnson and R. E. Vaughan. il Wis Ag Ext C 94 4p '18; Same. Hoard's D 55:180 F 22 '18

- Life history and poisonous properties of claviceps paspali. H. B. Brown. il J Ag Research 7:401-6 N 27 '16

**Erisoma.** *See* Apple aphid; Woolly aphid**Eritrea**

- Erythraea; land tenure and colonization. bibliog Int R Ag Econ 74:67-88 F '17

**Ermine moths**

- Apple ermine moth. P. J. Parrott. J Econ Entom 11:55-6 F '18

- Discovery of the European ermine moth (yponeutea) on nursery stock imported into Canada. C. G. Hewitt. il Ag Gaz of Canada 4:552-4 Jl '17

**Erosion**

- Aeolian erosion in Hawaii. C. S. Judd. il Am For 23:239 Ap '17

- Blasting to correct soil erosion. J. R. Matern. il Country Life 32:132 O '17

- Chasms of erosion and forest defense. C. A. Whittle. il Am For 23:492-3 Ag '17

- Choice of grasses to protect road embankments from erosion. W. C. Buetow. Eng News-Record (10th av. at 36th st., N.Y. 15c) 79:216 Ag 2 '17

- Clay boulders and the rolling action of water. E. B. Watson. Soil Sci 3:513-14 Je '17

- Erosion of soils. il Fla Ag Dept Quar B v 27: 23-5 Ap '17



**Erosion —Continued**

- Farms, forests, and erosion. S: T. Dana. il U S Ag Yearbook 1916:107-34; Same. Separate 688
- Fighting gully erosion. W. R. Mattoon. il Am For 22:286-7 My '16
- Grass on the southeastern hills. E. E. Miller. Country Gent 81:740 Ap 1 '16
- Gullies and hillside washes. Rural N Y 76:934 Ag 4 '17
- Helpful hints on terracing. J. C. Olsen. il Prog F 33:238 F 23 '18
- How to get rich lands; terracing as a means of saving soil fertility. B. L. Moss. Prog F 32:282 Mr 3 '17
- How to make terraces. B. L. Moss. Prog F 31:1335 N 18 '16
- Keep our hillside from washing. A. R. Whitson and T. J. Dunnewald. il Wis Ag Exp B 272:1-18 '16; Summary. Hoard's D 52:714 D 8 '16
- Keeping the farm at home. G: S. Howe. il Country Gent 82:685 Ap 7 '17
- Locust trees recommended to prevent soil erosion. Prac F 112:186 My 1 '16
- Mangum, or broad graded ridge terrace. H. M. Lynde. il Prog F 33:1090 O 20 '17
- Note on soil denudation by rainfall and drainage: conservation of soil moisture. G. D. Hope. Ag J of India 11:134-41 Ap '16
- One way to stop soil washing. Power F 27:43 F '18
- Preventing soil wash. C. O. Levine. Hoard's D 51:815 Je 9 '16
- Prevention and control of erosion in North Carolina, with special reference to terracing. F. R. Baker. il map N C Ag Exp B 236:1-27 '16; Same. N C Ag Exp Rep 1916 27p '17
- Prevention of erosion. L. Roudebush. Ohio F 140:133 Ag 25 '17
- Prevention of gullying. D. R. Collins. Farm Eng 3:276 Je '16
- Prevention of the erosion of farm lands by terracing. C. E. Ramser. il U S Ag B 512:1-40 '17
- Problem of erosion. R. S. Maddox. Am For 23:724-5 D '17
- Range preservation and its relation to erosion control on western grazing lands. A. W. Sampson and L. H. Weyl. il U S Ag B 675:1-35 '18
- Reclaiming eroded land. R. B. Shapinsky. Farm Eng 5:8 Mr '17
- Saving the soil from washing. J. A. King. Farm Eng 5:8 S '17
- So-called terracing in the South. W. F. Massey. Rural N Y 77:226 F 16 '18
- Sods save the hills. A. L. French. il Country Gent 81:148 Ja 22 '16
- Soil erosion in the South. R. O. E. Davis. U S Ag B 180:1-23 '15
- Soil erosion on farms. J: S. Glass. il Kimball's D F 16:859 N 15 '18
- Soil saving dam. W. H. Baker. il Mo Ag Ext C 14:1-4 '17
- Soil-saving terraces. il Wallaces' F 42:1639 D 7 '17
- Soil washing. Hoard's D 51:219 F 25 '16
- Some methods of controlling erosion. L. Roudebush. il Ohio F 138:221 S 9 '16
- Terracing farm lands. C. E. Ramser. il Farmers' B 997:1-40 '18
- Terracing the hills to make them fertile. Am Coop J 13:399 My '18
- Terracing to prevent soil washing. E. W. Lehmann. il Am Soc Ag Eng Trans 11:78-87 '18; Same. Power F 27:50-1 My '18
- To stop gullies. E. E. Miller. Country Gent 81:264 F 5 '16
- Too much grazing starts soil washing, and may lead to ruin of good ranges. Weekly N L 6:9 O 9 '18
- Washing of soils and methods of prevention. J. G. Mosier and A. F. Gustafson. il map Ill Ag Exp B 207:513-50 '18
- Espeletia**  
Genus espeletia. P. C. Standley. il Am J Bot 2:468-86 N '15

**Essences and essential oils**

- Aroma of hops: a study of the volatile oil with relation to the geographical sources of the hops. F. Rabak. bibliog J Ag Research 2:115-59 My '14
- Chemistry of the cotton plant, with special reference to upland cotton. A. Viehoever and others. bibliog J Ag Research 13:345-52 My 13 '18
- Concerning certain aromatic constituents of urine; a study of the non-phenolic volatile oils isolated from the urine of cows, goats, horses and human beings. R. J. Anderson. N Y State Ag Exp Tech B 55:1-25 '16
- Extracting flower oils. F. D. Crane. Rural N Y 75:1001 Jl 22 '16
- Important biological problem. J. Dufrenoy. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:210-11 Ap 6 '18
- Preliminary work at Soukhoum experiment station Caucasus, on the extraction of medical substances from local plants. M. H. Kozlov. Int R Sci & Prac Ag 7,no 11:1621-2 N '16
- Utilization of cherry by-products. F. Rabak. U S Ag B 350:17-20 '16
- See also Flavoring essences; Lemon-grass oil; Peppermint oil; Perfumery; Thymol; Wintergreen oil
- Essex county (N.Y.) sheep breeders' association**  
Cooperative wool marketing. J. Gelder. il Am Sheep B & W 38:174 Mr '18
- Etchings**  
Etchings; pictures. J. A. Smith. Country Life 33:53-5 Ja '18
- Ether**  
New method for drying ether and sample in the determination of ether extract. R. M. West. Assn Offic Ag Chem J 3:101-3 My '17
- Similarity in the effects of potassium cyanide and of ether. W. J. V. Osterhout. Bot Gaz 63:77-80 Ja '17
- Ethics**  
Ethics of the profession of veterinary medicine. C. F. Davis. Am Vet M Assn J 51:548-54 Jl '17
- For a clean life in the young. Wallaces' F 41:261 F 18 '16
- Will morality disappear? P. Popenoe. J Heredity 9:269-70 O '18
- See also Conduct of life; Sexual ethics
- Ethnology**  
America's fighting stocks. il J Heredity 8:435-41 O '17
- Great race passes; Nordic peoples. map J Heredity 8:34-40 Ja '17
- Mankind—racial values and the racial prospect, by Seth K. Humphrey. Review. J Heredity 8:493-9 N '17
- Melting pot a myth. A. Hrdlicka. il J Heredity 8:99-104 Mr '17
- Etiolation**  
Cell measurement as an aid in the analysis of quantitative variation. W. Brotherton, Jr., and H. H. Bartlett. il Am J Bot 5:192-206 Ap '18
- Etiquet**  
Manners in the home. Wallaces' F 42:358 F 23 '17
- Serving meals. M. R. McPheeters. il Okla Ag Ext C 65 4p '17
- Serving of meals. R. E. Dick. il Ohio Ag Ext B v 13,no 2 16p '17-18
- Teaching the youngsters manners. Mrs W. N. Hutt. Prog F 31:1082 S 9 '16
- Etrogs**  
Etrug or sacred Jewish citron. Country Gent 81:1119 My 27 '16
- Eucalyptus**  
Eucalypts for fencing-timber; some suitable species and how to grow them. J. H. Simmonds. il J Ag New Zealand 12:253-78 Ap '16
- Eucalypts for settlers. J. H. Simmonds. il J Ag New Zealand 14:1-21, 116-24 Ja-F '17
- Eucalyptus trees and malaria. S. L. Bostin. Ag J of India 12:495 Jl '17
- My neighbor's garden. C: D. Stuart. il Am Bee J 57:19-20 Ja '17

**Eucalyptus**—*Continued*

Relative frost resistance of eucalyptus in southern California. E. N. Munns. J For 16: 412-28 Ap '18

Two varieties of the eucalyptus. L. Burr. il Gleanings 44:979-80 O 15 '16

See also Red gum

**Eucalyptus oil**

Eucalyptus oil. F. R. Beuhne. J Dept Ag Victoria 14:742-4 D '16

**Eucomis**

New or noteworthy plants; eucomis Pole-Evansii. N. E. Brown. il Gard Chron (Lond) 63:185 My 4 '18

**Euethiola rugiceps.** See Cornstalk beetles, Rough-headed

**Eugenics**

Celibacy of teachers. J Heredity 8:259-60 Je '17

Coeducation and eugenics. H. J. Banker. J Heredity 8:208-14 My '17

Constructive aspect of birth control. R. J. Sprague. J Heredity 8:58-62 F '17

Eugenic aspect of sexual immorality. R. H. Johnson. J Heredity 8:121-2 Mr '17

Eugenic survey of Nassau county, New York. J Heredity 7:237-8 My '16

Eugenics and agriculture. O. F. Cook. J Heredity 7:249-54 Je '16

Eugenics for Arabic-speaking peoples. J Heredity 7:296 JI '16

Eugenics in Jewish life. M. Fishberg. J Heredity 8:543-9 D '17

Evolution and man. M. M. Metcalf. J Heredity 7:356-64 Ag '16

German suggestions for constructive eugenics. J Heredity 7:262 Je '16

Great unmarried. J Heredity 7:557-61 D '16

Increase of ignorance. J Heredity 8:178-83 Ap '17

Jewish eugenics. J Heredity 8:72-4 F '17

Large families. J Heredity 8:299-302 JI '17

Mankind—racial values and the racial prospect, by Seth K. Humphrey. Review. J Heredity 8:493-9 N '17

Mothercraft; education of girls. M. L. Read. J Heredity 7:339-42 Ag '16

Religion and birth control. J Heredity 7:450-1 O '16

Some English suggestions for eugenics. J Heredity 7:288 Je '16

Tide of immigration. J Heredity 7:541-5 D '16

Urban sterilization. J Heredity 8:268-9 Je '17

War, immigration, eugenics; third report of the committee on immigration, American genetic association. il J Heredity 7:243-8 Je '16

What to say about marriage? A. E. Hamilton. J Heredity 7:77-80 F '16

Will morality disappear? P. Popenoe. J Heredity 9:269-70 O '18

See also Consanguinity; Heredity; Sex—Cause and determination

**Eulachon**

\* Eulachon—a delicious food fish. Sci Am Sup (233 Broadway, N.Y. 10c) 86:335 N 23 '18

**Euonymus.** See Evonymus

**Eupatoriums**

Eupatoriums for the greenhouse. Gard Chron Am 21:14 Ja '17

See also White snakeroot

**Euphorbia**

Development of embryo sac and embryo in euphorbia preslii and e. splendens. W. Weniger. bibliog il Bot Gaz 63:266-81 Ap '17

Species of melampsora occurring upon euphorbia in North America. E. B. Mains. Phyt 7: 101-5 Ap '17

**Europe.** See subhead Europe under special subjects, e.g. Agriculture—Europe, Dairying—Europe

**European cornstalk borers**

Corn growers asked to aid authorities in stamping out destructive pest. Weekly N L 6:2 N 20 '18

European corn borer, pyrausta nubilalis Hubner. S. C. Vinal. Mass Ag Exp B 178: 147-52 '17

Some aliens we do not want; why we do not want them, and how they may arrive. D. B. Mackie. il Cal State Comm Hort B v 7:541-4 S '18

**European pine sawflies.** See Pine sawflies

**European pine-shoot moth.** See Pine-shoot moths

**European poplar canker.** See Poplar canker, European

**European war, 1914-**

Address of the president; delivered at a joint session of the two houses of Congress, December 4, 1917. W. Wilson. Weekly N L 5:1-3 D 19 '17

Address of the President; delivered at a joint session of two houses of Congress Feb. 11, 1918. W. Wilson. Weekly N L 5:1-2 F 20 '18

America fights for righteousness. C. Poe. Prog F 33:515 Ap 20 '18

Bread for a warring world. S: Sosland. il Country Gent 81:43-4 Ja 8 '16

Call of our country. J. M. Cox. il Breeder's Gaz 72:1128 D 20 '17

Effects of the great war. Wallaces' F 41:310 F 25 '16

Facts about the war that every farmer ought to know. E. Davenport. Banker-F 4:10-11 O '17

Farm, farmer and the war. H. Quick. Banker-F 5:2-3 Ap '18; Same abr. O Judd Farmer 64:15 Mr 16 '18

France at war. R. M. Olzendam. il Am For 24:201-3 Ap '18

Glory that was France. S. Lauzanne. il Country Life 34:24-39 My '18

How those at home—on the farm—in the bank can help to win the war. C. Vrooman. Banker-F 4:12-13 O '17

Nation's important war accomplishments and problems. D: F. Houston. Weekly N L 5: 7-12 D 19 '17

Realization of our patriotic duty at home. K. H. Addington. Gard Chron Am 21:429-30 D '17

Realizing war responsibilities. il Hoard's D 54:549 Ap 19 '18

War loans. J: Burke. N Y Farms & Markets Dept Ag B 105:63-80 Mr '18

Waste of the European war. Wallaces' F 41:4 Ja 7 '16

Who's paying for the war? E. C. Branson. Banker-F 5:4 F '18

Winning the war. W. A. Milne. Assn Am Dairy Food & Drug Offic Pro 1918:128-37

World war explained—in language a child can understand. C. Poe. Prog 33:935 959, 985, 1009, 1033, 1057, 1083, 1141, 1169, 1199, 1231, 1261, 1289, 1313, 1343, 1375 Ag 24-O 5, 19-D 14 '18

See also Agriculture and the war; Food supply; Forestry and the war; Military training; Military training camps; War economy; War emergency food associations; War finance; War loans; War measures; War savings stamps; also National society for the orphans of peasants killed in war

See also Agriculture and the war; Food supply; Forestry and the war; Military training; Military training camps; War economy; War emergency food associations; War finance; War loans; War measures; War savings stamps; also National society for the orphans of peasants killed in war

See also Agriculture and the war; Food supply; Forestry and the war; Military training; Military training camps; War economy; War emergency food associations; War finance; War loans; War measures; War savings stamps; also National society for the orphans of peasants killed in war

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See also Agriculture and the war; Food supply; Forestry and the war; Military training; Military training camps; War economy; War emergency food associations; War finance; War loans; War measures; War savings stamps; also National society for the orphans of peasants killed in war



**European war**—Personal narratives—*Continued*

- Otherwise the sector was quiet. A. W. Catlin. *il Country Life* 35:35-43 D '18  
Somewhere in France. J. D. Toll, jr. *Am Fert* 47:30-1 O 27; 44-5 N 10; 24-5 N 24; 70 D 8; 30-2 D 22 '17; 48:36 Ja 5; 36-8 F 2; 33-6 Mr 30; 32-3 Ap 13, 36-7 Ap 27 '18  
Story of thrilling fight in the air. *il Am For* 24:329-32 Je '18  
When the tide turned: the marine's own story as told to Arthur Bartlett Maurice. *il Country Life* 35:44-7 D '18

**Reconstruction**

See Reconstruction (European war)

**Relief work**

- Agricultural relief fund for the farmers in the devastated regions. *J Ag (Quebec)* 21:33 S '17

**Religious and social work**

- How the boys play in France. E. F. Allen. *il Country Life* 35:39-43 N '18  
United war work campaign. *Better Fruit* 13: 13 N '18

**Women and the war**

- Club programs in war time. H. L. Johnson. *J Home Econ* 9:471-5 O '17

**Canada**

- Canada's part in the war. G. C. Creelman. *Am Assn Farmers' Inst Workers Pro* 1917: 60-5 '18; Same. *Assn Am Ag Coll & Exp Pro* 1917:146-50 '18  
Clarion call. *J Ag (Quebec)* 20:65 S '16

**Great Britain**

- Agricultural relief for the allies. J. W. Robertson. (*In Reports, Dairymen's assns.*, 1916, p. 28-37) '17 Ontario ag. dept., Toronto  
When the English countryside went to war. A. Gleason. *Country Life* 34:24 O '18

**United States**

- New patriotism. C. S. Vrooman. *Mo Ag Bd v* 16:1-14 Ag '18  
Second liberty loan and the American farmer. W. G. McAdoo. 13p '17 U.S. Sec. of treasury, Washington, D.C.  
War problems and what the government is doing to meet them. B. T. Galloway. *Cornell Countryman* 14:719-20 Je '17  
War time farm prices. C. Ousley. *Kimball's D F* 15:858 D 1 '17  
Why we hate the food speculator. J. R. Smith. *il Country Gent* 82:1049-50 Je 23 '17  
**European war and agriculture.** See Agriculture and the war

**European war and art**

- Art from the trenches. J. M. Breese. *il Country Life* 34:88 O '18

**European war and business**

- Miscalled thrift injures business. L. Mayer. *Am Flor* 49:1353 Ja 12 '18  
War's effect on business. J. H. Rich. *Coop Manager & F* 7:31-2 Mr '18

**European war and science**

- Psychology and the war. G. S. Hall. *J Heredity* 8:442-6 O '17

**Eustoma**

- Eustoma russellianum.* *il Gard Chron (Lond)* 62:96 S 8 '17; Same. *Gard Chron Am* 21:374 O '17

**Eutane terminalis.** See Grass moths

**Euvassena antiopa.** See Spiny elm caterpillars

**Euxoa auxiliaris.** See Army cutworms

**Evaporated apples.** See Apples, Dried

**Evaporated milk.** See Milk, Condensed

**Evaporation**

- Evaporation from the surfaces of water and river-bed materials. R. B. Sleight. *bibliog il diags maps J Ag Research* 10:209-62 Jl 39 '17  
Evaporation records from the gulf coast. L. Gano and J. McNeill. *Bot Gaz* 64:318-29 O '17  
Experiments on loss of moisture from soils by evaporation. D. G. De Angelis. *Int R Sci & Prac Ag* 8,no 2:191-3 F '17

On the reduction of transpiration observations. N. Thomas and A. Ferguson. *Ann Bot* 31:241-55 Ap '17

Relation between evaporation and plant succession in a given area. F. C. Gates. *il Am J Bot* 4:161-78 Mr '17

Solving water waste problems. R. B. Sleight. *il Farm Eng* 5:5 Jl '17

See also Atmometers

**Evaporation of fruit and vegetables.** See Drying (fruits and vegetables)

**Evaporators**

- Community food driers. *il Country Gent* 82: 1392 S 8 '17  
Driers or evaporators. *Nat Stock & F* 42:393 Jl 20 '18  
Drying of food products or the dehydration system. *il plans (B. 5)* 32p (Ag 15) '17 New York State food supply commission, Albany  
Evaporated apples. C. S. McGillivray. 38p *il plans* '17 Canada Ag  
Evaporation of fruits and vegetables. J. S. Caldwell. *il plans Wash Ag Exp B* 148:1-111 '17  
Evaporator for potatoes. *Rural N Y* 75:1307 O 14 '16  
Home-made sun dryer. J. M. Hoover. *Better Fruit* 12:8 Jl '17  
Plans for a commercial evaporator. A. H. Pulver. *Rural N Y* 76:766 Je 9 '17  
Schilde universal drier. *il Int R Sci & Prac Ag* 8,no 7:1034-7 Jl '17  
Some simple fruit and vegetable evaporators. F. P. Reagle. *il plans Industrial Arts Magazine* (129 Michigan st, Milwaukee, Wis. 25c) 7:145-51 Ap '18

**Evening primroses.** See *Oenothera*

**Everglades**

- Duel to the death. *il Am For* 23:491 Ag '17  
Reclaiming the Everglades of Florida. I. Randolph. *il maps J Franklin Inst (Franklin Inst., Philadelphia 50c)* 184:49-72 Jl '17  
Swamp and overflow lands of Florida. R. E. Rose. *Fla Ag Dept Quar B v* 26:117-39 Jl '16

**Evergreens**

- Blanket for the farm. *il Wallaces' F* 42:135 Ja 26 '17  
Broad-leaved evergreens for American gardens. E. H. Wilson. *il Gard M* 25:171-4 Ap '17  
Duration of leaves in evergreens. V. A. Pease. *bibliog Am J Bot* 4:145-60 Mr '17; Summary. *J For* 15:913-15 N '17  
Evergreen crop for the Christmas trade. *Wallaces' F* 41:378 Mr 3 '16  
Evergreen pruning. *Gard Chron Am* 22:58 F '18  
Evergreen trees for Iowa. G. B. MacDonald. *il Ia Ag Exp B* 170:1-59 '17; Same. *Ia Ag Bd Yearbook* 1916:437-64  
Evergreens. C. S. Harrison. *il Minn Hort* 45: 68-73 F '17  
Evergreens for both utility and ornament. E. Ferris. *il Minn Hort* 44:29-32 Ja '16  
Evergreens for the prairie home. M. Soholt. *il Minn Hort* 46:441-5 D '18  
Evergreens in year round decoration. *il Am Flor* 50:867 My 18 '18  
Fall planting of evergreens. *Gard Chron Am* 20:425 O '16  
Frost and evergreens. J. B. Farmer. *il Gard Chron (Lond)* 62:72 Ag 18 '17  
Hill's window box evergreens. *Am Flor* 47: 1095 D 9 '16  
Native evergreens suitable for ground-covers. E. H. Costich. *il Gard M* 26:15-16 Ag '17  
Ornamental planting. G. H. Chisholm. *il Gard Chron Am* 20:429-30 O '16  
Pruning evergreens. E. Hemming. *Gard Chron Am* 20:440 O '16  
Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. *il Maine Ag Dept B v* 15:31-3 S '16  
Some correlations between vegetation and soils, indicated by census statistics. R. S. Harper. *Am Fert* 45:40-2 Ag 5 '16  
Spring planting for evergreens in the South. J. M. Patterson. *il Gard M* 23:29-31 F '16

**Evergreens—Continued**

Treatment of evergreens. *Gard Chron Am* 21: 21 Ja '17

See also Conifers; Hemlock; Lycopodium; Pine; Rhododendrons; Yew

**Evolution**

Blind cave fish. *il J Heredity* 8:448-51 O '17

Evolution and man. M. M. Metcalf. *J Heredity* 7:356-64 Ag '16

Evolution by hybridization, by J. P. Lotsy. Review by E. C. Jeffrey. *J Heredity* 9:25-8 Ja '18

Evolution of bacteria. R. E. Buchanan. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:320-4 Mr 29 '18

Evolution of the horse. *il J Heredity* 8:168-9 Ap '17

Hit-or-miss universe. J. Loeb. *il J Heredity* 8:320-34 Jl '17

Modern idea of evolution. *il J Heredity* 8:13-20 Ja '17

Ontogeny recapitulates phylogeny. Wallaces' *F* 41:674 Ap 28 '16

Utility of death; evolution could not take place without it. F. H. Pike. *J Heredity* 8: 195-9 My '17

See also Adaptation (biology); Biology; Color of animals; Color of plants; Embryology; Heredity; Mendelism; Natural selection; Species; Variation (biology)

**Euonymus**

Bud variation of euonymus. A. D. Shamel. *il J Heredity* 8:218-20 My '17

Useful hardy climber. *il Country Gent* 81:641 Mr 18 '16

**Ewes' milk. See Milk, Ewes'****Excavating machinery**

Austin tile ditcher, 00 size. *il Irr Age* 31:47 Ja '16

Austin trenching and back filling machine. *il Irr Age* 31:62+ F '16

Ditching machines. B. B. Robb. *il Cornell Countryman* 15:331-3 Mr '18

Ditching with machinery. *O Judd Farmer* 62: 9 Ap 14 '17

Drainage; motor-power and horse-power tile ditching machines. H. C. Ramsower. *il Farm Eng* 7:3-5 Ap '18

Excavating machinery used in land drainage. D. L. Yarnell. *il U S Ag B* 300:1-37 '15

Gopher holes for drainage; a power drainage machine that patterns the burrow made by the mole. *Power F* 26:18 Ja '17

Internal combustion farm drainage machines. *il Int R Sci & Prac Ag* 8,no 11:1125-7 N '17

Solving the irrigating problem with a ditching machine. *Irr Age* 32:76 Mr '17

Trenching machinery. *Va Ag Dept B* 110:13 Mr '16

U. S. Reclamation service specifications for dragline excavators. *Eng and Contracting* (608 S. Dearborn st., Chicago \$3 per yr) 47:275 Mr 21 '17

**Excavation**

Farmer his own builder; figuring the materials required and their cost. H. A. Roberts. *Country Gent* 82:93-4 Ja 20 '17

Getting the dirt out. D. R. Van Horn. *Farm Eng* 5:8 S '17

**Exhibitions.** See Agricultural exhibitions, and references under that subject; Chemical industries—Exhibitions; Entomological exhibits; Flower shows; Food conservation exhibits; Home economics exhibits

**Exochorda racemosa.** See Chinese pearl bush

**Exosmosis.** See Osmosis

**Expansion of cream.** See Cream—Expansion

**Expansion of milk.** See Milk—Expansion

**Experiment farms**

Bathurst experiment farm. R. W. Peacock. *Ag Gaz of New South Wales* 27:345-8 My '16

County experiment farms in Ohio; annual reports for 1915. *il Ohio Ag Exp B* 303:72-207 '16

County experiment farms in Ohio; annual reports for 1916 and 1917. *il Ohio Ag Exp B* 323:243-486 '18

Cowra experiment farm. M. H. Reynolds. *Ag Gaz of New South Wales* 27:468-70 Jl '16

Dominion experimental farms. *Ag Gaz of Canada* 4:7-8 Ja '17

Dry-land grain sorghums, trials at experimental farms. E. Breakwell. *il Ag Gaz of New South Wales* 27:471-8 Jl '16

Experimental farm harvest reports. W. J. Spafford. *J Dept Ag S Australia* 20:790-6, 867-79; 21:33-52, 119-29 My-Je, Ag-S '17

Experimental farm harvest reports; Boobrowie experimental farm. W. J. Spafford and F. E. Waddy. *J Dept Ag S Australia* 22:25-37 Ag '18

Experimental farm harvest reports; Eyre's peninsula experimental farm. W. J. Spafford and L. J. Cook. *J Dept Ag S Australia* 21:635-43 Mr '18

Experimental farm harvest reports; Kybybolite experimental farm. W. J. Spafford and L. S. Davie. *J Dept Ag S Australia* 21:767-81 My '18

Experimental farm harvest reports; Turretfield experimental farm. W. J. Spafford and G. H. Stevens. *J Dept Ag S Australia* 22: 11-24 Ag '18

Experimental farm harvest reports; Veitch's Well experimental farm. W. J. Spafford and L. Smith. *J Dept Ag S Australia* 21:852-60 Je '18

Experimental farm poultry work in province of Quebec. F. C. Elford. *il J Ag (Quebec)* 20:196-7 Mr '17

Experimental farms exhibit. W. A. Lang. *il Ag Gaz of Canada* 4:1036-9 D '17

Experimental farms; reports from the director; division of chemistry, division of field husbandry, division of animal husbandry for the year ending March 31, 1916. (7 George V. Sessional paper no. 16)v 1 598p 45c '17 Canada Ag

Experimental farms; reports from the division of horticulture, division of cereals, for the year ending March 31, 1916. (7 George V. Sessional paper no. 16) v 2 601-1093p 35c '17 Canada Ag

Experiments in the production of crops on alkali land on the Huntley reclamation project, Montana. D. Hansen. *il U S Ag B* 135: 1-19 '14

Experiments with crops under fall irrigation at the Scottsbluff reclamation project experiment farm. F. Knorr. *U S Ag B* 133:1-17 '14

Farmers' day at the Glen Innes experiment farm. *Ag Gaz of New South Wales* 27:877-82 D '16

Farmers' field day at Werribee. *il J Dept Ag Victoria* 15:666-70 N '17

Farmers' field day; Rutherglen experimental farm. *il J Dept Ag Victoria* 14:18-31 Ja '16

Farmers' field day; Wyuna state farm. *il J Dept Ag Victoria* 14:100-6 F '16

Field day at Longerenong agricultural college. *il J Dept Ag Victoria* 15:1-7 Ja '17

Field experiments with wheat, etc., Nyngan demonstration farm, 1916. H. J. Kelly. *Ag Gaz of New South Wales* 28:550-8 Ag '17

Field experiments with wheat, 1915; Wagga experiment farm. W. D. Kerle. *il Ag Gaz of New South Wales* 27:381-92 Je '16

First model farm in India. *Ag J of India* 12: 650-3 O '17

42d annual report of the Ontario agricultural college and experimental farm, 1916. 71p '17 Ontario ag. dept., Toronto

Glen Innes experiment farm. R. H. Gennys. *Ag Gaz of New South Wales* 27:467-8 Jl '16

Harvest report, 1915-16; Wagga experiment farm. G. M. McKeown. *Ag Gaz of New South Wales* 27:703-6 O '16

Harvest reports, 1915; Coonamble experiment farm. A. H. E. McDonald. *il Ag Gaz of New South Wales* 27:339-44 My '16

Harvest reports, 1915-16, Condobolin demonstration farm. A. H. McDougall. *Ag Gaz of New South Wales* 27:462-6 Jl '16

Lucerne manurial tests, State research farm, Werribee. A. E. V. Richardson. *il J Dept Ag Victoria* 14:449-60 Ag '16

Modern use of the historic Grant farm. G. W. Eads. *il Breeder's Gaz* 73:423-4 F 28 '18



**Experiment farms—Continued**

- Plan of work for Trumbull county experiment farm. C. W. Montgomery. Ohio Ag Exp B v 1:119-22 Ap '16
- Poultry work on the experimental farms. F. C. Elford. il J Ag (Quebec) 20:111 N '16
- Private farms in Oudh. H. R. C. Hailey. Ag J of India 12:519-24 O '17
- Progress report, substation no. 1, Beeville, Texas, 1910-1914. E. E. Binford. il Tex Ag Exp B 214:1-27 '17
- Progress report, substation no. 2, Troup, Texas, 1901-1914. W. S. Hotchkiss. il Tex Ag Exp B 209:1-33 '17
- Progress report, substation no. 4, Beaumont, Texas, 1909-1914. H. H. Laude. il Tex Ag Exp B 200:1-18 '16
- Report of demonstration area; Glen Innes experiment farm, 1915-16. R. H. Gennys. Ag Gaz of New South Wales 27:733-9 O '16
- Report of the experimental farms. J Ag (Quebec) 22:92 D '18
- Results of experiments, 1915. A. E. V. Richardson. J Dept Ag Victoria 14:147-52, 288-95 Mr, My '16
- Roseworthy agricultural college; harvest report, 1916-17. W. J. Colebatch. J Dept Ag S Australia 20:623-48 Mr '17
- Seventh annual report of the demonstration area, Bathurst experiment farm, 1915-16. R. W. Peacock. il Ag Gaz of New South Wales 27:640-8 S '16
- 6th report on the permanent field experiments, seasons 1904-1915. W. J. Colebatch and R. C. Scott. J Dept Ag S Australia 20:464-79 Ja '17
- Stratford model dairy farm and experimental area. J. W. Deem. il J Ag New Zealand 15:317-21 D '17
- Summary of work now being carried on in plant breeding. A. J. Logsdail. Ag Gaz of Canada 5:945-6 O '18
- Visit to Macdonald college. F. E. Ellis. il J Ag (Quebec) 21:56-7 O '17
- Work for Belmont county experiment farm. C. W. Montgomery. Ohio Ag Exp B v 3:111-12 Ap '18
- Work of the Belle Fourche reclamation project experiment farm in 1916. B. Aune. (W. I. A.—14) 28p il '17 U. S. Bur. of plant industry, Washington, D. C.
- Work of the Huntley reclamation project experiment farm in 1916. D. Hansen. (W. I. A.—15) 25p il '17 U. S. Bureau of plant industry, Washington, D. C.
- Work of the Huntley reclamation project experiment farm in 1917. D. Hansen. (W. I. A. C. 22) 29p '18 U S Ag
- Work of the San Antonio experiment farm in 1916. C. R. Letteer. (W. I. A.—16) 22p il '17 U S Ag
- Work of the San Antonio experiment farm in 1917. C. R. Letteer. (W. I. A. C. 21) 27p il '18 U S Ag
- Work of the Scottsbluff reclamation project experiment farm in 1916. F. Knorr. (W. I. A.—18) 18p '18 U S Ag
- Work of the Truckee-Carson reclamation project experiment farm in 1916. F. B. Headley. (W. I. A.—19) 18p il '18 U S Ag
- Work of the Truckee-Carson reclamation project experiment farm in 1917. F. B. Headley. (W. I. A. C. 23) 24p il '18 U S Ag
- Work of the Umatilla reclamation project experiment farm in 1915 and 1916. R. W. Allen. (W. I. A.—17) 37p il '17 U S Ag
- Work of the Yuma reclamation project experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) 40p il '18 U S Ag
- Wyuna state farm. il J Dept Ag Victoria 15:8-16 Ja '17

*See also* Agricultural experiment stations; Monteith demonstration farm

**Experiment plots.** *See* Field experiments

**Experiment stations.** *See* Agricultural experiment stations

**Experimentation, Engineering.** *See* Engineering experimentation

**Experiments, Field.** *See* Field experiments

**Explosions**

- Dust explosions and fires in grain separators in the Pacific Northwest. D: J. Price and E. B. McCormick. il U S Ag B 379:1-22 '16; Abstract. Int R Sci & Prac Ag 7:no 11:1653-7 N '16
- Grain dust explosion prevention campaign. D. J. Price. Coop Manager & F 7:39-40 Je '18; Same. Power F 27:49 Jl '18
- Grain-dust explosions. B. W. Dedrick and others. bibliog il U S Ag B 681:1-54 '18
- How dust explosions and fires started by them destroy elevator and cereal plants. C. H. Bailey. Coop Manager & F 7:40-2 Ag '18
- How separator explosions and fires occur. Coop Manager & F 7:49 Ag '18
- Preventing threshing explosions. Power F 25:30 Jl '16
- Prevention of separator explosions. D: J. Price and W. G. Goodenow. Farm Eng 5:5 Jl '17
- Smut dust explosions. D: J. Price and W. G. Goodenow. il Farm Eng 5:3-4 Je '17

**Explosives**

- Explosives for the farmer's use. J. S. Rodney. Power F 27:31 O '18
- Farm magazine for explosives. J. R. Mattern. il Country Gent 83:21 N 2 '18
- See also* Blasting; Dynamite in agriculture

**Export trade**

- \* Export lumber trade of the United States; with text of Webb bill. E: E. Pratt. (Misc. ser. no. 67) 117p il maps '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- \* Exports of cotton. Hoke Smith and others. Congressional Record (Washington, D.C.) 56:12712-15 N 21 '18
- Farmer and foreign trade. Ag Digest 1:332-3 Mr '17
- International trade in feeding stuffs. Int R Sci & Prac Ag 8,no 4:489-526 Ap '17
- \* September exports of breadstuffs, oils, cotton, etc. (Commerce Reports no. 251) p350 (O 25) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Laws and regulation**

- Restrictions imposées à l'exportation ou facilités accordées à l'importation dans les différents pays. Int Yearbook Ag Leg 1916:321-60 '17

**Express companies**

- Case of the express companies. Rural N Y 75:1440 N 18 '16
- Commissioner Dillon protests against regulation of express companies. N Y Prod R 44:502 Jl 25 '17
- Egg damage claim matters. N Y Prod R 44:609 Ag 15 '17
- Express companies and conservation. Rural N Y 76:945 Ag 4 '17
- Express companies lose. N Y Prod R 45:73 N 21 '17
- Express companies yield. N Y Prod R 45:221 D 19 '17
- Faults of the express companies. J. F. Archdekin. Am Bee J 58:117 Ap '18

**Express rates**

- Direct marketing of farm produce. B. H. Hibbard and A. Hobson. il Hoard's D 50:857+ Ja 21 '16

**Extension education**

- \* Extension courses and lectures, 1918-1919. (Ext. leaflets v. 2,no. 3; War information ser. no. 21) 11p '18 N.C. Univ., Bur. of ext., Chapel Hill
- Need of training teachers for extension education work. A. Loomis. J Home Econ 8:78-81 F '16

**Eye**

- Care of the eyes. Mrs W. N. Hutt. Prog F 32:44 Ja 13 '17
- Five-minute talks: care of the eyes. Prog F 31:656 My 13 '16
- Would you like to keep good eyesight. Prog F 33:1309 N 30 '18

**Eye (animals)**

- Examination of the eye. R. R. Bolton. Am Vet M Assn J 54:22-9 O '18

**Eye (animals)—Continued**

Eye as an indicator of disease. A. Saperstein. *Am Vet M Assn J* 48:745-6 Mr '16

**Diseases**

Periodic ophthalmia. R. F. Avery. *Am Vet M Assn J* 51:78-81 Ap '17

Eye-spotted bud-moth. See Bud-moths

**F****Factories**

Small factories and direct dealing. *Rural N Y* 76:1028 S 1 '17

See also Canneries; Fertilizer factories; Ice cream factories; Sugar factories

**Fairfax, Henry, 1850-1916**

Portrait. *Breeder's Gaz* 70:121 Jl 27 '16

Sketch. *Breeder's Gaz* 70:97 Jl 20 '16; *por Field* II 26:678 Ag '16

**Fairs**

Agricultural fair exhibits. *Western Wash Ag Exp B v* 5:73-5 Ag '17

Agricultural fair in China. C. O. Levine. *il Breeder's Gaz* 72:275 Ag 30 '17; Same. *Hoard's D* 54:253 S 21 '17

Agriculture at agricultural fairs. O Judd *Farmer* 63:1 S 15 '17

Alaska—1st annual fair a great success. *Alaska Railroad Record* (Anchorage, Alaska 5c) 1:372 O 2 '17

A. J. C. C. and the 1918 fairs. R. M. Gow. *Jersey B* 37:334 Mr 13 '18

Big little county fair. J. R. McMahon. *il Country Gent* 83:2+ Ag 17 '18

Boys attend school at state fair. F. M. White. *il O Judd Farmer* 65:175 S 7 '18

Building a state system of fairs. S. G. Rubinow. *Breeder's Gaz* 74:12 Jl 4 '18

Canadian western fairs. *Breeder's Gaz* 70:132 Jl 27 '16

Classification at agricultural fairs. P. E. Crabtree and F. L. Brown. *il Kan Ag Ext B* 7:1-31 '17

Coming farm festivals; list by states. O Judd *Farmer* 65:4 Jl 6 '18

Coping with county fair emergencies. R. C. Shoemaker. *il plan Rural Manhood* 8:103-6 Mr '17

County and community fairs. W. S. Brown and others. *il Ore Ag Ext Coll B* 212 (ser 2, no 45):1-46 n. d.

County fair in Missouri. W. L. Nelson. *Mo Ag Bd B v* 14:1-30 Jl '16

County fair livestock classes. C. T. Conklin. *Ohio F* 141:426 Mr 23 '18

Display of farm products. W. A. Lang. *Ag Gaz of Canada* 5:336-7 Ap '18

18th annual report of the Agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions, for the year 1918. 112p *il '18 Ontario ag. dept., Toronto*

Fair and fair exhibit experiences. *Prog F* 33:586 My 11 '18

Fair with no admission fee. R. Mathewson. *Rural N Y* 76:1317 N 17 '17

Fairs and the farmer. A. C. Thomas. *Country Gent* 82:1915 D 8 '17

Fairs and their educational value. S. G. Rubinow. *il N C Ag Ext C* 69:1-14 '18

Fairs converted into food training camps. R. P. Speer. *il Breeder's Gaz* 72:171 Ag 9 '17

Fall festivals as means of advertising. U. T. Cox. *Rural N Y* 75:1151 S 2 '16

Far Hills fair. R. V. Hoffman. *il Field* II 27:863 N '17

Function of a state fair and its educational features. J. C. Simpson. *Ia Ag Bd Yearbook* 1916:80-8

Get up a county fair—do it now. L. A. Markham. *Prog F* 32:902 Ag 25 '17

Getting up the premium list. S. G. Rubinow. *Prog F* 33:588 My 11 '18

Going to the county fair. *Prac F* 114:295 S 1 '18

Great eastern exhibition at Sherbrooke. J. Ag (Quebec) 21:59 O '17

Great fair at Ormstown. J. Ag (Quebec) 20:10 Jl '16

How farmers run a fair. O Judd *Farmer* 63:3 O 6 '17

How to live up a fair. M. R. Warren. *il Country Gent* 83:30+ Je 15 '18

Huntingdon fair. *il J Ag (Quebec)* 21:58 O '17

Indian fair in Oregon. F. W. Mitchell. *Breeder's Gaz* 70:388 S 7 '16

Making fairs fit the war. J. R. McMahon. *il Country Gent* 83:10-11 Jl 6 '18

Need of a new county fair. G. D. Black. *Ohio F* 140:238 S 22 '17

Organization and management of fairs. S. G. Rubinow. *il N C Ag Ext C* 68:1-24 '18

Our country fairs. E. Beach. J. Ag (Quebec) 21:47 S '17

Our second agricultural fair. *Rural N Y* 75:1547 D 16 '16

Pleasant Valley (Ill.) holds a fair. *il O Judd Farmer* 65:255 S 28 '18

Possibilities of the county fair. C. Adkins. *il O Judd Farmer* 65:85 Ag 3 '18

Premium lists for the fair. W. L. Nelson. *il Country Gent* 81:1399 Jl 22 '16

Red cross agricultural fair. *il Hoard's D* 54:452-3 O 26 '17

Seeking agriculture at the fairs. O Judd *Farmer* 63:3 S 22 '17

Significance of the fairs. F. D. Tomson. *Breeder's Gaz* 72:174 Ag 9 '17

State fairs for 1916. *il Hoard's D* 52:383-6+ O 13 '16

Successful industrial fair. G. A. Morris. *il Purdue Ag* 10:9-11 Ja '16

Two boys at the fair. *Hoard's D* 56:566 N 15 '18

Your Shakspeare celebration. K. Lord. *il Country Gent* 81:951 Ap 29 '16

See also Agricultural exhibitions; Community fairs; Jumble sales; School fairs; also Brookton fair; Eastern states agricultural and industrial exposition; Hawaii territorial fair; Interstate live stock fair; Iowa association of county and district fair managers; Iroquois county fair; Memphis tri-state fair; Mississippi-Alabama fair; Ontario provincial winter fair; Ottawa winter fair; Panhandle state fair; Pendleton roundup; Quebec provincial fair; Sherbrooke fair; Southeastern fair; Spokane interstate fair; Trenton interstate fair; also names of state fairs, e.g. Minnesota state fair, New York state fair, North Dakota state fair

**Laws**

Laws relating to fair grounds. 18p '18 N.Y. State law library, Albany

**Fairy rings**

Fungus fairy rings in eastern Colorado and their effect on vegetation. H. L. Shantz and R. L. Piemeisel. *bibliog il J Ag Research* 11:191-246 O 29 '17

Fakes for farmers. P. S. Lovejoy. *Country Gent* 83:13-14 My 18 '18

**Fall army worms**

Fall army worm, or grass worm, and its control. W. R. Walton and P. Luginbill. *il map Farmers' B* 752:1-16 '17

Fall poison. See Fly poison (plant)

**Fall webworms**

Fall web-worm. *bibliog Conn State Ag Exp B* 203:219-24 '18

Historical account of the forest tent caterpillar and of the fall webworm in North America. A. B. Baird. (*In* Report, Entomological soc. of Ontario, 1916, p. 73-87) map '17 Ontario ag. dept., Toronto

Synchronous rhythmic movements of fall web-worm larvae. L. M. Pears. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:501-2 My 25 '17

False apple red bug. See Apple red bugs

False budworm of tobacco. See Corn earworms

False castor oil plant. See Jimson weed

**False chinch bugs**

False chinch bug and measures for controlling it. F. B. Milliken. *il Farmers' B* 762:1-4 '16

Nysius ericae, the false chinch bug. F. B. Milliken. *il J Ag Research* 13:571-8 Je 10 '18

False soft brown scale. See Citricola scale



**False wireworms**

Notes on false wireworms with especial reference to *eleodes tricostrata* Say. J. W. McColloch. bibliog il J Econ Entom 11:212-24 Ap '18

**Family**

Families of farmers. H. T. Morgan. Farm Eng 5:4-5 F '17

See also Children; Domestic finance; Marriage; Mothers

**Family budget.** See Domestic finance

**Fancy work.** See Embroidery

**Fanning mills**

Fanning mill or grader. G. H. Alford. Prog F 33:385 Mr 23 '18

Vasino winnowing machine. A. Tarchetti. Int R Sci & Prac Ag 7,no 7:1007-8 Jl '16

**Farm animals.** See Live stock

**Farm bookkeeping**

Accounting the cost of farming. F. F. Rockwell. il Country Life 32:70-2 My '17

Balancing the farm ledger. Ag Digest 2:872 Mr '18

Banks: get these account sheets. Banker-F 5:16 N '18

Card system for simplifying farm records. W. A. Cook. il System on the Farm 1:180-1 Jl '17

Cost of things. Hoard's D 55:45 F 1 '18

Difficulties of farm cost accounting. Prog F 33:1363 D 14 '18

Farm accounting for the income tax. Country Gent 83:40 Mr 23 '18

\* Farm accounting problem. E. L. Smith. Sci Am (233 Broadway, N.Y. 10c) 119:436 N 30 '18

Farm accounts. R. N. Miller. Western Wash Ag Exp B v 6:46-8 Jl '18

Farm accounts as they should be kept. D: Bufum. Country Life 30:84 Je '16

Farm accounts, their significance and importance. J. R. Ummel. Reclamation Record (Washington, D.C. 50c per yr.) 8:238-9 My '17

Farm book-keeping. Ag Gaz of Canada 4:578-81 Jl '17

Farm bookkeeping. F. H. Demaree. Farm Eng 5:9 Ag; 13 S '17

Farm bookkeeping: how to get an accurate estimate of profits. F. H. Demaree. Farm Eng 5:11 D '17

Farm bookkeeping problems. Prog F 32:1231 N 24 '17

Farm cost accounting made easy. M. C. Burritt. Power F 25:14 Ja; 14 F; 24 Mr; 30 Ap '16

Farm costing. L. F. Foster. J Bd Ag 25:153-65 My '18

Farm inventory. T: D. Phillips. Ohio F 139: 107 Ja 27 '17

Farm records and accounts. H. P. Barrows. (Doc. 38) 10p '17 U.S. States relations service, Washington, D.C.

Farm records and the income tax. L. S. Robertson. Purdue Ag 12:426 Ap '18

Farm records that reduce costs. C. I. Hammet. il System on the Farm 1:215-18 Ag '17

Farm valuations for book-keeping purposes. J. Wylie. J Bd Ag 22:1215-28 Mr '16

Farmer who keeps books. Am Coop J 13:168 D '17

Farmers' bookkeeping for income tax. Ag Digest 2:891 Mr '18

Farmers' books and the banker—a great chance for cooperation. J. R. Wheeler. Banker-F 3:11 My '16

Farmers' experience meeting; keeping farm accounts. Prog F 33:1252 N 16 '18

Farming without guesswork. J. C. Marquis. Country Gent 82:2010-11 D 22 '17

How accurate records helped in establishing a pure bred business. P. H. Hofius. il System on the Farm 2:85-8 Mr '18

How banks can cooperate with farmers in keeping farm accounts. D. H. Otis. Banker-F 3:12 My '16

How I know my farm income. J. J. Jones. System on the Farm 3:98-9 S '18

How to keep farm accounts. R. M. Green and D. C. Wood. Mo Ag Exp C 84:1-28 '18

Keep farm accounts. Weekly N L 5:4 Mr 13 '18

Keeping farm accounts and records. Prog F 32:963 S 15 '17

Making poor land pay. il System on the Farm 1:323-6 N '17

Making shorter work of records and accounts. System on the Farm 3:160 O '18

Omissions in agricultural accounting. Hoard's D 50:823 Ja 14 '16

Ordonnance royale concernant la contribution de l'etat pour encourager une comptabilité bien ordonnée chez les petits propriétaires agricoles. Int Yearbook Ag Leg 1916:834-6 '17

Overhead charges on the farm. C: D. Kirkpatrick. Wallaces' F 43:542 Mr 22 '18

Poultry accounts. Mrs G: R. Shoup. Wallaces' F 42:1140 Ag 17 '17

Records and accounts. System on the Farm 3:106+ S '18

Records farmers should keep. Prog F 33:1256 N 16 '18

Simple farm account system. B. F. Harris. Banker-F 5:16 F '18

Simple method of keeping farm records. F. H. Demaree. Farm Eng 3:131-2 Ja '16

Smith comes through. G. H. Campbell. Hoard's D 55:369 Mr 22 '18

System of bookkeeping suitable for the farmer. D. Aikins. J Dept Ag S Australia 21: 431-6 D '17

This bank helps the farmer keep books. C. E. Alford. Banker-F 5:10 D '17

To keep farm books: Ohio college and bankers unite. R. F. Taber. Banker-F 6:11 D '18

Use of a diary for farm accounts. E. H. Thomson. Farmers' B 782:1-18 '17

Useful farm records and accounts. G. N. Dager. Ohio Ag Ext B v 12,no 4 12p '16-'17

Value of records to the farmer. J. S. Ball. il U S Ag Yearbook 1917:153-67

See also Accounting; Cost accounting; Inventories

**Farm bookkeeping circles**

Farm bookkeeping circle suggested. Hoard's D 54:842 Ja 4 '18

**Farm boy cavaliers**

Farm boy cavaliers. Nat Stock & F 40:265 Je 3 '16

Farm boy cavaliers. L. G. Hood. il Wallaces' F 41:1048 Ag 4 '16

Farm boy cavaliers; new boys' organization. J: D. Brown. il Ohio F 138:458 N 4 '16

**Farm boys**

Boy farmer. J. G. Poynton. Wis Dairymen's Assn Rep 1916:196-202 '17

Boy on the farm. M. K. Boyer. Am P Advocate 25:587 Ag '17

Boys, T. N. Vail. Hoard's D 54:812 D 28 '17

Boy's own farm. B. Howard. Country Gent 83:21 Mr 2 '18

Boys who got a chance. C: E. Gapen. Country Gent 83:8-9 Ja 19 '18

Country church and the country boy. B. R. Ryall. (Pamph no 14) 5p 2c '16 Moravian country church commission, E. De S. Brunner, sec., 225 N. 10th st., Easton, Pa.

Farm boy as a citizen. E. L. Earp. Rural Manhood 8:260-1 Je '17

Farm home and the boy. il Va Ag Dept B 115: 61-5 '17

Farmer and his son. Mrs C. Lee. Ohio F 142: 290 S 28 '18

It isn't right. H. Quick. Country Gent 81: 835+ Ap 15 '16

Junior dairyman. il Hoard's D 53:177+ F 23 '17

Junior dairymen's day. E. J. Trospier. il Kimball's D F 15:133 Mr 1 '17

Junior farm army. il Country Gent 82:897 My 19 '17

Keeping fit for war relief-farming. J. B. Modisett. Rural Manhood 8:251-3 Je '17

Making a farmer of him. Country Gent 82: 427+ Mr 3 '17

Making men through service. L. K. Hall. Rural Manhood 8:191-3 My '17

Making the farm boy a partner in business. Prog F 33:380 Mr 23 '18

Marketing the American farm boy. O. J. Kern. Breeder's Gaz 71:970 My 10 '17

**Farm boys—Continued**

- New system of education for farm boys and girls in Oregon. N. C. Maris. *il Breeder's Gaz* 70:9-10 J1 6 '16
- Problems and rewards of a rural leader. E. R. Wharton. *il Rural Manhood* 8:242-4 Je '17
- Recollections of boyhood days. C. P. Goodrich. *il Hoard's D* 53:836 Je 8 '17
- Talk with farm boys and girls; the new grand army of the republic. O. J. Kern. *il Breeder's Gaz* 70:1178-9 D 21 '16
- That boy of yours. A. M. Gates. *Nat Stock & F* 41:729 O 27 '17
- Why boys leave the farm. J. W. Ingham. *Ohio F* 138:556 D 2 '16
- Why the farm boy wins. S. S. Lappin. *Nat Stock & F* 40:1046 Ja 13 '17
- Why we leave. *Nat Stock & F* 41:1044 Ja 19 '18

**Farm boys' camps. See Camps, Agricultural****Farm boys' conferences**

- County boys' conference time. E. J. Arnot. *Rural Manhood* 8:350-2 O '17
- County farm boys' council. E. T. Judd. *Rural Manhood* 8:218-19 My '17

**Farm buildings**

- Adequate buildings for farm animals. C. McIntire. *il Ohio F* 141:665 My 18 '18
- Arrangement of the farmstead. L. W. Chase. *il plans Am Soc Ag Eng Trans* 10,no 2: 35-50 '17; Same cond. *Hoard's D* 53:448-9 Mr 30 '17
- Bringing down the cost of building. W. J. Mullenburg. *il Wallaces' F* 41:1330 O 13 '16
- Build the farm on paper first. W. A. Radford. *il plans Country Gent* 83:14-15 Ja 12 '18
- Building for convenience. *il plan Wallaces' F* 43:999 J1 5 '18
- Buildings for a purebred beef herd. R. C. Forbes. *Breeder's Gaz* 69:302 F 10 '16
- Concrete construction on the farm—its durability and economy. W. C. Dalzell. *N Y Ag Dept B* 80:1478-86 F '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1478-86 '17
- Concrete fits in the dairy farm scheme. H. C. Campbell. *il Kimball's D F* 16:210+ Mr 15 '18
- Consistent farm group. A. M. Githens. *il plan Country Life* 30:27-31 My '16
- Convenient buildings for the farm. W. E. Frudden. *il plans Building Age* (243 W. 39th st, N.Y. 25c) 39:687-90 D '17
- Farm architecture. N. Tjernagel. *il Wallaces' F* 41:1661 D 22 '16
- Farm building activities as affected by the war. J. L. Strahan. *il Cornell Countryman* 15:336-8+ Mr '18
- \* Farm building groups on Long Island; views. *Am Architect* (243 W. 39th st, N.Y. 25c) 114:pl 136-44 N 6 '18
- Farm building plans available; list. L. C. Hart and G. R. Jones. *Ga Ag Coll (Ext) C* 49:1-4 '17
- Farm building plans; list of available blueprints, plans *Wis Ag Ext C* 104:1-8 '18
- Farm buildings. F. G. Kraege. *N Y Ag Dept B* 93:37-40 Mr '17
- Farm buildings. F. W. Shephard. *J Dept Ag S Australia* 21:983-4 J1 '18
- Farm buildings for Missouri. F. C. Fenton. *Mo Ag Ext C* 38:1-8 '17
- Farm buildings in livery. *il plan Country Life* 31:62-3 F '17
- Farm home mechanics; farmstead arrangement. Mrs A. G. Vestal. *plan Power F* 27: 26 Ap '18
- Farm structures. F. L. Morrison. *il Farm Eng* 5:3-4 F '17
- Farm structures. H. Shearer. *plan Farm Eng* 3:259 My '16
- Farmer his own builder. H. A. Roberts. *il Country Gent* 81:2155+ D 16 '16
- Farmers' neglect and its cure—housing machinery, hogs and poultry a profitable prospect. *il Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2263:44-6 S 28 '18
- Fighting rats and disease with concrete. F. W. Ives. *Ohio F* 142:158 Ag 24 '18
- Fire proof farm buildings. T. Chard. *il plan Field* 11 27:753 O '17
- Free building plans for Mississippi farmers. *Prog F* 33:892 Ag 10 '18
- Fresh air for farm animals. K. J. T. Ekblaw. *il Country Gent* 81:497-8 Mr 4 '16
- Getting more from farm buildings. G. Clay; H. M. Johnson. *il System on the Farm* 3:62 Ag '18
- Good farm buildings soon save cost. W. E. Frudden. *il Ohio F* 138:117-18 Ag 12 '16
- Hollow blocks for farm buildings. J. L. Ahart. *Farm Eng* 5:12 F '17
- Hollow clay blocks for farm buildings. M. L. King. *Am Soc Ag Eng Trans* 10,no 2:62-7 '17; Excerpt. *Power F* 26:49 My '17
- Hollow tile on the farm. *il Jersey B* 35:987 Je 21 '16
- Housing equipment for less. H. V. Stanley. *il System on the Farm* 3:227 D '18
- How Burgess improved his farm buildings. W. A. Radford. *il plans Power F* 27:12-13 Ag; 18+ S '18
- How to arrange your buildings. A. Hopkins. *il plan Country Gent* 81:1787 O 7 '16
- Improvements on a farm in Kankakee, Ill. O Judd Farmer 60:3 Ja 29 '16
- List of farm building plans. *Miss Ag Ext* 11p '16
- Location of farm buildings. W. K. Brainerd. *Hoard's D* 52:206 S 8 '16
- Lumber's place on the farm. R. B. Goodman. *il Field* 11 27:853-5 N '17
- Making the most of buildings and equipment. *il System on the Farm* 1:160-1 Je '17
- Many improvements in dairy barn. *il O Judd Farmer* 60:7 My 20 '16
- Miscellaneous farm buildings. W. E. Frudden. *il plan Bldg Age* (243 W. 39th st, N.Y. 25c) 40:477-8 O '18
- Miscellaneous farm buildings; details of a smoke house, a milk house and a machine shed, all of concrete. W. F. Frudden. *il plans Building Age* (243 W. 39th st., N.Y. 20c) 39:237-9 My '17
- Modern farm-estate buildings. *il plan Field* 11 26:743-5 S '16
- Notable farm buildings; some graceful and practical applications of correct principles of housing. A. Staple. *il Field* 11 29:631-5 S '18
- Painting farm buildings—why and how. *Prog F* 33:1005 S 14 '18
- Planning a farmstead. M. C. Betts. *il plans Am Soc Ag Eng Trans* 10,no 2:50-61 '17; Same cond. *Wallaces' F* 42:584 Mr 30 '17
- Re-arranged and re-modeled buildings. H. P. Miller. *Ohio F* 139:547 Ap 14 '17
- Repairs and upkeep of farm buildings necessary. *il Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2260:44-5 S 7 '18
- Report of committee on farm structures. *Am Soc Ag Eng Trans* 9:202-30 '16
- Report of committee on major farm buildings. R. Thelen. *il Am Soc Ag Eng Trans* 10,no 1:12-23 '17
- Roofing farm buildings. J. Marsh. *Ohio F* 142: 346 O 12 '18
- Smaller farm buildings. 22p *il plans n.d.* Southern pine assn, New Orleans, La.
- Sub-committee on minor farm buildings. A. H. Connolly. *Am Soc Ag Eng Trans* 10,no 1: 24-8 '17
- This is the best time to do farm building. J. R. Stone. *Power F* 26:20 D '17
- Tower in the farm group. A. Hopkins. *il Country Life* 30:27 O '16
- Under one roof; grouping farm-estate buildings in a single unit. J. H. H. Alexander. *il Field* 11 27:671-3 S '17
- Use of concrete work on the farm. *il plans Building Age* (50 Union square, N.Y. 20c) 39:99-105 F '17
- Use of lumber on California farms. M. B. Pratt. *bibliog il Cal Ag Exp B* 299:89-121 '18
- Western farm buildings. C. E. Baker. *il Field* 11 28:154-5 Mr '18 (to be cont)

*See also* Barns and stables; Bee and honey houses; Calf pens; Cattle sheds; Corn houses; Dairy buildings; Garages; Granaries; Ice houses; Live stock sheds; Machine sheds; Manure sheds and pits; Milk houses; Poultry houses; Sheep shearing sheds; Silos; Storage houses and cellars; Swine houses; Tobacco curing barns; Trusses; Workshops



**Farm buildings—Continued**

**Bibliography**

Structural service department; farm buildings, accessories and rural engineering. Am Inst Architects J (The Octagon, Washington, D.C. 50) 5:655 D '17

**Farm bureaus**

Activities of a New York farm bureau. H. H. Lyon. Hoard's D 52:882 Ja 12 '17  
 Advocate of farm bureaus. G: H. Ritter. Rural N Y 75:1415 N 11 '16  
 Annual report of the director of farm bureaus for the year ending Dec. 31, 1915. Cornell Ag Exp Rep 1916, v 2: 1385-1435 '17  
 Another side of the farm bureau. Rural N Y 75:1125 Ag 26 '16  
 Chenung county; an account of its agriculture and of its farm bureau. M. E. Chubbuck and G. P. Scoville. il maps Cornell Ag Exp Rep 1916, v 2:1347-82 '17  
 Constitution for a farm bureau. Banker-F 4:13 F '17  
 County farm bureau. B. H. Crocheron. il Cal Ag Exp C 166:1-16 '17  
 County farm bureau in Kansas. il Kan Ag Ext C 10 n.p. '18  
 Defense of the farm bureau. W. Trueman. Rural N Y 75:1230 S 23 '16  
 Farm bureau. M. C. Burritt. Cornell Ag Exp Rep 1917:lxiii-lxxi '18  
 Farm bureau and preparedness. Penn State F 10:115+ Je '17  
 Farm bureau as an agency for demonstrating the control of injurious insects. C. R. Crosby and M. D. Leonard. J Econ Entom 10:20-5 F '17  
 Farm bureau as an agent in local development. M. C. Burritt. (In Pro., Nat. educ. assn., 1916, p. 614-18) '16 D. W. Springer, sec., Ann Arbor, Mich.  
 Farm bureau at work. il Country Gent 81: 1513 Ag 12 '16  
 Farm bureau membership week in Minnesota. A. D. Wilson. Coop Manager & F 8:90 D '18  
 Farm bureau movement. Market Growers J 19:132 S 15 '16  
 Farm bureau news. G: A. Starring. (Sup. to B. vol. 10, no. 3) 12p '18 S.D. state college, Brookings  
 General principles governing editorial work given briefly and simply as a help in editing farm bureau publications and in submitting copy for publication  
 Farm-bureau organization plan. L. R. Simons. (Doc. 54) 11p il '17 U.S. States relations service, Washington, D.C.  
 Farm bureau work in Pennsylvania. F. P. Weaver. map Penn State F 9:285-6+ Ja '16  
 Farm bureau work in the present national crisis. F. P. Weaver. Penn State F 10:135+ O '17  
 Farm bureaus and agents. il Ag Digest 1:179-80 N '16  
 Farm bureaus popular. Weekly N L 5:1 D 26 '17  
 Handbook on farm-bureau organization for county agricultural agents. L. R. Simons. (Doc. 65) 53p il '17 U.S. States relations service, Washington, D.C.  
 How to organize and keep going a bureau for farm development. H. M. Cottrell. (In Agricultural extension, p 18-22) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago  
 Need of more practical work. J. T. Campbell. Rural N Y 75:1304 O 14 '16  
 New York farm bureau agents; list of names. Rural N Y 75:889 Je 17 '16  
 New York institute workers meet. H. H. Lyon. Hoard's D 52:622-3 N 24 '16  
 Place of the farm bureau in agricultural extension work. C. B. Smith. N Y Ag Dept B 86:2321-7 Ag '16  
 Strength and weakness of farm bureaus. G: W. Dunn. Rural N Y 75:879 Je 17 '16  
 Value of the farm bureau in developing the live stock industry; with discussion. F. S. Barlow. N Y Ag Dept B 80:1452-62 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1452-62 '17

Weakness of the farm bureau. E. J. Baird. Rural N Y 75:1026 Jl 29 '16  
 What organization should precede food emergency agents in a county? M. C. Burritt; J. T. Caine, 3d. Assn Am Ag Coll & Exp Pro 1917:274-82 '18  
 Work of the farm bureaus; results of dairy farm surveys. A. M. Loomis. Kimball's D F 14:465 Jl 15 '16

**Farm cadet camps**

Camp Liberty, a farm cadet experiment. (B. 7) 24p il 10c '18 Bur. of educational experiments, 16 W. 8th st, N.Y.  
 \* Camp Liberty; an analysis of the social adjustments of city boys in a farm labor camp. C: E. Artinan. il Survey (112 E. 19th st, N.Y. 10c) 40:149-54 My 11 '18  
 War farming forces mobilized in farm cadet camps on Long Island. N.Y. H. R. Knight. il Rural Manhood 8:288-92 S '17

**Farm census**

Agricultural census for 1918. il Univ of the State of N Y B v 4, no 7 Ja 15 '18 1 sheet  
 Farm census by school children. Breeder's Gaz 70:27 Jl 6 '16  
 Farm census in five days. W. D. Lane. Survey (112 E. 19th st., N.Y. 10c) 38:155-6 My 19 '17  
 Farm census of New York state taken by the children in the rural schools. N Y Ag Dept B 89:1-32 N '16  
 Farm survey of Montana. E. L. Currier. Mont Ag Ext Pub no 25 19p '18  
 New York farm census. A. Kolbe. Hoard's D 55:388 Mr 22 '18  
 New York state agricultural census. Cornell Countryman 15:330+ Mr '18  
 New York's farm census. Nat Stock & F 41: 1275 Mr 9 '18  
 New York's hurry-up census. Country Gent 82:971 Je 2 '17  
 Preliminary report of the census of the agricultural resources of New York state. (B. 2) 18p My 22 '17 New York state food supply commission, Albany

Farm colonies. See Agricultural colonies

**Farm day**

Better farm day programme for the public schools of Virginia. J. H. Montgomery. Va Ag Dept B 110:19-31 Mr '16  
 Farm day: a Kentucky plan to interest her farmers of tomorrow. J. Speed. il Country Gent 81:663 Mr 18 '16

**Farm engineering**

American society of agricultural engineers discuss engineering problems at Chicago meeting. Breeder's Gaz 69:244 F 3 '16  
 Engineering work in food supply. F. H. Newell. Am Soc Ag Eng Trans 11:163-71 '18  
 Farm efficiency; how it depends on efficient equipment for living. X: Caverno. 48p '16 Xenophon Caverno. Kewanee, Ill.; Same. Am Soc Ag Eng Trans 9:12-29 '16  
 Farm engineering problems. Prog F 32:210 F 17 '17  
 Farm engineering questions answered. Prog F 33:196 F 16 '18  
 Farm mechanics. M. A. Cromwell. il Industrial Arts Magazine (129 Michigan st, Milwaukee, Wis. 25c) 7:256-7 Jl '18  
 How engineering may help farm life. E. B. McCormick. U S Ag Yearbook 1915:101-12  
 Inventions and discoveries. See monthly numbers of Farm engineering  
 Keeping the farmer on the farm. J. E. Ryan. Farm Eng 5:3 Mr '17  
 Musings of a tramp engineer. See monthly numbers of Power farming  
 Oil engine and its application to Indian agriculture. W. M. Schutte. Ag J of India 13: 608-15 O '18  
 Problems in agricultural engineering research; with discussion. P. S. Rose. Am Soc Ag Eng Trans 9:110-14 '16  
 What book knowledge is. C. V. Hull. Power F 26:46 Mr '17  
 See also Agricultural engineering; Levees; Surveying

**Farm engineering—Continued****Study and teaching**

- Amount of agricultural engineering work offered in agricultural colleges. A. H. Gilbert. *Am Soc Ag Eng Trans* 10,no 1:101-4 '17
- Farm mechanics instruction in Canada. *Ag Gaz of Canada* 3:731-9 Ag '16
- First school of mechanical cultivation founded in Germany. E. Eckmann. *Int R Sci & Prac Ag* 8,no 4:553-4 Ap '17
- Mechanical drawing for the farm and agricultural school. G. F. Krogh. bibliog il plans maps Minnesota Univ Ag Dept (Minneapolis) General Ser B 43 72p Jl '16 25c
- Scoates farm motor laboratory manual. 67p '18 D. Scoates, Miss. ag. and mechanical college, Agricultural College, Miss.

*See also* Tractor operation—Study and teaching

**Farm engines**

- Auxiliary engine for binder. J. J. Wright. *O Judd Farmer* 60:9 Ja 22 '16
- Belt speeds. E. R. Wiggins. *il Country Gent* 81:2073 D 2 '16
- Can a woman run an engine? S. J. Underwood. *Fruit-Grower* 27:31+ Ja 1 '16
- Convenient saw outfit. C. V. Hull. *il Power F* 27:37 D '18
- Engine on the binder. R. Olney. *il Country Gent* 81:1480 Ag 5 '16
- Engine to hoist hay. R. Olney. *il Country Gent* 81:1445 Jl 29 '16
- Farm boy, the hired man and the engine. R. B. Rushing. *il Prac F* 11:1337 Ap 1 '17
- Farm engine economy. *il Green's Am Fruit Grower* 38:21 Ap '18
- Farm power house—a factory idea. R. Olney. *il Power F* 26:7-8+ N '17
- Fit the engine to the farm. W. Jack. *Ohio F* 138:567 D 9 '16
- Gasoline engine for every farmer. G. H. Alford. *Prog F* 33:1270 N 16 '18
- General notes on power farming. E. R. Wiggins. *Power F* 25:18 Ja '16
- General-purpose gasoline engine. I. W. Dickerson. *Country Gent* 81:1910 O 28 '16
- How engines are lightening farm work. L. E. Dew. *il Ohio F* 138:349 O 14 '16
- Mechanical hired man. S. W. Charles. *Farm Eng* 5:10 F '17
- Meeting the labor situation. C. S. Phelps. *Country Gent* 81:1938 N 4 '16
- Motive power on the farm. R. S. Bundy. *il Purdue Ag* 12:296-7 F '18
- Power farming—past, present and future. R. Olney. *il Power F* 25:7 Ja '16
- Power on the dairy farm. F. M. White. *il Hoard's D* 53:911 Je 29 '17
- Practical uses for small gasoline engines on the farm. J. B. Kelley. *il Kimball's D F* 14:27 Ja 15 '16
- Some observations on the extent and value of farm power equipment. P. S. Rose. *Am Soc Ag Eng Trans* 9:275-89 '16
- Some practical farm engine hints. W. Morrow. *Power F* 27:43 Ap '18
- Steam and gas power on a Nebraska farm. G. Dietz. *il Power F* 25:24 Jl '16
- Use of gas engines on self-binders. C. Miller. *Purdue Ag* 11:36-7 My '17; Same. *Hoard's D* 53:910 Je 29 '17
- When Don got her small engine. plan *Power F* 27:28 F '18

*See also* Electricity on the farm; Gas and oil engines; Magnetos; Tractors

**Costs**

- What are your farm power costs? J. H. Francis. *il Power F* 27:16 S '18

**Fuel**

- Experiments on the fuel used in farm portable engines. *Int R Sci & Prac Ag* 7,no 7:1012 Jl '16

**Farm forestry.** *See* Woodlots

**Farm girls**

- Are you worth anything? M. B. Richardson. *Rural Manhood* 8:390-2 N '17
- Boys. T. N. Vail. *Hoard's D* 54:812 D 28 '17

- Farm girls who became famous. V. C. Meredith. *Breeder's Gaz* 70:1288 D 28 '16
- Girl on the farm. F. H. Sweet. *Green's Fruit Grower* 37:14 Ag '17
- Home problems of the rural woman. E. B. Kelley. (*In Trans.* Am. assn. for study and prevention of infant mortality, 1916, p. 231-4) \$3+postage '17 G. E. Knipp, sec., 1211 Cathedral st., Baltimore
- New system of education for farm boys and girls in Oregon. N. C. Maris. *il Breeder's Gaz* 70:9-10 Jl 6 '16
- Putting it up to Uncle Sam to direct the activities of farm girls. *Country Gent* 81:390 F 19 '16
- Restless girl. *Prog F* 32:636 My 26 '17
- Talk with farm boys and girls; the new grand army of the republic. O. J. Kern. *il Breeder's Gaz* 70:1178-9 D 21 '16
- Training country girls in homemaking. A. B. Cowles. *il Rural Manhood* 8:397-8 N '17
- Uneventful life of the farm girl. Mrs B. M. Patterson. *Green's Fruit Grower* 36:19 S '16
- When the country girl goes to the city. A. Henry. *Rural Manhood* 8:386-7 N '17

*See also* Young women's Christian association

**Farm home demonstration work**

- Agents in farm demonstration work in South. *Prog F* 33:220 F 16 '18
- Correlation of home demonstration with county agent work. C. A. Keffe. *Assn Am Ag Coll & Exp Pro* 1917:282-6 '18
- County agent and the home. *J Home Econ* 8: 199-201 Ap '16
- County home adviser. *Nat Stock & F* 42:642 O 12 '18
- Demonstrating in and to the home. A. C. True. *J Home Econ* 9:469-70 O '17
- Effect of home demonstration work on the community and the county in the South. B. Knapp and M. E. Creswell. *il U S Ag Yearbook* 1916:251-66; Same, Separate 710
- Financing the home demonstration work. D. W. Working. *J Home Econ* 9:8-13 Ja '17
- For the women of the South. W. H. Dean. *il Country Gent* 81:185+ Ja 22 '16
- Function of the woman extension worker; with discussion. A. E. Harris; A. L. Garvin. *Assn Am Ag Coll & Exp Pro* 1916:304-16 '17
- Girls' club and home demonstration work in Alabama. M. J. Reese. *Prog F* 31:361 Mr 11 '16
- Home cooperators' demonstration project. *Ore Ag Ext B* 183:1-8 '17
- Home demonstration project; with discussion. A. M. Turley. *Am Assn Farmers' Inst Workers Pro* 1916:119-33 '17
- Home-demonstration work and girls' clubs in the South. (*In* Cooperative extension work, 1916, pt. 2, p. 28-30) *il '17 U S Ag*
- Home demonstration work in St Joseph county. I. M. Richardson. *Purdue Ag* 12:341 Mr '18
- Home demonstrations. M. E. Creswell. *Assn Am Ag Coll & Exp Pro* 1915:247-53
- How Iowa is carrying out better living. G. C. Jessup. *il Country Gent* 81:301+ F 5 '16
- How one county got a home-making adviser—why not yours? M. Price. *Banker-F* 3:12 O '16
- How women agents transformed these southern communities. *il Banker-F* 4:6 S '17
- How women county agents are taking drudgery out of the farm home. L. Goss. *il Banker-F* 4:14 F '17
- Labor-saving in a club; Virginia women work together. W. H. Dean. *il Country Gent* 81: 428 F 19 '16
- Mass instruction thru group training. O. B. Martin. (*In* Pro., Nat. educ. assn., 1916, p. 97-101) '16 D. W. Springer, sec., Ann Arbor, Mich.
- New office for farm women. *Country Gent* 81:2023 N 18 '16
- Program for home demonstration work. *La Ag Ext C* 26:1-4 '17
- She lifted sixty-six counties. M. R. Warren. *il Country Gent* 83:8-9 Je 29 '18
- Women agents in war—and peace. C. DuBose. *il Banker-F* 5:2 Je '18

*See also* Housekeeping centers



**Farm home demonstration work—Continued**

**Statistics**

Number of counties with home-demonstration agents and expenditures for home-demonstration work for the fiscal year ended June 30, 1916; tabulation. (*In Co-operative extension work, 1916, pt. 2, p. 398*) '17 U S Ag

**Farm homes**

Agriculture for beginners; home and farm adornment. W. I. Chamberlain. *il Nat Stock & F* 40:228 My 27 '16  
Beautiful inside and outside. Mrs L. Patterson. *Prog F* 31:402 Mr 18 '16  
Beautify homes and farms. C: S. Barrett. *Prog F* 31:471 Ap 1 '16  
Beautifying farm homes. J. E. Ryan. *il Kimball's D F* 15:234 Ap 1 '17  
Beautifying the dairy farm. C. N. Keyser. *il Kimball's D F* 16:202 Mr 15 '18  
Beautifying the farm home. J. L. Justice. *il Ohio F* 137:426 Mr 18 '16  
Beauty outside the home. Mrs W. N. Hutt. *Prog F* 31:1058 S 2 '16  
Building and remodeling the home. M. G. Burleigh. *plans Green's Fruit Grower* 37: 1 Mr '17  
City comforts for the farm. *il Kimball's D F* 16:345+ My 1 '18  
Conservation kitchen for the farm home. H. B. Young. *plan Cornell Countryman* 15: 535-7 Je '18  
Co-operator's home; description of I. M. McKim's home, Plover, Ia. *il Am Coop J* 13: 423-4 Jl '18  
Equip the farm home with modern conveniences and comforts. X. Caverno. *il Banker-F* 3:4-5 Ap '16; Same. *Field* 11:26:752 S '16  
Equipping the farm home heating systems. *il plans Farm Eng* 6:12 Ja '18  
Exterior decoration of the farm home. G. V. Gray. *il Farm Eng* 3:256-7 My '16  
Facts about Illinois farm homes. O Judd *Farmer* 60:4 F 5 '16  
Farm cosmetics; brighten up the home grounds. R. H. Smith. *Rural N Y* 76:913-14 Jl 28 '17  
Farm home conveniences. M. J. Reese. *il Farmers' B* 927:1-32 '18  
Farm home mechanics; farmstead arrangement. Mrs A. G. Vestal. *plan Power F* 27: 26 Ap '18  
Farm wives and farm homes. Mrs M. S. Tschantz. *Ohio F* 142:106 Ag 3 '18  
Fresh air for farm families. A. G. Vestal. *il Power F* 26:26 Jl '17  
Good home provides comfort, profit, pleasure. 21p *il '16 Int. harvester co., Chicago*  
Have a real home on your farm. W. F. Massey. *Prog F* 31:392 Mr 18 '16  
Home building and equipment experiences. *Prog F* 33:1002 S 14 '18  
Home in an orchard. C. N. Crottsburg. *il Fruit-Grower* 27:463 O 15 '16  
Home we own. W. C. Smith. *il Fruit-Grower* 27:287 My 1 '16  
Hope farm notes; a good face. *il Rural N Y* 75:1096 Ag 19 '16  
How Frank Burgess modernized his farm home. W: A. Radford. *il plans Power F* 27: 9-11 D '18  
How we made Arcadia. Mrs L. L. Hobbs. *il Prog F* 31:396 Mr 18 '16  
Illinois countryside betterment; work of Wilhelm Miller. F. F. Rockwell. *il Field* 11: 26:105-7. 215-18 F-Mr '16  
Illinois farm women up-to-date. M. R. Reynolds. *il O Judd Farmer* 61:3 S 2 '16  
Implements used in home making. *Prog F* 31: 190 F 5 '16  
Improve home grounds with trees, shrubbery and grass. L. A. Niven. *Prog F* 33:1004 S 14 '18  
Inside a modern Illinois home. *il O Judd Farmer* 61:16 O 7 '16  
Just a country home. C. N. Crottsburg. *il Fruit-Grower* 27:319 Je 1 '16  
Living up to Genevieve; story. H. C. Bennett. *il Country Gent* 82:1949-50 D 8 '17  
Make the home attractive. J. A. Raiser. *Ohio F* 140:49 Jl 21 '17

Making the farm home beautiful. E. V. Laughlin. *il Farm Eng* 5:4 D '17  
Making the home beautiful. Mrs C. Bolick. *Wallaces' F* 41:777 My 19 '16  
Modern fuel and light. A. Carroll. *Fruit-Grower* 28:315 Jl 1 '17  
Motorizing the home. *il Kimball's D F* 16:399 My 15 '18  
Moving a city to the farm. *il Wallaces' F* 41:791 My 26 '16  
Music in the farm home; symposium. *Prac F* 114:33 Ja 15 '18  
North Dakota farmstead, its arrangement and adornment. H. O. Werner. *il N D Ag Exp C* 10:1-62 '16  
Ohio grange lecturer's home. *il Ohio F* 142: 588 D 14 '18  
Our farm home in Wisconsin. E. Williams. *il Fruit-Grower* 27:431 S 15 '16  
Planning a farmstead. M. C. Betts. *il plans Am Soc Ag Eng Trans* 10,no 2:50-61 '17; Same cond. *Wallaces' F* 42:584 Mr 30 '17  
Planning the farm home for comfort and convenience. *Prog F* 33:1010 S 14 '18  
Remodeling the old home. E. V. Laughlin. *plans Farm Eng* 3:236 Ap '16  
Replanning your place. R. J. Pearse. *il plan Country Gent* 82:1330 Ag 25 '17  
Rural worker and the country home. E. R. Groves. *Rural Manhood* 8:331-4 O '17  
Some farm accessories. *il Wallaces' F* 42:1455 O 26 '17  
Spring tour of cornbelt farm homes. *il Breeder's Gaz* 69:1247 Je 15 '16  
Suggestions for the home-maker. C. J. Hayden. *Prog F* 31:393 Mr 18 '16  
Suggestions on beautifying the farmstead. V. V. Westgate. *Better Fruit* 11:36 Ap '17  
Trees increase farm value. F. A. Aust. *il Field* 11:27:678-9 S '17  
United we stand—the farm and the home. *Hoard's D* 51:804 Je 9 '16  
Well planned home. Mrs R. D. Goodman. *il plan Prog F* 32:322 Mr 10 '17  
What makes an efficient country home? *Power F* 27:34 Ag '18  
What the bankers can do to help meet the needs of the farm woman. L. Goss. *il Banker-F* 3:3 Ap '16  
Who cares for the yard? E. A. Piester. *il Cornell Countryman* 14:547-9 Ap '17  
*See also Heating; Home economics; House decoration; Lighting*  
**Farm houses.** *See* Farmhouses  
**Farm implements.** *See* Farm machinery  
**Farm labor**  
Accentuating labor unrest. *Hoard's D* 54:911 Ja 18 '18  
Agricultural labour and wages in Sweden. *Int R Ag Econ* 62:113-25; 63:106-23; 64:113-17 F-Ap '18  
Agricultural labour in Dalmatia (Austria). *Int R Ag Econ* 73:124-6 Ja '17  
Agricultural labour in Ireland and the migration of Irish agricultural labourers. *Int R Ag Econ* 77:77-81 My '17  
Agricultural labor problem in Germany. *Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.)* 5:1135-6 D '17  
Agricultural labor problems during the past season. D. O. Lively. *Cal State Comm Hort B v* 7:70-3 Ja '18  
Agricultural labour question in France. E. Thebault. *Int R Ag Econ* 62:127-8 F '16  
Agricultural labour supply in 1915 in Sweden. *Int R Ag Econ* 76:115-18 Ap '17  
Agricultural wages boards in England and Wales. *J Bd Ag* 24:754-5 O '17; Same. *Int R Ag Econ* 84:79-82 D '17  
Agricultural wages in Great Britain. *Monthly R (U. S. Bur. of Labor Statistics, Washington, D.C.)* 6:97-100 Ja '18  
Agricultural wages in Ireland. C. C. Broy. (*Commerce Reports* no. 224) p 1122 (S 24) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Agriculture and the minimum wage. F. E. Green. *19th Century* (249 W. 13th st., N.Y. 50c) 82:596-608 S '17  
Another side of farm labor. *Rural N Y* 77:185 F 9 '18

**Farm labor—Continued**

- Anything to save time! J. C. Marquis. *il Country Gent* 82:895 My 19 '17
- Arrange for labor. O Judd Farmer 64:505 My 11 '18
- Average wages of agricultural labourers in France. *Int R Ag Econ* 69:101-7 S '16
- Best farmer in Massachusetts, Arthur H. Sagendorph. J. R. McMahon. *il Country Gent* 83:6-7 Mr 9 '18
- Better use of man labor on the farm. H. R. Tolley and A. P. Yerkes. *il Farmers' B* 989: 1-15 '18
- Boarding the harvest help. Ohio F 141:822 Je 29 '18
- Booze and the hired man. A. C. Laut. *il Country Gent* 82:1473-4 S 29 '17
- California agriculture as an occupation for city-bred boys. (School pub. no. 5) 12p '17 Los Angeles city school district, Los Angeles, Cal.
- Cause of \$3 wheat and 20-cent hogs. W. S. Anderson. *Breeder's Gaz* 72:48 Jl 12 '17
- Causes of absence from rural schools in Oklahoma. E. N. Clopper. *il map Child Labor B* (105 E. 22d st., N.Y. 50c) 6:90-113 Ag '17
- Children in agriculture. R. McIntire. (Pamph. 284) 14p *il '18 Nat. child labor com.*, 105 E. 22d st., N.Y.
- Chinese coolies or free land? Public (122 E. 37th st., N.Y. 10c) 21:106-7 Ja 25 '18
- Cities and farm labor. *Weekly N L* 5:3 Ap 3 '18
- Cities should assume part of the burden. Hoard's D 55:554 Ap 19 '18
- Corn production act, 1917, in England and Wales. J Bd Ag 24:621-8 S '17; Same cond. *Int R Ag Econ* 82:67-71 O '17
- Cost accounts on some New York farms. C. E. Ladd. *Cornell Ag Exp B* 377:773-815 '16
- Cottages for married workers on farms. J Ag New Zealand 15:204-6 O '17
- Cotton hands that stay. J. Roland. *il Country Gent* 82:2004-5 D 22 '17
- Country-bred hired men. D. C. Smith. *Rural N Y* 76:331 Je 30 '17
- County jails as farm labor centers. O. F. Lewis. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:215-16 Mr '18
- Crisis in production; how shall we meet it? W. W. Reynolds. *Rural N Y* 75:1535 D 16 '16
- Crop conditions and harvest field needs; estimates by county. (B 33) 28p map '16 Nebraska state dept. of labor, Lincoln
- Decisions taken by Catholic agricultural associations in favour of the working classes in Spain. *Int R Ag Econ* 63:38-9 Mr '16
- Department of agricultural labour at the Ministry of agriculture. *Int R Ag Econ* 82:79-81 O '17
- Devices for disabled farm-hands. A. C. Guillaume. *il Int R Sci & Prac Ag* 8,no 8:1169-71 Ag '17
- Distribution of labor on the farm. *il Prac F* 113:98 Mr 1 '17
- Distribution of rural property and closer settlement in relation to the agrarian problem in Spain. *Int R Ag Econ* 67:95-106 Jl '16
- Draining the South of labor. H. S. Stabler. *il Country Gent* 82:1371-2 S 8 '17
- Easy way of keeping track of labor. E. P. Jones. *System on the Farm* 1:251 S '17
- Effect of agricultural employment upon school attendance. R. McIntire. *Elementary School J* (Univ. of Chicago Press 20c) 18: 533-42 Mr '18
- Efficiency of Iowa farm labor. maps Wallaces' F 43:1816 D 13 '18
- Efficient use of farm labor. H. P. Young. *N H Ag Ext Press B* 70 1p '17
- Efficient use of farm man power. R. F. Taber. *il Ohio F* 141:741 Je 8 '18
- Eliminating two men. J. F. Duncan. *System on the Farm* 1:143 Je '17
- Emergency on the farm. J. Wilson. Wallaces' F 42:1713 D 21 '17
- \* Employment of boys in agriculture and the rural exodus. R. Lennard. *Econ J* (St Martin's st, London, W.C. 5s) 27:559-61 D '17
- Encouraging hired men. J. Underwood. *Prac F* 112:4 Ja 1 '16
- Enquiry into the rate of wages per acre in England, 1913-1914. W. H. R. Curtler. *Int R Ag Econ* 68:85-103; 70:88-103 Ag, O '16
- Equipment that resulted in releasing a dozen men. A. J. Piper. *il System on the Farm* 2: 130-1 Ap '18
- Every farmer train a boy for 1918. *Power F* 26:29 N '17
- Farm-hand question. Wallaces' F 43:759, 792, 1021 My 3-10, Jl 5 '18
- Farm-hand's point of view. W. W. Baylor. Wallaces' F 43:685 Ap 19 '18
- Farm hand's views. Ohio F 140:3 Jl 7 '17
- Farm-help specialists. *Weekly N L* 5:7 Ja 23 '18
- Farm labour. Ag Gaz of Canada 4:493 Je '17
- Farm labor. Cal Commonwealth Club (San Francisco 12c) *Trans v* 13:73-122 My '18
- Farm labor. A. Agee and F. App. *il N J Ag Ext B* v1, no 18 31p '17
- Farm labor in central New York. E. L. Horton. *Rural N Y* 76:623 Ap 28 '17
- Farm labour in the provinces. Ag Gaz of Canada 4:387-93 My '17
- Farm labor—man and horse. T. Butler. *Prog F* 32:1303 D 15 '17
- Farm labor men adopt plan for harvest help drive in the South. *Weekly N L* 5:9 Jl 31 '18
- Farm labor must be paid more. E. Hutchins. Hoard's D 54:32 Ag 3 '17
- Farm labor problem. C. L. Snow. Wallaces' F 43:1566 O 25 '18
- Farm labor problem in Illinois. *Rural N Y* 77: 410 Mr 23 '18
- Farm labor problem—present and prospective. E. van Alstyne. *il N Y Farms & Markets Dept Ag B* 97:208-21 Jl '17
- Farm labor problems. *Power F* 25:44 Ja '16
- Farm labor problems. G. D. Black. Ohio F 142:422 N 2 '18
- Farm-labor round-up. J. E. Pickett. *il Country Gent* 83:3-4+ Ap 6 '18
- Farm labor shortage. L. F. Post. *Coop Manager & F* 7:61 My '18; Same. *Power F* 27:41 Je '18
- Farm labor situation. J. W. Brewer. *Oregon Voter* (Worcester bldg., Portland, Ore. 10c) 13:76-7 Ap 20 '18
- Farm labor situation in California. R. L. Adams. *Cal Ag Exp* 14p Jl 14 '17
- Farm labor suggestions. C. Ousley. Hoard's D 55:654 My 3 '18; Same. Kimball's D F 16:402 My 15 '18
- Farm labor; with list of Ohio employment offices. Ohio F 141:519 Ap 6 '18
- Farm laborers' wages in Holland. *Monthly R* (U. S. Bur. of Labor Statistics, Washington, D.C.) 6:108 Ja '18
- Farm servants' wages in Scotland. *Int R Ag Econ* 71:130-1 N '16
- \* Farm supply organization in every state to meet problem of food shortage. U.S. Employment Service (Dept. of labor, Washington, D.C.) B 1:1-2 O 29 '18
- Farm wages in the United States in 1917. *Econ World* (128 Water st, N. Y. 25c) n s 15:699 My 18 '18
- Farm workers' wages in Scotland. H. A. Johnson. (Commerce Reports no. 165) p 201 (Jl 17) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Farmer and organized labor. M. G. Owens. *Ag Digest* 2:523 Jl '17
- \* Farmer's labor problem. E. V. Wilcox. *Am Labor Legislation R* (131 E. 23d st, N.Y. \$1) 8:38-51 Mr '18
- Farmers' side. W. W. Reynolds. *Rural N Y* 76: 1075 S 15 '17
- Farmwork and schools in Kentucky. E. N. Clopper. *il Child Labor B* (Nat. Child Labor Com., 105 E. 22d st., N.Y. 50c) 5:178-206 F '17
- Feeding harvest help. Mrs. E. M. Anderson. Ohio F 141:806 Je 22 '18
- Feeding help on the dairy farm. Mrs. W. J. Dougan. *il Hoard's D* 54:759+ D 21 '17
- Feeding the hired man. *Rural N Y* 76:96 Ja 20 '17
- Finding farm labor. C. DuBose. *Banker-F* 5:5 My '18
- Findings of labor bureau. O Judd Farmer 62: 10 F 17 '17



**Farm labor—Continued**

- Five suggestions to improve labor conditions. Prog F 33:534 Ap 27 '18
- Former farm hand. T. B. Sawyer. Nat Stock & F 42:38 Ap 6 '18
- Fruit farmer's plans. J. Friday. System on the Farm 1:141 Je '17
- Gain in farm-wage rates in 1917 shown in report from department. Weekly N L 5:6 My 22 '18
- Garden as a labor agent. J. F. Duggar. Prog F 33:269 Mr 2 '18
- Graphic summary of seasonal work on farm crops. O. E. Baker and others. maps U S Ag Yearbook 1917:537-89
- Harvesting the crops without harvest hands. S. Fraser. il Country Gent 82:1516-17 O 6 '17
- Help problem. Kimball's D F 16:139 F 15 '18
- Help problem has no terrors. P. D. Cooper. O Judd Farmer 62:10 Ap 14 '17
- Helping the hired man. N. K. Jones. Country Gent 81:1919 O 28 '16
- Hired help question. Hoard's D 55:329 Mr 15 '18
- Hired man. P. McArthur. Wallaces' F 42:721 Ap 27 '17
- Hired man a partner. D. M. Hardy. O Judd Farmer 60:29 F 5 '16
- Hired man—his kick. F. M. Loomis. Farm Eng 5:8 F '17
- Hired man question. Rural N Y 76:679 My 12 '17
- Hired man's children—another side. Rural N Y 77:513 Ap 6 '18
- Hired man's problems. il Ag Digest 2:959-60 My '18
- Hired man's side of it. Rural N Y 76:789 Je 16 '17
- Hired men's meals. E. Allen. J Home Econ 8:552-3 O '16
- Houses for farm help. F. H. Scott. plan Kimball's D F 16:540 Jl 1 '18; Same. Power F 27:39 O '18
- Housing farm labor. H. C. Campbell. il Kimball's D F 16:388 My 15 '18
- How bunch labor fills silos. J. Underwood. Prac F 113:286 Ag 15 '17
- How Chinese labor would keep us from starving. il Literary Digest (354 4th av, N.Y. 10c) 57:34-5 Je 1 '18
- How I help my men earn more. J. E. Kennedy. il System on the Farm 1:327-8 N '17
- How I overcame the labor problem. M. L. Ruetenik. Market Growers J 22:174 Mr 1 '18
- How large is a profitable farm. il Country Life 30:53 My '16
- How needed farm labor was found. Power F 27:58-9 Mr '18
- How the Department of labor and industry aided in supplying workers on Pennsylvania farms during the months of May, June and July, 1917. Pa Dept Labor and Industry (Harrisburg) B v 4, no 7:56-64 '17
- How the state steals farm labor. F. R. Allen. Rural N Y 76:811 Je 23 '17
- How we met the farm labor situation. S. N. Trimble. il Prac F 113:423 D 15 '17
- Illinois schoolboys and the farm. School and Soc (Science Press, Garrison, N.Y. 10c) 7:73-4 Ja 19 '18
- Immigration offices of the national office for agricultural labour. Int R Ag Econ 71:127-9 N '16
- Imported Chinese farm labor. T. Pendell. Rural N Y 76:189 F 10 '17
- Increasing the hired man's efficiency. L. A. Markham. Prog F 32:971 S 15 '17
- Industrial reorganization of agriculture. T. H. Price. Outlook (381 4th av., N.Y. 10c) 117:176-7 O 3 '17
- Interesting award affecting labour in sheep-farming. Int R Ag Econ 9, no 3:234-40 Mr '18
- It depends on the point of view. Ag Digest 3:19 Jl '18
- Jest supposin': what would happen if the farmer paid city wages. E. Davenport. Country Gent 83:3+ D 21 '18
- Job for the retired farmer. J. E. Pickett. il Country Gent 82:1595+ O 20 '17
- Keeping men and teams busy. T. Clark. il System on the Farm 2:14-17 Ja '18

- \* Labour awakening in rural England. F. E. Green. Spectator (1 Wellington st, Strand, London, W.C. 6d) 120:225 Mr 2 '18
- Labor charge in farm cost accounting. E. L. Currier. Hoard's D 54:494 N 2 '17
- Labor problem; symposium. Market Growers J 18:291 Ap 15 '16
- Labor problem among fruit growers. H. Suzzallo. Better Fruit 12:7 F '18; Same cond. Ag Digest 2:937 Ap '18
- Labor requirements of crop production. T. P. Cooper, F. W. Peck and A. Boss. Minn Ag Exp B 157:1-55 '16
- Labor requirements of dairy farms as influenced by milking machines. H. N. Humphrey. il map U S Ag B 423:1-17 '16; Same cond. Kimball's D F 15:4+ Ja 15 '17; Same cond. Hoard's D 52:924 Ja 19 '17
- Labor requirements of livestock. A. Boss and others. Minn Ag Exp B 161:1-43 '16
- Labor savers and the help problem. il O Judd Farmer 61:3 D 23 '16
- Labor saving in livestock production. G. M. Rommel. il U S Ag C 122:1-14 '18
- Labor shortage. C. W. Waid. Market Growers J 22:370 My 15 '18
- Labor supply; experiences of growers. Market Growers J 21:63-4 Ag 1 '17
- Labor supply in 1918 for the fruit and vegetable farms, by W. A. Riddell; Labor situation for fruit farmers. (In Report, Ontario fruit growers' assn., 1917, p. 39-46, 59-65) '18 Ontario ag. dept., Toronto
- Labour supply, working hours and wages in Swedish agriculture in 1914. Int R Ag Econ 67:118-21 Jl '16
- Land and labour in a Deccan village, by H. H. Mann and others. Review. G. F. Keatinge. Ag J of India 13:471-8 Jl '18
- Legislative reforms in favour of labourers in the state of Jalisco, Mexico. Int R Ag Econ 9, no 2:170-2 F '18
- Making farm labor efficient. J. L. Justice. Ohio F 137:94 Ja 22 '16
- Mary Saunders' hired man; story. H. C. Bennett. Am Coop J 13:60+, 98-9 O-N '17
- Meeting the farm labor situation. Ohio F 141:342, 383 Mr 9-16 '18
- Meeting the high-cost-of-labor problem. Prog F 32:693 Je 16 '17
- Metayage on an Umbrian estate. C. Papi. Int R Sci & Prac Ag 7, no 12:1823-7 D '16
- Methods of meeting the farm labor shortage; organization of farm labor bureaus. C. W. Pugsley; W. D. Hurd. Assn Am Ag Coll & Exp Pro 1917:297-304 '18
- Milking machines and labor problems. H. N. Humphrey. il Kimball's D F 15:619 S 15 '17
- Mobilizing a farm labor force. H. C. Taylor. Hoard's D 54:618 N 23 '17
- New kind of farm hand. C. M. Harger. Country Gent 83:7 Ag 17 '18
- No chores, square wages, keep help. J. A. Hatch. O Judd Farmer 65:501 N 30 '18
- Normal day's work of farm implements, workmen, and crews in western New York. H. H. Mowry. U S Ag B 412:1-16 '16; Same cond. Int R Sci & Prac Ag 8, no 3:439-51 Mr '17
- Observations in Ohio. C. W. Montgomery. Nat Stock & F 40:1183 F 10 '17
- Old man on the farm. Ohio F 140:498 D 1 '17
- One reason for farm labor shortage. il Ag Digest 2:823 F '18
- Only the hired man. A. C. Laut. Country Gent 82:1909+ D 8 '17
- Order as to benefits and advantages which may be reckoned as payment of wages in lieu of payment in cash. J Bd Ag 25:905-7 O '18
- Payment plans for encouraging men to do more. il System on the Farm 1:151-3 Je '17
- Picking and marketing the cherry crop; how Wisconsin provides pickers. B. Jelinek. Rural N Y 77:139, 184 F 2-9 '18
- Planning ahead for farm labor. F. M. White. il O Judd Farmer 65:21+ Jl 13 '18
- Plans for holding men. il System on the Farm 1:124-5, 164-5, 196, 310 My-Jl, O '17
- \* Policies of state superintendents toward students entering agricultural employment during the war. T. J. Smart. School and Soc (Science Press, Garrison, N.Y. 10c) 8:481-7 O 26 '18

**Farm labor—Continued**

- Pretty girls milk in California. J. P. Hertel. *il Jersey B* 37:77 Ja 16 '18
- Profit sharing on farms impractical. Hoard's *D* 51:78 F 4 '16
- Profit sharing on the farm. A. L. Richie. *Rural N Y* 76:145-6 Ap '18
- Pulling of flax in Somersetshire. *il J Bd Ag* 23:657-60 O '16
- Rates of cash wages of agricultural labourers in England and Wales. *Int R Ag Econ* 81:74-8 S '17
- Relation of malaria to crop production. D. L. Van Dine. *bibliog Scientific Monthly (Science Press, Garrison, N.Y. 30c) 3:131-9 N '16*
- Renters. Nat Stock & F 42:683 O 26 '18
- Replacing men with tractors; experiences from six states. *il System on the Farm* 1:154-8 Je '17
- Replies to hired man. Hoard's *D* 55:644 My 3 '18
- Rooting out the hired man. J. E. Pickett. *il Country Gent* 82:1729 N 10 '17
- Satisfactory hired help. R. H. Birlingmair. *O Judd Farmer* 60:22 Ap 1 '16
- School pupils for farm work. *Ag Gaz of Canada* 5:371-5 Ap '18
- Seasonal distribution of farm labor in Chester county, Pa. G. A. Billings. *U S Ag B* 528:1-29 '17
- Seven plans that have helped us through the labor crisis. U. G. Sass. *il System on the Farm* 1:185-7 Jl '17
- Shall we let in the Chinaman? R. L. Adams. *il Country Gent* 82:1678-9 N 3 '17
- Sheep labor being drafted. H. Sproat. *Nat Wool Grower* 8:28-9 Jl '18
- Sidelights on the farm help problem. Hoard's *D* 55:330 Mr 15 '18
- Sliding scale bonuses in the sugar-cane plantations of Hawaii. *Int R Ag Econ* 9,no 3:258-60 Mr '18
- Solution of the problem of field labourers through the agency of the Catholic agricultural unions in Spain. *Int R Ag Econ* 65:50-1 My '16
- Solving the vegetable riddle. J. R. McMahon. *il Country Gent* 83:10-11 F 9 '18
- \* Steps to victory. D. F. Houston. *Academy Political Sci Pro (Columbia Univ., N.Y. \$1.50) 7:697-700 F '18*
- Student labor on New York farms; with discussion. A. C. King. *N Y State Fruit Growers' Assn Pro* 1916:298-310
- Study of farm labor in California. R. L. Adams and T. R. Kelly. *Cal Ag Exp C* 193:1-75 '18
- Suggestion for the labor problem. H. A. Von Nieda. *Power F* 26:28 N '17
- Tempting the farm hands. G. F. Stratton. *il Country Gent* 83:6-7 F 16 '18
- Tickling the thrift streak; how a Kansas orchardist gets his cherries picked. S. O. Rice. *il Country Gent* 83:18 Ag 3 '18
- Training the hired man. W. H. Dean. *il Country Gent* 82:1589 O 20 '17
- 218,000 state farms looking for laborers: members of Board of agriculture predict decreased production in Pennsylvania. E. E. Robbins. *Congressional Record (Washington, D.C.) 56:1673-4 F 1 '18*
- Use of farm labor during the war. W. F. Handschin and J. B. Andrews. *Ill Ag Ext C* 20:1-11 '18
- Utilization of waste on the farms. W. S. A. Smith. (*In Am. farm management assn. Record of pro., 1915, p. 18-25*) '16 G. A. Billings, sec., Washington, D.C.
- Vegetable gardener's labor problem. W. C. Gohl. *il Penn State F* 10:52-3 Mr '17
- Viticulture in South Africa. A. I. Perold. *Int R Sci & Prac Ag* 7,no:21-3 Ja '16
- Wages of farm labor in the United States. *Monthly Review (U.S. Bur. of labor statistics, Washington, D.C.) 6:1484-5 Je '18*
- Way of the hired man. E. C. A. Smith. *il Country Life* 31:70 F '17
- What they do about help. *System on the Farm* 1:346; 2:182 N '17, My '18
- What to do about farm labor. C. DuBose. *Power F* 27:49 Mr '18
- Why farm labor must be skilled. E. Davenport. *il Country Gent* 82:1773-4 N 17 '17
- Why I get best results with college men. D. L. Williams and others. *il System on the Farm* 1:188-9 Jl '17
- Why I would leave the farm. H. Waugh. *Rural N Y* 76:434 Mr 17 '17
- Wisconsin farmer's experience. J. N. Wishka. *Rural N Y* 76:543 Ap 14 '17
- Woman in the tenant house; a typical case from the big city. E. C. Yarnell. *Rural N Y* 75:1467 N 25 '16
- Work of the farm woman. T. N. Vail. *il Ag Digest* 2:559-60 Ag '17
- See also Agriculture and the war—Farm labor; Allotment of land; Farm managers; Greenhouses—Employees; Insurance, Accident; Negroes as farmers; Servants; Tractor operators; Women as farm laborers; Workmen's compensation; also United States boys' working reserve*

**Bibliography**

- \* Problem of agricultural labor; a contribution to a bibliography. I. M. Newman. 18p '18 Univ. of Wisconsin library school, Madison Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew 90c)

**Statistics**

- Farmers and farm laborers, 1910. *Monthly Crop Rep* 4:28 Mr '18
- How farm labor is hired. *Monthly Crop Rep* 4:24 Mr '18
- Increase in agricultural wages from 1914 to 1916. *Int R Ag Econ* 81:67-73 S '17
- Number of persons engaged in agriculture in various countries. *U S Ag Yearbook* 1917:750
- Wages of male farm labor. *Monthly Crop Rep* 3:25 Mr '17
- Wages of male farm labor in United States. *Monthly Crop Rep* 4:27 Mr '18

Farm law. See Agricultural law

**Farm life**

- Back-to-the-land. G. O. Berylson and C. P. Berylson. *Rural N Y* 75:5 Ja 1 '16
- Borrowed plows and gear and things. W. H. Dean. *il Country Gent* 82:1761 N 17 '17
- Boys. T. N. Vail. Hoard's *D* 54:812 D 28 '17
- Building a real home on the farm. *il Power F* 26:45 S '17
- Busy big county makes farm life really attractive to its boys and girls. A. M. Loomis. *il Country Gent* 81:671 Mr 18 '16
- Call of the spirit of the farm. J. S. Charles. Hoard's *D* 55:801 My 31 '18
- Cash, or contentment? A. C. Wortman. *il Fruit-Grower* 28:147 F 15 '17
- Community betterment. Mrs V. C. Meredith. *Mo Ag Bd B v* 14:6-15 Ap '16
- Conditions of rural life in France. *Int R Ag Econ* 79:68-78 Jl '17
- Day at Elmwood. H. L. Wood. *il Rural N Y* 77:697 My 18 '18
- Dwell in the land and verily thou shalt be fed. C. S. Moore. *J Ag (Quebec)* 20:222 My '17
- Families of farmers. H. T. Morgan. *Farm Eng* 5:4-5 F '17
- Family government. *Ohio F* 138:450 N 4 '16
- Family partners on the farm. A. C. Laut. *Country Gent* 82:1753+ N 10 '17
- Farm efficiency; how it depends on efficient equipment for living. X. Caverno. 48p '16 Xenophon Caverno, Kewanee, Ill.: Same. *Am Soc Ag Eng Trans* 9:12-29 '16
- Farm home and the boy. *il Va Ag Dept B* 115:61-5 '17
- Farm life from a woman's standpoint. Mrs. I. F. Dunwiddie. Hoard's *D* 54:766 D 21 '17
- Farm woman's notes. Mrs A. G. Doren. *Rural N Y* 77:583 Ap 20 '18
- From a farm woman's diary. N. B. Gosnell. *Ohio F* 140:610 D 29 '17
- Getting the most out of country living. Mrs C. Frederick. *il Ill Farmers Inst Rep* 1917:71-83 '17; Same. *Ill Farmers Inst Household Sci* 1917:56-67 '18
- Hermit's summer. W. D. I. Arnold. *il Country Life* 32:58+ Jl '17
- Hibernation of a hermit. W. D. I. Arnold. *Country Life* 33:66 F '18



**Farm life—Continued**

- How the Department of agriculture promotes organization in rural life. C. W. Thompson. U S Ag Yearbook 1915:272a-p
- How to build up rural communities through co-operative clubs. B. R. Murphy. (*In* Agricultural extension, p 88-92) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Impressions of farm life in Chile. A. E. Turner. Rural Manhood 9:291-3 S '18
- \* Improving the farmer's surroundings. Am Architect (243 W. 39th st, N.Y. 25c) 114: 549-50 N 6 '18
- Keeping the boy on the farm. T: M. Olson. il Hoard's D 55:274 Mr 8 '18
- Keeping the boys interested. J. M. Field. il Fruit-Grower 27:367 Jl 15 '16
- Labor and recreation. A. Boss. il Hoard's D 54:761+ D 21 '17
- Making sorghum syrup in Tennessee. Rural N Y 77:1265 N 9 '18
- Man who stayed home. W. F. French. il Illustrated World (Drexel av. and 53th st., Chicago 15c) 26:193-6 O '16
- Man's part, the woman's part on the farm. F. C. Brown. Rural N Y 75:1020 Jl 22 '16
- Monotony of farm life. Nat Stock & F 42: 563 S 14 '18
- My first farm. Country Gent 82:1967+ D 15 '17
- Nobility of farm work. R: H. Edmonds. Prog F 31:416 Mr 18 '16
- Notes by a farm mother. Rural N Y 77:587 Ap 20 '18
- Old clothes; they must be discarded, but how comfortable they were! Country Gent 82:723 Ap 14 '17
- Open mind in the open country. Mrs C. G. Lewis. Mo Ag Bd Yearbook 1916:61-70
- Pastoral parson on the lonely road. G: B. Gilbert. Rural N Y 75:1008 Jl 22 '16
- Plans for the season; work and recreation. J: Marsh. Hoard's D 51:539 Ap 21 '16
- Pro and con of farm life. J. Van Wagenen, jr. N Y Farms & Markets Dept Ag B 97:202-7 Jl '17
- Rural home and the farm woman. D: B. Johnson. (*In* Pro., Nat. educ. assn., 1916, p. 36-40) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Rural progress in Missouri. W. L. Nelson. Mo Ag Bd B v 14:1-29 Mr '16
- Story of a day. Rural N Y 77:707 My 18 '18
- Story of a day in the Tennessee mountains. Rural N Y 77:459 Mr 23 '18
- Story of a day on a northern dairy farm. Rural N Y 77:244 F 16 '18
- Success in farm life. W. H. Jordan. Hoard's D 53:271 Mr 9 '17
- Sunday in farm homes. Ohio F 139:496 Mr 31 '17
- What is your creed? Have you given thought to what you are living for? Country Gent 82:317 F 17 '17
- What the grange has meant to me. Country Gent 82:1897 D 1 '17
- Why I turned farmer. J. A. Dimock. il Country Life 33:56-7 Ja '18
- Winter on the hills. M. B. Dean. Rural N Y 77:1347 D 7 '18
- Winter week-end in a New York farmhouse. R. Bartlett. Rural N Y 77:1272 N 9 '18
- See also Amusements; City and country; Country life; Hunting
- Farm loan act, Federal.** See Agricultural credit—United States—Law
- Farm loan associations, National.** See National farm loan associations
- Farm loans.** See Loans
- Farm machinery**
- Advice to a one-horse farmer. L. A. Markham. Prog F 31:363 Mr 11 '16
- Agricultural implements and machinery. il Scientific Am (233 Broadway, N.Y. 10c) 118: 90 Ja 26 '18
- Agricultural implements and machinery. E. B. McCormick. (*In* Pan American scientific congress Pro., 1915, v. 6, p. 144-9) '17

- Agricultural implements and machinery in Australia and New Zealand. J. Homs. (Special agents series, no. 166) 195p il '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Agricultural implements used in India. (Commerce Reports no. 121) p 728 (My 23) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Agricultural machinery in demand for Greece. Am Industries (30 Church st, N.Y. 10c) 18: 28-9 O '17
- Agricultural power machinery. Engineer (33 Norfolk st, Strand, London, W. C. 2) 125: 143-4 F 15 '18
- Agriculture Americanized. F. M. White. il Field 11 27:175-7 Mr '17
- Application of electricity to agriculture in France. Int R Sci & Prac Ag 9,no 4:485-8 Ap '18
- Barn and farm power. il Kimball's D F 16: 439 Je 1 '18
- Be careful about the speed of your machinery. I. W. Dickerson. il Wallaces' F 43:1086 Jl 26 '18
- Best farmer in Massachusetts, Arthur H. Sagendorph. J: R. McMahon. il Country Gent 83:6-7 Mr 9 '18
- Better farm implements and how to use them. 156p il n.d. John Deer plow co., Syracuse, N.Y.
- Better farm machinery. P. S. Rose. il Country Gent 83:12-13 F 23 '18
- Better use of man labor on the farm. H. R. Tolley and A. P. Yerkes. il Farmers' B 989: 1-15 '18
- Buying machinery for cash? Power F 25:19 My '16
- Care and repair of farm implements; mowers, reapers and binders. E. B. McCormick and L. L. Beebe. il Farmers' B 947:1-15 '18
- Care and repair of farm implements; plows and harrows. E. B. McCormick and L. L. Beebe. Farmers' B 946:1-9 '18
- Care of farm machinery. J. L. Justice. Ag Digest 1:81 Je '16
- Choosing farm machinery; how government aid is handicapped. B. W. Currie. Country Gent 81:1067 My 20 '16
- Circular farm. R. H. Moulton. il Sci Am (233 Broadway, N.Y. 10c) 119:105 Ag 10 '18
- Comparative costs of using agricultural machinery in the United States and in France. M. Ringelmann. Int R Sci & Prac 8,no 5: 777-80 My '17
- Coöperation in buying machinery. J. Z. Green. Prog F 31:194 F 5 '16
- Co-operative supply and production of agricultural machines in Russia. Int R Ag Econ 73:26-9 Ja '17
- Co-operative use of motor plough by Pinvin agricultural co-operative society. J Bd Ag 23:258-9 Je '16
- Custom charge for machines. J. J. Newlin. Wallaces' F 43:1640 N 8 '18
- Depreciation of farm machinery. Wallaces' F 43:177 F 1 '18
- Devices which save farm labor. L. E. Scott. O Judd Farmer 60:7 Ja 22 '16
- Does it pay to buy best machinery? R. Olney. Power F 25:12 S '16
- Don't neglect to lubricate your machinery. I. W. Dickerson. Wallaces' F 43:982 Je 28 '18
- Ears and farm machinery. F. N. G. Kranich. Country Gent 81:1797 O 7 '16
- Economic value of machinery care. Farm Eng 4:37 Ag '16
- Effect of farm tools on production. E. W. McCullough. Power F 26:12 Je '17
- Effects of machinery on rural life. J: M. Gillette. (Community leaflet no. 9, p. 17-24) '17 U.S. Bur. of educ., Washington, D.C.
- Exhibition and trial of new agricultural machinery and appliances organised by the German agricultural society in 1916. G. Fischer. Int R Sci & Prac Ag 8,no 3:421-3 Mr '17
- Expense of wintering farm machinery. R. E. Stephenson. Rural N Y 76:1257 N 3 '17
- Farm engineering. F. M. White. O Judd Farmer 63:6 D 29 '17

**Farm machinery—Continued**

- Farm implement designs. Automotive Industries (231 W. 39th st., N.Y. 10c) 39:115 JI 18 '18
- Farm implement repair week. K. J. T. Ekblaw. Nat Stock & F 41:1219 F 23 '18
- Farm implements and equipment adopted by War industries board. Weekly N L 5:14 JI 31 '18
- Farm implements and machinery. G. H. Alford. Prog F 33:10, 40, 68, 124, 166, 240, 272, 348, 385, 420, 442, 478, 518, 538 Ja 5-19, F 2-9, 23, Mr 2, 16-Ap 27 '18
- Farm implements to be scarce and high. Farm Eng 4:11 JI '16
- Farm machinery does its bit. F. C. Lewis. il Purdue Ag 12:492-3 My '18
- Farm machinery in the corn belt. C. Emrich. Scientific Am (233 Broadway, N.Y. 10c) 118: 87 Ja 26 '18
- Farm machinery—its care and repair. A. S. Kinsley. Purdue Ag 11:32 F '17
- Farm machinery preparedness. F. M. White. O Judd Farmer 64:12 Ja 26 '18
- Farm machinery problems. il Field II 27:546-7 JI '17
- Farm machinery question affected by present conditions. J. F. Duggar. Prog F 32:148 F 3 '17
- Farm machinery should be conserved. Jersey B 36:1965 D 12 '17
- Farm machinery situation. E. A. White. Ill Ag Exp C 210:1-4 '18
- Farm power house—a factory idea. R. Olney. il Power F 26:7-8+ N '17
- Farming must be motorized. P. S. Rose. il Country Gent 83:3-4 F 9 '18
- Fitting the tractor to the job. F. M. Loomis. il Motor Age (59 E. Madison st., Chicago 10c) 34:5-9, 24-5 JI 4-11 '18
- France opens first state agricultural motor school. Automobile (231 W. 39th st., N.Y. 10c) 36:530 Mr 8 '17
- Get the farm machinery in trim. Power F 27: 27 F '18
- Get the machinery in good shape. I. W. Dickerson. Wallaces' F 43:408 Mr 1 '18
- Grader or drag. il Ag Digest 1:81 Je '16
- Grain shocking machine. il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26: 359-60 N '16
- Great and growing use of farm machinery. il Ohio F 137:29 Ja 8 '16
- Growth of farm machinery. F. N. G. Kranich. il Field II 28:147-9 Mr '18
- Handy sap wagon. J. E. Ally. Ohio F 137: 455 Mr 25 '16
- Housing farm machinery. M. G. Kirkpatrick. il Farm Eng 4:30 Ag '16
- How elevating graders are being used in sugar beet farming. il Eng & Contracting (608 S. Dearborn st., Chicago \$3 per year) 49:281 Mr 20 '18
- How engineering may help farm life. E. B. McCormick. U S Ag Yearbook 1915:101-12
- How I reduced my labor bill 54 per cent. J. L. Justice. il System on the Farm 1:27-9 Mr '17
- How implements affect production. W. E. Taylor. Power F 26:43 F '17
- How the farmer can do his bit. Power F 26: 36 JI '17
- Implements and machinery at the Smithfield (London) show, December 1915. il Int R Sci & Prac Ag 7,no 3:411-17 Mr '16
- Implements or munitions, farmers or soldiers. Prac F 113:270 Ag 1 '17
- Importation of agricultural machines and implements into Russia from 1903 to 1912 (in metric tons). Int R Sci & Prac Ag 8,no 2: 280-4 F '17
- Increased use of power farming equipment. C. C. Bray and others. (Commerce Reports no. 130) p 873-5 (Je 4) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- India's greatest industry: scope for agricultural machinery. D. Clouston. Ag J of India 13:325-32 Ap '18
- Internal combustion engines for farm use. V. W. Page. il plan Scientific Am (233 Broadway, N.Y. 10c) 117:44-5 JI 21 '17
- "Kahlotus taxdodger." il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26: 354-5 N '16
- Keep a machinery repair book. L. W. Kay. Power F 27:14 Mr '18
- Labor-saving farm implements and farm machinery, a factor in the solution of the farm labor problem. G. R. James. 8p '17 Georgia state agricultural society, Statesboro
- Labor saving farm machinery. A. E. Morehouse. il Cornell Countryman 15:459-61 My '18
- Labor saving machinery. C. I. Gunness. il Mass Ag Ext C 42:1-4 '17
- Labor-saving methods for busy season in corn belt. Weekly N L 5:11 Je 26 '18
- Little things in machinery. W. H. Underwood. Power F 26:26 My '17
- Machinery for the large farm. G. H. Alford. Prog F 32:126 F 3 '17
- Machinery for the one, two and three-horse farmer. A. L. French. Prog F 32:132 F 3 '17
- Machinery on a big farm. Country Gent 81: 762 Ap 1 '16
- Machinery preparedness for the big drive. E. A. White. Power F 27:8 Ap '18
- Making the most of buildings and equipment. il System on the Farm 1:160-1 Je '17
- Mars' hand at the plow. C. S. Brantingham. il Nation's Business (Riggs bldg., Washington, D.C. 25c) 6:24-5 Mr '18
- Mobilizing the farm machinery. A. L. Dahl. il Scientific Am (233 Broadway, N.Y. 10c) 117:274 O 13 '17
- Modern equipment helps farmer. C. White. Power F 26:19 Mr '17
- More horse-power and machinery on our farms. W. F. Massey. Prog F 31:562 Ap 22 '16
- My visit to a Mississippi power farm. J. F. Hobart. il Power F 27:10-11 Je '18
- N. I. V. A. asks priority order. Power F 26: 50 Ag '17
- New draft spring. il Ag Digest 1:81 Je '16
- Old man Haynes says: I aim to fix everything just a little before it needs fixing. W. C. Smith. Farm Eng 5:5 Ap '17
- Overhauling farm machinery. Wallaces' F 41: 214 F 11 '16
- Power farming solves crop production problems. R. Olney. il Power F 26:9 My '17
- Power machinery for home-made supplies. R. C. Wilcox. Gleanings 46:26 Ja '18
- Power requirements of feed mills, shredders and silage cutters. il Am Soc Ag Eng Trans 10,no 1:59-67 '17
- Practical uses for small gasoline engines on the farm. J. B. Kelley. il Kimball's D F 14:27 Ja 15 '16
- Preparedness as applied to farm machinery. I. W. Dickerson. il Power F 26:7 F '17
- Progress in farm machinery. F. F. Rockwell. il Field II 27:179-80 Mr '17
- Provide for machinery. Weekly N L 5:6 N 28 '17
- Recent machinery patents. il Power F 25: 46-7 Ja; 54-5 F; 58-9 Mr; 42-3 O '16
- Report of the committee on farm field machinery. O. W. Sjogren. il Am Soc Ag Eng Trans 11:212-19 '18
- Requisites in engine operation. I. W. Dickerson. il O Judd Farmer 60:4 Ap 1 '16
- Review of patents. See monthly numbers of International review of the science and practice of agriculture
- Safety first on the farm. W. C. Smith. Green's Fruit Grower 36:5 Ag '16
- Sale and loan of agricultural implements. H. R. C. Hailey. Ag J of India 13:319-24 Ap '18
- Saving tools and credit. H: Wolfe. Country Gent 81:590 Mr 11 '16
- Selecting an engine. J. B. Kelley. Kimball's D F 14:74 F 1 '16
- Some observations on the extent and value of farm power equipment. P. S. Rose. Am Soc Ag Eng Trans 9:275-89 '16
- Steam and gasoline work together. G. Dietz. il Fruit-Grower 27:258 Ap 15 '16
- Steam ploughing and cultivating equipment. il map Engineer (33 Norfolk st, Strand, London, W.C. 2.) 125:527-30, 536 Je 21 '18



**Farm machinery—Continued**

- Storage of farm machinery. F. W. Ives. *Scientific Am* (233 Broadway, N.Y. 10c) 118:276 Mr 30 '18
- Supply of agricultural implements by co-operative societies. B. C. Burt. *Ag J of India* 11:205-9 Ap '16
- Threatened implement shortage. C. S. Brantingham. *Power F* 26:22 Jl '17
- Timely notes on farm implements. G. H. Alford. *Prog F* 32:989 S 22 '17
- To make farm tools last longer. J. R. Stone. *Power F* 26:30 N '17
- Tractor and three engines. L. Johnstone. *il O Judd Farmer* 60:4 Ja 22 '16
- Trucks, tractors and trailers. C. E. Stone. See monthly numbers of *Field illustrated*
- Use and care of farm machinery. G. H. Alford. *Prog F* 32:1010, 1121, 1233, 1349; 33: 147, 245, 438, 565, 679, 773, 851, 964, 1067, 1190, 1336 S 29, O 27, N 24, D 29 '17, F 2, 23, Ap 6, My 4, Je 1, Jl 6, 27, Ag 31, S 28, N 2, D 7 '18
- Utilizing power on the farm. *il O Judd Farmer* 60:3 Ja 22 '16
- When differentiation becomes persecution. G. E. Wentworth. *Breeder's Gaz* 70:238 Ag 17 '16
- Where farm machines come from. G. F. Whitsett. *il Wallaces' F* 42:1751 D 28 '17
- Where machinery does the work. *il Wallaces' F* 41:1527 N 24 '16
- Why implement and vehicle manufacturers and dealers should be desirous of assisting in the betterment of farm and rural conditions. W. E. Taylor. (*In Agricultural extension*, p 15-18) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- See also Belting; Chaff cutters; Corn harvesting machinery; Cotton growing machinery; Cotton picking machines; Cultivators; Dairy machinery; Electricity on the farm; Fanning mills; Fertilizer spreaders; Gas and oil engines; Grain binders; Grain cleaning machines; Grain drying machines; Harrows; Harvesting machinery; Hay drying machinery; Hay making machinery; Hay rakes; Lime spreaders; Limestone crushers; Listers; Machine sheds; Manure spreaders; Mowing machines; Planters (machines); Plows; Potato machinery; Pulleys; Rollers, Farm; Seeding machinery; Sheep shearing machines; Silo filling machinery; Soil milling machines; Sprocket wheels; Straw spreaders; Threshing machines; Tractor tillers; Tractors; United States—Farm equipment control, Office of; also Syndicats de mécanique agricole; Tractor club of America

**Costs**

- Cost of farm machinery. *Ag Digest* 1:81 Je '16
- Machinery cost in farm operations. *Power F* 27:37 S '18
- Machinery cost of farm operations in western New York. H. H. Mowry. *U S Ag B* 338: 1-24 '16; Same cond. *Wallaces' F* 41:909 Je 23 '16
- Machinery costs. C. D. Kirkpatrick. *Wallaces' F* 43:1235 Ag 30 '18

**Prices**

- Explains licensing of farm-equipment industry; Secretary Houston states department's policy. *Weekly N L* 5:1 Je 12 '18; Same. *Power F* 27:61 Jl '18; Excerpts. *Prog F* 33: 758 Je 29 '18
- Price of farm implements. T. Gallinger and others. *Congressional Record* (Washington, D.C.) 56:6417-20 My 2 '18

**Repair**

- Have you a "fix" in your neighborhood? W. Fix. *il Power F* 27:10 N '18

**Standardization**

- Farm machinery standardized now. F. M. White. *il O Judd Farmer* 65:373 O 26 '18
- How to accomplish standardization. G. E. Wentworth. *Breeder's Gaz* 73:1143 My 30 '18

**Study and teaching**

- Character of instruction in farm machinery. F. A. Wirt, jr. *Am Soc Ag Eng Trans* 9: 190-6 '16
- Instruction in farm machinery. F. A. Wirt. *Am Soc Ag Eng Trans* 10,no 1:104-16 '17
- Instruction in farm machinery. F. A. Wirt. *Am Soc Ag Eng Trans* 11:220-5 '18
- Scotates' farm machinery laboratory manual. 2d ed 98p '18 D. Scotates, Miss. ag. and mechanical college, Agricultural College, Miss.
- Short course instruction in gas engines and tractors. L. F. Seaton. *Am Soc Ag Eng Trans* 10,no 2:146-9 '17
- Some exercises in farm handicraft for rural schools. H. O. Sampson. *il U S Ag B* 527:1-38 '17
- See also Tractor operation—Study and teaching

**Farm machinery industry**

- Agricultural implement industry to conserve supplies. (Commerce Reports no. 232) p 36-7 (O 3) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Agricultural implements and machinery in Australia and New Zealand. J. Homs. (Special agents ser.—no. 166) 195p *il* 25c '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- East African markets for hardware and agricultural implements. H: P. Starrett. (Special Consular Rep. 78) 27p '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Effect of war conditions on the farm operating equipment industry. 11p n.d. National implement & vehicle assn., 76 W. Monroe st., Chicago
- Effects of war on farm implement business. *Ag Digest* 3:27 Jl '18
- Farm implement situation. H. B. Dinneen. *Power F* 27:46-7 Ap '18
- Farm implements and equipment adopted by War industries board. *Weekly N L* 5:14 Jl 31 '18
- Farm machinery standardized now. F. M. White. *il O Judd Farmer* 65:373 O 26 '18
- Game and a gamble. B. W. Currie. *Country Gent* 81:48-9, 148-9, 254-5, 384-5, 502-3 Ja 8, 22, F 5, 19, Mr 4 '16
- How the farm paper helps the implement dealer. J: P. Wallace. *Wallaces' F* 41:234 F 11 '16
- Implements as merchandise. W. A. Jones. *Wallaces' F* 41:125 Ja 28 '16
- Made in U. S. A.; the farm machinery demands of France for now and the future. W: H. Dean. *il Country Gent* 83:9+ My 18 '18
- Manufacture and co-operative supply of agricultural machinery and implements in the Russian empire in 1913. M. Dechevoj; V. D. Koval. *Int R Sci & Prac Ag* 7,no 11: 1647-9 N '16
- Manufacturers for cheaper farm machinery. *Wallaces' F* 43:695 Ap 19 '18
- Markets for agricultural implements and machinery in Argentina. F. H. von Motz. (Special agents ser. no 125) 88p '16 U. S. Bureau of foreign and domestic commerce, Washington, D. C.; 5c Supt. of doc.
- Markets for agricultural implements and machinery in Brazil. F. H. von Motz. (Special agents ser. no. 140) 59p *il* '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.; 10c Supt. of doc.
- Markets for agricultural implements and machinery in Chile and Peru. F. H. von Motz. (Special agents ser. no. 142) 48p '17 U. S. Bureau of foreign and domestic commerce, Washington, D. C.; 5c Supt. of doc.
- Markets for agricultural implements and machinery in South Africa. J. Homs. (Special agents ser. no. 146) 231p *il* map 20c '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Mid-west implement dealers meet. *Wallaces' F* 41:139 Ja 28 '16

**Farm machinery industry—Continued**

Tractor: beginnings of a great industry. B. W. Currie. Country Gent 81:620-1, 729-30+, 782-3+, 830-1, 882-3, 926-7 Mr 18, Ap 1-29 '16  
War time eliminations. Power F 27:56 J1 '18

See also Dairy machinery industry

**Regulation**

Explains licensing of farm-equipment industry; Secretary Houston states department's policy. Weekly N L 5:1 Je 12 '18; Same. Power F 27:61 J1 '18; Excerpts. Prog F 33:758 Je 29 '18  
Government control of farm machinery. P. S. Rose. Country Gent 83:32 J1 20 '18  
Loi amendant la loi sur l'outillage agricole au Canada. Int Yearbook Ag Leg 1916:318-20 '17  
Points on licensing farm equipment industry explained by Department. Weekly N L 5:7 J1 24 '18  
President places farm-implements industry under license system. Weekly N L 5:1 My 29 '18  
War status of implement industry. Power F 27:46 Je '18

**Statistics**

Agricultural implements; summary and analysis by states and by products. 12p '17 U.S. Bureau of census, Washington, D.C.  
Production of agricultural machinery in the United States in 1914. Int R Sci & Prac Ag 7, no 9:1326-7 S '16

**Farm machinery sheds. See Machine sheds****Farm management**

Accredited farms and state farm management contest in the United States. A. W. Ashby. J Ed Ag 24:943-9 D '17  
Adapting farm management plans to boll weevil conditions. J. F. Duggar. Prog F 32:37 Ja 13 '17  
Alfalfa paid for farms. H. F. McDougal. il Country Gent 83:13 Ja 26 '18  
Applying business methods to farming. R. P. Speer. il Breeder's Gaz 70:533 S 28 '16  
Are you farming as well as you know how? W. F. Massey. Prog F 32:120 F 3 '17  
Arrangement of the farmstead. L. W. Chase. il plans Am Soc Ag Eng Trans 10, no 2:35-50 '17  
Avoiding farm wastes. il System on the Farm 1:344, 378-9; 3:112 N-D '17, S '18  
Back to the land; how Jewish farmers solve the problem. H. Lasher. Rural N Y 75:272 F 19 '16  
Banker's viewpoint; Wisconsin farm management demonstration work. B. M. Smith. Hoard's D 54:764 D 21 '17  
Be a business farmer in 1916. J. L. Mogford. il Prog F 31:7 Ja 1 '16  
Be a business farmer in 1918. Prog F 32:1350 D 29 '17  
Berries and cream; an Iowa farmer sells his patrons a dessert combination. C. C. Sherlock. il Country Gent 83:13 J1 20 '18  
Best crops for least labor. Nat Stock & F 42:592 S 28 '18  
Best farmer in New Jersey; Minch brothers use 1800 acres in fifteen farms. J. R. McMahon. il Country Gent 83:10-11 S 14 '18  
Best farmer in Oklahoma; Charles Haxton. W. Stemmons. il Country Gent 83:6-8 Mr 30 '18  
Better use of man labor on the farm. H. R. Tolley and A. P. Yerkes. il Farmers' B 989:1-15 '18  
Big crops vs. normal crops. il Country Life 30:43 Ag '16  
Bringing old farms back. G. Tritler. il Country Gent 81:47 Ja 8 '16  
Business organization as related to agriculture. M. L. Urann. Mass Ag Bd Yearbook 1916, pt 2:141-51 '17  
Business truck farm; exact costs and returns. C. E. Brehm. il Country Gent 81:1182-3 Je 10 '16  
Canadian farm management survey. J Ag (Quebec) 21:129 Mr '18

Causes of good and poor farming in Cortland area, Trumbull county, as shown by a farm management demonstration. M. O. Bugby and G. N. Dagger. Ohio Ag Ext B v 11, no 11 4p '15-16

Conservation of man-power on the farm. H. C. Ramsower. il Field 11 27:538+ J1 '17  
Corn-belt farming system which saves harvest labor by hogging down crops. J. A. Drake. il map Farmers' B 614:1-16 '17  
Cotton hands that stay. J. Roland. il Country Gent 82:2004-5 D 22 '17  
Cropping systems for the moister portion of eastern Washington and Oregon and northern Idaho. L. W. Fluharty. U S Ag B 625:1-11 '18  
Crops and stock on the home farm; methods of farming. E. Molyneux. Gard Chron (Lond) 64:64 Ag 10 '18  
Current farm problems. L. A. Markham. Prog F 32:673 Je 9 '17  
Cutting farm expenses. See monthly numbers of System on the farm  
Cutting operating expenses by knowing costs. C. W. Carrigan. System on the Farm 2:125-8 Ap '18  
Diversification means better utilization of labor. Prog F 32:514 Ap 21 '17  
Does the farm pay? J Ag (Quebec) 20:vii D '16  
Doing chores. Wallaces' F 42:1429 O 19 '17  
Doing farm work at right time. A. M. Ten Eyck. il Power F 26:16 S '17  
Double profits from a single farm. C. J. Lisle. il Country Life 29:46-7 Ja '16  
Economies in farming practice. A. M. McTaggart. J Ag New Zealand 13:367-74 N '16  
Effect of climate and soil upon agriculture. R. R. Spafford. maps University Studies (Nebraska Univ., Lincoln) v 16, nos 1, 2:91-113 Ja-Apr '16  
Efficiency in farming. H. P. Miller. Ohio F 137:787 Je 10 '16  
Efficient livestock management. H. P. Miller. Ohio F 139:827 Je 30 '17  
Efficient use of farm man power. R. F. Taber. il Ohio F 141:741 Je 8 '18  
Eliminating two men. J. F. Duncan. System on the Farm 1:143 Je '17  
Engineered out of a crop failure. J. Ryan. Farm Eng 4:74 N '16  
Everybody works but father. R. W. Latta. Purdue Ag 11:94 F '17  
Examination and interpretation of data in investigations on agricultural economics. E. Marengi. Int R Sci & Prac Ag 7, no 12:1827-35 D '16  
Example of successful farm management in southern New York. M. C. Burritt and J. H. Barron. il U S Ag B 32:1-24 '13  
Extension work thru income tax. Cornell Countryman 15:521-2 Je '18  
Factors affecting methods of farm-management in the North Island. J. Brown. il J Ag New Zealand 13:1-16 J1 '16  
Factors for success in farming. H. O. Watrud. Hoard's D 51:97 F 11 '16  
Factors of successful farming near Monett. Mo. W. J. Spillman. U S Ag B 633:1-26 '18  
Factory system of farming; the big farm not a success. B. Black. il Rural N Y 76:1461 D 29 '17  
Failures at farming. B. Howard. il Country Gent 83:14 F 16 '18  
Farm accounts and farm management. A. J. Nicoll. il N Y Ag Dept B 86:2631-41 Ag '16  
Farm efficiency. C. D. Kirkpatrick. Wallaces' F 42:928 Je 15 '17  
Farm incomes. Wallaces' F 42:685 Ap 20 '17  
Farm inventory, field plats and efficiency plans. I. J. Mathews. Ohio F 137:206 F 12 '16  
Farm investments that bring returns: silos and livestock. D. H. Otis. il Banker-F 3:11 Mr '16  
Farm machinery. Wallaces' F 41:453 Mr 17 '16  
Farm management. A. H. DeGraff. Hoard's D 51:233 Mr 3 '16  
Farm management. J. Van Wagenen, jr. N Y Ag Dept B 86:2456-63 Ag '16



**Farm management—Continued**

- Farm management and farm profits on irrigated land in the Provo area (Utah lake valley). L. G. Connor. il U S Ag B 582:1-40 '18
- Farm management demonstration. W. L. Elser. Purdue Ag 10:18-19 Mr '16
- Farm management demonstration work in Massachusetts. W. H. Bronson. il map Mass Ag Ext B 9:1-15 '16
- Farm management demonstrations in the United States. E. A. Brown. Ag Gaz of Canada 3:1008-12 N '16
- Farm-management demonstrator and the county agent. map Ag Digest 1:178 N '16
- Farm management experiences. Prog F 33:1250 N 16 '18
- Farm-management field studies; a reconnaissance conducted in Butler township, Knox county. C. W. Montgomery. il Ohio Ag Exp B v 2:29-32 Ja '17
- Farm management in the Gulf Coast country. L. T. Rhodes. Prog F 33:1259 N 16 '18
- Farm management investigations in Minnesota. F. W. Peck. (*In* Am. farm management assn. Record of pro., 1915, p. 70-7) '16
- G. A. Billings, sec., Washington, D.C.
- Farm management practice of Chester county, Pa. W. J. Spillman and others. il maps U S Ag B 341:1-99 '16; Abstract. Prac F 114:301 S 15 '18
- Farm management studies in eastern Nebraska. H. C. Filley. il map Neb Ag Exp B 157:1-32 '16
- Farm-management study in Anderson county South Carolina. A. G. Smith. map U S Ag B 651:1-32 '18
- Farm management study in southeastern Minnesota; factors influencing profits. A. Boss and others. il map Minn Ag Exp B 172:1-51 '17
- Farm management study of cotton farms of Ellis county, Texas. R. E. Willard. il maps U S Ag B 659:1-53 '18
- Farm management suggestions. Prog F 32:63 Ja 20 '17
- Farm-management survey in Brooks county, Georgia. E. S. Haskell. il U S Ag B 648:1-59 '18
- Farm-management survey of three representative areas in Indiana, Illinois, and Iowa. E. H. Thomson and H. M. Dixon. il map U S Ag B 41:1-42 '14
- Farm on a business basis. P. C. Henry. Prac F 112:434 D 1 '16
- Farm organization; balance between crops and stock, crop rotation, and labor distribution. K. C. Livermore. maps N Y Ag Dept B 86:242-48 Ag '16
- Farm organization in the irrigated valleys of southern Arizona. R. W. Clothier. il map U S Ag B 654:1-58 '18
- Farm practice in growing sugar beets for three districts in Utah and Idaho, 1914-15. L. A. Moorhouse and others. il map U S Ag B 693:1-43 '18
- Farm practice in growing sugar beets in the Billings region of Montana. S. B. Nuckols and E. L. Currier. il map U S Ag B 735:1-37 '18
- Farm practice in the production of hay in Steuben county, N.Y., and Washington county, Pa. H. B. McClure. il U S Ag B 641:1-16 '18
- Farm practices that increase crop yields in the Gulf Coast region. M. A. Crosby. il map Farmers' B 986:1-28 '18
- Farm profits and factors influencing farm profits on 284 general farms and 75 dairy farms in Monmouth county, New Jersey. F. App. il map N J Ag Exp B 312:1-89 '17
- Farm profits and factors influencing farm profits on 370 potato farms in Monmouth county, New Jersey. F. App. il map N J Ag Exp B 294:1-103 '16
- Farm renter or farm owner. J. C. Gordon. Rural N Y 75:463-4 Mr 18 '16
- Farm without a pasture. il Wallaces' F 41:519 Mr 31 '16
- Farm work for January. J. F. Duggar. Prog F 32:1353 D 29 '17
- Farm work for February. J. F. Duggar. Prog F 33:164 F 9 '18
- Farm work for March. J. F. Duggar. Prog F 33:278 Mr 2 '18
- Farm work for April. J. F. Duggar. Prog F 33:440 Ap 6 '18
- Farm work for May. J. F. Duggar. Prog F 33:562 My 4 '18
- Farm work for June. J. F. Duggar. Prog F 33:664 Je 1 '18
- Farm work for July. J. F. Duggar. Prog F 33:769 Jl 6 '18
- Farm work for August. J. F. Duggar. il Prog F 33:857 Ag 3 '18
- Farm work for September. J. F. Duggar. Prog F 33:978 S 7 '18
- Farm work for October. J. F. Duggar. Prog F 33:1086 O 5 '18
- Farm work for November. J. F. Duggar. Prog F 33:1185 N 2 '18
- Farm work for December. B. L. Moss. Prog F 32:1260 D 1 '17
- Farm-work program for every week in the year. Mrs G. H. Mathis. Prog F 31:211 F 12 '16
- Farmer's office. J. K. Kincaid. Am Coop J 13:244 F '18
- Farming in the bluegrass region. J. H. Arnold and F. Montgomery. il map U S Ag B 482:1-29 '17
- Farming on horseback. il Wallaces' F 42:1031 Jl 20 '17
- Farms that leak. C. Edward. Country Gent 82:94 Ja 20 '17
- Father and seven sons; Ireton farms. J. W. Henceroth. il Ohio F 137:205-6 F 12 '16
- Feeding steers as a means of increasing crop production. A. B. Futerbaugh. il System on the Farm 1:219-22 Ag '17
- Fitting scheme to conditions. il Country Life 30:47 O '16
- Five lessons failure taught me. L. G. Berry. System on the Farm 2:132-3 Ap '18
- Five-year farm management survey in Palmer township, Washington county, Ohio, 1912-1916. H. W. Hawthorne. il map U S Ag B 716:1-53 '18
- Forty years in the hog business. W. S. Tomlinson. Ohio F 137:525 Ap 8 '16
- Four management changes that helped in paying off a \$5,000 mortgage in 3 years. F. Gaylor. plan System on the Farm 2:173-4 My '18
- 14 plans that made a small farm big. W. S. Prickett. il System on the Farm 3:91-4 S '18
- Full acreage until the boys come home. il System on the Farm 3:219-21 D '18
- Gas tractor in eastern farming. A. P. Yerkes and L. M. Church. il Farmers' B 1004:1-27 '18
- Getting ahead of my work. H. Radtke. System on the Farm 2:95 Mr '18
- Getting the farm work done. Hoard's D 53:952 Jl 6 '17; Same. Jersey B 36:1216 Ag 8 '17
- Getting things done. Country Gent 82:1084 Je 30 '17
- Getting together in Iowa. F. Crissey. il Country Gent 82:1974-5 D 15 '17
- Greater economy in farm production and home management. W. F. Massey. Prog F 31:924 Jl 29 '16
- Gumption. W. R. Butler. Country Gent 81:445 F 26 '16
- Handling barnyard manure in eastern Pennsylvania. D. A. Brodie. il Farmers' B 978:1-24 '18
- How a schedule lowered labor bills. O. W. Rowlands. il System on the Farm 3:12-13 Jl '18
- How I doubled the returns from my corn crop. F. J. Rist. il System on the Farm 1:146-8 Je '17
- How I reduced my labor bill 54 per cent. J. L. Justice. il System on the Farm 1:27-9 Mr '17
- How I reduced the cost of marketing. A. L. Brown. il System on the Farm 1:175-8 Jl '17
- How I save \$26.40 worth of time a month. J. Corliss. il System on the Farm 3:15 Jl '18

## Farm management—Continued

- How I took much of the uncertainty out of farming. I. Adrian. *il System on the Farm* 2:134-5 Ap '18
- How live stock is handled in the bluegrass region of Kentucky. J. H. Arnold. *Farmers' B* 812:1-14 '17
- How much capital does a farmer need? *il Country Life* 30:53 Je '16
- How one man replaces three. A. S. Bard. *il System on the Farm* 3:138-9 O '18
- How one young man is winning. *il Wallaces' F* 41:1043 Ag 4 '16
- How the wise use of capital makes bank accounts for Badger farmers. E. R. McIntyre. *Banker-F* 3:6 Jl '16
- How to get rich lands; systems of farming as they affect soil fertility. T. Butler. *Prog F* 32:968 S 15 '17
- How to turn spare time to cash. W. Jack. *Prac F* 114:10 Ja 1 '18
- How we study our records in cutting expense bills. R. Williams. *il System on the Farm* 1:362-4 D '17
- Illinois beef on \$200 land. C. Borgelt. *il O Judd Farmer* 62:3 My 26 '17
- Importance of diversity in farming. *il Country Life* 30:45 Jl '16
- Impressions gained from working fringe country of South-East. S. Ockley. *J Dept Ag S Australia* 20:807-13 My '17
- Increasing man efficiency on the farm. I. J. Mathews. *il Ohio F* 142:453-4 N 9 '18
- Inexpensive equipment that reduces labor; photographs. *System on the Farm* 1:144-5 Je '17
- Investments for a farmer with limited capital. W. L. Cavert. (*In Minnesota farmers' institute annual, 1916, p 36-42*) *il '16 Extension division, University Farm, St Paul*
- Is your farm an efficiency farm? H. A. Von Nieda. *il Power F* 27:50 Je '18
- Keeping good men interested. J. Murray. *System on the Farm* 1:164 Je '17
- Keeping men and teams busy. T. Clark. *il System on the Farm* 2:14-17 Ja '18
- Labor income of the farm. *Prac F* 112:460 D 15 '16
- Labor requirements of crop production. T. P. Cooper, F. W. Peck and A. Boss. *Minn Ag Exp B* 157:1-55 '16
- Labor requirements of livestock. A. Boss and others. *Minn Ag Exp B* 161:1-43 '16
- Labor savers on 5 farms. *il System on the Farm* 3:144 O '18
- Labor saving practices in hay making shown pictorially. H. B. McClure. *il Farmers' B* 987:1-20 '18
- Learning from the other fellow. W. D. Nicholls. *il Country Gent* 83:13 S 28 '18
- Letters to a young farmer. W. H. Dean. *il Country Gent* 81:1929, 1998, 2071; 82:97 N 4, 18, D 2 '16, Ja 20 '17
- Live stock and other factors for profitable farming in northern Kentucky. J. B. Hutson. *Ky Ag Exp C* 21:1-20 '18
- Live stock and quality farming. W. E. Watkins. *Breeder's Gaz* 70:165 Ag 3 '16
- Live stock and the orchard. E. J. Iddings. *Better Fruit* 12:16 Je '18; Same. *Better Fruit* 13:15+ Ag '18
- Livestock farming as affecting soil fertility. *Prog F* 33:1254 N 16 '18
- Livestock vs. grain-farming. G. S. Beaumont and R. S. Dunham. *Farm Eng* 5:14 Mr '17
- Livestock vs. grain farming. C. G. Williams. *Ohio Ag Exp B* 328:39-53 '18
- Looking forward in farming operations. *Weekly N L* 6:6-7 S 4 '18
- Lowering crop losses. C. P. Coon. *System on the Farm* 2:92 Mr '18
- Lucky farmer. S. C. Hoyle. *Prog F* 33:1267 N 16 '18
- Make the farm family a partnership. W. F. Massey. *Prog F* 31:876 Jl 15 '16
- Making poor land pay. *il System on the Farm* 1:323-6 N '17
- Making sure of a profit on cattle, corn and clover. H. J. Stelford. *il System on the Farm* 1:305-6 O '17
- Man-power in agriculture. *Tex Ag Ext B B-* 46:1-30 '18
- Management of a Minnesota farm. A. Boss. *Breeder's Gaz* 69:586 Mr 9 '16
- Management of irrigated grass pastures. J. S. Welch. *il Idaho Ag Exp B* 95:1-17 '17
- Management of muck-land farms in northern Indiana and southern Michigan. H. R. Smalley. *il map Farmers' B* 761:1-26 '16
- Management of sandy-land farms in northern Indiana and southern Michigan. J. A. Drake. *il Farmers' B* 716:1-28 '16
- Management plan that makes 17 per cent a year for me. P. Hackett. *il System on the Farm* 1:11-14 Mr '17; Same. *Coop Manager & F* 6:26-9 Ap '17
- Managing alfalfa pastures in Arizona. R. W. Clothier. *Int R Sci & Prac Ag* 7,no 3:421-2 Mr '16
- Managing soils for profit. H: G. Bell. *Am Fert* 45:34-9 N 25 '16
- Master farmer of seventy; Weatherby farm in southern Jersey. H. R. Cox. *il Country Gent* 81:1251-2 Je 24 '16
- Meeting the farm labor shortage. *Ohio F* 141:487 Ap 6 '18
- Method of analyzing the farm business. E. H. Thomson and H. M. Dixon. *Farmers' B* 661:1-28 '18
- Model farm management and credit system. A. R. Foote. 59p 50c '17 American progress pub. co., 332 C st., N.W., Washington, D.C.
- Negro, the boll weevil and farm management. *Prog F* 31:98 Ja 15 '16
- New field arrangement that is developing a one-man farm. R. T. Benton. *map System on the Farm* 2:89-90 Mr '18
- Nine leaks on my farm. F. C. Landorf. *System on the Farm* 1:359-61 D '17
- 1918 plans of a wide-awake farmer. *Prog F* 33: 80 Ja 19 '18
- No more hired hands. C. H. Newman. *il System on the Farm* 1:148-50 Je '17
- Normal day's work for various farm operations. H. H. Mowry. *U S Ag B* 3:1-44 '13
- Office equipment that cuts indoor jobs. C. F. Richardson. *il System on the Farm* 3:48-9 Ag '18
- One answer to the help problem and 10 other management plans. M. Meyer. *il System on the Farm* 2:45-7 F '18
- One-man farm, 100 acres and no hired help. T. C. Merrick. *System on the Farm* 2:53 F '18
- Ontario; farm management surveys. *Ag Gaz of Canada* 5:489-91 My '18
- Operating 800 acres on borrowed capital. C. M. Baker. *il Ohio F* 139:685 My 19 '17
- Orchard and garden efficiency. O. Davis. *il Field* 11 27:545 Jl '17
- Orchard and truck farm work for August. L. A. Niven. *Prog F* 33:858 Ag 3 '18
- Organization of the farm business for profit. G. N. Dagger and J. I. Falconer. *il Ohio Ag Ext B v* 13, no 3:1-29 '17-'18
- Organizing the farm business. H. P. Miller. *Ohio F* 142:314 O 5 '18
- Paying off a \$5,000 mortgage in three years. F. Gaylor. *Ag Digest* 3:8 Jl '18
- Planning the year's work. F. F. Rockwell. *il Field* 11 27:103+ F '17
- Plotting the estate's big job. F. F. Rockwell. *Country Life* 33:70-1 F '18
- Possible Wayne County farm. C. E. Thorne. *il Ohio Ag Exp B* 304:211-25 '16
- Practical application of farm management principles. H. W. Jeffers. (*In Am. farm management assn. Record of pro., 1915, p. 51-60*) *il '16 G. A. Billings, sec., Washington, D.C.*
- Practical farm suggestions. T. B. Parker. *Prog F* 33:990 S 7 '18
- Present farm labor saving possibilities. A. H. Gerbazi. *Farm Eng* 4:76 N '16
- Price fixing and cost of farm products. H. C. Taylor. *il Hoard's D* 56:65+, 254-5 Ag 9, S 20 '18
- Problem in engineering. *Wallaces' F* 43:855 My 24 '18
- \* Production. J. H. Grisdale. (*In Report, Dairymen's assns., 1917, p. 11-16*) '18 Ontario ag. dept., Toronto
- Profitable management of general farms in the Willamette valley, Oregon. B. Hunter and S. O. Jayne. *U S Ag B* 705:1-23 '18



**Farm management—Continued**

- Profitable uses of capital. F. W. Peck. (*In* Minnesota farmers' institute annual, 1916, p 43-6) il '16 Extension division, University Farm, St Paul
- Profits in farming on irrigated areas in the Gallatin valley, Montana. E. L. Currier. Mont Ag Exp B 111:1-52 '16; Summary (With title, Business management pays). Wallaces' F 42:533 Mr 23 '17
- Proper use of capital in farming. A. Boss. (*In* Minnesota farmers' institute annual, 1916, p 48-54) '16 Extension division, University Farm, St Paul
- Proportionate investment of capital on the farm. F. W. Peck. (*In* Minnesota farmers' institute annual, 1916, p 54-65) il '16 Extension division, University Farm, St Paul
- Putting farm preaching into practice. J. F. Cunningham. il Ohio F 137:833 Je 24 '16
- Readjustment of farm conditions. G. D. Black. Ohio F 139:183 F 10 '17
- Rebuilding sandy loam farms. Power F 25:27 Ag '16
- Records and accounts. System on the Farm 2: 20 Ja '18
- Rejuvenating a run-down farm. il Ohio F 140:341 O 20 '17
- Reorganization of farms in boll weevil territory. J. R. Fain and S. H. Starr. il Ga Ag Coll (Ext) B 117:1-16 Ja '17
- Report of the specialist in farm management. W. B. Duryee. N J Ag Dept B 17:91-105 '18
- Results of farm management demonstration work in U. S. A. L. H. Goddard. Int R Sci & Prac Ag 7,no 9:1337-40 S '16
- Results of farm management survey in Caledon township, Peel county. A. Leitch. (*In* Report, Ontario ag. & exp. union, 1917, p. 25-8) '18 Ontario ag. dept., Toronto
- Review of Wisconsin farm management demonstration. D. H. Otis. Hoard's D 54:762-3 D '17
- Rushmore way; when they don't know they find out. H. R. Cox. il Country Gent 81: 1718-19 S 23 '16
- Safe farming. B. Knapp. U S Ag C 56:1-16 '16
- Saving man power. Weekly N L 4:3 My 30 '17
- Saving souls and soils. T. J. Murphy. il Country Gent 83:10-11+ Mr 23 '18
- Saving steps at chore time. E. Thronson and E. Shinnick. System on the Farm 1:334-5 N '17
- School of experience. H. E. West. Hoard's D 51:537 Ap 21 '16
- Seasonal distribution of farm labor in Chester county, Pa. G. A. Billings. U S Ag B 528:1-29 '17
- Seven plans that have helped us through the labor crisis. U. G. Sass. il System on the Farm 1:185-7 Jl '17
- Shoestring farm. W. Hardison. il Country Gent 82:978-9, 1010-11 Je 2-9 '17
- Short cuts. il System on the Farm 1:348, 376-7; 2:59 N-D '17, F '18
- Short cuts that have paid on eight farms. C. A. Waugh. plans System on the Farm 3: 43-4 Ag '18
- Should you be allowed to run your own farm? F. F. Rockwell. Country Life 32:70-1 Je '17
- Six methods reducing farm wastes. H. J. Sconce. il System on the Farm 1:99-103 My '17
- Six winter jobs for busy farmers. L. A. Markham. Prog F 31:80 Ja 15 '16
- 6,500 customers for our farm. F. McKee. il System on the Farm 1:15-18 Mr '17
- Small farm well tilled—does it pay? W. R. Butler. Country Gent 81:599 Mr 11 '16
- Some factors in efficient farm management. A. E. Grantham. Prac F 113:381 N 15 '17
- Some outstanding factors in profitable farming. J. S. Cates. U S Ag Yearbook 1915: 113-20
- Some real farm problems. I. J. Mathews. J Ag (Quebec) 22:16 Jl '18
- Some results of the farm management survey in Geauga county, Ohio, Burton area. F. L. Allen and J. I. Falconer. Ohio Ag Ext B v 11, no 2 11p '15-'16
- Sources of farm profits and their relative importance. D. H. Otis and R. V. Gunn. Hoard's D 51:900+ Je 30 '16; Abstract. Int R Sci & Prac Ag 7,no 11:1663-7 N '16
- Southern farmer needs accurate farm management data. T. Butler. Prog F 33:1279 N 23 '18
- Speaking of fruit growers; Frank C. Bancroft of Delaware. H. R. Cox. il Country Gent 81:1391-2 Jl 22 '16
- Statistical researches on the chief factors which influence farm profit in Denmark. L. Nanneson. Int R Sci & Prac Ag 7,no 11: 1668-76 N '16
- Stock and grain farm plan. W. I. Chamberlain. il Nat Stock & F 41:45-6 Ap 7 '17
- Strategic points in farming. Wallaces' F 41: 24 Ja 7 '16
- Study of farm management problems in Lenawee county, Michigan. H. M. Dixon and J. A. Drake. il map U S Ag B 694:1-36 '18
- Study of farming in southwestern Kentucky. J. H. Arnold. U S Ag B 713:1-19 '18
- Studying the southern farm from a business standpoint. E. H. Thomson. Prog F 32:965 S 15 '17
- Successful farm management. J. Bower. Hoard's D 55:981 Jl 5 '18
- Successful farm organization. O. R. Johnson. Mo Ag Exp B 142:1-25 '16
- System and order bring success. il Wallaces' F 42:963 Je 29 '17
- System on seven acres. A. P. Marshall. il Country Gent 81:523 Mr 4 '16
- Taking time by the forelock. E. F. Cauthen. Prog F 33:1267 N 16 '18
- Tenderfoot farming. J. A. Dimock. il Country Gent 81:435-6 F 26 '16
- Tests of good farming; how the survey gets at the facts of a farm business. J. C. Marquis. il Country Gent 83:10 Mr 2 '18
- 3 if's. il Am Coop J 12:764 Ag '17
- Thrift plans from 10 states; photographs. System on the Farm 2:48-9 F '18
- Time savers. System on the Farm 3:234 D '18
- Time well spent. H. Quick. Country Gent 81:929 Ap 29 '16
- Tractor—a farm management viewpoint. A. P. Yerkes. il Power F 26:12 O '17
- Tractor and farm management. A. P. Yerkes. il Power F 25:7-8 Mr; 44 Ap; 15 My '16
- Two women on a little farm. E. Pollard. Country Gent 81:1254 Je 24 '16
- Unprofitable acres. J. C. McDowell. il U S Ag Yearbook 1915:147-54
- Validity of the survey method of research. W. J. Spillman. U S Ag B 529:1-15 '17
- Vital question of farm management. J. C. Marquis. il Country Gent 82:1866-7 D 1 '17
- Wartime farm efficiency. J. C. Marquis. il Country Gent 82:859-60 My 12 '17
- Waste land and wasted land on farms. J. S. Ball. il map Farmers' B 745:1-17 '16; Same cond. Prog F 31:1270 O 28 '16
- Ways of making southern mountain farms more productive. J. H. Arnold. il Farmers' B 905:1-27 '18
- What a paying cow must produce on the general farm. D. B. Hogan. Breeder's Gaz 69:490 Mr 2 '16
- What is a successful farm; interesting Arkansas figures. A. D. McNair. Prog F 32: 1257 D 1 '17
- What is wrong with our farmers? G. H. Conn. Hoard's D 52:702 D 8 '16
- \* What the farm business survey shows. A. Leitch. (*In* Report, Dairymen's assns., 1917, p. 74-80) '18 Ontario ag. dept., Toronto
- What the future holds in farm management. A. Boss. (*In* Am. farm management assn. Record of pro., 1915, p. 5-9) '16 G. A. Billings, sec., Washington, D.C.
- Why farmers make money at a loss. H. L. Staples. il Country Gent 83:5-6+ S 14 '18
- Why land values rise. G. R. Bliss. il Country Gent 81:1360 Jl 15 '16
- Wonderful question answered. F. C. Kelly. il Am Magazine (381 4th av., N.Y. 15c) 83: 47-8 Ja '17

**Farm management—Continued**

Work for winter days. W. H. Rothenberger. *Prac F* 112:51 F 1 '16

See also Cost accounting; Dairy farm management; Diversified farming; Dry farming; Farm labor; Farms; Income; Irrigation farming; Market gardening; Marketing; Orchard management; Poultry farm management; Rotation of crops; also American farm management association; North Lake farm management club

**Bibliography**

Farm management, farm accounts, credits, marketing, homes, and statistics; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 68—2d ed) 20p '18 Supt. of doc., Washington, D.C.

**Study and teaching**

Farm management summer practice courses. R. L. Adams. (*In* Am. farm management assn. Record of pro., 1915, p. 40-50) '16 G. A. Billings, sec., Washington, D.C.  
Report of the committee on teaching; problems for investigation and theses leading to a master's degree in 13 institutions. (*In* Am. farm management assn. Record of pro., 1915, p. 79-83) '16 G. A. Billings, sec., Washington, D.C.

Farm management association, American. See American farm management association

**Farm management clubs**

Boys' farm management club. F. M. Shanklin. *Purdue Ag* 13:64 N '18

**Farm managers**

Compensation for farm managers. A. Boss. *Hoard's D* 52:349 O 6 '16  
Developing the country estate. R. V. Hoffman. *il Field* 11 27:11-12, 100-1 Ja-F '17  
Dividing profits with the farm manager. *Hoard's D* 50:788 Ja 7 '16  
Farm manager sharing in profits. A. Boss. *Hoard's D* 51:170 F 18 '16  
Farm managers—married and otherwise. W. F. McSparran. *Nat Stock & F* 40:1110 Ja 27 '17  
Growth of estate farming. J. A. McLean. *il Field* 11 28:564-5 Ag '18  
How to support your farm manager. F. F. Rockwell. *Country Life* 31:70-1 Ap '17

**Farm maps**

Farm map. E. V. Laughlin. *Farm Eng* 3:197 Mr '16  
How to survey and map your farm. J. F. Hobart. *il plan Power F* 26:9 D '17; 27:20 Ja; 12+ F; 12-13 Mr; 12+ Ap; 10 My; 52 Je; 42 Jl; 26+ Ag '18

**Farm mortgage bankers' association**

Policy of organized farm mortgage bankers. F. W. Thompson. (*In* Minnesota farmers' institute annual, 1916, p 155-9) '16 Extension division, University Farm, St Paul

**Farm names**

Choosing a farm name. W. L. Nelson. *Breeder's Gaz* 69:746 Mr 30 '16  
Farm names. *il Mo Ag Bd B v* 14:1-42 O '16  
Farm names. Wallaces' *F* 43:320 F 15 '18  
Names for farms; list. *Prog F* 33:213 F 16 '18  
Naming farms. *Breeder's Gaz* 69:516 Mr 2 '16  
Realizing a profit from farm names. D. G. Beaty. *il System on the Farm* 1:63-5 Ap '17

See also Dairy farm names

Farm papers. See Agricultural periodicals

**Farm produce**

\* By-products on the farm. *Sci Am* (233 Broadway, N.Y. 10c) 119:482 D 14 '18  
Farm should produce sixty per cent of living. Wallaces' *F* 42:1528 N 9 '17  
Human food from an acre of staple farm products. M. O. Cooper and W. J. Spillman. *Farmers' B* 877:1-10 '17; Excerpt. O Judd Farmer 63:6 D 1 '17  
Industrial preparedness for peace; agricultural conservation. E. E. Miller. *Scientific Am* (233 Broadway, N.Y. 10c) 116:120+ F 3 '17  
Market news service; Bureau of markets to open several new branch offices. *Weekly N L* 5:4 Ag 22 '17

Why the era of cheap farm products is over. C. Poe. *Review of Reviews* (30 Irving Place, N.Y. 25c) 58:178-81 Ag '18

See also Crops; Dairy products

**Costs**

Cost accounts on some New York farms. C. E. Ladd. *Cornell Ag Exp B* 377:773-815 '16; Same. *Cornell Ag Exp Rep* 1916:773-815 '17  
Cost of production survey in British Columbia. *Ag Gaz of Canada* 4:398-9 My '17  
Determination of the cost of production of farm crops. J. Wyllie. *J Bd Ag* 24:403-16 Jl '17  
Fixing the cost of products. *J Ag* (Quebec) 22:77 N '18  
No dependable data on cost of growing farm products. D. F. Houston. *Weekly N L* 6:1+ N 27 '18  
Price fixing and cost of farm products. H. C. Taylor. *il Hoard's D* 56:65+, 254-5 Ag 9, S 20 '18

See also Farm produce—Prices

**Distribution**

Distributing farm produce. C. R. Martin. *Am Coop J* 11:638 F '16

**Grading**

Standard grades for apples, eggs, potatoes, corn, wheat, oats, hay and straw. *Pa Ag Dept B* 303:1-13 '18

**Marketing**

See Marketing

**Packing**

See Packing for shipment

**Prices**

Farm prices; comparison of the averages for principal crops for the years 1915 and 1917. *Weekly N L* 5:5 F 20 '18  
Farm product values. *Weekly N L* 5:6 Ap 3 '18  
Farmer not responsible for high prices. J. W. Chamberlain. *Hoard's D* 53:897 Je 22 '17  
Fixing prices of farm products. *Breeder's Gaz* 73:705 Ap 4 '18  
Hudson Valley farm prices. *Rural N Y* 77:787 Je 15 '18  
Price fixing and cost of farm products. H. C. Taylor. *il Hoard's D* 56:65+, 254-5 Ag 9, S 20 '18  
Trend of prices in farm products. *Ag Digest* 1:35-6 My '16  
Why American farmers must get more for their crops. C. Poe. *Prog F* 33:913 Ag 17 '18

**Statistics**

Estimated farm value of important products and average prices received by producers in U. S., for the 15th of the month and the 1st of the following month. See monthly numbers of Monthly crop report  
Estimated value of farm production in 1916. *Monthly Crop Rep* 3:16 F '17  
Estimated value of farm products, 1897-1917. *Monthly Crop Rep* 4:1 Ja '18  
Prices of articles bought by farmers and amount purchasable with different products. *Monthly Crop Rep* 4:26-7 Mr '18  
Range of prices of agricultural products at important markets. *Monthly Crop Rep* 4:56 My '18  
United States summary of farm prices. See monthly numbers of the Monthly crop report  
Value of farm products in the United States and their prices at the farm in 1914. *Int R Sci & Prac Ag* 7,no 1:132-4 Ja '16

**Standards**

Our marketing problem: the producers' part. A. Hobson. *Hoard's D* 54:357 O 12 '17  
Standard grades for apples, eggs, potatoes, corn, wheat, oats, hay and straw. *Pa Ag Dept B* 303:1-13 '18  
Standardization of farm products. E. S. Brigham. *N Y Ag Dept B* 81:1712-20 Mr '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1712-20 '17



**Farm produce—Standards—Continued**

Uniform grades and standard packages. C. T. More. (*In* Pan American scientific congress Pro., 1913, v. 3, p. 468-74) '17

**Statistics**

Commercial stocks of farm products. Monthly Crop Rep 4:93 Ag '18

Farm production. Weekly N L 5:7 Mr 13 '18

Farms reporting various crops and live stock; percentage at the time of the 1910 census. Monthly Crop Rep 4:52 My '18

Our foreign trade in farm and forest products. P. Elliott. U S Ag B 296:1-50 '15

Relative supplies of crops on farms Jan. 1. Monthly Crop Rep 4:52 My '18

**Storage**

See Storage of farm produce

**Transportation**

See Transportation

**Farm rollers.** See Rollers, Farm

**Farm surveys**

Applying business methods to farming. R. P. Speer. *Il Breeder's Gaz* 70:533 S 28 '16

Business of ten dairy farms in the bluegrass region of Kentucky. J. H. Arnold. U S Ag B 548:1-12 '17

Canadian farm management survey. J Ag (Quebec) 21:129 Mr '18

Causes of good and poor farming in Cortland area, Trumbull county, as shown by a farm management demonstration. M. O. Bugby and G. N. Dagger. Ohio Ag Ext B v 11,no 11 4p '15-'16

Cost of growing wheat on typical non-irrigated areas in Montana. E. L. Currier. Mont Ag Exp B 122:142-61 '18

Cost of horse labor on the farm. O. R. Johnson and R. M. Green. maps Mo Ag Exp B 152:1-32 '18

Cost of living on Minnesota farms—1905-1914. F. W. Peck. *il map Minn Ag Exp B* 162:1-31 '16

Cost of producing apples in western Colorado. S. M. Thomson and G. H. Miller. *il map U S Ag B* 500:1-44 '17

Crop-cost surveys. Country Gent 81:1764 S 30 '16

Farm management and farm profits on irrigated land in the Provo area (Utah lake valley). L. G. Connor. *il U S Ag B* 582:1-40 '18

Farm management demonstration work in Massachusetts. W. H. Bronson. *il map Mass Ag Ext B* 9:1-15 '16

Farm management practice of Chester county, Pa. W. J. Spillman and others. *il maps U S Ag B* 341:1-99 '16; Abstract. Prac F 114:301 S 15 '18

Farm-management study in Anderson county South Carolina. A. G. Smith. map U S Ag B 651:1-32 '18

Farm management study in southeastern Minnesota; factors influencing profits. A. Boss and others. *il map Minn Ag Exp B* 172:1-51 '17

Farm management study of cotton farms of Ellis county, Texas. R. E. Willard. *il maps U S Ag B* 659:1-53 '18

Farm-management survey in Brooks county, Georgia. E. S. Haskell. *il U S Ag B* 648:1-59 '18

Farm-management survey of three representative areas in Indiana, Illinois, and Iowa. E. H. Thomson and H. M. Dixon. *il map U S Ag B* 41:1-42 '14

Farm organization in the irrigated valleys of southern Arizona. R. W. Clothier. *il map U S Ag B* 654:1-58 '18

Farm practice in growing sugar beets for three districts in Utah and Idaho, 1914-15. L. A. Moorhouse and others. *il map U S Ag B* 693:1-43 '18

Farm practice in the cultivation of cotton. H. R. Cates. *il U S Ag B* 511:1-62 '17

Farm profits and factors influencing farm profits on 284 general farms and 75 dairy farms in Monmouth county, New Jersey. F. App. *il maps N J Ag Exp B* 312:1-89 '17

Farm profits and factors influencing farm profits on 370 potato farms in Monmouth county, New Jersey. F. App. *il map N J Ag Exp B* 294:1-103 '16

Five-year farm management survey in Palmer township, Washington county, Ohio, 1912-1916. H. W. Hawthorne. *il map U S Ag B* 716:1-53 '18

Handling barnyard manure in eastern Pennsylvania. D. A. Brodie. *il Farmers' B* 978:1-24 '18

Man-power in agriculture. Tex Ag Ext B B-46:1-30 '18

Profitable management of general farms in the Willamette valley, Oregon. B. Hunter. and S. O. Jayne. U S Ag B 705:1-23 '18

Profits in farming on irrigated areas in the Gallatin valley, Montana. E. L. Currier. Mont Ag Exp B 111:1-52 '16

Report of the committee on lands. F. C. Nunnick. (*In* Report, 1917, p. 209-26) '17 Canada Comm. of conservation, Ottawa

Results of farm management survey in Caledon township, Peel county. A. Leitch. (*In* Report, Ontario ag. & exp. union, 1917, p. 25-8) '18 Ontario ag. dept., Toronto

Seasonal distribution of farm labor in Chester county, Pa. G. A. Billings. U S Ag B 523:1-29 '17

Some results of the farm management survey in Geauga county, Ohio, Burton area. F. L. Allen and J. I. Falconer. Ohio Ag Ext B v 11,no 2 11p '15-'16

Study of farm management problems in Lenawee county, Michigan. H. M. Dixon and J. A. Drake. *il map U S Ag B* 694:1-36 '18

Study of farming in southwestern Kentucky. J. H. Arnold. U S Ag B 713:1-19 '18

Studying the southern farm from a business standpoint. E. H. Thomson. Prog F 32:965 S 15 '17

Tests of good farming: how the survey gets at the facts of a farm business. J. C. Marquis. *il Country Gent* 83:10 Mr 2 '18

Theory of correlation as applied to farm-survey data on fattening baby beef. H. R. Tolley. U S Ag B 504:1-14 '17

Validity of the survey method of research. W. J. Spillman. U S Ag B 529:1-15 '17

What is a successful farm; interesting Arkansas figures. A. D. McNair. Prog F 32:1257 D 1 '17

\* What the farm business survey shows. A. Leitch. (*In* Report, Dairymen's assns., 1917, p. 74-80) '18 Ontario ag. dept., Toronto

See also Agricultural surveys; Dairy farm surveys; Farm census

**Farm tenancy**

About cooperative farming. Prog F 33:4 Ja 5 '18

Address at convention of National agricultural society. L. G. Robinson. Ag Digest 1:420 My 1 '17

Advancing from tenant to landlord. J: F. Cunningham. *il Ohio F* 142:345 O 12 '18

Agrarian question in Bosnia and Herzegovina. Int R Ag Econ 70:69-82 O '16

Agricultural credit legislation and the tenancy problem. Int R Ag Econ 62:93-5 F '16

Alabama tenant farmer. B. R. Taylor. Breeder's Gaz 70:146 Jl 27 '16

Better methods of land rental for land-owner and tenant. W. F. Massey. Prog F 31:1072 S 9 '16

Biltmore system of tenantry. A. S. Wheeler. Hoard's D 53:706 My 11 '17

Building up the run-down farm. O. R. Geyer. Country Life 29:16j Ap '16

By an absentee landlord. Country Gent 81:2109 D 9 '16

Central Illinois tenant method. O Judd Farmer 60:16 Mr 11 '16

Comparative results obtained on an estate in Tuscany where a farm worked by the landlord was afterwards run on the metayage system. F. Brini. Int R Sci & Prac Ag 7,no 12:1821-2 D '16

Compensation claims under the agricultural holdings (Scotland) act 1908. Int R Sci & Prac Ag 7,no 1:31-3 Ja '16

Concentration of land ownership. C. M. Harger. Financial World (29 Broadway, N.Y. 15c) 29:22 N 17 '17

## Farm tenancy—Continued

- Cooperation between landlord and tenant. L. A. Markham. Prog F 31:1086 S 9 '16
- Debate: resolved, That improving farm leases is the best way of meeting the evils of tenancy. Wallaces' F 43:533 Mr 22 '18
- Economic study of farming in Sumter county, Ga. H. M. Dixon and H. W. Hawthorne. U S Ag B 492:1-64 '17
- Farm leases in Iowa. Wallaces' F 41:5 Ja 7 '16
- Farm leasing. H. F. Kling. Hoard's D 54:650 N 30 '17
- Farm rental at shares. Nat Stock & F 40: 886 D 2 '16
- Farm renter or farm owner. J. C. Gordon. Rural N Y 75:463-4 Mr 18 '16
- Farm tenancy in the United States. B: H. Hibbard. Int R Ag Econ 76:90-9 Ap '17
- Farm tenancy not an unmixed evil. H. P. Miller. Ohio F 142:161 Ag 24 '18
- Farm tenantry in California. E. E. Cox. Cal Commonwealth Club Transac (San Francisco 19c) 11:444-56 D '16; Same. (In Report, 1916, p. 101-12) '16 Cal. Comm. on land colonization and rural credits, Sacramento
- Farm tenantry in the United States. W. J. Spillman and E. A. Goldenweiser. maps U S Ag Yearbook 1916:321-46; Same. Separate 715
- Farm-tenantry problem of the country church. Current Opinion (63 W. 36th st., N.Y. 25c) 61:406-7 D '16
- Farm tenant's share. W. I. Chamberlain. Nat Stock & F 41:764 N 10 '17
- Farm tractor and the renter. R. T. Mally. il Power F 25:8 S '16
- Farming by the golden rule. L. G. Parker. Wallaces' F 41:1351 O 13 '16
- Farming under five-year lease. il O Judd Farmer 60:5 Ja 29 '16
- Forty Jerseys on forty acres. L. E. Parsons. Jersey B 35:266 F 23 '16
- Gaining a foothold on the land. E. H. Thomson. (In Am. farm management assn. Record of pro., 1915, p. 34-9) '16 G. A. Billings, sec., Washington, D.C.
- Gives tenant plenty of leeway. R. H. Birling-mair. O Judd Farmer 60:10 Ja 29 '16
- Giving the tenants a chance. C: Dillon. Country Gent 82:13 Mr 10 '17
- Half-and-half system most successful. Jersey B 37:1223 J1 31 '18
- Has a farm tenant any rights? Am City—Town and county ed (Tribune bldg., N. Y. 35c) 15:630-7 D '16
- Hildebrand, master landlord. G: H. Dacy. Country Gent 82:1854 N 24 '17
- How a tenant succeeded. Prog F 31:1073 S 9 '16
- How I select a food farm tenant. D. G. Beaty. System on the Farm 2:50 F '18
- How to choose a tenant. C. A. Wilson. Country Gent 83:15 Mr 23 '18
- If they make a dollar, so do we. H. R. O'Brien. il Country Gent 83:11-12 Ap 6 '18
- Ill fares the land. H. R. O'Brien. il Country Gent 83:3-4+ D 14 '18
- Illinois landlord-tenant conference. O Judd Farmer 60:7 Ja 1 '16
- Investigating tenancy problems in Missouri. Prog F 31:1258 O 28 '16
- Is renting profitable here? O Judd Farmer 65:452 N 16 '18
- Land problem and rural welfare. P. L. Vogt; Discussion by W. O. Hedrick. (In Am. sociological soc., Pub. v. 11, p. 82-96)
- Land question in the Southwest. (In United States. Comm. on industrial relations. Final report and testimony submitted to Congress, v. 9, p. 8949-9056; v. 10, p. 9057-290) '16
- Land tenure in the United States with special reference to Illinois. C: L. Stewart. (Studies in the social sciences, v 5 no 3) 135p bibliog maps 75c (S) '16 Univ. of Illinois, Urbana
- Land utilization in Iowa. O. G. Lloyd. Wallaces' F 42:1725 D 21 '17
- Landlord and tenant. Am Coop J 12:503 Mr '17; Same. Ag Digest 1:379 Ap '17
- Landlord and tenant's compensation and dilapidation act. W: R. Dewhurst. Prog F 31: 1090 S 9 '16
- Landlord and tenants in partnership. G. W. Marshall. il O Judd Farmer 60:3 F 26 '16
- Landlord, tenant and soil fertility. E. T. Bill. Hoard's D 52:302 S 22 '16
- Landlordism in the corn belt. Wallaces' F 41: 76 Ja 21 '16
- Landowner and tenant experiences. Prog F 33:1050 S 28 '18
- Leasing recommendations. Hoard's D 52:280 S 22 '16
- Legislation needed by our rural interests. C. Poe. Prog F 31:153 Ja 29 '16
- Let tenant and landlord work together. Prog F 31:1087 S 9 '16
- Living on and off the land. H. Erickson. il Country Gent 81:2143-5, 2187-8, 2220-1 D 16-30 '16
- Maintaining soil fertility on a rented farm. J. R. Wiley. il Ohio F 139:801 Je 23 '17
- Make a business partner of the tenant. Prog F 32:967 S 15 '17
- Metayage on an Umbrian estate (Italy). C. Papi. Int R Sci & Prac Ag 7, no 12:1823-7 D '16
- Modern home on tenant farm. W. H. Bois. O Judd Farmer 60:12 Mr 18 '16
- More agricultural knowledge needed by both landlords and tenants. Prog F 31:1071 S 9 '16
- New basis for farm leases proposed. E. H. Webster. Hoard's D 52:279 S 22 '16
- Only safe way to rent a farm. C. A. Willson. Country Gent 82:1780-1 N 17 '17
- Partners with the renter. C. A. Willson. Country Gent 83:8 F 2 '18
- Plea for the tenant. J. D. Burton. Prog F 31:1231 O 21 '16
- Problem of tenant and landlord in the cotton states. Mrs G. H. Mathis. (In Agricultural extension, p 118-25) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- \* Problems of tenantry and farm labor. (In Report, 1916, p. 59-65) '16 Cal. Comm. on land colonization and rural credits, Sacramento
- Reflections of a tenant. il Country Gent 81: 1103-4 My 27 '16
- Relations between landlord and tenant. C. W. Bloom. Ohio F 141:298 Mr 2 '18
- Renting dairy farms on shares. Hoard's D 55: 987 J1 5 '18; Same. Wallaces' F 43:1042 J1 5 '18; Same. Prog F 33:1050 S 28 '18; Same. Ohio F 142:377 O 19 '18
- Renting systems in the South. A. M. Soule. Breeder's Gaz 69:581 Mr 9 '16
- Rights of the land. H: Wallace. Hoard's D 52:316 S 29 '16
- Safest tenant system. Country Gent 81:390 F 19 '16
- Share plan for dairy tenant farming. D. W. Watkins. Hoard's D 52:281 S 22 '16
- Should farm owners raise rent now? O Judd Farmer 65:254 S 28 '18
- Sizes of family and farming in Iowa county, Wisconsin. Monthly Crop Rep 3:15 F '17
- Solving rented farm problems. M. Ryder. Coop Manager & F 6:76 Ja '17
- Some market garden partnership problems. J. R. Bechtel. Market Growers J 22:171 Mr 1 '18
- Some observations on land tenantry in the South. Prog F 33:1071 O 5 '18
- Square deal will get and keep good tenants. Prog F 33:1052 S 28 '18
- Stock-farming and renting. Breeder's Gaz 69: 437 F 24 '16
- Study of share-rented dairy farms in Green county, Wis., and Kane county, Ill. E. A. Boeger. map U S Ag B 603:1-14 '18
- Study of the tenant systems of farming in the Yazoo-Mississippi delta. E. A. Boeger and E. A. Goldenweiser. U S Ag B 337:1-18 '16
- Systems of renting truck farms in southwestern New Jersey. H. A. Turner. U S Ag B 411:1-20 '16
- Tenancy and land tenure reform. G: E. Putnam. Kansas Univ (Lawrence 75c) B 17:73-91 D 1 '16
- Tenancy in the South. (B. v. 4, no. 1, Serial no. 13) 12p '16 Georgia club, State normal school, Athens
- Tenant contract. J. I. Falconer. Ohio F 138: 515 N 25 '16
- Tenant farmer and the poultry business. B. F. Kaupp. Prog F 33:13 Ja 5 '18



**Farm tenancy.—Continued**

- Tenant is improving farm. R. M. Wood. O Judd Farmer 60:10 F 19 '16  
 Tenant problem. Hoard's D 51:437 Mr 31 '16  
 Tenant question as affected by the boll weevil. J. F. Duggar. Prog F 31:1075 S 9 '16  
 Tenants and landowners should be business partners. Prog F 33:1045 S 28 '18  
 Tenant's experience. Wallaces' F 41:680 Ap 28 '16  
 Tenant's greatest chance. B. F. Harris. Country Gent 82:1255 Ag 11 '17  
 Tenants partners on Illinois farms. O Judd Farmer 61:3 S 30 '16  
 Torp and its place in the agricultural labour system, Sweden. Int R Ag Econ 64:113-17 Ap '16  
 Value of inventories on rented farms. W. M. Peacock. Rural N Y 76:1462 D 29 '17  
 Wanted—renter for a farm. C. A. Willson. Country Gent 82:1485 S 29 '17  
 Wasted land on farms. Country Gent 81:1430 JI 29 '16  
 What is right? L. W. Lighty. Nat Stock & F 49:716 O 21 '16  
 What should be in the rental contract. C. E. Allred. Tenn Ag Ext Pub 73 2p '18  
 Where the tenant loses. Wallaces' F 43:1830 D 13 '18  
 Why father's tenants leave. H. R. O'Brien. Hoard's D 54:173 S 7 '17  
 Will our farmers become tenant class? T. Roosevelt. Ohio F 140:314 O 13 '17  
 Will tenant farming increase? W. A. Martin. Ohio F 140:422 N 10 '17  
 Working basis for leasing. R. L. Adams. Country Gent 81:2069 D 2 '16

*See also Leases; Live stock—Renting*

**Laws**

Décret n. 2637 portant de nouvelles dispositions en matière de contrats d'affermage des terrains et de bail à colonat partiaire dans la province du Cap Vert en Portugal. Int Yearbook Ag Leg 1916:1218-21 '17

**Farm tools.** See Farm machinery; Garden tools

**Farm tours**

- Ames farm tours. il Wallaces' F 41:967 JI 14 '16  
 Among the Howick farmers again. il J Ag (Quebec) 21:23 Ag '17  
 Arkansas farmers study northern methods. Prog F 33:793 JI 13 '18  
 Climbing to success on a whole county's experience. S. M. Trimble. Prac F 114:269-70 Ag 15 '18  
 Farm boys' county hikes and camps. C. W. Clemmer. il Prac F 112:355+ O 1 '16  
 Farm bureau boys' camp. E. W. Cleaves. il Rural N Y 75:1124 Ag 26 '16  
 Farm home study tour. M. L. Harlan. il Purdue Ag Ext B 50:1-8 '16  
 Farm tours for farm workers. Mrs H. M. Woodward. Prac F 112:274 JI 15 '16  
 Farmers' auto excursion. H. S. Adams. Penn State F 9:289 Ja '16  
 Farmers' field day at Werribee. il J Dept Ag Victoria 15:666-70 N '17  
 Farmers' shore leave. F. Crissey. il Country Gent 83:8 N 2 '18  
 Flying squadron of Virginia farmers capture ideas from Pennsylvania. W. H. Dean. il Country Gent 81:1681-2 S 16 '16  
 Good farming examples in Grundy county, Ill. il O Judd Farmer 63:3 Ag 11 '17  
 Home tour of Maryland. il Rural N Y 76:87 Ja 20 '17  
 Hood river of the corn belt. il Wallaces' F 41:1087 Ag 18 '16  
 How the wise use of capital makes bank accounts for Badger farmers. E. R. McIntyre. Banker-F 3:6 JI '16  
 Illinois dairy special. Kimball's D F 15:769 O 15 '17  
 Kansas farmers visit dairy farms. F. P. Lane. Hoard's D 50:824 Ja 14 '16  
 Lancaster dairymen's assn. R. C. Hibben. il Kimball's D F 15:15 Ja 15 '17  
 Live stock farm tours. W. O. Mills. Hoard's D 53:1011 JI 20 '17  
 Live stock tour in Champaign county, Ill. O Judd Farmer 62:6 My 12 '17

- Louisiana farmers' tour. R. G. Miller. il Kimball's D F 14:619+, 661 O 1-15 '16  
 Missouri farmers learn from Wisconsin dairymen. A. C. Ragsdale. il Hoard's D 56:292 S 27 '18  
 Motoring through the orchards. C. N. Crottenburg. il Fruit-Grower 27:390-1 Ag 15 '16  
 Nebraska dairy farm tour. il Hoard's D 52:810 D 29 '16  
 N. Y. fruit growers' tour. Ohio F 138:146 Ag 19 '16  
 Pennsylvania potato pilgrimage. C. F. Preston. Market Growers J 23:129 O 1 '18  
 Seeing farms by autos. il Fruit-Grower 27:405 S 1 '16  
 Students visit Chicago dairy districts. R. A. Avery. Hoard's D 53:822 Je 8 '17  
 Trip to successful Wisconsin farms. Hoard's D 51:934 JI 7 '16  
 University boys visit dairy district. E. L. Bill. O Judd Farmer 62:3 My 19 '17

**Farm tractors.** See Tractors

**Farm valuation.** See Valuation

**Farm values**

- Average value of farms in Canada. Breeder's Gaz 69:1296 Je 22 '16  
 Buying a farm forty years ago and now. Wallaces' F 42:95 Ja 19 '17  
 Can the boy without much capital buy a farm of high priced land? A. J. Bill. Banker-F 3:14 N '16  
 Estimated value per acre of farm lands. Monthly Crop Rep 3:31 Ap '17  
 Estimating the value of farm lands for loans. Wallaces' F 41:156 F 4 '16  
 Factors of farm appraisal. S. N. Reep. il Hoard's D 55:958 Je 28 '18  
 Farm land boom. Wallaces' F 42:1456 O 26 '17  
 Farm lands and their value. Country Life 31:86 F '17  
 Farm values rising. C. M. Harger. Financial World (29 Broadway, N.Y. 15c) 29:22 N 10 '17  
 How to buy a farm. H. R. O'Brien. il Country Gent 83:3-4+ Ja 5 '18  
 How to sell a farm. E. H. Chandler. il Country Gent 83:5+ Mr 16 '18  
 Influence of a city on farming. J. H. Arnold and F. Montgomery. map U S Ag B 678:1-24 '18  
 Letters to a young farmer. W. H. Dean. il Country Gent 81:1859 O 21 '16  
 Passing of low-priced lands. M. Ryder. Coop Manager & F 6:76 Ja '17  
 Paying the price for land. E. Rogers. Power F 26:21 Je '17  
 Rolling-stone farmer. C. M. Harger. il Country Gent 83:5 Ja 19 '18  
 Scientific appraisal and agricultural development. C. A. Stanton. Nation (20 Vesey st, N.Y. 10c) 106:376-7 Mr 28 '18  
 Securing a foothold on the land. J. I. Falconer. Ohio F 137:647 My 6 '16  
 Shall I buy the farm? W. A. Martin. Ohio F 141:559 Ap 20 '18  
 That elusive capital. S. Fraser. Country Gent 81:321 F 12 '16  
 Trading a farm for city real estate. S. O. Rice. Country Gent 82:1639 O 27 '17  
 True basis of farm land values. R. S. Dunham. Farm Eng 6:11 F '18  
 Two more letters to Jim opposing Hardwick's advice to sell the corn-belt farm. S. T. Price; H. C. Taylor. Country Gent 82:185 F 3 '17  
 Unearned increment measured in crops. Green's Fruit Grower 36:8 Ag '16  
 Value of farm lands in Maryland and change of value owing to good roads. F. B. Bomberger. (In Maryland. Conference on taxation. Proceedings, 1916, p 40-9) '16 Legislative reference dept., Baltimore, Md.  
 Value of farm lands increasing. Am Fert 44:40 Ap 29 '16  
 What is your farm worth? C. M. Harger. il Country Gent 81:378 F 19 '16  
 Why land values rise. G. R. Bliss. il Country Gent 81:1360 JI 15 '16

*See also Mortgages; Valuation*

**Farm waste**

Avoiding farm wastes. System on the Farm 3:64+ Ag '18

**Farm water supply.** See Water supply, Rural

**Farm woman's bureau bill**

Farm woman's bureau bill. Country Gent 81:869 Ap 15 '16

**Farm women**

All's fair in love; story. H. C. Bennett. il Country Gent 81:1383+ JI 15 '16

As we see ourselves. il Country Gent 81:35 Ja 1 '16

Beat them if you can; farm women in the Pennsylvania Dutch country. M. H. Talbott. il Country Gent 82:625 Mr 24 '17

City woman who found her war job on a farm. R. Lovewell. Sp '18 U S Ag Reprinted from The Designer for May, 1918

Community betterment. Mrs V. C. Meredith. Mo Ag Ed B v 14:6-15 Ap '16

Consideration of the farm wife. F. S. Robertson. Nat Stock & F 41:348 Je 30 '17

Crocheted cluny and pin money. Fruit-Grower 27:351 JI 1 '16

Farm girl. Breeder's Gaz 69:1121 My 25 '16

Farm woman in business. Mrs F. I. Mann. Ill Farmers Inst Household Sci 1917:147-54 '18

Farm woman's vacation. E. T. Owen. Ohio F 142:150 Ag 17 '18

Farm women's recreation. K. Pope. Ohio F 137:776-7 Je 3 '16

Farmers' reading and music. F. M. Wood. il Ohio F 137:312 F 26 '16

For the women of the South. W: H. Dean. il Country Gent 81:185+ Ja 22 '16

Germany; housewives' agricultural organizations and their activity. Int R Ag Econ 73: 20-1 Ja '17

Greatest needs of the farm woman—told by farm women. il Banker-F 3:6-7 Ap '16

Greetings and a message to farm women. Mrs V. C. Meredith. il Breeder's Gaz 70: 1187 D 21 '16

Help for farmers' wives. Ohio F 141:276 F 23 '18

Home-makers. Wallaces' F 41:800 My 26 '16

Home problems of the rural woman. E. B. Kelley. (In Trans. Am assn. for study and prevention of infant mortality, 1916, p. 231-4) \$3+postage '17 G. B. Knipp, sec., 1211 Cathedral st., Baltimore

In the cellar on the farm. M. R. Myers. Am Coop J 13:85 N '17

Let us be proud of our occupations. Prog F 31:446 Mr 25 '16

Maternity and infant care in a rural country in Kansas. E. Moore. (Pub. no. 26; Rural child welfare ser. no. 1) 50p il '17 U.S. Children's bureau, Washington, D.C.

Mother-daughter canning. Country Gent 81: 188 Ja 22 '16

Recreation for the country woman. B. Boyle. il Purdue Ag 10:44-5 F '16

Rural education. P. P. Claxton. Farmers' Nat Congress Pro 1916:88-98

She does her own work. E. Davenport. il Country Gent 82:2057 D 29 '17

When do you live? M. K. Dunne. Country Gent 81:2026 N 18 '16

Where farm women rest. M. E. Bemis. il Country Gent 81:1923 O 28 '16

Why the girls leave the farm. Rural N Y 76: 793 Je 16 '17

Woman in the tenant house; a typical case from the big city. E. C. Yarnell. Rural N Y 75:1467 N 25 '16

Woman on the farm; her needs and the forces available for the betterment of her condition. N. K. Jones. (In Agricultural extension, p 115-17) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

Woman's present place in poultrydom and how she won it. Mrs E. W. Mahood. il Reliable P J 22:1400-1+ F '16

See also Women as farm laborers; Women as farmers; Women's clubs; Women's institutes

**Bibliography**

Published sources of information about farm women. Assn Am Ag Coll & Exp Pro 1916: 90-107 '17

Woman on the farm. H. C. Bullock. 25p '17 Syracuse univ. Lib. school

Obtained only thru Public affairs information service, 958-964 University av., N.Y. (Typew \$1.25)

**Farm women's clubs.** See Women's clubs

**Farm workshops.** See Workshops

**Farmers**

Agriculture for beginners; farmers' club, the grange, etc. W. I. Chamberlain. Nat Stock & F 40:252 Je 3 '16

All American farmers. E. Staley. Field il 27: 451-2 Je '17

All kinds of farmers. E. Davenport. il Country Gent 83:3-4+ Je 22 '18

Another burden for the farmers. R. M. Gow. Jersey B 37:1730 O 16 '18

Autobiography of a farmer. J. T. Campbell. Ohio F 141:615+, 643+, 667+ My 4-18 '18

Can the farmer and wage earner unite? G. Pinchot. Am Coop J 13:139 D '17

Connecticut farmers and war profits. Rural N Y 76:1414 D 15 '17

Do farmers work harder and get less than city dwellers? T. Butler. Prog F 31:643 My 13 '16

Essay in Americanism; letter written to a meeting of farmers at Kansas City, by Mr William Kent. Public (122 E. 37th st, N.Y. 10c) 21:914-15 JI 20 '18

Fakes for farmers. P. S. Lovejoy. Country Gent 83:13-14 My 18 '18

Farmer and self-improvement. J Bd Ag 23: 760-7 N '16

Farmer and the socialists. K. Colegrove. Unpopular Review (18 W. 45th st, N.Y. 75c) 8:287-301 O '17; Excerpts. Ag Digest 2:781-2 Ja '18

Farmer and the war. New Republic (421 W. 21st st, N.Y. 10c) 13:8-9 N 3 '17

Farmer and three-dollar wheat. C: M. Harger. Scribner's (597 5th av, N.Y. 35c) 64:80-6 JI '18

Farmer of fifty years. J. G. Morse. Rural N Y 77:643, 745, 853 My 4, Je 1, JI 6 '18

Farmer of the Middle West. M. Nicholson. il Scribner's (597 5th av, N.Y. 35c) 63:385-404 Ap '18

Farmer vs. the board of trade. J: R. Mauff. Coop Manager & F 7:26-7 F '18

Farmers and others. New Republic (421 W. 21st st, N.Y. 10c) 16:155-6 S 7 '18

Farmers and the Red cross. C. S. Clark. Hoard's D 56:663 D 6 '18

Farmer's old age. W: A. Martin. Ohio F 142:91 Ag 3 '18

Food and the future. New Republic (421 W. 21st st., N.Y. 10c) 11:348-50 JI 28 '17

From the farmer's standpoint. Country Gent 82:135-6 Ja 27 '17

How Bill Peters retired. I. B. Granger. Wallaces' F 41:75 Ja 21 '16

How John and Mary may start farming. C. E. Ladd. Country Gent 83:12 Je 29 '18

Making of a farmer. Wallaces' F 43:1771 D 6 '18

Mind of the farmer. E. R. Groves. (In Am. sociological soc. Pub. v. 11, p. 47-53)

Plain tale of a back to the lander. Rural N Y 77:693, 718 My 18-25 '18

Plea for the farmer. A. F. Thomas. 24p '16 10c Union Star pub. co., Brookneal, Va.

Political revolt in the Northwest. C: Merz. New Republic (421 W. 21st, N.Y. 10c) 13:15-17, 44-6, 71-3, 121-3 N 3-17, D 1 '17

Real farmer. H. C. Taylor. Breeder's Gaz 69:458 F 24 '16

Relation of the new federal reserve system to the farmer. J: S. Williams. Farmers' Nat Congress Pro 1916:105-18

Rolling-stone farmer. C: M. Harger. il Country Gent 83:5 Ja 19 '18

Rural education. P. P. Claxton. Farmers' Nat Congress Pro 1916:88-98

Sayings and doings of Donald Ban. P: McArthur. Wallaces' F 43:686, 752 Ap 19, My 3 '18

Theory of rural attitudes. L. L. Bernard. Am J Sociology (Univ. of Chicago Press, Chicago 50c) 22:630-49 Mr '17

Thrift clubs in Mississippi. G. T. Hower-ton. Miss Ag Coll B 138p O '16

Tomlinson's 19th annual statement. W. S. Tomlinson. Ohio F 141:130 F 2 '18



**Farmers—Continued**

- Weakness of the farmer. Wallaces' F 42:985 J1 6 '17  
 What is a farmer? G: H. Dacy. Farm Eng 6:13 F '18  
 Who's a farmer and why? M. R. Shafer. Furdie Ag 11:9 Ap '17  
 Wisconsin's farm roll of honor grows. Hoard's D 55:192 F 22 '18  
 Work for the countryman. Breeder's Gaz 72: 47 J1 12 '17  
*See also* Agricultural centers; Farm life; Merchants and farmers; Negroes as farmers; Quakers as farmers; Women as farmers

**Statistics**

- Farmers and farm laborers, 1910. Monthly Crop Rep 4:28 Mr '18

**Farmers, Retired**

- Rented and retired. R. A. Hayne. Nat Stock & F 41:280 Je 9 '17  
 Retired farmer. Wallaces' F 41:216 F 11 '16  
 Should a farmer retire at fifty? H. R. Smalley. Country Gent 82:1730 N 10 '17  
 Some retired farmers. Nat Stock & F 41:582 S 15 '17  
 Swatting the retired farmer. W. B. Perrin. Country Gent 81:2195 D 23 '16  
 Travelin' back. W. F. McSparran. Ohio F 141: 572 Ap 20 '18  
 Why the retired farmer? E. Davenport. Country Gent 83:17 F 2 '18

**Farmers and merchants.** See Merchants and farmers

**Farmers' associations**

- Cooperative buying by farmers' clubs in Minnesota. E. D. Durand and H. B. Price. maps Minn Ag Exp B 167:1-44 '17  
 Dave Thompson's farm meetings. il O Judd Farmer 62:1 Mr 31 '17  
 Distrust busting in Canby. B. Ostrolenk. il Country Gent 81:143-4 Ja 22 '16  
 Experimenting on 1000 Iowa farms. O Judd Farmer 60:5 Ap 15 '16  
 Farmer's club. W. L. Nelson. Mo Ag Bd B v 16:1-12 D '18  
 Farmers' organizations. Wallaces' F 41:116 Ja 28 '16  
 Farmers' organizations in Mississippi and Tennessee. Prog F 33:222 F 16 '18  
 Farmers' reading circles. W Va Ag Ext C 93: 1-6 '16  
 Farmers' union information. Prog F 32:228 F 17 '17  
 Fayette county (Pa.) Union farmers' club. J. T. Smith. il Nat Stock & F 40:668 S 30 '16  
 Fifty years of farmers' clubs. C. C. Jones. il O Judd Farmer 61:3 Ag 19 '16  
 Get-together; incorporate on the right basis. J. H. Collins. Country Gent 81:1253 Je 24 '16  
 Harrison county farmers' clubs. L. J. Haynes. il Wallaces' F 42:479 Mr 16 '17  
 New Zealand—With much ceremony the foundation stone of the Dominion farmers' institute has been laid at Wellington by the governor-general. The object of founding the institute is to assist in the organization of the farmers, more especially in view of post-war problems. The institute will be the meeting place of numerous rural bodies to discuss their common interests  
 Plan of organization for the rural community. C. Poe. Prog F 31:227 F 12 '16  
 Two thousand farmers at Iowa short course. O Judd Farmer 60:14 F 19 '16  
 Washington county (Minn.) better farming association. Hoard's D 51:429 Mr 31 '16  
 What our local is doing. C. D. Haverty. Prog F 31:1181 O 7 '16

*See also* Agricultural cooperative credit associations; Agricultural societies; Clubs; Farmers' cooperative associations; Farmers' grain dealers' associations; Grain improvement associations; Live stock associations; also California association of practical farmers; Farmers' general sales and supply company; Farmers' union of Maine; Illinois agricultural association; Intermountain association of sugar beet

growers; Intermountain farmers' equity association; Iowa women farmers' association; Kankakee county (Ill.) soil and crop improvement association; Mayview farmers' club; Minnesota state federation of farmers' clubs; National farmers' educational and co-operative union; National nonpartisan league; Nebraska farmers' union; New York state agricultural society; North Dakota co-operative auditing circle; Quebec cheese-makers' cooperative agricultural society; South Dakota farmers' cooperative society; Williams county (N.D.) better farming association

**Directories**

- Farmers' business organizations in New Jersey. N J Ag Dept B 17:124-9 '18

**Programs**

- Outline for farmers' club programs or for individual reading. (*In* Minnesota farmers' institute annual, 1916, p 211-14) '16 Extension division, University Farm, St Paul  
**Farmers' banks.** See Banks and banking, Cooperative  
**Farmers' bulletins**  
 How teachers of elementary schools may use Farmers' bulletin 936, The city and suburban vegetable garden. F. E. Heald. 2p '18 U.S. States relations service, Washington, D.C.  
 Life and adventures of a Farmers' bulletin. W. H. Dean. il Country Gent 81:98-9 Ja 15 '16  
 Our Washington library. Nat Stock & F 40: 1246 F 17 '17

**Bibliography**

- Classified list of available Farmers' bulletins. Mass Ag Ext C 14 2p '17  
 Farmers' bulletins; department bulletins, yearbooks, Journal of agricultural research, for sale by the superintendent of documents, Washington, D.C. (Price list 16—11th ed) 46p '17 Supt. of doc., Washington, D.C.  
 Farmers' bulletins you ought to have; bibliography. Prog F 31:218 F 12 '16  
 Farmers' bulletins you ought to have; classified list. Prog F 32:211 F 17 '17  
 Farmers' bulletins you ought to have; classified list. Prog F 33:202 F 16 '18

**Indexes**

- Farmers' bulletins, with contents and index, prepared under the supervision of editor and chief (Division of publications), nos. 501-525, 526-550, 551-75, 576-600, 601-625, 701-725, 726-750, 751-775 8 pts '13-'18 U S Ag  
**Farmers' clubs.** See Farmers' associations  
**Farmers' cooperative association, Huntingdon, Tennessee**  
 Live farmers' cooperative association. F. Tate. Prog F 31:704 My 27 '16  
**Farmers' cooperative associations**  
 Cooperative organization by-laws. C. E. Bassett and O. B. Jesness. U S Ag B 541:1-23 '18  
 Farmers' cooperative selling associations. E. S. Turville. Nat Stock & F 42:849 D 21 '18  
 Farmers' organizations. H. H. Flynt. Wallaces' F 43:1605 N 1 '18  
 Farmers' organizations; methods and benefits of organizations for the co-operative purchases and sales as conducted in Canada. A. A. MacMillan. Am Sheep B & W 38:241-2 Ap '18; Same. J Ag (Quebec) 21:151, 169 Ap-My '18  
 Grain growers' organizations. G. F. Chipman. Ag Gaz of Canada 5:1175-6 D '18  
 Greatest farmers' business union. J. R. McMahon. il Country Gent 83:1-2 D 21 '18  
 Michigan farmers' organization. Rural N Y 76:810 Je 23 '17  
 Mobilizing New England farmers. H. W. Olney. Public (122 E. 37th st, N. Y. 10c) 21:668-70 My 25 '18  
 Organization of co-operative agricultural associations. A. Hobson. Western Wash Ag Exp B v 5:161-2 F '18  
 Other side of co-operative trading. H. H. Pigott. Better Business (605 Ashdown blk., Winnipeg, Manitoba 15c) 1:2+ My '18

**Farmers' cooperative associations—Continued**

Pothunter merchant. W. Harper. il Coun-  
try Gent 83:9-10 O 12 '18

Relationship of agricultural extension work  
to farmers' cooperative buying and selling  
organizations; with discussion. B. Knapp.  
Assn Am Ag Coll & Exp Pro 1917:305-11 '18  
Statistical enquiry into agricultural organiza-  
tions in the United States. Ag Gaz of Can-  
ada 5:840-1 Ag '18

**Farmers' exchanges**

Work of a farmers' exchange. O. R. Johnson.  
Mo Ag Ext C 27:1-8 '17

**Farmers' general sales and supply company**

Federation of co-operative farm organiza-  
tions. Rural N Y 77:239 F 16 '18

**Farmers' grain dealers' associations**

Co-operation making great strides in North-  
west. C. E. Eckerle. Am Coop J 11:1235-7  
Ag '16

Institution—the manager—the service ren-  
dered—appreciation. M. R. Myers. Am Coop  
J 13:110-12 N '17

More money for our associations. Am Coop J  
12:670 Je '17

More money for our organizations. G. M. Dyer.  
Am Coop J 12:755-6 Ag '17

Recent successes of agricultural co-operation  
in Canada. Int R Ag Econ 75:17-24 Mr '17

State and national organizations. P. C. Allen.  
Am Coop J 13:110 N '17

Test case needed in Illinois. Am Coop J 11:  
1119 Jl '16

Two great farmers' grain companies of Can-  
ada unite. Am Coop J 12:297 D '16

See also Canadian grain growers' grain  
company; Northwestern grain dealers' as-  
sociation; Saskatchewan cooperative ele-  
vator company; also names of state asso-  
ciations, e. g., Illinois farmers' grain deal-  
ers' association, Nebraska farmers' coop-  
erative grain and live stock association,  
South Dakota farmers' cooperative society

**Farmer's income. See Income****Farmers' institute workers, American associa-  
tion of. See American association of  
farmers' institute workers****Farmers' institutes**

Agricultural exhibits and farmers' institutes.  
S. M. Jordan. il Mo Ag Bd B v 14:1-68 Ja '16

Agricultural extension institute meetings.  
S. T. Newton. Ag Gaz of Canada 5:882-4 S  
'18

Cornell farmers' week. H. H. Lyon. Hoard's  
D 53:455 Mr 30 '17

Defense of the farmers' institutes. E. J.  
Lonis. Rural N Y 77:1087 S 21 '18

East Tennessee farmers' convention. T. But-  
ler. Prog F 32:661 Je 2 '17

\* 11th annual state farmers' institute held at  
Frankfort, Ky., Feb. 15-17, 1916. 127p n. d.  
Ky. State bd. of ag. Frankfort

Farm institutes in schoolhouse. B. L. Hath-  
away. Rural N Y 77:1019 Ag 31 '18

Farmers' institute. G. F. Aldrich. Nat Stock  
& F 42:711 N 2 '18

Farmers' institute and agricultural exten-  
sion work in the United States in 1913. J.  
Hamilton. U S Ag B 83:1-41 '14

Farmers' institute announcement, 1917. Conn  
Ag Ext C 10:1-16 '16

Farmers' institute as a factor in rural educa-  
tion. W. C. Latta. Purdue Ag 12:278-80 F '18

Farmers' institute ideals. J. W. Henceroth.  
Breeder's Gaz 70:932 N 16 '16

Farmers' institute schedule 1917-1918. W. C.  
Latta. Purdue Ag Ext B 60:1-19 '17

Farmers' institute work in the United States  
in 1914, and notes on agricultural extension  
work in foreign countries. J. M. Stedman.  
U S Ag B 269:1-21 '15

Farmers' institutes in the United States in  
1916. J. M. Stedman. (In Cooperative exten-  
sion work, 1916, pt. 2, p. 373-5) '17 U S  
Ag

Farmers' week at Ames. Wallaces' F 42:246  
F 9 '17

Farmers' week at Ames, Ia. Wallaces' F 43:  
232 F 8 '18

Farmers' week at Cornell. [Feb. 12-17, 1917].  
il map Cornell Reading Courses v 5, no 100:  
27-50 '15; Same. Cornell Ag Exp Rep 1916, v  
2:1107-28 '17

Contains information regarding the gen-  
eral plan for the week, descriptions of and  
guide to the buildings, etc.

Farmers' week at Cornell. Rural N Y 77:373  
Mr 9 '18

Farmers' week at Cornell. W. H. Jenkins. il  
Kimball's D F 16:166 Mr 1 '18

Farmers' week at Cornell. H. H. Lyon.  
Hoard's D 55:324 Mr 15 '18

Farmers' week excels itself at New York state  
college of agriculture. il Rural N Y 77:352  
Mr 2 '18

Farmers' week in Ohio. Nat Stock & F 41:1155,  
1159 F 9 '18

Farmers' week in Wisconsin. N. Negley. il  
Kimball's D F 16:153 Mr 1 '18

Farmers' week, Macdonald college, Feb. 12-15;  
programme. J Ag (Quebec) 21:119 F '18

Farmers' week—1918. Mo Ag Ext 8p n.d.  
Features at Illinois state institute. E. L. Bill.

O Judd Farmer 60:5 Mr 11 '16

5th annual Massachusetts poultry conven-  
tion, July 25-7, 1917. N. W. Sanborn. il Am  
P Advocate 25:606-7 S '17

Institutes in eastern Ohio. J. Begg. Ohio F  
137:487, 527 Ap 1-8 '16

Iowa farmers' week at Ames. Wallaces' F 41:  
241 F 11 '16

Minnesota farmers' institute annual, 1916. 320p  
il '16 Extension division, University Farm,  
St Paul

Mission of the Farmers' institute. F. L.  
Allen. Ohio F 142:418 N 2 '18

Mission of the institutes. C. F. Organ. Ohio  
F 137:94 Ja 22 '16

More about the farmers institutes. H. S. K.  
Willcox. Rural N Y 77:870 Jl 13 '18

New York farm institute workers meet. H. H.  
Lyon. Hoard's D 54:828 Ja 4 '18

N. Y. farmers' institutes. M. C. Burritt.  
Rural N Y 77:915 Jl 27 '18

New York farmers' week, Ohio F 139:310; 141:  
332 Mr 3 '17, Mr 2 '18

New York institute workers meet. H. H.  
Lyon. Hoard's D 52:622-3; 56:584 N 24 '16,  
N 22 '18

Ohio farmers' institutes. J. Begg. Ohio F 139:  
507 Ap 7 '17

Ohio farmers' institutes during 1917-18. J.  
Begg. Ohio F 141:719 Je 1 '18

Ohio farmers' week at Columbus. Ohio F 141:  
175+, 218 F 9-16 '18

Poultry helps from the farmers' week at  
Massachusetts agricultural college. N. W.  
Sanborn. Am P Advocate 25:458 My '17

Proceedings of the Farmers' annual normal  
institute and spring meeting of the state  
board of agriculture held at Hotel Berk-  
shire, Reading, Pa., May 23-25, 1916. Pa Ag  
Dept B 283:1-276 '16

Proceedings of the 6th meeting Texas state  
farmers' institute, 1916. Tex Ag Dept B 52:  
1-179 '16

Proceedings of the women's, girls' and boys'  
sessions, state farmers' institute, July 17-  
19, 1916. il Tex Ag Dept B 54:1-228 F '17

Program for farmers' week; College of agri-  
culture, West Virginia university, Jan. 7-11,  
1918. W Va Univ (Morgantown) B 13,no 3,  
pt 2:1-15 Ja '18

Purdue farmers' short course. Ohio F 141:130  
F 2 '18

Report of extension schools. G. W. Firor. il  
Ga Ag Coll (Ext) B 140:1-23 '17

Report of farmers' institutes; year June 15,  
1915, to June 30, 1916, inclusive. E. Van Al-  
styne. il N Y Ag Dept B 86:2241-2706 Ag  
'16

Report of farmers' institutes, year July 1, 1916,  
to June 30, 1917, inclusive, il map N Y  
Farms & Markets Dept Ag B 97:1-315 Jl '17

Report of superintendent of farmers' insti-  
tutes, Michigan. Mich Ag Bd Rep 1917:71-93

Sheep at farmers' institutes. W. W. Rey-  
nolds. Ohio F 142:428 N 2 '18

Short courses in agriculture. J Ag (Quebec)  
19:167 F '16



**Farmers' institutes—Continued**

- Short courses or extension schools in agriculture and home economics. C. W. Pugsley and P. L. Gaddis. *il* diags Neb Ag Ext B 37:1-23 '16
- Subject for institutes. W. W. Reynolds. *Nat Stock & F* 40:910 D 9 '16
- Teacher's relation to the farmers' institute. R. L. Fleming. *Ohio F* 140:510 D 1 '17
- Topic for institute discussion. G. S. Banta. *Wallaces' F* 41:23 Ja 7 '16
- 22d annual gathering of Illinois farmers' institute. O Judd *Farmer* 62:8 Mr 10 '17
- What about the farmers' institutes? H. H. Lyon. *Rural N Y* 77:807 Je 22 '18
- Wisconsin farmers' week. Hoard's D 55:193+ F 22 '18
- Wisconsin farmers' week. Feb. 5-7, 1917. Hoard's D 53:236 Mr 2 '17
- Wisconsin junior farmers at Madison. E. R. McIntyre. *il* Hoard's D 53:1020 Jl 20 '17
- See also Community institutes; Women's institutes; also American association of farmers' institute workers; Farmers' institutes of British Columbia

**Statistics**

- Farmers' institute work conducted by the states and colleges 1916; tabulation. (*In* Co-operative extension work, 1916, pt. 2, p. 376-7) '17 U S Ag
- Farmers' institutes in the United States in 1917. J. M. Stedman. *Am Assn Farmers' Inst Workers Pro* 1917:17-20 '18
- Report of farmers' institute work in the United States for 1916. J. M. Stedman. *Am Assn Farmers' Inst Workers Pro* 1916:134-7 '17

**Farmers' institutes of British Columbia**

- 16th annual report and minutes of the proceedings of the 17th annual convention of the Central farmers' institute. 108p '16 British Columbia Dept. of ag., Victoria

**Farmers' managers association of South Dakota**

- Organized at meeting, Huron, July 16, 1918. *Am Coop J* 14:16 S '18
- South Dakota managers of farmer elevator companies organize state association. *Coop Manager & F* 8:58 S '18

**Farmers' markets.** See Markets, Farmers'

**Farmers' national congress**

- Proceedings of the 36th annual session, Indianapolis, Ind., Oct. 17-20, 1916. *Farmers' Nat Congress Pro* 1916:1-208
- 36th annual session to be held at Indianapolis, Ind., Oct. 17-20, 1916. F. F. Griffin. *Hoard's D* 51:921 Je 30 '16

**Farmers' non-partisan political league.** See National non-partisan league

**Farmers' service organization.** See Southern fertilizer association

**Farmers' short courses.** See Agricultural colleges—Short courses

**Farmers' union of Iowa**

- 2d annual meeting, Des Moines. *Wallaces' F* 43:1335 S 20 '18

**Farmers' union of Maine**

- Farmers' union of Maine. C. E. Embree. *N Y Ag Dept B* 81:1675-82 Mr '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1675-82 '17

**Farmers' week.** See Farmers' institutes

**Farmhouses**

- Better farm houses. L. H. Bailey. *Wallaces' F* 41:1000 Jl 21 '16
- Better household equipment. *Ohio F* 137:272 F 19 '16
- Complete farmhouse. C. W. Porter. *il* plans *Country Gent* 81:1756 S 30 '16
- Concrete house on the farm. H. C. Campbell. *il* Hoard's D 52:909+ Ja 19 '17
- Doing over the farmhouse. M. Greenleaf. *il* *Country Gent* 82:818+ Ap 28 '17
- Easy-housekeeping farm house. A. G. Vestal. *il* plans *Power F* 25:30 S '16
- Farm efficiency: how it depends on efficient equipment for living. X. Caverno. 48p '16 Xenophon Caverno, Kewanee, Ill.; Same. *Am Soc Ag Eng Trans* 9:12-29 '16
- Farm home. L. M. Schindler. *il* plans *Hoard's D* 53:819 Je 8 '17

- Farm structures. L. M. Frederick. *il* plans *Farm Eng* 4:63 O '16
- Farmer's bungalow. W. E. Frudden. *il* *Hoard's D* 50:779 Ja 7 '16
- Farmhouse for farm needs. H. R. O'Brien. *plans O Judd Farmer* 61:4 O 7 '16
- Farmhouse improved. W. A. Etherton. *Kan Ag Coll B v 1*, no 8:1-88 My 1 '17 (50c)
- Farmhouse of the cottage type. *il* plans *Building Age* (243 W. 39th st, N.Y. 20c) 39:572-5 O '17
- Good farm-house plan. F. W. Ives. *il* plans *Ohio F* 141:320-1 Mr 2 '18
- Home with an open door. L. Berry. *il* plan *Country Gent* 81:1739 S 23 '16
- Housing farm labor. H. C. Campbell. *il* *Kimball's D F* 16:388 My 15 '18
- Inexpensive house for farmer or tenant. E. L. D. Seymour. *il* plan *Country Life* 30:76 O '16
- Inexpensive small house. *il* plan O Judd *Farmer* 63:27 O 6 '17
- Large country home. H. Shearer. *il* plan *Farm Eng* 4:32 Ag '16
- Little farm houses of old Canada; their simplicity and beauty. *il* *Touchstone* (118 E. 30th st, N.Y. 35c) 3:43-9 Ap '18
- Little house without frills. W. H. Butterfield. *il* plans *Country Gent* 81:2191 D 23 '16
- Locating the farm house. C. A. Norman. *il* *Purdue Ag* 11:22 D '16
- Machine power housekeeping. P. Dorsey. *il* *Ohio F* 137:50 Ja 8 '16
- Modern conveniences for the farm home. E. T. Wilson. *plans Farmers' B* 270:1-48 '16
- Numbering farm houses. J. B. Plato. *Cornell Countryman* 15:401-2 Ap '18
- Plumbing and water supplying system in a typical farm house. J. A. Ward. *il* *Domestic Eng* (407 S. Dearborn st, Chicago 10c) 79:495-6 Je 30 '17
- Prize winning house plan. F. W. Beckman. *Wallaces' F* 41:970 Jl 14 '16
- Rejuvenating the old house with stucco. H. C. Campbell. *il* *Hoard's D* 51:659+ My 12 '16
- Report of sub-committee on farm homes. *Am Soc Ag Eng Trans* 9:224-30 '16
- Rural architecture. C. D. Turnbull. *Farm Eng* 3:160 F '16
- Small farmstead. W. H. Butterfield. *il* plan *Country Gent* 81:1971 N 11 '16
- Survey of sanitation in farm homes. *Domestic Eng* (407 S. Dearborn st, Chicago 10c) 79:212 My 12 '17
- Two-family farm house. H. Shearer. *il* *Farm Eng* 3:148 Ja '16
- Well planned farm home. W. E. Frudden. *il* plans *Hoard's D* 52:64 Ag 11 '16
- What should the farmhouse cost; with discussion. W. A. Etherton. *Am Soc Ag Eng Trans* 10,no 2:5-14 '17; Same cond. *il* *Hoard's D* 53:272 Mr 9 '17; Same cond. *Kimball's D F* 15:181-2 Mr 15 '17
- Farmhouses, Remodeled**
- Making over a farmhouse. *il* *Rural N Y* 75:800 My 20 '16
- Plumbing and heating old farm residence of revolutionary days. J. F. Newman. *il* *Domestic Eng* (407 S. Dearborn st, Chicago 10c) 78:238-40, 74-6, 112-13, 155-7 Ja 13-F 3 '17
- Remodeling an old farm house. *il* *Field* 11 28:81 F '18
- Remodeling old houses. *Farm Eng* 5:12 Ap '17
- Remodeling the farm home. Mrs C. W. Sewell. *il* *Ohio F* 141:364 Mr 9 '18
- Remodeling the old house. F. Ingraham. *plans O Judd Farmer* 61:29 O 7 '16
- Farming.** See Farm life
- Farms**
- Advancing from tenant to landlord. J. F. Cunningham. *il* *Ohio F* 142:345 O 12 '18
- Agricultural evangelist. W. D. Zinn. *Woodbine farm, Philippi, W. Va. Nat Stock & F* 42:196 My 18 '18
- American farmer in Guernsey. *Wallaces' F* 43:138 Ja 25 '18
- Apples, hens and sheep; Hayward farm. J. T. Bartlett. *il* *Fruit-Grower* 28:249 My 1 '17

## Farms—Continued

- Back-to-the-land. G. O. Berylson and C. P. Berylson. Rural N Y 75:5 Ja 1 '16
- Berries and cream; an Iowa farmer sells his patrons a dessert combination. C. C. Sherlock. il Country Gent 83:13 Jl 20 '18
- Best farmer in France; Henry Girard. W. H. Dean. il Country Gent 83:11-12+ N 23 '18
- Best farmer in Illinois. J. R. McMahon. il Country Gent 83:1+ Ag 31 '18
- Best farmer in Kansas; W. J. Burtis is elected. J. E. Pickett. il Country Gent 83:14-15 Ja 26 '18
- Best farmer in Massachusetts. Arthur H. Sagendorph. J. R. McMahon. il Country Gent 83:6-7 Mr 9 '18
- Best farmer in Missouri; H. G. Windsor. J. E. Pickett. il Country Gent 83:8-9 Ja 5 '18
- Best farmer in New Jersey; Minch brothers use 1800 acres in fifteen farms. J. R. McMahon. il Country Gent 83:10-11 S 14 '18
- Best farmer in Ohio; Homer C. Price. J. R. McMahon. il Country Gent 83:12+ O 19 '18
- Best farmer in Oklahoma; Charles Haxton. W. Stemmons. il Country Gent 83:6-8 Mr 30 '18
- Best farmer in Vermont; Elbert S. Brigham. F. Tilden. Country Gent 83:6-7 N 30 '18
- Best farmer in Virginia. Governor Stuart. T. J. Murphy. il Country Gent 83:5-6+ Ag 17 '18
- Big eighty acres. G. H. Dunne. il Country Gent 82:1164 Jl 21 '17
- Big man on a big farm. J. Deare. il Country Gent 82:1405 S 15 '17
- Breeder of champions. G. H. Dacy. il Country Gent 82:1405 S 15 '17
- California becoming a Jersey stronghold. A. L. Tichane. il Jersey B 36:1359-60 S 5 '17
- Cows for milk and beef. Wallaces' F 43:115 Ja 25 '18
- Dogs, problems, and other things. W. Learn. Hoard's D 55:1048 Jl 19 '18
- Ed Dillon's plain, old-fashioned farming. H. W. Collingwood. il Country Life 30:40-1 O '16
- Eighty-acre farmer. H. V. Stanley. il Country Gent 83:17 Mr 9 '18
- Farm of John W. Logan of Howick. il J Ag (Quebec) 20:103 N '16
- Farmer commissioner of agriculture; E. S. Brigham of Vermont. il Hoard's D 54:289 S 28 '17
- Farmer experimenter; Oscar P. Sell. Kutztown, Pa. R. E. Allen. Prac F 112:309 Ag 15 '16
- Farmer on wheels. G. F. Stratton. il Country Gent 83:2 Ag 24 '18
- Farmer who grows good seeds. il O Judd Farmer 65:397 N 2 '18
- Farmer with a motto. R. E. Allen. Prac F 112:401 N 1 '16
- Farming on horseback. il Wallaces' F 42:1031 Jl 20 '17
- Father and seven sons. J. W. Henceroth. il Ohio F 137:205-6 F 12 '16
- From brushland to alfalfa and Guernseys. J. Deare. il Country Gent 82:1630 O 27 '17
- Gardener-farmer; Edwin Molyneux's farm in Hampshire. Gard Chron (Lond) 63:220 My 25 '18
- Getting the right start. B. Howard. il Country Gent 83:17+ Ja 26 '18
- Good farmers that we know. il Country Gent 82:1166 Jl 21 '17
- Good methods on an Illinois farm. H. Parke. O Judd Farmer 60:5 Ap 29 '16
- Governor's farm; profit for Virginia's chief. W. H. Dean. il Country Gent 83:46 Ja 5 '18
- Grit wins in the cut-over country. C. A. Leclair. il Country Gent 83:7 Jl 27 '18
- Heirloom of American country life. A. G. Morrell. il Country Life 30:58 O '16
- Hotel man's farm. L. W. Lighty. Nat Stock & F 40:946 D 16 '16
- How to buy a farm. H. R. O'Brien. il Country Gent 83:3-4+ Ja 5 '18
- Hugh and Sara buy a farm. H. Fergus. il Country Gent 83:8-9 Ag 24 '18
- Intensive general farm of Pettis county, Mo. Country Gent 83:7 F 9 '18
- Learning from others; farm of J. M. Hussey. il Wallaces' F 41:1667 D 22 '16
- Livestock, crops and labor; rotation system of this Missouri farmer. W. L. Nelson. il Country Gent 82:1924 D 8 '17
- Live stock paid for 320 acres. il O Judd Farmer 62:1 Je 30 '17
- Making a farm pay in the shallow water section of Kansas. il Irr Age 31:74 Mr '16
- Making his cattle produce cotton. H. S. Stabler. il Country Gent 81:2067-8 D 2 '16
- Master farmer of seventy; Weatherby farm in southern Jersey. H. R. Cox. il Country Gent 81:1251-2 Je 24 '16
- Mixer farm; a Massachusetts milk plant, breeding establishment, and general farm. E. L. D. Seymour. il Country Life 31:50-1 Ja '17
- My visit to a Mississippi power farm. J. F. Hobart. il Power F 27:10-11 Je '18
- New methods at Meharry farm. O Judd Farmer 63:3 S 8 '17
- 92,000 Texas farms without cows, hogs or poultry. Ag Digest 2:569 Ag '17
- On seventy-five acres in Ohio. W. I. Chamberlain. Nat Stock & F 41:940 D 29 '17
- On the battle line of the tick; Wyndale farm, Virginia. H. S. Stabler. il Country Gent 81:878-9 Ap 22 '16
- One-horse farm in 1915. F. Hill. il Country Gent 81:778-9 Ap 8 '16
- One man on a hundred acres. G. H. Dacy. il Country Gent 82:959 Je 2 '17
- Open air dairying at River Ridge. E. A. Grombacher. il Field il 26:239-41 Mr '16
- Operating 800 acres on borrowed capital. C. M. Baker. il Ohio F 139:685 My 19 '17
- Other kind of pet farm. Flint stone farm. B. W. Currie. il Country Gent 81:1783-4 O 7 '16
- Phosphate and clover revive farm. O Judd Farmer 65:452 N 16 '18
- Pioneer Wisconsin farm. J. A. Lonsdorf. il Hoard's D 53:378 Mr 23 '17
- Progressive Vermont farmer; Walnut Grove dairy farm owned by Senator A. A. Dunklee. M. R. Tolstrup. il Hoard's D 53:93 F 9 '17
- Reconstruction in Louisiana. R. G. Miller. il Kimball's D F 15:380 Je 1 '17
- Rosemary—an estate to withstand a siege. R. R. Conklin. il Country Life 34:49-52 My '18
- Rotating for corn. il Wallaces' F 43:35 Ja 11 '18
- Rules for selecting a farm. H. E. Cox. Rural N Y 75:1123 Ag 26 '16
- Rushmore way; when they don't know they find out. H. R. Cox. il Country Gent 81:1718-19 S 23 '16
- Second generation from town; the son succeeded at farming after his father had failed. B. Howard. Country Gent 82:1917 D 8 '17
- Sheep and hen farm. E. I. Farrington. il Country Gent 83:35 My 4 '18
- Shoestring farm. W. Hardison. il Country Gent 82:978-9, 1010-11 Je 2-9 '17
- Stock farm with home-grown help. il Wallaces' F 41:1263 S 29 '16
- Story of a bootstrap lift; Piedmont farmer paid for poor land, and made it rich through clover. B. Howard. il Country Gent 83:8 Jl 20 '18
- Successful bean and wheat farm. H. S. Miller. Ohio F 139:739 Je 2 '17
- Successful dairyman and fruit grower in Wisconsin. N. A. Rasmussen. il Hoard's D 54:765 D 21 '17
- Successful New York farmer; Thomas Rich of Delaware Co. W. H. Jenkins. il Hoard's D 51:693 My 19 '16
- Successful south Jersey truck farm. R. E. Allen. il Prac F 112:341 S 15 '16
- Swathmoore farm. N. C.; a story of business knowledge, farm knowledge and agricultural thrift blended. B. Howard. il Country Gent 82:1960 D 15 '17
- Ten years on a small farm; Woodside farm. il Hoard's D 53:715 My 18 '17
- This is the farm where—; farm in intermountain region, Utah. il Ag Digest 2:932-3 Ap '18
- Three generations on one farm. F. Hersman. il Wallaces' F 42:1721 D 21 '17
- Three tractors and an eastern farm. P. Shirley. il Country Gent 83:9-10 Ap 13 '18



**Farms—Continued**

- Three women and a farm. E. K. Carruth. J Home Econ 8:256-8 My '16  
Twin Oaks farm. G. P. Williams. il Nat Stock & F 40:818 N 11 '16  
Up-to-date ranch in South Dakota. G. A. Starring. Breeder's Gaz 69:457 F 24 '16  
Way the farm light led. E. L. Vincent. il Wallaces' F 41:1668 D 22 '16  
Ways that have paid on a Green county, Iowa, farm. il Wallaces' F 41:1623 D 15 '16  
Well managed Marion County farm; some of the essentials utilized by a city-bred farmer. W. A. Martin. il Ohio F 141:485 Ap 6 '18  
What the homeseeker should look for. J. F. Duggar. Prog F 31:1225 O 21 '16  
When good farmers get together. J. E. Pickett. il Country Gent 83:1+ S 14 '18  
Where machinery does the work. il Wallaces' F 41:1527 N 24 '16  
Wholesale farming and feeding. il Wallaces' F 42:1151 Ag 24 '17  
Working a farm double shift. H. W. Collingwood. il Country Life 30:40-1 J1 '16  
*See also* Cotton plantations; Dairy farm management; Dairy farms; Farm management; Farm values; Fruit farms; Live stock farms; Orchard management; Poultry farm management; Poultry farms; Sheep farms; State farms

**Farms, Abandoned.** *See* Farms, Worn-out

**Farms, Care of**

- How to sell a farm. E. H. Chandler. il Country Gent 83:5+ Mr 16 '18

**Farms, Experiment.** *See* Experiment farms

**Farms, Large**

- Factory system of farming; the big farm not a success. B. Black. il Rural N Y 76:1461 D 29 '17

**Farms, Lists of**

- Farms for sale in New Jersey. map N J Ag Dept C 1:1-25 '16  
Farms for sale or rent in New York, 1916 (B. 78). il map N Y Ag Dept Rep 1916, pt 2: 429-624 '17  
Farms for sale or rent in New York, 1917. il map N Y Ag Dept B 90:1-179 D '16  
Farms for sale or rent in New York, 1918. il map N Y Farms & Markets Dept Ag B 103: 1-214 Ja '18  
List of Louisiana lands for sale. La Ag Bd 40p '17  
New Hampshire farms available for farming or summer homes. 22p il map '16 N.H. State dept. of ag., Concord  
Red book of Straus quality farms 1917-1918. 159p il maps '17 Straus bros. co., Fort Wayne, Ind.

**Farms, Model**

- Accredited farms and state farm management contest in the United States. A. W. Ashby. J Bd Ag 24:943-9 D '17  
Developing a country estate. il Field II 27: 186-7 Mr '17  
Developing the country estate. R. V. Hoffman. il Field II 27:11-12, 100-1 Ja-F '17  
Farming de luxe a costly hobby. O. Crooker. il O Judd Farmer 60:3 Ap 22 '16  
Feeding and farm management. M. H. Roberts, jr. il plans Jersey B 37:1860-1+, 1942-3+ N 6, 20 '18  
Forest tree nurseries for private estates. A. Smith. Gard Chron Am 22:271-2 N '18  
Gee whiz, what a farm. Longview farm, Missouri. E. Howe. il Country Gent 83:1+ J1 20 '18  
Growth of estate farming. J. A. McLean. il Field II 28:9-11, 76-7, 564-5 Ja-F, Ag '18  
Hobby farm uses gas tractor. R. E. Theinhardt. il Power F 26:22 O '17  
How the Lenox folk are helping to win the war. E. L. D. Seymour. il Country Life 35:54-7 N '18  
Longview farm, a dream realized. il Kimball's D F 14:56+ F 1 '16  
Modern use of the historic Grant farm. G. W. Eads. il Breeder's Gaz 73:423-4 F 28 '18  
National farm, Point Fortune. J Ag (Quebec) 20:195 Mr '17  
Play place built for profit. Jersey B 36:1986 D 19 '17

- Rich folks at farming. E. Howe. il Country Gent 83:3-4 Je 8 '18  
Sidewalk farmer's club. W. I. Chamberlain. il Nat Stock & F 41:589 S 15 '17  
Some city men's farms. il J Ag (Quebec) 20:107, 126 N-D '16  
Story of Brookwood. H. G. Gulliver. il Field II 28:748-60 O '18  
Stratford model dairy farm. J. W. Deem. J Ag New Zealand 17:231-2 O '18

**Farms, Size of**

- Big and small farms. Rural N Y 77:998 Ag 24 '18  
Big or little farms? H. H. Whittaker. Nat Stock & F 41:997 Ja 12 '18  
Corn belt farm—how big shall it be? O. R. Johnson. Mo Ag Bd Yearbook 1916:554-8  
Economic study of farming in Sumter county, Ga. H. M. Dixon and H. W. Hawthorne. U S Ag B 492:1-64 '17  
How big a farm? T. Butler. Prog F 31:391 Mr 18 '16  
Influence of a city on farming. J. H. Arnold and F. Montgomery. map U S Ag B 678:1-24 '18  
Influence of the size of farms on their gross yield. Int R Sci & Prac Ag 7,no 6:871-7 Je '16  
Influence of the size of the farm upon the wages of labour in the irrigated sections of the United States. Int R Sci & Prac Ag 7, no 2:276-7 F '16  
Size of farm business. O. R. Johnson and W. E. Foard. il Mo Ag Exp B 140:1-40 '16  
Small farm delusion. E. Butler. Prog F 33:1293 N 23 '18

*See also* Farms, Large; Farms, Small

**Farms, Small**

- Asleep at the switch. Fruit-Grower 27:360 J1 15 '16  
Back-to-the-lander backed by wife. W. D. Sydnor. il Rural N Y 75:1018 J1 22 '16  
Building up a cotton farm. Country Gent 81: 922 Ap 29 '16  
In defense of the little farm. O. Blesch. il Country Gent 81:1751 S 30 '16  
Intensive small farm. il Wallaces' F 42:1079 Ag 3 '17  
Little farm well tilled. Country Gent 81:6 Ja 1 '16  
One acre—one man's job. F. W. Proctor. Rural N Y 75:651-2 Ap 22 '16  
Profitable little farm. il O Judd Farmer 65: 343 O 19 '18  
Putting a farm on its feet. il Wallaces' F 43: 1635 N 8 '18  
Small farm well tilled—does it pay? W. R. Butler. Country Gent 81:599 Mr 11 '16  
Two women on a little farm. E. Pollard. Country Gent 81:1254 Je 24 '16  
When Jim Ferguson went back. Rural N Y 76:706, 729, 796 My 19-26, Je 16 '17  
*See also* Land tenure—Small holdings

**Farms, Worn-out**

- Baynard's estate, Cranleigh: an example of a war committee's efforts to increase food production. il J Bd Ag 25:17-21 Ap '18  
First aid to the abandoned farm. C. W. Moores. il House Beautiful (41 Mt. Vernon st, Boston 25c) 44:90-1 J1 '18  
Forest growth on abandoned agricultural land. P. L. Butterick. il Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:80-91 J1 '17  
Fruit from worn-out land. J. R. Mattern. il Country Gent 81:315 F 12 '16  
How we went back to the farm. Mrs J. A. Martin. il Rural N Y 75:784 My 20 '16  
Making a wornout farm pay. D. D. Saunders. System on the Farm 2:216 Je '18  
Making good on a run-down farm. Mrs J. Lampman. il Kimball's D F 13:799 Ja 1 '16  
Mechanic in the country; a back-to-the-land record. R. A. Young. il Rural N Y 76:70 Ja 20 '17  
Poverty Bottom: an experiment in increased food production. W. Somerville. il J Bd Ag 24:1186-1202 F '18  
Reclaiming a rundown farm. W. H. Jenkins. il Ohio F 141:390 Mr 16 '18

**Farms, Worn-out —Continued**

- Rejuvenating a run-down farm. *il* Ohio F 140:341 O 20 '17  
 Renter's experience on a run-down farm. *Nat Stock & F* 41:717 O 27 '17

**Farriery.** See Horeshoeing**Fashion**

- Golden mean in dress. H. H. Murphy. *il* Country Gent 81:133 Ja 15 '16  
 Style craze and farm folks. C. C. Johnston. *Ohio F* 138:604 D 16 '16  
*See also* Clothing and dress; Costume; Dressmaking

**Father and son week**

- Father and son week in a county and what it means. M. V. Arnold. *Rural Manhood* 9: 201-2 My '18

**Fats.** See Oils and fats**Faverolles (poultry)**

- Faverolles. F. H. Valentine. *il* Country Life 30:50 Jl '16  
 White faverolles—why they should be bred in America. K. M. Turner. *Reliable P J* 24:148-9+ Ap '17  
 Why the white faverolle should be among the popular fowls of America. K. M. Turner. *il* Reliable P J 23:302 Ap '16

**Favill, Henry Baird, 1860-1916**

- Dairy interests lose staunch supporter. W. A. Parcelle. *Jersey B* 35:305 Mr 1 '16  
 Sketch. *por* Breeder's Gaz 69:433 F 24 '16; *Hoard's D* 51:247, 248 Mr 3 '16; *Kimball's D F* 14:192 Mr 15 '16

**Fear**

- Two snakes in the modern business mind. S. L. Krebs. *il* Am Coop J 14:124 D '18

**Feather-sedge grass**

- Fire danger in feather grass. R. T. Morris. *Am For* 24:627 O '18

**Feathers**

- Few feather facts. *Country Gent* 81:899 Ap 22 '16

**Feces****Bacteriology**

- On the value of the petroleum-ether method for the isolation of *b. typhosus* from feces. L. A. Kohn and C. Krumwiede, jr. *J Bact* 3:361-6 Jl '18

**Fecundity**

- Exceptional fecundity and longevity. H: M. Jones. *il* J Heredity 7:562-4 D '16  
 Fecundity in relation to stamina. A. A. Dunn-cliff. *Ag Gaz of New South Wales* 27:507-10 Jl '16  
 Increasing fecundity; effect of pituitary substance. *J Heredity* 7:102-4 Mr '16  
 Inheritance of fertility in swine. E: N. Wentworth and C. E. Aubel. *bibliog J Ag Research* 5:1145-60 Mr 20 '16; *Abstract. Am Soc Animal Production Pro* 1915-1916:33-5 '17  
 Long life means many children. *J Heredity* 7:98-101 Mr '16  
 Triplet calves. *il* J Heredity 7:135-7 Mr '16

*See also* Poultry—Egg production

**Federal board of farm organizations.** See National board of farm organizations**Federal farm land banks**

- Bill (H. R. 8827) to provide short-term credit for the farmers of the United States, and for other purposes. *Congressional Record* (Washington, D.C.) 56:1364-7 Ja 25 '18  
 Broadening the farm bank. C. M. Harger. *Financial World* (29 Broadway, N.Y. 15c) 30:22 Ja 19 '18  
 Business of the federal land bank. *Rural N Y* 77:4 Ja 5 '18  
 Credit and cash—how to get both in war times. E. W. Gage. *System on the Farm* 3: 131-3 O '18  
 Farm loan banks. W: G. McAdoo. *Wallaces' F* 43:9 Ja 4 '18  
 Farm loan banks; list of 12 districts. *Breeder's Gaz* 71:19 Ja 4 '17  
 Federal land bank bonds as investments. J. F. Ebersole. (*In* Minnesota farmers' institute annual, 1916, p 103-9) '16 Extension division, University Farm, St Paul

- Federal land banks appeal to Congress. E. G. Quamme. *il* Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 6:4+ Ja 7 '18

- First year of the federal farm loan act. *Int R Ag Econ* 83:54-6 N '17

- Interest rate increased. *Hoard's D* 55:190 F 22 '18

- Leonard G. Robinson—federal land bank president. *Rural N Y* 76:512 Ap 7 '17

- Loans to drought-hit farmers described in treasury and agricultural circular. *Coop Manager & F* 8:44 O '18

- Market freedom through federal loans. J. H. Collins. *Country Gent* 83:36 Ja 5 '18

- Profits from debts; results of first year's work in making loans to farmers by federal land bank of St Louis. H. W. Danforth. *map O Judd Farmer* 64:641 Je 22 '18

- Text of act authorizing government to purchase \$200,000,000 of farm loan bonds. *Commercial and Financial Chronicle* (W. Pine and Depeyster sts, N.Y. \$10 per yr.) p 349 Ja 26 '18

- Two big facts about our federal land banks. G: P. Hampton. *Prog F* 33:1226 N 9 '18

- Work of the federal land bank; with discussion. L. G. Robinson. *Mass Ag Bd Yearbook* 1917, pt 2:28-38 '18; *Same. Mass Ag Bd C* 77: 1-13 '18

**Federal farm loan act.** See Agricultural credit—United States—Law**Federal farm loan associations.** See National farm loan associations**Federal farm loan board**

- 1st annual report covering the period from the organization of the board up to November 30, 1917. (House doc. 714) 31p '18  
*U.S. Federal farm loan bur., Washington, D.C.*

- Review of the first annual report of the federal farm loan board. R. Ingalls. *Congressional Record* (Washington, D.C.) 56:5127-31 Ap 6 '18

- Successful bond-selling campaign. by G: W. Norris; One year of the federal farm loan system. by M. T. Herrick. *Am Bankers Assn J* (5 Nassau st, N.Y. \$2 per yr.) 10: 639-43 Mr '18

**Federal food products inspection law.** See Freight inspection**Federal fruit and vegetable inspection service.** See United States—Food inspection service**Federal grain corporation.** See United States food administration grain corporation**Federal land bank bonds.** See Bonds**Federal land banks.** See Federal farm land banks**Federal milk commission**

- Federal milk commission; text of bill now before Congress. *N Y Prod R* 42:322 Je 14 '16

**Federal milk investigation**

- Food administration's milk committee reports. *Creamery* 7:22 Mr '18; *Same. Jersey B* 37:352 Mr 6 '18; *Same. Kimball's D F* 16:238 Mr 15 '18

- Milk committee makes report; some prominent results. 3p *min* '18 *U.S. Food administration, Washington, D.C.*

- Milk prices. *Creamery* 7:13-16 F; 18-19 Ag '18  
 Regional tribunals on milk prices. *Survey* (112 E. 19th st, N.Y. 10c) 39:293-4 D 8 '17

- Statement from the Federal milk commission. W. H. Jordan. *N Y Farms & Markets Dept Ag B* 105:208-14 Mr '18

- See also* Chicago milk investigation; Detroit milk investigation; New York milk investigation

**Federal trade commission.** See United States—Federal trade commission**Federated meat producers' association**

- Central organization of state live stock associations, cattle, sheep and hog feeders' associations. *Breeder's Gaz* 73:1256 Je 13 '18

- Changing the style in steers; cattle will be marketed younger and lighter. S: O. Rice. *il* Country Gent 83:5-6 Jl 6 '18



**Federation of Jewish farmers of America**  
Farm almanac and buyers' guide. 140p il  
n.d. The federation, 174 2d av., N.Y.  
Most of the text is in Yiddish  
9th annual convention, New York city, Dec.  
9-12, 1917. (In Yiddish) Jewish Farmer (174  
2d av., N.Y. 5c) 10.no 1:1-68 Ja 1 '18; Same  
cond. (In English) 4p '18

**Federation of water users, American.** See Amer-  
ican federation of water users

**Feeble-minded**

Eliminating feeble-mindedness. R. C. Punnett.  
J Heredity 8:464-5 O '17  
Feeble-minded in Ohio. M. A. Sessions. il J  
Heredity 8:291-8 Jl '17  
Feeble-mindedness in Delaware. J Heredity 9:  
45-8 Ja '18  
Hidden feeble-mindedness. E. M. East. J  
Heredity 8:215-17 My '17  
Intelligence of immigrants. J Heredity 8:554-  
56 D '17  
Let's positivize our negative eugenics. A. E.  
Hamilton. il J Heredity 7:309-10 Jl '16  
See also Defectives

**Feed bins**

Convenience of the feed bin. A. G. Crerar. il  
Hoard's D 55:180 F 22 '18  
Grain feeding bin. L. A. Hays. Hoard's D  
55:876 Je 14 '18  
Handy mill-feed bin. H. Williams. Country  
Gent 81:571 Mr 11 '16

**Feed buying associations**

Organizing for feed defense. S. Sosland.  
Hoard's D 55:948, 983, 1016; 56:7, 35, 67, 129,  
157 Je 28-Jl 12, 26-Ag 9, 23, 30 '18

**Feed cars**

Silage feeding plan. C. E. Wheatley. il Wal-  
laces' F 41:271 F 18 '16  
Small car for the stable. H. E. Skott. il  
Farm Eng 3:144 Ja '16

**Feed dealers' associations**

Farmers and the feed dealers. H. H. Lyon.  
Rural N Y 75:1465 N 25 '16  
Getting at your cost and a few things; rea-  
sons why feed dealers should organize. F.  
H. Beach. Coop Manager & F 7:74 Ap '18

**Feed hoppers**

Feed hopper. H. Mitman. il Country Gent  
83:33 Mr 30 '18

**Feed industry**

**Laws and regulation**

Agricultural law, 1916; sale and analysis of  
concentrated commercial feeding stuffs. N  
Y Ag Dept B 83:2031-5 My '16; Same.  
N Y Ag Dept Rep 1916.pt 3:2031-5 '17  
Astounding proposal of Senator Gore, slipped  
into the agricultural bill when no one was  
looking, but will meet a deserved defeat.  
J. H. Woolridge. Coop Manager & F 8:66+  
N '18  
Commerce des aliments du bétail. Int Year-  
book Ag Leg 1916:244-60 '17  
Commercial feeding stuffs. W. J. Jones, jr.  
and others. Ind Ag Exp B 190:1-35 '16  
Commercial feeding stuffs. A. J. Patten and  
others. il Mich Ag Exp B 279:3-11 '17  
Commercial feeding stuffs, laws and regula-  
tions in Alabama. Ala Ag Dept B 6:1-30 Ja  
1 '16  
Commercial feeding stuffs, 1915-16; Texas  
feed law. B. Youngblood. Tex Ag Exp B 194:  
1-351 '16  
Commercial feeding stuffs, 1916-17; Texas feed  
law. Tex Ag Exp B 216:381-5 '17  
Concentrated commercial feeding-stuffs law  
in effect July 4, 1917. 8p '17 Ia. Dairy and  
food comm., Des Moines  
Concentrated feeding stuffs law. 20p n.d.  
Wyo. Dairy, food and oil comr., Cheyenne  
Digest and copy of revised feeding-stuffs  
law. N J Ag Exp C 74:1-8 '17  
Feed registration under the Kansas feeding-  
stuffs law. L. A. Fitz and A. E. Lang-  
worthy. Kan Ag Exp Inspec C 5:1-63 '17  
Feed rules and regulations. Market News &  
Exchange (Ohio ag. dept., Columbus) B v  
1, no 40:1-2 S 14 '18  
Feeding stuffs control law and how to comply  
with it. E. G. Proulx. Ind Ag Exp C 75:1-8  
'17

Horse and poultry mixtures order, 1917. J  
Bd Ag 24:1023-6 D '17

Indiana feeding stuffs control. E. G. Proulx.  
Ind Ag Exp C 72:1-6 '17

Laws relating to the adulteration and mis-  
branding of foods, drugs and feeding-stuffs,  
narcotic and poison laws, sanitary law; re-  
vised rules, regulations and food standards  
of Georgia. R. E. Stallings. Ga Ag Dept B  
66:1-141 n.d.

Manual of laws pertaining to the Department  
of farms and markets; sale and analysis of  
concentrated commercial feeding stuffs. N Y  
Farms & Markets Dept Ag B 108:139-43 Je  
'18

New Missouri feed law. Coop Manager & F  
7:76+ S '17

Regulations governing the taking and for-  
warding of samples of commercial fertilizer  
and commercial feeding stuff to the com-  
missioner of agriculture for analysis by the  
state chemist. Fla Ag Dept Quar B v 28:68-  
75 O '18

Rules and regulations governing the sale of  
commercial feed stuffs in the state of South  
Carolina, and copy of the law. il S C Ag  
Dept B 60:1-36 '17

Seed and feed law passed by special session of  
the North Dakota legislature; furnishing  
seeds and feeds to farmers at cost. Coop  
Manager & F 7:27 Mr '18

Working of the Indiana feedstuffs control law.  
W. J. Jones. Purdue Ag 10:22+ My '16

**Statistics**

Exports of domestic feedstuffs from the  
United States. Monthly Crop Rep 4:141 N  
'18

International trade in feeding stuffs. Int R  
Sci & Prac Ag 3,no 4:489-526 Ap '17

International trade in feeding stuffs; statis-  
tical data by country of production and  
prices. bibliog Int R Sci & Prac Ag 7,no 4:  
467-510 Ap '16

**Feed inspection.** See Feeding and feeding  
stuffs—Analysis

**Feed manufacturers' association, American.** See  
American feed manufacturers' association

**Feed mills**

Should I own a power feed mill? E. L. Wat-  
son. il Power F 25:14 N '16

**Feed surveys**

Feed survey and purchasing feed. Hoard's  
D 55:1053 Jl 19 '18

**Feed water**

Water for boilers and for steam production.  
F. B. Guthrie. Ag Gaz of New South Wales  
29:229-34 Ap '18

**Feeding and feeding stuffs**

Acidosis (excess of acids) in omnivora and  
herbivora and its relation to protein storage.  
Int R Sci & Prac Ag 7, no 2:244 F '16

Acreage for one cow. R. C. Jones. O Judd  
Farmer 60:7 Mr 25 '16

Alfalfa and clover for fattening stock. F. G.  
King. Breeder's Gaz 69:429 F 24 '16

Altitude in feed prices. O Judd Farmer 63:6  
S 29 '17

Balanced ration. F. E. Place. J Dept Ag S  
Australia 22:103-9 S '18

Balanced rations. W. W. Reynolds. Rural  
N Y 76:109 Ja 27 '17

Balanced rations which starve. O Judd  
Farmer 65:7 Jl 6 '18

Balancing a ration. il Hoard's D 51:520 Ap  
14 '16

Blackstrap molasses and lespedeza hay for  
cattle. T. Butler. Prog F 31:3 Ja 1 '16

Bush sickness; progress of the investigation.  
J Ag New Zealand 13:274-6 O '16

Buying feed for next winter. Hoard's D  
55:873+, 928 Je 14-21 '18

Buying feeds wisely. W. C. Jeffries. Ohio F  
137:218 F 12 '16

Buying meals and grains for winter use. E. S.  
Archibald. J. Ag (Quebec) 22:44 S '18

Buying the winter feeds. O Judd Farmer 60:  
12 F 12 '16

Cattle feeding stuffs (committees) order, 1917.  
J Bd Ag 24:1142-6 Ja '18

**Feeding and feeding stuffs—Continued**

- Cheap feeds for the southern farmer. L. I. Gulon. Prog F 32:184 F 10 '17
- Commercial feed situation. R. W. Chapin. Kimball's D F 16:154 Mr 1 '18
- Comparative money values of feeding stuffs. J Bd Ag 24:733-6 O '17
- Comparative study of the feeding of cattle and pigs with regard to meat-production. A. Gouin and P. Andouard. Int R Sci & Prac Ag 8,no 12:1247-9 D '17
- Comparative value of concentrated protein meals for dairy cattle, sheep and swine. E. S. Archibald. Ag Gaz of Canada 3:687-92 Ag '16
- Comparing corn and cowpeas as feeds. T. Butler. Prog F 33:811 JI 20 '18
- Comparison of digestible co-efficients for cattle, swine and poultry as suggestive of a more accurate basis on which to compute poultry rations. A. B. Dann. N Y Ag Dept B 86:2389-98 Ag '16
- Computing rations for farm animals. (B. 321). E. S. Savage. il Cornell Ag Exp Rep 1917: 3-68 '18; Same. Cornell Reading Course 17:51-116 '16; Same cond. Field II 26:1023-4+ D '16
- Co-operative live stock feeding experiment. il Am Coop J 12:776; 13:37, 70 Ag-O '17
- Corn substitutes. Weekly N L 5:8 S 19 '17; Same. Coop Manager & F 7:66 O '17
- Cost of digestible nutrients in principal cattle feeds. H. B. Winters. N Y Ag Dept B 84:2149-64 Je '16; Same. N Y Ag Dept Rep 1916, pt 3:2149-64 '17
- Dairy farm of 84 acres makes \$2271. il O Judd Farmer 61:5 S 30 '16
- Dairy products essential to health. E. V. McCollum. N J Ag Dept B 16:57-71 '18
- Dairy products make us what we are. E. V. McCollum. Kimball's D F 16:356-7+ My 1 '18; Same. Jersey B 37:973-4+, 1015+ Je 19-26 '18; Excerpts. Creamery 7:30-3 My '18
- Dairymen's league and feed. Wallaces' F 42: 1471 O 26 '17
- Dangers of greenfeed. J Dept Ag S Australia 21:369-70 D '17
- Department reports on the progress of investigation in feeding experiments. il Mo Ag Exp B 141:19-22 '16
- Diet and abortion. P. A. Fish. Am Vet M Assn J 50:282-5 D '16
- Digestibility of sugars, starches, and pentosans of roughages. G. S. Fraps. Tex Ag Exp B 196:1-36 '16
- Digestible nutrients and fertilizing constituents in various farm crops. Va Ag Dept B 126:51-6 '18
- Distillers' and brewers' grains. Rural N Y 75:56 Ja 8 '16
- Does feeding pay? F. J. Iles. Nat Stock & F 40:1084 Ja 20 '17
- Does livestock waste our food? C. T. Conklin. il Field II 28:84-5 F '18
- Economical feeding of farm animals. H. P. Miller. il Ohio F 138:202 S 2 '16
- Economical feeding of farm animals. H. P. Miller. il Ohio F 139:181 F 10 '17
- Economical purchase of concentrates. A. C. McCandlish. Hoard's D 53:290 Mr 9 '17
- Effect of rations from single plant sources. Hoard's D 52:195 S 1 '16
- Effects of feeding calcium chloride to domestic animals. O. Loew. Int R Sci & Prac Ag 9,no 2:211-13 F '18
- Elevator screenings for poultry and farm animals. Ag Gaz of Canada 4:851-2 O '17
- Excellor feeds. Coop Manager & F 7:34 O '17
- Experiments on the digestibility of various little-used cattle foods. Int R Sci & Prac Ag 7,no 8:1131-6 Ag '16
- Extension of cropping and fodder conservation. J Ag New Zealand 15:179-84 O '17
- Facts for the feed buyer. W. H. Strowd. Wis Ag Exp B 267:1-56 '16
- Facts in the feed situation. W. H. Jenkins. Nat Stock & F 41:137 Ap 28 '17
- Feed dealer's toll. W. A. Martin. Ohio F 137:70 Ja 15 '16
- Feed problem. H. P. Miller. Ohio F 141:136 F 2 '18
- Feed shortage and some suggested remedies. T. Butler. Prog F 33:975 S 7 '18
- Feed survey and purchasing feed. Hoard's D 55:1053 JI 19 '18
- Feeding. Wallaces' F 41:1278 S 29 '16
- Feeding a balanced ration. Rural N Y 75:22, 56, 94, 132, 169, 208, 252, 302, 342, 400, 450, 494, 534, 568, 593, 640, 670, 726, 756, 902 Ja 1- Ap 22, My 6-13, Je 17 '16
- Feeding and the making of balanced rations. H. H. Dean. Prac F 112:124, 159, 182, 201, 220, 238 Mr 15-Je 1 '16
- Feeding farm animals. W. E. Carroll. Utah Ag Exp C 32:1-23 '18
- Feeding live stock. J Ag (Quebec) 21:169 My '18
- Feeding problem. Prog F 32:495 Ap 21 '17
- Feeding questions. See weekly numbers of Wallaces' farmer
- Feeding situation. C. C. Hayden. Jersey B 36:391 Mr 14 '17
- Feeding stuffs of minor importance. F. W. Woll. Cal Ag Exp C 167:1-7 '17
- Feeding stuffs report. G. G. Hutchison. Pa Ag Dept B v 1:54-60 Ap '18
- Feeding stuffs report. G. G. Hutchison. Pa Ag Dept B 278:148-58 '16
- Feeding tables. Wallaces' F 43:1483 O 11 '18
- Feeding value of bhusa and straw. O. T. Faulkner. Ag J of India 12:308-10 Ap '17
- Feeding values of corn and soy bean stover. T. Butler. Prog F 33:903 Ag 17 '18
- Feeds and feeding. Wallaces' F 42:1315 S 28 '17
- Feeds and feeding figures. Prog F 31:221 F 12 '16
- Feeds that make for fertility. G. H. Campbell. il Country Gent 82:1446 S 22 '17
- Fodder substitutes: how wild vegetation is utilised in other countries. J Bd Ag 25:448-52 JI '18; Excerpts. Hoard's D 56:132 Ag 23 '18; Excerpts. Jersey B 37:1368 Ag 28 '18; Excerpts. Nat Wool Grower 8:19 Ag '18
- Food values and rations. B. A. Barr. J Dept Ag Victoria 14:513-21 S '16
- German substitutes for cattle feed. Scientific Am (233 Broadway, N.Y. 10c) 118:313 Ap 6 '18
- Getting ahead of my work. H. Radtke. System on the Farm 2:95 Mr '18
- Grass roots as feed. Weekly N L 5:7 F 20 '18
- Growing and feeding meat animals. Mo Ag Bd B v 15:1-63 S '17
- Hansen feed mill, feeding yards and experiment station at West Ogden. Utah. C. Hayne. il Am Sheep B & W 38:127 F '18
- Has undue emphasis been laid upon protein. N Y Ag Dept B 86:2336-44 Ag '16
- Hogs and cattle at the Iowa station. H. A. Wallace. Wallaces' F 41:700 My 5 '16
- How feeders coin money this year. F. E. Moore. Am Coop J 12:398 Ja '17
- How feeds affect the size of the vital organs. D. T. Gray. Prog F 31:84 Ja 15 '16
- How to balance a ration. E. R. Eastman. Country Gent 81:533 Mr 4 '16
- How to feed live stock successfully. C. A. Willson. il Tenn Ag Exp B 116:51-106 '16; Same. il Tenn Ag Ext Gen Ser 14 (Pub 24):1-58 '17
- Influence of milk and carbohydrate feeding on the character of the intestinal flora. T. G. Hull and L. Rettger. bibliog J Bact 2:47-71 Ja '17
- Injurious weed seeds in feeding stuffs. H. B. Sifton. il Ag Gaz of Canada 5:951-7 O '18
- Investigations into nutritional deficiency. E. Weill and others. Int R Sci & Prac Ag 7,no 8:850 Je '16
- Is feed bill larger than milk check? Ag Digest 2:704 N '17
- Kansas dairy ration. Wallaces' F 41:1126 Ag 25 '16
- Leak in the feed box. C. M. McConnell. il Ohio F 141:387 Mr 16 '18
- Legumes in the garden. W. H. Jenkins. Country Life 30:72 My '16
- Live stock policy of the Board of agriculture & fisheries and the Ministry of food. J Bd Ag 24:1177-80 F '18
- Livestock suggestions for August. Prog F 32: 842 Ag 4 '17
- Living and winter feeding in Denmark. O. Molgaard. Kimball's D F 16:294-5 Ap 15 '18
- Long legs with more meat. Breeder's Gaz 73:1198 Je 6 '18



Feeding and feeding stuffs—Continued

- Loss of appetite. Prog F 33:183 N 2 '18  
 Luck or good management—which? W: R. Butler. il Country Gent 81:1215-16 Je 17 '16  
 Making a mixed feed on the farm. Prog F 31:1443 D 16 '16  
 Making the most of roughage. M. Coverdell. Jersey B 37:471 Mr 27 '18  
 Meat situation in the United States. pt 4. Utilization and efficiency of feed stuffs. W. F. Ward and S. H. Ray. U S Ag Report 112:1-27 '16  
 Meat without corn. J. I. Thompson. il Country Gent 81:1296 Jl 1 '16  
 Metabolism of the organic and inorganic compounds of phosphorus. E. B. Forbes and others. Int R Sci & Prac Ag 7,no 10:1465-8 O '16  
 Method of calculating economical balanced rations. J. C. Rundles. U S Ag B 637:1-18 '18; Summary. Jersey B 37:491 Mr 27 '18  
 Milk and feed prices. O Judd Farmer 63:10 S 1 '17  
 Mill-feed situation. S: Sosland. Wallaces' F 41:1473 N 10 '16  
 Mill feed standards and situation. S. Sosland. Hoard's D 55:322 Mr 15 '18  
 Mixed feed situation. H. H. Lyon. Rural N Y 76:1415 D 15 '17  
 Mixed feeds and tonics. T. B. Rogers. Country Gent 81:207 Ja 29 '16  
 Need for caution in the feeding of live stock under present conditions. J Bd Ag 25:560-3 Ag '18  
 Need of scientific feeding. Farm Eng 5:16 Ja '17  
 Net energy values for ruminants. H: P. Armsby and J. A. Fries. Pa Ag Exp B 142: 1-20 '16; Same abr. (tables). Int R Sci & Prac Ag 8,no 3:401-6 Mr '17  
 Net energy values of feeding stuffs for cattle. H: P. Armsby and J. A. Fries. bibliog J Ag Research 3:435-91 Mr '15  
 New dairy feeds from the South; peanut meal, soy bean meal and velvet bean meal. L. A. Niven. O Judd Farmer 64:10 Ja 5 '18  
 New feed stuffs. J. B. Lindsey. Mass Ag Ext C 63 3p '18  
 New feeding-stuffs used in Germany during the war. M. Kling. Int R Sci & Prac Ag 8,no 6:892-9 Je '17  
 New ideas in feeding. Wallaces' F 43:687 Ap 19 '18  
 New York feed notes. H. H. Lyon. Hoard's D 54:39 Ag 3 '17  
 Notes on feeding stuffs in the month. See monthly numbers of Journal of the board of agriculture  
 Output of mill feeds. Hoard's D 56:342 O 4 '18  
 Overcoming the feed shortage. A. F. Kidder. Prog F 33:995 S 7 '18  
 Position of mixed feeds. Nat Stock & F 42: 636 O 12 '18  
 Position of the German stock feeder. J Bd Ag 23:945-50 Ja '17  
 Practical live stock feeding. il Va Ag Dept B 108:6-8 Ja '16  
 Preparedness in the dairy. E. Brown. Prac F 112:199 My 1 '16  
 Present feedstuff situation. S. Sosland. Hoard's D 55:808 My 31 '18  
 Present situation in nutrition. E. V. McCollum. il Hoard's D 51:989+; 52:3+, 32-3, 63 Jl 21-Ag 11 '16; Same (Effect of feeds on growth and health of animals). Hoard's D 54:625+, 653+, 684-5, 723 N 23-D 14 '17  
 Principles of animal nutrition. J. A. McLean. Jersey B 35:1956-7 D 13 '16  
 Production coefficients of feeds. G. S. Fraps. Tex Ag Exp B 185:1-16 '16  
 Production of roughage on West Virginia farms. W. D. Zinn. W Va Ag Dept B 30: 20-2 '17  
 Productive values of some Texas feeding stuffs. G. S. Fraps. Tex Ag Exp B 203:1-42 '16  
 Protein meals of the South. C: A. Whittle. Hoard's D 54:13 Jl 27 '17  
 Purchased feeds. Wallaces' F 43:1423 O 4 '18  
 Queer fodder fed in Europe; animals eating acorns, leaves and seaweed. O Judd Farmer 65:216 S 14 '18  
 Real opportunity for feed manufacturers. Coop Manager & F 6:96 F '17  
 Recent development in the science of feeding. J Ag (Quebec) 22:2 Jl '18  
 Relative cost of animal feeds. E. Davenport. Breeder's Gaz 73:110 Ja 17 '18  
 Relative value of certain protein and protein concentrates as supplements to maize gluten. T. B. Osborne and L. B. Mendel. Int R Sci & Prac Ag 9,no 4:476-7 Ap '18  
 Reply to Lyon's feed criticism. R. W. Chapin. Hoard's D 55:1012 Jl 12 '18  
 Roughages and roots. G: E. Brown. Breeder's Gaz 73:259 F 7 '18  
 Saving farm labor by harvesting crops with live stock. J. A. Drake. il Farmers' B 1008: 1-15 '18  
 Scandinavian methods of valuing and using feeding stuffs. J. Wilson. J Dept Ag Ireland 17,no 2:208-17 '17  
 Screenings in mill feeds. J. R. Dymond. Ag Gaz of Canada 4:672-3 Ag '17  
 Second crops for milk and meat. H. L. Blanchard. Western Wash Ag Exp B v 5:30-2 Je '17  
 Selecting supplements for farm feeds. Breeder's Gaz 73:319 F 14 '18  
 Selling high-priced feeds versus feeding them. Prog F 32:775 Jl 14 '17  
 Single food diet and nutritional deficiency. E. Weil and G. Mouriquand. Int R Sci & Prac Ag 7,no 4:549 Ap '16  
 So-called vitamins or food accessories and their importance in the nutrition of animals. F. W. Christensen. N D Ag Exp Spec Food B v 4, no 12 p 331-46 '17  
 Soiling crops and summer silage. W. H. Tomhave. il Field II 26:508-9 Je '16  
 Some comparative feeding values. Prog F 33: 3 Ja 5 '18  
 Some feeding inquiries: analyses of alfalfa. Prog F 31:1327 N 18 '16  
 Some recent investigations in nutrition at the University of Wisconsin. R. Loughlin. J Home Econ 9:546-9 D '17  
 South's big opportunity. H. S. Stabler. il Country Gent 82:1633 O 27 '17  
 Stock-feeding policy. Ag Gaz of Canada 5: 972-4 O '18  
 Study of the rate of passage of food residues through the steer and its influence on digestion coefficients. P. V. Ewing and F. H. Smith. J Ag Research 10:55-63 Jl 9 '17  
 Suggestions on feeding stock. G. E. Day. Ontario Ag Dept B 246:1-23 '17  
 Tankage, peanuts and cottonseed meal compared as feeds. Prog F 32:1231 N 24 '17  
 Theory of feeding animals. J Ag (Quebec) 21:74 N '17  
 Timely topics for feeders. Ohio F 137:6, 34, 100, 132, 163, 212, 255, 296, 420, 491, 532, 652, 710, 738, 763, 814; 138:47, 495, 618, 663 Ja 1-3, 22-F 26, Mr 18, Ap 1-8, My 6, 20-Je 3, 17, Jl 15, N 18, D 23-30 '18  
 Use of energy values in the computation of rations for farm animals. H: P. Armsby. U S Ag B 459:1-31 '16  
 Utilization of farm wastes in feeding live stock. S. H. Ray. Farmers' B 873:1-12 '17  
 Valuation of feeding stuffs. E. Pfeiffer. Int R Sci & Prac Ag 8,no 3:397-400 Mr '17  
 Value of good feeding methods. J: Bower. Hoard's D 54:832 Ja 4 '18  
 Value of protein and starch. O Judd Farmer 60:12 Ja 22 '16  
 Value of the starch equivalent system in modern feeding practice. Int R Sci & Prac Ag 7, no 2:242-3 F '16  
 Values of commercial feeding stuffs based on the net energy. C. W. Holdaway. Va Ag Exp Rep 1915-1916:200-8 '17  
 Velvet beans compared with cottonseed meal for fattening steers; velvet beans, cottonseed meal and corn as feeds for dairy cattle; velvet bean pasture compared with corn and dried blood; velvet bean meal compared with corn for fattening hogs. G: S. Templeton and others. Ala Ag Exp B 198: 103-22 '17  
 War! keep breeding stock, feed cheap roughage; save grain for food! C. Vrooman. Banker-F 4:2 My '17  
 Waste of forage through lack of grazing. Am For 23:748 D '17

**Feeding and feeding stuffs—Continued**

- We must adapt our livestock feeding to the changed conditions. T. Butler. *Prog F* 32: 855 Ag 11 '17
- What chemistry teaches about feeds for animals. F. D. Fuller. *Coop Manager & F* 6:90 JI '17
- What is a balanced ration: how obtained. T. Butler. *Prog F* 31:1427 D 9 '16
- What live stock men are planning. O Judd Farmer 64:3 Ja 26 '18
- Why feed a heavy ration? H. E. Mern. *Ohio F* 138:322 O 7 '16
- Winter care of stock. *J Ag (Quebec)* 19:159 Ja '16
- Winter dairy helps. W. M. Kelly. *Ohio F* 139: 446 Mr 24 '17

*See also* Alfalfa as feed; Calves—Feeding; Cattle—Feeding; Corn (feed); Cows—Feeding; Feed bins; Feeding racks; Feeding stuffs, Proprietary; Forage plants; Forage poisoning; Grazing; Hay; Horses—Feeding; Lambs—Feeding; Poultry—Feeding; Ranges; Sheep—Feeding; Silage; Silos; Swine—Feeding

**Analysis**

- Analyses of commercial feeding stuffs. P. H. Wessels and G. E. Merkle. *R I Ag Exp Inspec B* 12p My '18
- Analyses of feeding stuffs. P. H. Wessels. *R I Ag Exp Inspec B* 16p My '17
- Analyses of feeding stuffs. P. H. Wessels and F. O. Fitts. *R I Ag Exp Inspec B* 12p My '16
- Analysis of feeding-stuffs. B. E. Curry and T. O. Smith. *N H Ag Exp B* 178:1-16 '16; Same. *N H Ag Dept Rep v* 34 '16
- Analysis of feeding stuffs. B. E. Curry and T. O. Smith. *N H Ag Exp B* 184:1-16 '17
- Analysis of licensed commercial feeding stuffs in percentage: 1915. *Wis Ag Exp B* 267:24-55 '16
- Average composition of Florida feeding stuffs. *Fla Ag Dept Quar B v* 27:81-2 Ap '17
- Commercial feeding stuffs. *Ind Ag Exp B* 209:1-342 '17
- Commercial feeding stuffs. J. L. Hills and others. *bibliog Vt Ag Exp B* 197:1-45 '16; Same. (*In Vt Ag Exp Report, 1915-1916*) '16
- Commercial feeding stuffs. J. L. Hills and others. *Vt Ag Exp B* 204:1-39 My '17
- Commercial feeding stuffs. W. J. Jones, jr., and others. *Ind Ag Exp B* 190:1-360 '16
- Commercial feeding stuffs. A. J. Patten and others. *Mich Ag Exp B* 276:1-72 '16; Same. *Mich Ag Bd Rep* 1917:347-416
- Commercial feeding stuffs. A. J. Patten and others. *il Mich Ag Exp B* 279:1-66 '17
- Commercial feeding stuffs, 1915-16. C. D. Woods. *Maine Ag Exp Official Inspec* 79: 53-136 '16
- Commercial feeding stuffs, 1915-16; Texas feed law. B. Youngblood. *Tex Ag Exp B* 194:1-351 '16
- Commercial feeding stuffs, 1916. *Conn State Ag Exp Rep* 1916, pt 3:147-84 '17
- Commercial feeding stuffs, 1916-17. C. D. Woods. *Maine Ag Exp Official Inspec* 84:53-120 '17; Same. *Maine Ag Exp Rep* 1917:53-120
- Commercial feeding stuffs, 1916-17; Texas feed law. *Tex Ag Exp B* 216:1-385 '17
- Commercial feeding stuffs and registrations for 1916. C. S. Cathcart. *N J Ag Exp B* 295: 1-95 '16
- Commercial feeding stuffs and registrations for 1917. C. S. Cathcart. *N J Ag Exp B* 311: 1-100 '17
- Commercial feeds, 1918. J. M. Pickel. *N C Ag Dept B v* 39:1-47 N '18
- Concentrated commercial feeding stuffs. J. D. Turner and H. D. Spears. *Ky Ag Exp B* 203:251-333 '16
- Determination of crude fiber. G. L. Bidwell and G. P. Walton. *Assn Offic Ag Chem J* 2, no 1, pt 1:32-5 My '16
- Effect of time of digestion on the hydrolysis of casein in the presence of starch. J. S. McHargue. *J Ag Research* 12:1-7 Ja 7 '18
- Feed adulteration. C. Cutler. *Assn Office Ag Chem J* 2, no 3, pt 1:123-5 N '16

- Feed inspection and the farmers. W. H. Strowd. *Wis Dairymen's Assn Rep* 1913-1916:223-7 '17
- Feed inspection for 1917. W. H. Strowd and others. *Wis Ag Dept B* 13:1-40 '18
- Feed registration under the Kansas feeding-stuffs law. L. A. Fitz and A. E. Langworthy. *Kan Ag Exp Inspec C* 5:1-63 '17
- Feeding stuff analyses. See quarterly numbers of Florida agricultural department quarterly bulletin
- Feeding stuffs report, 1917. J. W. Kellogg. *Pa Ag Dept B v* 1 (Gen. B. 312):1-297 JI '18
- Fodders and feeding stuffs. (*In Experimental farms, 1916. v. 1, p. 121-5*) 45c '17 Canada Ag
- Foods and feeding stuffs; methods of analysis. *bibliog Assn Offic Ag Chem J* 2, no 2, pt 1:79-119 Ag '16
- How feed inspection helps the farmer. W. H. Strowd. *Wis Ag Exp B* 281:1-56 '17
- Inspection of commercial feedstuffs. P. H. Smith. *Mass Ag Exp Control Series B* 5:1-69 '16
- Inspection of commercial feedstuffs. P. H. Smith. *Mass Ag Exp Control Ser B* 7:1-30 '17
- Inspection of feeding stuffs. *N Y State Ag Exp B* 441:585-691 '17
- Inspection of feeding stuffs (B. 404). *N Y State Ag Exp Rep* 1915:727-840 '16
- Inspection of feeding stuffs, 1915-16. *N Y State Ag Exp B* 420:161-309 '16
- Inspection of feeding stuffs, 1916-17. *N Y State Ag Exp B* 434:141-309 '17
- Mineral content of southern poultry feeds and mineral requirements of growing fowls. B. F. Kaupp. *il J Ag Research* 14:125-34 JI 15 '18
- Report on commercial feeding stuffs 1917. E. M. Bailey. *Conn State Ag Exp B* 206: 449-77 '18
- Report on feed adulteration. C. Cutler. *Assn Offic Ag Chem J* 2, no 1, pt 1:36-8 My '16
- Report on feeds and feeding stuffs. G. L. Bidwell. *Assn Offic Ag Chem J* 2, no 1, pt 1:29-30 My '16
- State chemist's report, 1915; analyses of fertilizers, feed stuffs, food and drugs; rules and regulations. R. E. Rose. *Fla Ag Dept Quar B v* 26:1-194 Ja '16
- State chemist's report, 1916; analyses of fertilizers, feed stuffs, food and drugs; rules and regulations. R. E. Rose. *Fla Ag Dept Quar B v* 27:213 Ja '17
- Table of relative values of some concentrated cattle foods. O. T. Faulkner. *Ag J of India* 12:126-31 Ja '17
- Tabulated analysis of commercial feeding stuffs. *Tenn Ag Dept B* 61p '16

**Bibliography**

- International trade in feeding stuffs; articles received during period from Mar. 31, 1915 to Mar. 31, 1916. *Int R Sci & Prac Ag* 7, no 4:500-10 Ap '16
- International trade in feeding stuffs: bibliography. *Int R Sci & Prac Ag* 8, no 4:527-51 Ap '17

**Composition**

- Composition and digestibility of feeding stuffs grown in Hawaii. M. O. Johnson and K. A. Ching. *Hawaii Ag Exp Press B* 53:1-26 '18
- Nature of the inosite phosphoric acids of some feeding materials. J. B. Rather. *Ark Ag Exp B* 138:1-16 '17
- Nitrogenous constituents of feeding stuffs. H. S. Grindley. *Am Soc Animal Production Pro* 1915-1916:133-41 '17

**Costs**

- Method of calculating economical balanced rations. J. C. Rundles. *U S Ag B* 637:1-18 '18; Summary. *Jersey B* 37:491 Mr 27 '18
- Milk-making machine. E. S. Savage. *il Country Gent* 83:12-13 Ap 6 '18

**Experiments**

- Feeding and other experiments; work of N. J. Fjord. *J. Wilson. J Dept Ag Ireland* 17, no 3: 451-60 '17



**Feeding and feeding stuffs—Experiments—Cont.**

- Feeding experiments on the substitution of protein by definite mixtures of isolated aminoacids. H. H. Mitchell. *Int R Sci & Prac Ag* 9, no 5:589-90 My '18
- Feeding experiments with cattle, sheep, and pigs (County Northumb. Ed. Com. Bul. 23 3-26p. '16). *Exp Sta Record* 38:370 Mr '18
- Growth-promoting properties of foods derived from corn and wheat. C. Voegtlin and C. N. Myers. *bibliog Pub Health Reports* (U.S. Pub. health service, Washington, D.C.) 33: 843-68 My 31 '18
- Methods of experimentation in animal nutrition. *Am Soc Animal Production Pro* 1915-1916:101-11 '17
- Refinement of feeding experiments for milk production by the application of statistical methods. L. A. Maynard and W. I. Myers. *bibliog Cornell Ag Exp B* 397:213-49 '18
- Weak places in the methods used in animal nutrition investigations. J. A. Fries. *Am Soc Animal Production Pro* 1915-1916:54-63 '17

See also Nutrition—Experiments

**Prices**

- Angles of problems confronting feeders. J. G. Imboden. *Breeder's Gaz* 73:758 Ap 11 '18
- Federal rulings on mill feeds. O Judd Farmer 64:553 My 25 '18
- Feed markets are strong. S. Sosland. *Hoard's D* 56:359 O 11 '18
- Feed rules and regulations. *Market News & Exchange* (Ohio ag. dept., Columbus) B v 1, no 40:1-2 S 14 '18
- Government and feed control. *Hoard's D* 55: 989 J 5 '18
- In defense of the feed dealer. C: Staff. *Hoard's D* 55:283 Mr 8 '18
- Investigation in animal nutrition; beef-production. T. L. Haecker. *Minn Ag Exp B* 155:1-31 '16
- Judging feeds by the dollar's worth. C. R. George. *Hoard's D* 55:916 Je 21 '18
- Mill feed regulations; new price relations between commercial mill feeds and wheat. J. F. Bell. 3p *mim* '18 U.S. Food administration, Washington, D.C.; Same. *Jersey B* 37: 271 F 20 '18; Same. *Coop Manager & F* 7:94 Mr '18; Same cond. *Ag Digest* 2:873-4 Mr '18
- Mr Hoover and poultry feeds. *Am P J* 48:1133 D '17
- New feed regulations. *Market News & Exchange* (Ohio ag. dept., Columbus) B v 1, no 46:1-2; v 1, no 47:1-2 O 26-N 2 '18
- Organizing for feed defense. S. Sosland. *Hoard's D* 55:948, 933, 1016; 56:7, 35, 67, 129, 157 Je 28-Jl 12, 26-Ag 9, 23-30 '18
- Price of feed. *Country Gent* 83:36 F 23 '18
- Price of feed at mills. *Rural N Y* 77:367 Mr 9 '18
- Price of wheat mill feeds. F. Rasmussen. *Prac F* 114:299 S 1 '18
- Prices for wheat mill feeds. C: E. Treman. *Rural N Y* 77:1167 O 12 '18
- \* Retail selling prices per ton f.o.b. warehouse. (In Official statement, no. 7, p. 10-11) '18 U.S. Food administration, Washington, D.C.

**Sampling**

- How to legally draw, pack and transmit samples of fertilizers and commercial feed stuffs for analysis by the state laboratory. R. E. Rose. *Fla Ag Dept Quar B* v 27:59-60 Jl '17
- Regulations governing the taking and forwarding of samples of commercial fertilizer and commercial feeding stuff to the commissioner of agriculture for analysis by the state chemist. *Fla Ag Dept Quar B* v 28:72-9 Jl '18

**Standards**

- Modified Wolff-Lehman feeding standards. F. B. Morrison. *Am Soc Animal Production Pro* 1915-1916:64-9 '17
- Pig versus the feeding standards. J: M. Evvard. *Am Soc Animal Production Pro* 1915-1916:36-48, 142-57 '17
- Poultry feeding standards. *Pa Ag Dept B* 306: 1-16 '18

**Terminology**

- Feeding terms, some simple explanations. B. A. Barr. *J Dept Ag Victoria* 14:409-12 Jl '16; Same cond. *Ag J of India* 12:315-19 Ap '17

**Acorns**

- Acorns as food for poultry. H. T. Cranfield. *J Bd Ag* 25:573-6 Ag '18
- Feeding value of acorns. G. W. Carver. *Rural N Y* 77:1398 D 21 '18
- Use of acorns for stock feeding. *J Bd Ag* 24: 986-7 D '17

**Alfalfa**

See Alfalfa as feed

**Apples**

- Apple pomace. J. T. Bartlett. *Prac F* 113:334 O 1 '17
- Apple pomace and its feeding value. *Rural N Y* 76:1104 S 22 '17
- Apple pomace as stock food. J. T. Bartlett. *Rural N Y* 76:843 Je 30 '17
- Apple pomace for milch cows. E. I. Farrington. *Country Life* 32:104 O '17
- Feeding value of apple pomace. J. B. Lindsey. *Mass Ag Ext C* 10 4p '17
- Value of cider apples and pomace as food for farm stock. B. T. B. Barker and B. N. Wale. *J Bd Ag* 24:530-7 Ag '17

**Bagasse**

- Sugar cane bagasse. *Hoard's D* 53:974 Jl 13 '17

**Barley**

- Barley as a substitute for corn. J. W. Weston. *Hoard's D* 53:12 Ja 26 '17
- Value of the barley for cows fed alfalfa; experiments in California. G. H. True and others. *Int R Sci & Prac Ag* 7, no 3:402-3 Mr '16

**Beans**

- Cull beans for dairy cows. C. C. Lillie. *Hoard's D* 55:969 Je 28 '18
- Experience in feeding and cooking beans. E. C. Smith. *Hoard's D* 51:127 F 11 '16
- Rusted beans for seed and feed. O. Lee, jr. *Rural N Y* 75:184 F 5 '16

**Beets**

- Beet for sheep; feeding value of silver beet. *J Dept Ag Victoria* 16:53-4 Ja '18
- Beet growers' winter job. F. L. Clark. *Am Sheep B & W* 38:182 Mr '18
- Beet pulp for succulence. *Country Gent* 81: 517 Mr 4 '16
- Beet pulp vs. corn silage. R. E. Hundertmark. *Hoard's D* 51:805 Je 9 '16
- Beets and mangels compared with silage for milk production. C. C. Hayden. *Ohio Ag Exp B* v 1:49-53 F '16
- Feeding beet pulp to dairy cows. T. Butler. *Prog F* 32:311 Mr 10 '17
- Feeding sheep on beet pulp. R. Wood. *il Nat Wool Grower* 7:11-14 Mr '17
- Feeding value of the beet tops and pulp. *Wallaces' F* 43:1474 O 11 '18
- Lactic acid bacteria in silage making. F. B. Morrison. *Hoard's D* 52:116 Ag 18 '16
- Silage vs. sugar beets. *Wallaces' F* 41:744 My 12 '16
- Stock-raising is advised for sugar-beet growers. *Weekly N L* 6:11 S 11 '18
- Sugar beets. *Better Fruit* 11:28 S '16
- Wet beet pulp as a dairy feed. L. W. Hillam. *Hoard's D* 55:344 Mr 15 '18; Same cond. *Kimball's D F* 16:893 N 15 '18

**Bone meal**

- More about bone meal for abortion. *Hoard's D* 51:18 Ja 28 '16

**Bran**

- Chopped alfalfa vs. bran in grain ration for dairy cows. W. P. Snyder and E. A. Burnett. *il Neb Ag Exp B* 164:1-11 '18; Abstract. *Wallaces' F* 43:1648 N 8 '18; Excerpt. *Hoard's D* 56:485 N 1 '18
- Cows prove alfalfa superior to bran. *Hoard's D* 56:485 N 1 '18
- Feeding experience with bran. E. W. Ferguson, jr. *Wallaces' F* 41:1534 N 24 '16

**Feeding and feeding stuffs—Bran—Continued**

Where is the bran? S. Sosland. Hoard's D 56:581 N 22 '18

**Buckwheat**

Fagopyrismus (buckwheat poisoning) and similar affections. E. A. Bruce. Am Vet M Assn J 52:189-94 N '17

**Buttermilk**

See Feeding and feeding stuffs—Milk

**Cabbages**

Food value of the waste leaves of different varieties of cabbage; investigations in Holland. J. J. O. De Vries. Int R Sci & Prac Ag 9,no 1:75-7 Ja '18

**Cactus**

Dairying in the cactus country. H. W. Collingwood. il Country Life 29:36-7 Ja '16  
Influence of prickly pear upon percentage of butterfat. T. E. Woodward. Hoard's D 52:579 N 17 '16  
Prickly-pears as a feed for dairy cows. T. E. Woodward and others. il J Ag Research 4:405-50 Ag '15  
Spineless cactus for dairy cows. F. W. Woll. Hoard's D 52:914 Ja 19 '17  
Value of prickly-pear as a cattle feed: experiments made at the prickly-pear feeding station at Wallumbilla, Queensland, Australia. F. Smith. Int R Sci & Prac Ag 8,no 2:272-3 F '17

**Castor bean meal**

Castor bean meal feed for pigs. J Bd Ag 24:1444-6 Mr '18

**Clover**

Chemistry of sweet-clover silage in comparison with alfalfa silage. C. O. Swanson and E. L. Tague. J Ag Research 15:113-32 O 14 '18  
Clover for chickens. Country Gent 81:170 Ja 22 '16  
Clover for poultry. Am P J 48:885 Ag '17  
Clover or alfalfa in the silo. F. C. Minkler. Rural N Y 75:1027 Jl 29 '16  
Clover poisoning. D. F. Luckey. Mo Ag Bd Yearbook 1916:466-70  
Clover vs. alfalfa for milk production. C. C. Hayden. Ohio Ag Exp B 327:1-36 '18; Abstract. Ohio Ag Exp B v 3:184-6 Je '18  
Energy values of red-clover hay and maize meal. H. P. Armsby and others. J Ag Research 7:379-87 N 27 '16  
Handling live stock on sweet clover. Hoard's D 54:58 Ag 10 '17  
How to feed the dairy cow. H. C. Van Pelt. Kimball's D F 14:485, 510 Ag 1-15 '16  
Studies on the composition and nutritive value of clover hay and clover silage in Montana. E. Burke. Mont Ag Exp B 117:59-72 '17  
Sweet clover a coming pasture and fodder crop. Am Sheep B & W 36:274-5 My '16  
Sweet clover for pasture. W. E. Bowers. Hoard's D 53:598 Ap 27 '17; Same cond. Country Gent 81:790 Ap 8 '16  
Sweet-clover pasture. Weekly N L 4:4 Jl 11 '17  
Sweet clover: utilization. H. S. Coe. il Farmers' B 820:1-32 '17; Same cond. Nat Wool Grower 7:52 Je '17; Same cond. Hoard's D 53:825 Je 8 '17; Excerpt. Wallaces' F 42:1093 Ag 3 '17  
Value of clover as stock feed. D. P. Witter. N Y Ag Dept B 87:2875-7 S '16

**Coconut**

Feeding coconut cake on grass. K. J. J. MacKenzie and E. H. Powell. J Ed Ag 23:117-23 My '16  
Feeding value of coconut meal. T. Butler. Prog F 33:583 My 11 '18

**Corn**

See Corn (feed)

**Cottonseed products**

About cottonseed cake. F. T. Collins. Nat Wool Grower 8:15 O '18

Acidosis and cotton seed meal injury. C. A. Wells and P. V. Ewing. bibliog il Ga Ag Exp B 119:35-64 '16

Associative digestibility of corn silage and cottonseed meal in steer rations: pt 2. P. V. Ewing and others. il Ga Ag Exp B 125:151-64 '17

Beriberi and cotton seed poisoning in pigs. G. M. Rommel and E. B. Vedder. J Ag Research 5:489-93 D 13 '15

Changes in composition of butter fat produced by feeding cottonseed oil. F. H. Smith and others. bibliog Ga Ag Exp B 122:95-111 '16

Comparative toxicity of cottonseed products. W. A. Withers and F. E. Carruth. bibliog J Ag Research 14:425-52 S 2 '18

Composition and market qualities of butter when corn silage is fed with cottonseed meal. L. S. Palmer and D. P. Crockett. J Dairy Sci 1:235-45 S '17

Cottonseed for horses. Breeder's Gaz 71:777 Ap 12 '17

Cottonseed meal: a good feed for laying hens. E. P. Clayton. Miss Ag Exp B 175:1-7 '16

Cottonseed meal and silage. Hoard's D 54:38 Ag 3 '17

Cotton seed meal as a feed for hogs. J. C. Burns. Am Soc Animal Production Pro 1915-1916:15-20 '17

Cottonseed meal cheapens ration for work animals. D. T. Gray. Prog F 32:1012 S 29 '17

Cottonseed meal compared with velvet beans for fattening steers. G. S. Templeton and E. Gibbens. il Ala Ag Exp B 192:135-41 '16

Cottonseed meal for cows. C. T. Bray. Kimball's D F 13:811 Ja 1 '16

Cotton seed meal proves a good substitute for beef scraps. E. P. Clayton. il Reliable P J 22:1239+ Ja '16

Effects of feeding cotton seed and its products to swine. G. A. Roberts. Am Vet M Assn J 49:12-17 Ap '16

Effects of feeding cottonseed products on the composition and properties of butter. C. H. Eckles and L. S. Palmer. bibliog Mo Ag Exp Research B 27:1-44 '16

Feeding cottonseed meal to fattening hogs. T. Butler. Prog F 33:1183 N 2 '18

Feeding cottonseed meal to hogs. T. Butler. Prog F 32:579 My 12 '17

Feeding cottonseed meal to poultry. J. K. Morrison. Prog F 31:143 Ja 29 '16

Feeding of cottonseed products to dairy cows. Prog F 33:235 F 23 '18

Feeding value of cottonseed hulls. T. Butler. Prog F 32:1317 D 29 '17

Gossypol, the toxic substance in cottonseed. W. A. Withers and F. E. Carruth. bibliog il J Ag Research 12:83-102 Ja 14 '18

Gossypol, the toxic substance in cottonseed meal. W. A. Withers and F. E. Carruth. bibliog il J Ag Research 5:261-88 N 15 '15

Iron as an antidote to cottonseed meal injury. W. A. Withers and F. E. Carruth. (J. Biol. Chem., 32,no. 2 245-57p. '17). Exp Sta Record 38,no 3:282-3 '18

Methods for approximating the relative toxicity of cottonseed products. F. E. Carruth. Int R Sci & Prac Ag 9,no 1:74-5 Ja '18

Protein in 7 per cent cottonseed meal. Prog F 33:63 Ja 19 '18

Reasonable feeding of cottonseed meal will not injure horses. Prog F 32:671 Je 9 '17

Soy bean meal and cottonseed meal compared. T. Butler. Prog F 31:751 Je 10 '16

Studies of cotton-seed as food. Ag Gaz of Canada 5:1103-4 N '18

Study of the effect of cottonseed meal vs. beef scrap upon the egg production, fertility and vitality of poultry. B. A. Ahrens. Okla Ag Exp B 112:1-20 '17

**Cowpeas**

Hogging down soy beans and cowpeas. E. S. Good and M. J. Smith. il Ky Ag Exp B 201:139-49 '16

**Feterita**

Deserving new dairy feed. M. Coverdell. Jersey B 35:806 My 24 '16



Feeding and feeding stuffs—Continued

Fish meal

- Chemical composition of green sprouted oats; fish wastes for feeding animals. J. M. Bartlett. *Maine Ag Exp B* 266:291-2 '17; Same. *Maine Ag Exp Rep* 1917:291-2 '18
- Conservation of a neglected source of indirect food supply; with discussion. J. B. Fielding. (*In Report*, 1917, p. 106-18) il '17 Canada Comm. of conservation, Ottawa
- Fish meal as a feed for swine. F. G. Ashbrook. *U S Ag B* 610:1-9 '17
- Fish meal as food for pigs. C. Crowther. *J Bd Ag* 23:27-33 Ap '16; Same cond. *Int R Sci & Prac Ag* 7,no 12:1801-4 D '16
- Fish meal; its use as a stock and poultry food. F. C. Weber. *U S Ag B* 378:1-21 '16; Same cond. *Am Fert* 45:41 O 14 '16
- Microscopic analysis of meat and fish meals. R. Lucks. *Int R Sci & Prac Ag* 7,no 3:433 Mr '16

Fruit

- Value of cider apples, perry pears, and their respective pomace as food for farm stock. *Int R Sci & Prac Ag* 9,no 1:78-80 Ja '18

Garbage

- Army waste makes pork. C. C. Mason. il *Country Gent* 81:13 J 13 '18
- British cities build municipal garbage piggeries. *Eng News-Record* (10th av at 36th st. N. Y. 15c) 79:880 N 8 '17
- Disposal of city garbage by feeding to hogs. F. G. Ashbrook and J. D. Bebout. *U S Ag C* 80:1-8 '17
- Feed garbage to hogs. *Weekly N L* 5:6 D 12 '17
- Feeding city garbage to hogs; information and instructions furnished by the U.S. Department of agriculture. plans Municipal J (243 W. 39th st. N.Y. 10c) 44:206-8 Mr 9 '18
- Feeding garbage to hogs. J. E. Downing. il *Ga Ag Coll (Ext)* C 58:1-8 '17
- Feeding hogs kitchen slops or garbage. T. Butler. *Prog F* 33:471 Ap 13 '18
- Feeding pigs on kitchen waste. *J Bd Ag* 24: 1107-9 Ja '18
- Food conservation through utilization of garbage waste. G. R. Bascom and B. A. Beach. (*Ext. B. Serial no. 900, gen. ser. 690*) 10p '18 Univ. of Wis., Madison
- Garbage as food for swine. C. V. Chapin. *Ohio Pub Health J (Columbus)* 8:416-19 S '17
- Garbage disposal by incineration, reduction and feeding to swine. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr) 48: 211-14 S 12 '17
- Garbage-fed poultry. *N Y Prod R* 46:182 My 29 '18
- Garbage for animal feeding. *Coop Manager & F* 7:79 Ap '18
- Garbage for hogs; possibility of hog cholera being transmitted. *Weekly N L* 5:1 Mr 27 '18
- Garbage for swine. J. M. Evvard. *Breeder's Gaz* 73:757 Ap 11 '18
- Garbage utilization with particular reference to utilization by feeding. 21p '18 U. S. Food administration, Washington, D.C.
- Hog in relation to municipal garbage. C. B. Palmer. *Am Vet M Assn J* 54:227-30 D '18
- How Worcester is helping to conserve the national food supply. F. Bonnet, jr. il *Am City—City ed (Tribune bldg., N.Y. 35c)* 17:395-400 N '17
- Increasing production via garbage feeding. *Swine World* 5:10 F '18
- Municipal garbage goes into the growing of meat. *Weekly N L* 5:3 Ag 15 '17
- Municipal piggery profitable in Lansing. *Mich. Municipal J* (243 W. 39th st., N.Y. 10c) 43: 206-7 Ag 30 '17
- Municipally collected garbage fed to hogs. F. G. Hall. *Am City (Tribune bldg., N.Y. 35c)* 17:255-6 S '17
- New piggery in Topeka utilizes garbage. il *Eng News-Record* (10th av at 36th st. N.Y. 15c) 79:890-1 N 8 '17
- Pig as a garbage reduction plant. il *Am City—City ed (Tribune bldg., N.Y. 35c)* 19:87-92 Ag '18

- Pork—a city's by-product. H. T. Morgan. il *Country Gent* 81:313 F 12 '16
- Supplementing garbage for swine. J. M. Evvard. *Breeder's Gaz* 72:936 N 22 '17
- Turning garbage into dollars; advantages of hog raising. *Municipal J* (243 W. 39th st. N.Y. 10c) 44:394-5 My 11 '18
- Use the garbage pail. *Banker-F* 5:7 S '18
- Value of a nitrogenous supplement for garbage fed pigs. R. W. Duck. *N Y Ag Dept B* 94:47-51 Ap '17
- What a city planning a garbage piggery should know. S. A. Greeley. *Eng News-Record* (10th av. at 36th st., N.Y. 15c) 78:210-11 Ap 26 '17
- Wichita, Kansas, shares profits from feeding garbage to hogs. *Eng News-Record* (10th av at 36th st. N.Y. 15c) 80:1180-2 Je 20 '18

Grain

- Is lysine the limiting amino-acid in the proteins of wheat, maize or oats? E. V. McCollum. *Int R Sci & Prac Ag* 8,no 6:901-2 Je '17
- Output of mill feeds. *Jersey B* 37:1843 O 30 '18
- Saving a poor grain crop by buying sheep to glean the stubble. J. H. Shepperd. il *System on the Farm* 1:66 Ap '17

Hay

- Alfalfa hay versus timothy hay for dairy cows. J. H. Weghorst. *Purdue Ag* 11:40-1 F '17
- Can I feed high priced hay to my cow? F. R. Cammack. *Jersey B* 37:1499 S 18 '18
- Hay-fed steer. E. L. Potter. *Breeder's Gaz* 71:328 F 15 '17
- Hays that horses like. *Country Life* 32:78 S '17
- How to feed the dairy cow; timothy hay. H. G. Van Pelt. *Kimball's D F* 14:102 F 15 '16
- Influence of date of cutting on the food value of hay; experiments carried out in Denmark. I. Kaisten and R. R. Kristensen. *Int R Sci & Prac Ag* 9,no 2:209-11 F '18
- Leguminous hays best for dairy cattle. *Fla Ag Dept Quar B v* 27:27-9 J 1 '17
- Palatability of farm grasses. C. G. Williams. *Ohio Ag Exp B v* 1:70-2 Mr '16
- See also Alfalfa as feed

Horse-chestnuts

- Feeding value of the horse-chestnut. E. J. Crane. *Ohio F* 138:103 Ag 5 '16

Horse flesh

- Horse meat proves to be valuable poultry feed. W. T. Wittman. *Reliable P J* 25:675 O '18

Insects

- Study of the proteins of certain insects with reference to their value as food for poultry. J. S. McHargue. *biolog J Ag Research* 10:633-7 S 17 '17

Iodine

- Cause and prevention of hairless pigs. H. Welch. il *map Mont Ag Exp C* 71:37-47 '17
- Hairless pigs—the cause and remedy (abstracts of *Wis Ag Exp B* 297). E. B. Hart and H. Steenbock. *Wallaces' F* 43:1520 O 18 '18; *Hoard's D* 56:511 N 8 '18; *O Judd Farmer* 65:428 N 9 '18; *Ohio F* 142:527 N 30 '18
- Hairlessness and goiter in new-born domestic animals. H. Welch. il *map Mont Ag Exp B* 119:83-104 '17; *Abstract. Am Vet M Assn J* 53:523-6 J 1 '18

Mangels

- Mangel wurzel. A. H. De Graff. *Hoard's D* 53:582 Ap 20 '17
- Mangels for chicks. J. R. Kessler. il *Country Gent* 81:122 Ja 15 '16
- Mangels for swine. J. M. Hunter. *Rural N Y* 76:1188 O 13 '17
- Mangels vs. sprouted oats. R. J. Holliday. *Prac F* 112:73 F 15 '16
- Mangolds or Swede turnips for dairy cows. J. J. Dunne. *J Bd Ag* 23:58-65 Ap '16

## Feeding and feeding stuffs—Continued

## Meat meal

Microscopic analysis of meat and fish meals. R. Lucks. *Int R Sci & Prac Ag* 7,no 3:433 Mr '16

## Milk

Bottle milk for orphan lambs. *Nat Wool Grower* 7:51 S '17  
Buttermilk as a poultry food. M. K. Boyer. *Am P Advocate* 26:402 My '18  
Buttermilk for swine. J. M. Evvard. *Breeder's Gaz* 71:628 Mr 22 '17  
Creameries and buttermilk hogs. H. T. Morgan. *Country Gent* 81:1789 O 7 '16  
Dairy by-products versus tankage for fattening swine. H. E. Dvorachek. *Ark Ag Exp* C 38 4p '18  
Feeding experiments on young pigs with skim milk supplemented by cream substitutes of varying protein content. *Int R Sci & Prac Ag* 7,no 1:108-10 Ja '16  
Good feed to let alone. T. Butler. *Prog F* 33:659 Je 1 '18  
How to feed skim milk to pigs and calves. T. Butler. *Prog F* 33:707 Je 15 '18  
Influence of feeding with milk rich in carbohydrates (diapharinised) and milk rich in fat (emulsion milk) of varying protein content, on the composition of young pigs. O. Wellman. *Int R Sci & Prac Ag* 7,no 11:1626-9 N '16  
Milk the cheapest animal food. A. J. Reed. *Prog F* 32:696 Je 16 '17  
Pasteurization of skim milk and whey as food for calves. V. A. Moore. *bibliog N Y Ag Dept B* 81:1780-97 Mr '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1780-97 '17; Same. *Am Vet M Assn J* 49:365-80 Je '16  
Skimmilk and calf rearing. T. L. Haecker. *J Ag (Quebec)* 21:xv Je '18  
Skim milk and milk substitutes for calf feeding. O. F. Hunziker and R. E. Caldwell. *Il Ind Ag Exp B* 193:1-104 '16; Excerpts with conclusions. *Am Soc Animal Production Pro* 1915-1916:21-32 '17; Summary. *Hoard's D* 53:10 Ja 26 '17  
Skimmilk for pigs and calves. W. M. Kelly. *Ohio F* 141:461 Mr 30 '18  
Sour milk for chicken feeding. H. L. Kempster. *Mo Ag Exp C* 79:1-4 '16  
Studies of the values of different grades of milk in infant feeding. R. M. Washburn and C. H. Jones. *bibliog il Vt Ag Exp B* 195:1-134 '16; Same. *(Un Vt Ag Exp Report, 1915-1916)* '16; Same cond. (Popular ed with title: Value of different grades of milk in infant feeding). *B* 201:1-32 '16  
Value of the cream separator to the farmer. R. A. Lamson. *Purdue Ag* 12:93 N '17

## Millet

Silage and labor. B. G. Southwick. *Rural N Y* 77:498 Mr 30 '18

## Molasses

Feeding value of molasses. F. B. Hills. *Prac F* 112:sup6 F 15 '16  
How to feed the dairy cow. H. G. Van Pelt. *Kimball's D F* 14:712, 740 N 1-15 '16  
Molasses for farm stock. J. B. Lindsey. *Mass Ag Ext C* 9:1-4 '16  
Use of sugar cane molasses. *Kimball's D F* 16:612 O 15 '18

## Nuts

Acorns and beechnuts as food for cattle. *Int R Sci & Prac Ag* 9,no 1:77-8 Ja '18  
Fatal results from feeding nuts to live stock. *Scientific Am* (233 Broadway, N.Y. 10c) 118:59 Ja 12 '18

## Oats

Boiled oats as substitute for wheat. W. T. Wittman. *Reliable P J* 25:854 D '18  
Chemical composition of green sprouted oats. J. M. Bartlett. *Maine Ag Exp B* 266:285-90 '17; Same. *Maine Ag Exp Rep* 1917:285-90  
Disease resembling forage poisoning in horses and mules. R. Graham and others. *Am Vet M Assn J* 48:574-90 F '16  
Mangels vs. sprouted oats. R. J. Holliday. *Prac F* 112:73 F 15 '16

Nature of the dietary deficiencies of the oat kernel. E. V. McCollum and others. *Int R Sci & Prac Ag* 9,no 5:587-9 My '18  
Shoup oat sprouter. Mr and Mrs G. R. Shoup. *il Western Wash Ag Exp B v* 4:12-20 S '16  
Silage made from oats and tares as a food for milking-cows. A. W. Oldershaw. *J Bd Ag* 23:224-9 Je '16  
Sprouted oats profitable. E. W. Gage. *Ohio F* 141:26 Ja 5 '18  
Sprouting oats for hens. T. F. McGrew. *Country Gent* 81:214 Ja 29 '16

## Oil cakes

Comparative digestibility of palm kernel cake, extracted palm kernel meal and undecorticated cottonseed cake. C. Crowther and H. E. Woodman. *il J Ag Sci* 8:429-47 D '17  
Comparative keeping qualities of palm kernel, coconut, ground-nut and other oil-cakes. W. Godden. *J Ag Sci* 8:419-28 D '17  
See also Feeding and feeding stuffs—Palm kernel cakes

## Palm kernel cakes

Cause and prevention of rancidity in palm nut kernel cake. R. B. Calder. *J Ag Sci* 7:470-2 Ap '16  
Influence of palm-kernel cake on the production of milk and butter. C. Crowther. *bibliog J Bd Ag* 23:305-20 JI '16  
Influence of palm kernel cake upon the composition of milk-fat. C. Crowther and H. Woodhouse. *J Ag Sci* 8:451-4 D '17  
Nut oil industry. *N Y Prod R* 42:590 Ag 2 '16  
Palm kernel cake; a summary of investigations made in the University of Leeds. *J Bd Ag* 23:734-49 N '16; Abstract. *Int R Sci & Prac Ag* 8,no 1:99-102 Ja '17  
Palm kernel cake and meal as food for pigs. C. Crowther. *J Bd Ag* 23:850-9 D '16  
Palm kernels and palm-kernel cake. *J Bd Ag* 23:363-6 JI '16  
Palm-nut kernel cake. *J Bd Ag* 22:998-1001 Ja '16

## Peanuts

Employment of ground-nut cake in the feeding of livestock. F. Heim. *Int R Sci & Prac Ag* 8,no 5:763-6 My '17  
Feeding peanuts in Texas. *Nat Wool Grower* 7:25 My '17  
Influence of peanuts and rice bran on the quality of pork. L. B. Burk. *Tex Ag Exp B* 224:1-14 '18  
More about feeding peanuts to hogs compared with selling the nuts. T. Butler. *Prog F* 33:343 Mr 16 '18  
Peanut cake as a dairy feed. C. A. Whittle. *Hoard's D* 51:674 My 12 '16  
Peanut meal and ground whole pressed peanuts for hogs. L. B. Burk. *Tex Ag Exp B* 201:1-9 '16  
Peanut meal possibilities. C. A. Whittle. *Hoard's D* 52:502 N 3 '16  
Peanuts and pigs. *Tex Ag Ext B B* 17:1-18 '16  
Peanuts as hog feed. *Va Ag Dept B* 115:155-6 '17; Same. *Weekly N L* 4:6 Ja 3 '17  
Plant peanuts to make cheap pork. T. E. Browne. *Prog F* 33:319 Mr 9 '18

## Peas

Pea-cannery refuse. M. Rosby. *il Country Gent* 81:1403 JI 22 '16

## Peat

Is peat a stock feed? A. C. McCandlish. *Hoard's D* 56:6 JI 26 '18

## Potatoes

Arrêté n. 5149 concernant l'emploi des pommes de terre comme aliments du bétail en Allemagne. *Int Yearbook Ag Leg* 1916:245-7 '17  
Experiments in feeding milch cows with potatoes from silo. *Int R Sci & Prac Ag* 7,no 1: 104-5 Ja '16  
Feeding dried pressed potatoes to swine. F. G. Ashbrook and R. E. Gongwer. *il U S Ag B* 596:1-10 '17; Abstract. *Coop Manager & F* 7:82 Ap '18  
Feeding milch cows with potatoes from silos. *Creamery* 5:36 Je '17



**Feeding and feeding stuffs—Potatoes—Cont.**

- Feeding potatoes. Coop Manager & F 7:89-90 Ja '18  
 Irish and sweet potatoes as feeds. T. Butler. Prog F 33:1247 N 16 '18  
 Potatoes as hog feed. Weekly N L 5:7 O 3 '17  
 Potatoes for calves. J. T. McKim. Hoard's D 51:806 Je 9 '16

**Pumpkins**

- Composition, digestibility and feeding value of pumpkins. J. B. Lindsey. Mass Ag Exp B 174:55-71 '17  
 Field-pumpkins; Wanganui experience. J. W. Deem. J Ag New Zealand 17:220-1 O '18  
 Pumpkin-growing for sheep. A. J. Faulkner. J Ag New Zealand 13:266-8 O '16  
 Stolen crop. J. W. Ingham. Hoard's D 52:167 S 1 '16

**Rice**

- By-products of the decortication of rice (pula vergine) in the feeding of working oxen; experiments in Italy. A. Pirocchi. Int R Sci & Prac Ag 8,no 10:1387-9 O '17  
 Influence of peanuts and rice bran on the quality of pork. L. B. Burk. Tex Ag Exp B 224:1-14 '18  
 Rice hulls, deleterious and unwholesome—prohibited in stock feed sold in Florida. R. E. Rose. Fla Ag Dept Quar B v 28:67-70 Jl '18  
 Soft pork from rice bran. H. E. Dvorachek and H. A. Sandhouse. Ark Ag Exp B 142:1-8 '18

**Roots**

- Root crops; high price of grain makes healthful roughage more essential than ever. D. S. Blair. Il Field Il 28:242-3+ Ap '18

**Rutabagas**

- Mangolds or Swede turnips for dairy cows. J. J. Dunne. J Bd Ag 23:58-65 Ap '16

**Rye**

- Rye for cover. E. E. Miller. Country Gent 81:1552 Ag 19 '16

**Seaweed**

- Utilization of seaweed for feeding of horses. (Commerce Reports no. 82) p 108-9 (Ap 8) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.; Same. Am Vet M Assn J 53:410-11 Je '18

**Sorghum**

- Comparative feeding value of sorghum silage. T. Butler. Prog F 33:1327 D 7 '18  
 Feeding of grain sorghums to live stock. G. A. Scott. bibliog il Farmers' B 724:1-15 '16  
 Poisoning of stock by sorghum plant. Hoard's D 51:186 F 25 '16  
 Saccharine and non-saccharine sorghum. H. G. Van Pelt. Kimball's D F 14:382 Je 1 '16  
 Sorghum bagasse silage. Hoard's D 56:195 S 6 '18  
 Sorghum crops for silage. J. B. Fitch. Kimball's D F 15:233 Ap 1 '17  
 Sorghum grains versus corn for fattening swine. H. E. Dvorachek and H. A. Sandhouse. Ark Ag Exp C 34 4p n.d.  
 Sorghums—their use as forage and grain crops in New York. H. N. Vinall. Il N Y Ag Dept B 87:2832-53 S '16  
 Utilization of feed by range steers of different ages; alfalfa hay and milo maize meal. F. W. Christensen and others. Il N M Ag Exp B 103:1-117 '16  
 Utilization of grain sorghum in meat production. W. A. Cochel. Am Soc Animal Production Pro 1915-1916:9-14 '17  
 Utilizing the sorghums. T. F. Hunt. Cal Ag Exp C 187:1-7 '17  
 Veterinary problems; sorghum poisoning—feeding frosted forage. Prog F 33:1363 D 14 '18

**Soybeans**

- Corn and soy bean silage. H. G. Van Pelt. Kimball's D F 14:185, 272 Mr 15, Ap 15 '16

- Corn and soy beans compared as feeds. Prog F 33:1023 S 21 '18  
 Dry brood sows on soy bean pasture. D. T. Gray. Prog F 32:254 F 24 '17  
 Extracted soya meal poisoning; abstracts. S. Stockman. J Bd Ag 23:691-2 O '16; Am Vet M Assn J 50:286-9 D '16  
 Hogging down soy beans and cowpeas. E. S. Good and M. J. Smith. Il Ky Ag Exp B 201:139-49 '16  
 How much meat will soy beans make? il O Judd Farmer 65:140 Ag 24 '18  
 How to feed the dairy cow. H. G. Van Pelt. Kimball's D F 14:541 S 1 '16  
 Legume crops ensiled with corn taint milk? J. L. Justice. Ohio F 137:817 Je 17 '16  
 Nutritive value of the soy bean. A. L. Daniels and N. B. Nicholls. Int R Sci & Prac Ag 9,no 1:15-16 Ja '18  
 Soybean hay and feeding costs. S. B. Stowe. Ohio F 140:427 N 10 '17  
 Soy bean meal and cottonseed meal compared. T. Butler. Prog F 31:751 Je 10 '16  
 Soybeans as a protein crop. C. C. Hayden. Ohio F 139:516 Ap 7 '17  
 Soybeans for hay. J. McQueen. Ohio F 137:647 My 6 '16  
 Study of soy bean hay. A. C. Whittier. Del Ag Exp B 112:1-18 '16  
 Toxicity of soya beans. Am Vet M Assn J 50:286-9 D '16  
 Utilizing soybean vines. J. L. Justice. Ohio F 138:514 N 25 '16  
 War pork on soy beans. F. A. Hayes. Hoard's D 56:713 D 13 '18

**Straw**

- Feeding value of straw. il Ag Gaz of Canada 3:781-4 S '16  
 How to feed the dairy cow; straw. H. G. Van Pelt. Kimball's D F 14:144 Mr 1 '16  
 Investigations into factors affecting the handling of wheat hay, including a study of its digestibility. A. I. Perkins and others. Int R Sci & Prac Ag 7,no 9:1287-9 S '16  
 Making straw palatable. Wallaces' F 41:525 Mr 31 '16  
 Meat situation in the United States. pt 4, Utilization and efficiency of feed stuffs. W. F. Ward and S. H. Ray. U S Ag Report 112:9-13 '16  
 Straw as feed. F. G. King. il Country Gent 82:871 My 12 '17  
 Straw concentrate in Germany. J Bd Ag 23:274 Je '16

**Sudan grass**

- Composition and digestibility of Sudan grass hay. W. G. Gaessler and A. C. McCandlish. bibliog la Ag Exp Research B 46:67-75 '18  
 Sudan grass as a dairy feed. M. Coverdell. Kimball's D F 15:134 Mr 1 '17  
 Sudan grass silage. C. K. Francis and W. G. Friedemann. il Okla Ag Exp B 115:1-8 '17; Abstract. Rural N Y 76:926 Jl 28 '17; Abstract. Wallaces' F 42:1111 Ag 10 '17

**Sunflowers**

- New forage plant. F. B. Linfield. il J Heredity 9:135-8 Mr '18; Same cond. il Rural N Y 77:667 My 11 '18  
 Russian sunflowers for silage. il Hoard's D 55:511 Ap 12 '18  
 Sunflower silage for dairy cows; a preliminary report. C. N. Arnett and O. Tretsven. Mont Ag Exp B 118:75-80 '17  
 Sunflowers for silage. C. M. Reed. Ohio F 142:47 Jl 20 '18

**Tankage**

- Dairy by-products versus tankage for fattening swine. H. E. Dvorachek. Ark Ag Exp C 38 4p '18  
 Economy of \$110 tankage for hogs. J. R. Wiley. il Ohio F 142:424 N 2 '18

**Tepary beans**

- Feeding tepary beans to hogs. Ariz Ag Exp Rep 1916:286-8 '16

**Turnips**

- Feeding-off root-crops in the South; need for supplementary dry fodder. W. J. McCulloch. J Ag New Zealand 14:216-19 Mr '17

## Feeding and feeding stuffs—Continued

## Vegetable ivory

Chemical composition, digestibility and feeding value of vegetable-ivory meal. C. L. Beals and J. B. Lindsey. bibliog J Ag Research 7:301-20 N 13 '16; Abstracts. Int R Sci & Prac Ag 8,no 3:406-9 Mr '17; Am Soc Animal Production Pro 1915-1916:260-6 '17

## Velvet beans

Cottonseed meal compared with velvet beans for fattening steers. G. S. Templeton and E. Gibbens. il Ala Ag Exp B 192:135-41 '16  
Crop that's all velvet. H. S. Stabler. il Country Gent 82:1820+ N 24 '17  
Digestibility of corn silage, velvet-bean meal, and alfalfa hay when fed singly and in combinations. P. V. Ewing and F. H. Smith. J Ag Research 13:611-18 Je 17 '18  
Feeding value of velvet beans. J. F. Duggar. Prog F 32:98 Ja 27 '17  
Feeding value of velvet beans. J. F. Duggar. Prog F 33:354 Mr 16 '18  
Feeding velvet beans. Weekly N L 5:2 D 26 '17  
Feeding velvet beans in Alabama. L. A. Niven. Hoard's D 56:661 D 6 '18  
Feeding velvet beans to cattle. L. A. Niven. Hoard's D 56:418 O 18 '18  
Value of velvet beans. W. M. Brown. Breeder's Gaz 71:16 Ja 4 '17  
Velvet bean feed. C. A. Whittle. Hoard's D 55:386 Mr 22 '18  
Velvet bean for feeding. Rural N Y 76:980 Ag 18 '17  
Velvet bean for the southern farmer. C. A. Whittle. il Hoard's D 53:380 Mr 23 '17  
Velvet beans as a feed. H. C. Bates. il Hoard's D 54:615 N 23 '17  
Velvet beans as stock food. G. W. Carver. Rural N Y 77:369 Mr 9 '18  
What is velvet bean meal? Prog F 32:1279 D 8 '17  
Will horses and mules eat velvet beans? Prog F 32:1087 O 20 '17

## Wheat

Composition and classification of wheat of-fals. T. B. Wood and R. H. Adie. J Bd Ag 23:1179-86 Mr '17  
Composition of bran and shorts as milled under the regulations of the Canada food board. F. T. Shutt. Ag Gaz of Canada 5:760-2 Ag '18  
Effects of feeding the proteins of the wheat kernel at different planes of intake. E. V. McCollum and others. Int R Sci & Prac Ag 8,no 2:261-2 F '17  
Exchanging wheat for wheat shorts. T. Butler. Prog F 33:235 F 23 '18  
Feeding-off growing wheat. J. W. Shaw. Ag Gaz of New South Wales 27:203-8 Mr '16  
Ground wheat versus whole wheat for fattening pigs. R. K. Bliss and others. Int R Sci & Prac Ag 7, no 5:713-15 My '16  
\* Mill feed conditions. (In Official statement no. 5, p. 6-7) '18 U. S. Food administration, Washington, D. C.  
Pledge of honor for mill feeds. Hoard's D 56:370 O 11 '18  
Prices for wheat mill feeds. C. E. Treman. Rural N Y 77:1167 O 12 '18  
Wheat by-products in mixed feeds. Hoard's D 56:416 O 18 '18  
Wheat mill feeds. R. W. Chapin. Hoard's D 56:328 O 4 '18  
Wheat offals and their adulteration. M. Sirot and G. Josef. Int R Sci & Prac Ag 7,no 12:1841-3 D '16  
Where is the mill feed? Kimball's D F 16:591 O 15 '18

## Wood

Nutritive value and digestibility of wood; feeding experiments in Germany. G. Haberlandt. Int R Sci & Prac Ag 7,no 8:1136-7 Ag '16

## Yeast

Digestibility of dried yeast. C. Crowther and H. E. Woodman. J Ag Sci 8:448-50 D '17  
Dried yeast as food for stock. J Dept Ag Victoria 14:187 Mr '16

## Yucca

\* Desert feed for drought seasons. il Sci Am (233 Broadway, N.Y. 10c) 119:357 N 2 '18  
Soapweed or palmilla (yucca elata) as emergency forage. J. J. Thornber. il Ariz Ag Exp Timely Hints 135:1-7 '18  
Stock feed in the desert. R. P. Crawford. Breeder's Gaz 74:265 Ag 22 '18  
Woody stems of yucca yield drought-time feed for stock. Weekly N L 6:1 Ag 21 '18

## Feeding floors

Concrete feeding floor. il Wallaces' F 41:1234 S 22 '16  
Construction of concrete feeding floors. W. G. Kaiser. il Bldg Age (243 W. 39th st, N.Y. 25c) 40:208-9 Ap '18

## Feeding racks

Feeding racks for live stock. H. Shearer. il Farm Eng 4:51 S '16  
New feed rack for winter feeding. H. C. Gardiner. (In Report, 1915-1916) p 17-18 n.d. Live stock sanitary board, Helena, Mont.

## Feeding stuffs, Proprietary

Condimental or stock foods. F. W. Christensen. Jersey B 35:900 Je 7 '16  
Condimental stock foods and proprietary remedies. W. G. Gaessler. Ia Ag Exp C 31:1-4 '16

## Feeding troughs

Pig weaning trough. il Hoard's D 56:672 D 6 '18

## Feedstuffs. See Feeding and feeding stuffs

## Feet. See Foot

## Feijoa. See Pineapple guava

## Felch, Isaac K., 1834-1918

Seventy-four years a poultry fancier. P. T. Woods. por il Am P J 49:817-20 O '18  
Sketch. pors Reliable P J 25:694-5 O '18  
Sketch. M. K. Boyer. Am P Advocate 26:602 O '18

## Feldspar

Feldspar: an important small industry. Am Fert 44:44 Je 10 '16  
Ground feldspar. R. E. Rose. Am Fert 44:39 Ap 1 '16  
Ground feldspar not recommended as a fertilizer. Am Fert 44:42 Mr 18 '16  
Manufacture of potash from feldspar. J Bd Ag 23:1087-91 F '17  
Potash from feldspar. Am Fert 46:66 My 26; 47:62 Ag 4; 44 O 27 '17  
Potash from feldspar; abstract. E. A. Ashcroft. Metallurgical & Chemical Eng (10th av at 36th st, N. Y. 25c) 18:153 F 1 '18  
Potash from feldspar; patents. Metallurgical & Chem Eng (10th av at 36th st, N.Y. 25c) 18:100, 317 Ja 15, Mr 15 '18  
Potash from ground rock. Am Fert 47:33-4 N 24 '17  
Production of feldspar in 1915. F. J. Katz. Am Fert 45:39-40+ Ag 19 '16

## Bibliography

Extraction of potash from complex mineral silicates, such as feldspar, leucite and glauconite (greensand marl). E. C. Buck. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:33-7, 90-5 Ja 1-15 '18

## Fence posts

Boiling in creosote preserves fence posts. Prog F 31:12 Ja 1 '16  
Cedar versus oak posts. Wallaces' F 41:266 F 18 '16  
Corner post. L. Ogilvy. Hoard's D 52:241 S 15 '16  
Creosote treatment will prolong life of fence post. Prac F 112:85 F 15 '16  
Farm fence posts that last. Power F 27:41 Mr '18  
Fence posts compared. W. C. Kolb. il Purdue Ag 13:59 N '18  
Gates and gateposts for farmhouses. W. B. Brinckloe. O Judd Farmer 61:24 O 28 '16  
Post timbers: factors affecting their relative durability. J. J. Crumley. il Ohio Ag Exp B v 2:125-9 Ap '17



**Fence posts—Continued**

- Preservative treatment of farm timbers. G. M. Hunt. *il Farmers'* B 74:7-27 '16  
Preserving fence posts. Power F 25:36 Ap '16  
Preserving fence posts. Rural N Y 75:333 F 26 '16  
Preserving wood posts. L. R. W. Allison. *il Country Gent* 81:1554 Ag 19 '16  
Steel fence posts. Wallaces' F 41:607 Ap 14 '16  
To preserve fence posts. Power F 25:27 Jl '16  
Treating fence post. R. R. Stokes. *O Judd Farmer* 60:6 Mr 11 '16

**Fence posts, Concrete**

- Backbone of the farm fence. *il Power F* 25:15 Ag '16  
Concrete end and gate post. K. J. T. Ekblaw. *Country Gent* 81:1873 O 21 '16  
Concrete fence posts. B. F. Dashiell. *Country Gent* 81:2054 N 25 '16  
Concrete fence posts. K. J. T. Ekblaw. *il Country Gent* 82:461 Mr 3 '17  
Concrete fence posts. J. W. Griffin. *il Country Gent* 81:689 Mr 25 '16  
Concrete fence posts. J. B. Hays. *Country Gent* 81:2131 D 9 '16  
Concrete fencing posts. J Dept Ag S Australia 20:984 Jl '17  
Concrete posts. *il Wallaces' F* 42:1313 S 28 '17  
Fence posts that never rot out. H. C. Campbell. *il Power F* 25:7-8 Je '16  
Homemade cement fence posts. B. J. Ruetenik. *il O Judd Farmer* 61:3 Jl 15 '16  
Making an inexpensive concrete fence post. *il Bldg Age* (243 W. 39th st. N.Y. 20c) 40:209 Ap '18  
Making cement posts. A. M. Latham. *il O Judd Farmer* 61:9 S 23 '16  
Making concrete fence posts. *il Wallaces' F* 41:767 My 19 '16  
Making concrete posts on the farm. E. W. Lehmann. *Prac F* 113:21 Ja 1 '17  
Twisting wire for reënforcing. K. J. T. Ekblaw. *Country Gent* 81:1553 Ag 19 '16

**Fences**

- Abolishing farm fences. Green's Fruit Grower 36:12 My '16  
Chapter on fences. *il Nat Stock & F* 41:505 Ag 25 '17  
Cheap sheep fences. J. T. Bartlett. *Prac F* 113:221 Je 1 '17  
Colonial fences. E. D. Litchfield. *il Country Life* 31:61-4 Mr '17  
Cost of fencing farms in the north central states. H. N. Humphrey. *il U S Ag B* 32:1-32 '16  
Crossings in fences for autos. W. C. Barnes. *Breeder's Gaz* 69:1349 Je 29 '16  
Farmers' experience meeting: the cheapest and best fencing. *Prog F* 33:1334 D 7 '18  
Fence for the exercising lot. B. E. Carmichael. *Breeder's Gaz* 69:431 F 24 '16  
Fences: materials, manufacturing and building. H. E. Horton. *bibliog il Am Soc Ag Eng Trans* 9:134-80 '16  
Fences that turn goats. *Country Gent* 81:1228 Je 17 '16  
Fencing. J Dept Ag S Australia 20:924-6 Je '17  
Fencing and pasture for sheep. E. Van Alstyne. *il N Y Ag Dept B* 96:25-31 Je '17  
Fencing the estate. W. H. Butterfield. *il Country Life* 30:56 Jl '16  
Foliage, wood and wire fences. H. N. Humphrey. *il Cornell Countryman* 14:561-2 Ap '17  
Garden fences; photographs. *Country Life* 31:37 N '16  
Legal fences vs. the no-fence law. Hoard's D 51:124 F 11 '16  
Legal fixings for the suburban home. J. R. McMahon. *il Country Gent* 81:1154 Je 3 '16  
Serviceable kind of hog-lot fence. W. Rann-dell. *Nat Stock & F* 40:138 Ap 29 '16

See also Wire fencing

**Fences, Portable**

- Cheap portable fence. J. R. Kessler. *Country Gent* 81:979 My 6 '16  
Portable pasture fence. T. S. Webb. *Country Gent* 81:294 F 5 '16  
Useful fence unit for poultry. *Reliable P J* 23:257 Ap '16

**Fences, Wire. See Wire fencing**

**Fens. See Marsh lands**

**Fermentation**

- Bakhar, the Indian rice beer ferment. *Int R Sci & Prac Ag* 7, no 2:283-6 F '16  
By-products of the fermentation of cabbage. V. E. Nelson and A. J. Beck. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 40:1001-5 Je '18  
Fallacy of refined readings of gas percentages in the fermentation of lactose peptone bile and lactose broth. W. W. Browne and B. Ackman. *bibliog J Bact* 2:249-61 My '17  
Investigations into the proteolytic activity of lactic ferments. *Int R Sci & Prac Ag* 9, no 2:244-5 F '18  
Occurrence of *l*-leucine in sweet clover silage. G. P. Plaisance. *Am Chemical Soc J* (Box 505, Washington, D. C. \$6 per yr.) 39:2087-8 S '17  
To preserve vegetables by fermentation. *Prog F* 32:908 Ag 25 '17  
See also Enzymes; Silage fermentation; Wine yeast

**Bibliography**

- \* List of references to periodical articles, and also to patents, which have appeared since July 1, 1914, on products of commercial value, produced by microorganisms. 22p typew '18 U. S. Bur. of chemistry library, Washington, D. C.  
Contents: Alcoholic fermentation; Glycerin; Acetone; Yeasts; Vinegar; Lactic acid; Foods and feeding-stuffs; Nitrification and fixation of free nitrogen by bacteria; Miscellaneous

**Fermented milk. See Milk, Fermented**

**Fern rusts**

- Note on hyalopsora. J. R. Weir and E. E. Hubert. *Phyt* 8:37-8 Ja '18

**Fernald, Iowa**

- Town owned by farmers. M. G. Franklin. *il Country Gent* 82:1449 S 22 '17

**Ferns**

- Apogamy in phegopteris polypodioides Fée, *osmunda cinnamomea* L., and *O. clay-toniana* L. E. D. Wuist. *Bot Gaz* 64:435-7 N '17  
Autumn care. *Am Flor* 49:755 O 27 '17  
Boston ferns from spores. R. C. Benedict. *Am Flor* 47:105 Ag 5 '16  
Breeding nephrolepis ferns. S. Boshnagian. *il J Heredity* 7:225-25 My '16  
Comparative list of fern pinna-traces, with some notes on the leaf-trace in the ferns. R. C. Davie. *Ann Bot* 32:233-45 Ap '18  
Contribution to the study of the marattia-ceae. C. West. *bibliog il Ann Bot* 31:361-414 Jl '17  
Conversion of fern-land into grass. A. H. Cockayne. *il J Ag New Zealand* 12:421-39 Je '16  
Culture of adiantum farleyense. A. Kneuker. *Gard Chron* Am 22:197 Jl '18  
Culture of commercial ferns. E. J. Hayward. *Am Flor* 47:389 S 9 '16  
Development of the sorus and sporangium and the prothallus of peranema cyatheoides. R. C. Davie. *bibliog il Ann Bot* 30:101-10 Ja '16  
Farmers, ferns and florists. W. D. Goodwin. *il Rural N Y* 75:396 Mr 4 '16  
Fern picking in Vermont. G. D. Aiken. *il Rural N Y* 76:1257 N 3 '17  
Fernery. *Am Flor* 46:218 F 19 '16  
Ferns as a side line. S. J. Record. *Country Gent* 81:973 My 6 '16  
Ferns for profit. J. Good. *il Country Gent* 81:1234 Je 17 '16  
Florists' ferns. *Am Flor* 49:1263 D 29 '17  
Florists' ferns; hot weather treatment. *Am Flor* 51:179 Ag 17 '18  
Freeing pastures from ferns. *N Y Prod R* 42:323 Je 14 '16  
Further evidence for age and area; its applicability to the ferns etc. J. C. Willis. *bibliog Ann Bot* 31:335-49 Jl '17  
Growing of ferns in the home. E. H. Jones. *J Ag (Quebec)* 19:146 Ja '16  
Making a whole fernery in a single pot. *il Gard M* 25:34 F '17

**Ferns—Continued**

- Method for staining antherozoid of fern. W. N. Steil. *il Bot Gaz* 65:562-3 Je '18
- Nephrolepis varieties at the Brooklyn botanic garden. R. C. Benedict. *Gard Chron* (Lond) 61:64 F 10 '17; Same. *Am Flor* 48:640 Ap 7 '17
- Observations on the anatomy of the leaf in the osmundaceae. D. T. Gwynne-Vaughan. *il Ann Bot* 30:487-93 O '16
- On some climbing davallias and the petiole of lygodium. D. T. Gwynne-Vaughan. *il Ann Bot* 30:495-507 O '16
- On stigeosporium marattiacearum and the mycorrhiza of the marattiaceae. C. West. *bibliog il Ann Bot* 31:77-99 Ja '17
- On the branching of the zygopteridean leaf, and its relation to the probable pinna nature of gyropteris sinuosa, Goeppert. Birbal Sahni. *bibliog Ann Bot* 32:369-79 J1 '18
- Our house ferns. *il Gard Chron Am* 22:176 Je '18
- Potting wild ferns. G. T. Browne. *Country Gent* 82:1046 Je 16 '17
- Raising ferns from spores. *Gard Chron Am* 22:196 J1 '18
- Some ecological adaptations of certain fern prothallia—camptosorus rhizophyllus Link., asplenium platyneuron Oakes. F. L. Pickett. *il Am J Bot* 1:477-98 N '14
- Sowing spores. *Am Flor* 46:168 F 12 '16
- Spring care of seedlings. *Am Flor* 48:507 Mr 24 '17
- Spring treatment of British ferns. C. T. Drury. *Gard Chron* (Lond) 59:183 Ap 1 '16
- Studies in the phylogeny of the filicales. F. O. Bower. *bibliog il Ann Bot* 31:1-39; 32:1-68 Ja '17, Ja '18
- Summer care. *Am Flor* 47:104 Ag 5 '16
- Terminology of common ferns. *Country Life* 31:126 Ap '17
- Wild ferns in the garden. R. W. Moore. *il Country Life* 32:100 Je '17
- Winter growth of ferns. *Gard Chron Am* 22:125 Ap '18
- See also Aspleniums; Brakes (ferns); Cyatheaaceae; Maidenhair ferns
- Ferrets**  
Ferrets for killing rats. H. A. Surface. *Rural N Y* 75:4 Ja 1 '16
- Ferric chloride**  
Nitrogen distribution of fibrin hydrolyzed in the presence of ferric chloride. C. A. Morrow and W. R. Fetzner. *bibliog Soil Sci* 5:163-7 F '18
- Ferric sulfate**  
See also Fer-Sul
- Ferrification**  
Ferrification in soils. P. E. Brown and G. E. Corson. *bibliog Soil Sci* 2:549-73 D '16
- Ferrous sulfate**  
Green vitriol (ferrous sulphate) as a preventive of take-all. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 27:134 F '16
- Fer-Sul**  
Bacteria and their control. H. C. Stewart. *Field* 11 26:437 My '16
- Fertility of soils.** See Soil fertility
- Fertilization of plants**  
Alfalfa seed production; pollination studies. C. V. Piper and others. *il U S Ag B* 75:1-32 '14
- Artificial pollination of corn. J. Ag (Quebec) 20:30 Ag '16
- Bearing of heterosis upon double fertilization. D. F. Jones. *bibliog il Bot Gaz* 65:324-33 Ap '18
- Bee keeping may increase the cotton crop. R. M. Meade. *il J Heredity* 9:282-5, 288 O '18
- Bees in the greenhouse. J. T. Rosa, jr. *il Country Gent* 82:2024 D 22 '17
- Benefits in horticulture from cross-pollination. O. B. Whipple. *Better Fruit* 12:11+ Je '18
- Centrosomes in fertilization stages of preissia quadrata (Scop.) Nees. M. Graham. *bibliog il Ann Bot* 32:415-20 J1 '18
- Controlled pollination in nicotiana. T. H. Goodspeed and P. Davidson. *Cal Univ Pub Botany v 5*, no 13 429-34p '18 (10c)

- Cross and self-fertilization. J. Heredity 7:33 Ja '16
- Cross-pollination of sugar cane. H. B. Cowgill. *bibliog Am Soc Agron J* 10:302-6 O '18
- Cucumbers without fertilization. *Am Flor* 51:234 Ag 31 '18
- Defertilisation of flowers by insects. N. E. Brown. *Gard Chron* (Lond) 63:4 Ja 5 '18
- Effects of cross- and self-fertilization in tomatoes. H. K. Hayes and D. F. Jones. *il Conn State Ag Exp Rep* 1916, pt 5:305-18 '17
- Explanation of self-sterility. E. M. East. *J Heredity* 8:382-3 Ag '17
- Fecundation and formation of the primary endosperm nucleus in certain liliaceae. M. Nothnagel. *bibliog il Bot Gaz* 66:143-61 Ag '18
- Fertility in cichorium intybus: the sporadic occurrence of self-fertile plants among the progeny of self-sterile plants. A. B. Stout. *bibliog il Am J Bot* 4:375-95 J1 '17
- Fertilization in lilium. W. Weniger. *bibliog il Bot Gaz* 66:259-68 S '18
- Flowers and insects. C. Robertson. *Bot Gaz* 63:307-16 Ap '17
- Flowers pumping and exploding. *il Gard Chron Am* 20:350 Ag '16
- Flowers that fertilize themselves. A. A. Hansen. *il Sci Am* (233 Broadway, N.Y. 10c) 118:406 My 4 '18
- Fragments of the flower biology of Westralian plants. O. H. Sargent. *Ann Bot* 32:215-31 Ap '18
- Hand-fertilizing dahlias. *Gard M* 24:34 S '16
- Honey-bees in relation to horticulture. B. N. Gates. *Mass Hort Soc Trans* 1917, pt 1:71-88 '17
- How blossoms are fertilized. J. E. Hewitt. *Green's Fruit Grower* 36:5 Ag '16
- How flowers work and what they do. *il Gard Chron Am* 20:243 My '16
- How plants are mated or reproduce themselves. J. F. Duggar. *Prog F* 31:1029 Ag 26 '16
- Importance of bees in horticulture. L. H. Pammel. *Am Bee J* 57:14-15 Ja '17
- Improved technique in preventing access of stray pollen. A. Waller and L. E. Thatcher. *il Am Soc Agron J* 9:191-5 Ap '17
- Inheritance of sex in vitis rotundifolia. L. R. Detjen. *bibliog il N C Ag Exp Tech B* 12:1-42 '17
- Irritability of the pollen-presentation mechanism in the compositae. J. Small. *bibliog Ann Bot* 31:261-8 Ap '17
- Method for determining the percentage of self-pollination in maize. A. E. Waller. *Am Soc Agron J* 9:35-7 Ja '17
- Mode of pollination in some farm crops. M. N. Pope. *bibliog Am Soc Agron J* 8:209-27 J1 '16
- Natural cross-pollination in wheat. H. K. Hayes. *bibliog Am Soc Agron J* 10:120-2 Mr '18
- Normal self-fertilization in corn. H. K. Hayes. *bibliog Am Soc Agron J* 10:123-6 Mr '18
- Pollenization of corn and cotton salsify and beets killed by hot, dry weather. *Prog F* 33:976 S 7 '18
- Pollinating tomatoes. *Am Flor* 48:1342 J1 7 '17
- Pollination and fertilization of flowers. V. G. Burns. *il Penn State F* 9:370+ Ap '16
- Pollination in the pine. *il J Heredity* 7:402-5 S '16
- Pollination of alfalfa by bees of the genus megachile. F. W. L. Sladen. *il Ag Gaz of Canada* 5:125-6 F '18
- Pollination of asclepias cryptoceras. E. Payson. *il Bot Gaz* 61:72-4 Ja '16
- Pollination of plants. L. H. Pammel. *Am Bee J* 57:196-7 Je '17
- Pollination of vallisneria spiralis. R. B. Wylie. *il Bot Gaz* 63:135-45 F '17
- Population analyses and inheritance studies concerning self-sterility, self-fertility, and sterility in rye. N. Heribert-Nilsson (Ztschr. Pflanzenzücht., 4, no. 1 44p. '16). *Exp Sta Record* 38, no 3:236-7 '18
- Red-clover seed production: Pollination studies. J. M. Westgate and others. *bibliog il U S Ag B* 289:1-31 '15; Summary. *Int R Sci & Prac Ag* 7, no 1:67-8 Ja '16



**Fertilization of plants—Continued**

- Self-sterility. C. W. Moore. bibliog il J Heredity 8:203-7 My '17  
Self-sterility in dewberries and blackberries. L. R. Detjen. il N C Ag Exp Tech B 11:1-37 '16  
Sterility in the strawberry. W. D. Valleau. bibliog il J Ag Research 12:613-70 Mr 11 '18  
Studies on the contamination of the pollen of rye with the help of indicator plants in Sweden. N. Heribert-Nilsson. Int R Sci & Prac Ag 9,no 2:170-2 F '18  
Studies on the embryo sac and fertilization in oenothera. M. Ishikawa. bibliog il Ann Bot 32:279-317 Ap '18  
Thrips as pollinators of beet flowers. H. B. Shaw. il U S Ag B 104:1-12 '14  
Too-perfect milkweed. il J Heredity 8:460-2 O '17

See also Fruit trees—Pollination; Plant breeding; Pollen

**Fertilizer factories**

- Appraisals and depreciation of fertilizer plants. W. S. Rankin. Am Fert 45:94+ JI 22 '16  
Dust problems in fertilizer plants. W. G. Clark. Am Fert 48:30-1 Ap 13 '18  
Fertilizer machinery in Russia; modern factory equipment needed. Am Fert 44:44-6 Ja 22 '16  
New mechanical loader for handling fertilizer and acid phosphate in fertilizer plants. il Am Fert 44:40-1 Ja 8 '16  
Up-to-date equipment in the Armour fertilizer plant, at Chrome, N.J. il Am Fert 46:38-9 Ja 20 '17

**Fertilizer factories, Cooperative**

- Co-operative fertilizer plants for sour soil communities. S. R. Winters. Am Coop J 13: 113 N '17

**Fertilizer industry**

- Address before the Livestock round-up and citrus seminar, Gainesville, Florida, September 24-27, 1918. R. E. Rose. Fla Ag Dept Quar B v 28:83-90 O '18  
American fertilizer hand book, 1917; the standard reference book and directory of the commercial fertilizer industry and allied trades, various paging \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia  
Includes: List of agricultural experiment stations; Dictionary of fertilizer materials; Directory of allied fertilizer trades; Directory of cottonseed oil mills; Directory of fertilizer manufacturers; Directory of packers and renderers  
Beginning of the industry. Am Fert 46:30-1 Ja 20 '17  
British fertilizer notes. See fortnightly numbers of American fertilizer  
British sulphuric acid and fertilizer trades. Am Fert 48:62 Ap 27 '18  
Committee on fertilizers. Am Fert 48:25-8 F 2 '18  
Committee on fertilizers: car shortage; Canadian imports; loading cars to full capacity; meeting of directors of the Chemical alliance, inc. Am Fert 48:25-6 Mr 30 '18  
Committee on fertilizers; domestic pyrites; phosphate rock situation; meeting of the board of directors of the Chemical alliance, inc.; car loading reports. Am Fert 48:29 My 25 '18  
Committee on fertilizers of the chemical alliance. Am Fert 49:29-30 D 7 '18  
Committee on fertilizers; phosphate rock situation; cooperation with U.S. tariff commission; embargoes on burlap bags. Am Fert 48:25-6 Mr 2 '18  
Committee on fertilizers; phosphate rock situation; fuel oil; labor problems; transportation. Am Fert 48:32-3 Mr 16 '18  
Committee on fertilizers; ready to cooperate on any problem. Am Fert 48:25-6 Ja 5 '18  
Committee on fertilizers; sales to consumers; phosphate rock situation; to increase car loads. Am Fert 48:24-5 Ap 13 '18  
Committee on fertilizers; scarcity of burlap; government competition for labor; lower freight on pyrites ore. Am Fert 48:25-6 Je 8 '18

Committee on fertilizers: Spanish pyrites fee for committee; movement of phosphate rock; car loading; meetings of the Chemical alliance, the committee on acids and the committee on fertilizers. Am Fert 48:25-6 My 11 '18

Committee on fertilizers; transportation; embargoes; licenses for explosives. Am Fert 48:24-5 F 16 '18

Credit and collection problems. M. V. Haselden. Am Fert 49:31-3 D 7 '18

\* Fertilizer companies. W. Staaks. Investment Weekly (42 Broadway, N.Y. 15c) 20:7-9 F 16 '18

Fertilizer industry, developed by chemistry, and its relation to agriculture. F. B. Carpenter. Am Fert 45:21-4 S 30 '16

Fertilizer industry growth. Am Flor 47:218 Ag 12 '16

Fertilizer industry's part in war work. C. H. MacDowell. Am Fert 49:125-7 Ag 3 '18

Fertilizer materials market. See fortnightly numbers of American fertilizer

Fertilizer situation. Am Fert 46:21-2 Je 9; 43-5 Je 23; 47:21-5 JI 7; 32-4 S 1; 34-6 S 15; 21-3 D 22 '17

General fertilizer situation. C. G. Wilson. Am Fert 49:128-30+ Ag 3 '18

Good outlook for fertilizers. Am Fert 45:26 D 23 '16

Important adjunct to the fertilizer industry. il Am Fert 46:74 Je 23 '17

Japan's fertilizer trade. Am Fert 48:21-3 Ap 13 '18

Manufacture of fertilizers in relation to selling. J. E. Breckenridge. Am Fert 49:25-8+ O 26 '18

Materials situation. Am Fert 46:21-2 Ap 28 '17

Northern salesmen's conferences. Am Fert 47:26-7 O 27 '17

Post-war problems of the fertilizer industry. D. B. Osborne. Am Fert 49:37-41 Ag 31 '18

Production of sulphuric acid; its effect on the fertilizer industry. W. D. Huntington. Am Fert 49:123-5 Ag 3 '18

Raymond roller mills. il Am Fert 49:70n JI 6 '18

Relation of the county agricultural agent to the fertilizer industry. B. Knapp. Am Fert 46:21-3 F 17 '17

Report on the fertilizer industry, August 19, 1916. 269p '16 U. S. Federal trade comm., Washington, D. C.

Salesmen's conferences a big success. Am Fert 47:40-2+ N 24 '17

Salesmen's conferences at Boston and New York. il Am Fert 49:29-35+ S 14 '18

\* Southern fertilizers; science of manufacturing, selling and economic use of fertilizers in the South. 212p '17 Soil improvement comm., Southern fertilizer assn., Atlanta, Ga.

Southern salesmen's meetings. Am Fert 47:32-4 O 27 '17

Squaring the fertilizer industry with wartime problems. Am Fert 49:29-32 Ag 17 '18

Sulphur and pyrites situation in relation to the fertilizer industry. A. D. Ledoux. Am Fert 49:113-14 Ag 3 '18

War and the fertilizer industry. H. G. Bell. Am Fert 47:41-2 N 24 '17

War-time conditions in the fertilizer industry. F. P. Hubbard. Am Fert 49:37-9 S 14 '18

See also Nitrate industry; also Canadian fertilizer association; Chemical alliance; National fertilizer association; Northern fertilizer manufacturers; Southern fertilizer association

**Directories**

Directory of fertilizer manufacturers. (In Am. fertilizer hdbk., 1918, p. A2-A63) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia

**Laws and regulation**

Agricultural law, 1916; sale and analysis of commercial fertilizers. N Y Ag Dept B 83: 2039-43 My '16; Same. N Y Ag Dept Rep 1916, pt 3:2039-43 '17

\* British control of acid and fertilizer industry. (Commerce Reports no. 261) p 502-5 (N 6) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Fertilizer industry—Laws—Continued**

Commerce des engrais. Int Yearbook Ag Leg 1916:224-37 '17

Commercial fertilizers. W. J. Jones, jr. and others. Ind Ag Exp B 186:943-51 '16

Décret législatif fixant les conditions dans lesquelles l'approvisionnement et la vente du soufre et du sulfate de cuivre pour le compte de l'Etat sont confiés à la Banque nationale ou à d'autres personnes morales en Grèce. Int Yearbook Ag Leg 1916:655-6 '17

Fertilizer trade under license. Am Fert 48:32-3 Mr 2 '18

Georgia fertilizer laws; and Rulings by the commissioner interpreting the laws. Ga Ag Dept B 73:5-40 O '17

Licensing of fertilizer industry ordered by the President. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:323-4 Ap '18

Licensing of the fertilizer industry. Am Fert 48:21-8 Mr 16 '18

Manual of laws pertaining to the Department of farms and markets; sale and analysis of commercial fertilizers. N Y Farms & Markets Dept Ag B 108:148-52 Je '18

Pennsylvania law. Am Fert 47:44 Ag 4 '17

Regulations governing the taking and forwarding of samples of commercial fertilizer and commercial feeding stuff to the commissioner of agriculture for analysis by the state chemist. Fla Ag Dept Quar B v 28:68-75 O '18

West Virginia fertilizer law. W Va Ag Dept B 20:1-4 n.d.

**Statistics**

Commercial stocks of fertilizer and fertilizer materials. Am Fert 49:70s-71 Jl 6 '18

Fertilizer materials statistics. (In Am. fertilizer hdbk., 1917, p. 17-38) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

Fertilizer materials statistics; annual review of the market. (In Am. fertilizer hdbk., 1918, p. 21-3) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia

Imports and exports of fertilizer materials. Appears once a month in American fertilizer

International movement of chemical manures during the first half of 1915. Am Fert 44:30-1 Ja 8 '16

International movement of fertilizers. Am Fert 48:52 Mr 2 '18

International movement of fertilisers and chemical products useful to agriculture. (no. 8) 86p bibliog My '18 Int. inst. of ag., Rome

International movement of fertilisers and chemical products useful to agriculture. Int Crop Report and Ag Statistics (Int. inst. of ag., Rome) 7th year, no 9 p 617-75 S '16; Abstract. Int R Sci & Prac Ag 8, no 1:27-30 Ja '17

International trade in fertilisers and chemical products employed in agriculture. Int R Sci & Prac Ag 9, no 1:37-41 Ja '18

State fertilizer tonnage; consumption for years 1909-1915. Am Fert 45:37 Jl 8 '16

State fertilizer tonnage consumption of fertilizers for 1910-1917. (In Am. fertilizer hdbk., 1918, p. 20) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia

United States Census bureau's summary concerning the industry for 1914. Am Fert 45:31-3 Ag 19 '16

World trade in fertilizers. Am Fert 49:41-2 O 12 '18

World's production of fertilizers. Am Fert 45:36 Jl 8 '16

**Fertilizer spreaders**

Seeding machinery and fertilizer sowers. G. H. Alford. Prog F 33:68 Ja 19 '18

See also Manure spreaders

**Fertilizers**

Absorption and other modifications of certain fertilising or anti-cryptogamic compounds in various natural and artificial soils. B. De Wilkowszski. Int R Sci & Prac Ag 9, no 2:145-6 F '18

Absorption of nutrients as affected by the number of roots supplied with the nutrient. P. L. Gile and J. O. Carrero. bibliog J Ag Research 9:73-95 Ap 16 '17

Action of precipitated magnesium carbonate on soils. W. P. Kelley. bibliog Am Soc Agron J 9:285-96 S '17

Alfalfa fertilizers. G. G. Brown. Ore Ag Exp B 141:55-6 '17

All-American fertilizer. F. A. Waugh. il Country Gent 83:9-10 O 5 '18

American fertilizer hand book, 1917; the standard reference book and directory of the commercial fertilizer industry and allied trades. various paging \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

American fertilizer hand book, 1918; the standard reference book and directory of the commercial fertilizer industry and allied trades. various paging \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia

Are you selling part of your farm each year? T. Butler. Prog F 31:3 Ja 1 '16

Assimilation of organic nitrogen by zea mays and the influence of bacillus subtilis on such assimilation. R. O. Brigham. bibliog il Soil Sci 3:155-95 F '17

Balanced rations for crops. J. W. Henceroth. Jersey B 35:1883 N 29 '16

Bread from stones in Effingham county, Ill. A. R. Weed. il O Judd Farmer 65:69 Jl 27 '18

Building up the run-down farm. C. G. Williams. il Ohio F 139:353 Mr 10 '17

Burned oyster shells versus marl. Prog F 33:119 F 2 '18

Buying and using fertilizers. R. M. Salter. il W Va Ag Ext C 87:1-15 '16

Calcium silicates as fertilizers; abstract. A. H. Cowles. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 17:664-5 D 1 '17

Can vegetables be grown commercially without animal manures? S. B. Haskell. Market Growers J 21:245-8 D 1 '17

Carbon dioxide production in soils and carbon and nitrogen changes in soils variously treated. R. S. Potter and R. S. Snyder. bibliog la Ag Exp Research B 39:253-309 '16

Carbonic acid gas in relation to soil acidity changes. H. S. Noyes and L. Yoder. bibliog il Soil Sci 5:151-61 F '18

Cause of the disappearance of cumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. bibliog il Ala Ag Exp B 195:49-64 '17

Chemistry in relation to crop production. A. Smith. Gard Chron Am 22:238-40 S '18

Commercial fertilizers variously manure and legumes—do not replace them. J. W. Henceroth. Am Coop J 12:617 My '17

Comparative study of salt requirements for young and for mature buckwheat plants in solution cultures. J. W. Shive and W. H. Martin. bibliog J Ag Research 14:151-75 Jl 22 '18

Composition and fertilizing value of farm crops and other farm materials; tabulation. N C Ag Ext C 70 3p '18

Composition of the potato plant at various stages of development. J. T. Ramsay and W. C. Robertson. il J Dept Ag Victoria 15:641-55 N '17; Same cond. Int R Sci & Prac Ag 9, no 4:446-51 Ap '18

Conservation of fertilizer materials from minor sources. C. C. Fletcher. il U S Ag Yearbook 1917:283-8

Co-operative experiments at Matamata; manurial and root-variety trials. J. W. Hadfield. J Ag New Zealand 13:214-24 S '16

Cooperative fertilizer experiments with corn, 1908-1914. G. S. Fraps. Tex Ag Exp B 184:1-64 '16

Corn fertilizers for Indiana soils in 1918. S. D. Conner. il Purdue Ag 12:435-7 Ap '18

Corn production in the South. J. C. Pridmore. il (B. 19) 12p n.d. Southern fertilizer assn., Soil improvement com., Atlanta, Ga.; Same. Am Fert 48:46- F 16 '18

Correlation between bacterial activity and lime requirement of soils. F. E. Bear. bibliog Soil Sci 4:433-62 D '17

Cranberry fertilization. H. J. Wheeler. (B. 5) 4p il n.d. Am. agricultural chemical co., 92 State st., Boston



**Fertilizers—Continued**

- Crop rotation investigations; field T experiments. A. C. Army. *il Minn Ag Exp B* 170: 1-55 '17
- Crops thrive under Imhoff-tank sludge tests at Dallas. C: Saville. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 81:164-5 J1 25 '18
- Cylinder experiments relative to the utilization and accumulation of nitrogen. J. G. Lipman and A. W. Blair. *il N J Ag Exp B* 289:1-88 '16
- Delayed applications of fertilizers. *Am Fert* 48:28 My 11 '18; Same cond. *Coop Manager* & F 7:65 My '18
- Development of soluble manganese in acid soils as influenced by certain nitrogenous fertilizers. M. J. Funchess. *bibliog il Ala Ag Exp B* 201:37-78 '18
- Distributing fertilizer. *Better Fruit* 12:25 D 17
- Effect of different rotation systems and of fertilizers on the protein content of oats. R. W. Thatcher and A. C. Army. *Am Soc Agron J* 9:344-8 O '17; Same cond. *Int R Sci & Prac Ag* 9,no 2:153-6 F '18
- Effect of fertilizers on the composition and quality of oranges. H. D. Young. *bibliog J Ag Research* 8:127-38 Ja 22 '17
- Effect of fertilizers on the physical properties of Hawaiian soils. *Int R Sci & Prac Ag* 7, no 1:45 Ja '16
- Effect of fertilizers on woody plants, by L. Chancerel. *Review. J For* 15:1024-7 D '17
- Effect of inoculation, fertilizer treatment and certain minerals on the yield, composition and nodule formation of soybeans. C. R. Fellers. *bibliog il Soil Sci* 6:81-129 Ag '18
- Effect of liming on crop yields in cylinder experiments. J. G. Lipman and A. W. Blair. *il Soil Sci* 6:157-61 Ag '18
- Effect of paraffin on the accumulation of ammonia and nitrates in the soil. P. L. Gailey. *bibliog J Ag Research* 10:355-64 Ag 13 '17
- Effect of some alkali salts upon fire-holding capacity of tobacco. H: R. Kraybill. *bibliog Bot Gaz* 64:42-56 J1 '17
- Effect of three annual applications of boron on wheat. F. C. Cook and J. B. Wilson. *bibliog J Ag Research* 10:591-7 S 17 '17
- Effect on soil moisture of changes in the surface tension of the soil solution brought about by the addition of soluble salts. P. E. Karraker. *J Ag Research* 4:187-92 My '15
- Effects of certain alkali salts on ammonification. P. E. Brown and D. R. Johnson. *bibliog Ia Ag Exp Research B* 44:1-24 '18
- Effects of certain organic compounds on plant growth; coumarin, vanillin, pyridine, quinine, dihydroxystearic acid, pyrogallol, etc. M. J. Funchess. *il Ala Ag Exp B* 191:103-32 '16
- Enriching sandy soils. J. C. Beaver. *Breeder's Gaz* 69:965 My 4 '16
- Essential chemical elements for plant growth. *Gard Chron Am* 20:310 J1 '16
- Essentials in larger food production. C. G. Hopkins. *Ill Ag Exp C* 197:1-4 '17
- Experiments in connection with the assimilation of potassium and sodium ions by the sugar beet. J. Stoklasa. *Int R Sci & Prac Ag* 7,no 8:1102-3 Ag '16
- Experiments in fertilizer application; with discussion. H: G. Bell. *Am Soc Ag Eng Trans* 9:127-33 '16
- Experiments on the manuring of potatoes in Germany. *Int R Sci & Prac Ag* 7,no 12:1766-8 D '16
- Experiments with fertilizers on cranberries. F. P. Schlatter. *N J Ag Exp Rep* 1916:329-41 '17
- Extension circulars. *Mass Ag Ext C* 25, 30, 48 '17
- Titles are: Cropping and fertilizer suggestions for 1917; Seeding mowings; Clover and lime
- Factor in the use of fertilizer. J. W. Henceroth. *Jersey B* 36:817 My 23 '17
- Factors influencing the efficiency of fertilizers. J. N. Harper. *Am Fert* 49:60+ D 7 '18
- Facts about fertilizers. T. Butler. *Prog F* 32: 62, 96, 152, 172, 226, 248, 286, 323, 354, 382, 443 Ja 20-Mr 24, Ap 7 '17
- Farm facts & fancies. A. Agee. *Nat Stock & F* 41:44 Ap 7 '17
- Farm manures vs. commercial fertilizers. *il Ohio F* 137:413 Mr 18 '16; Same. *J Ag (Quebec)* 20:55 S '16
- Farm manures versus commercial fertilizers. T. H. Eaton. *N Y Ag Dept B* 86:2594-2602 Ag '16
- Farm that won't wear out. A. Vivian. (*In De Laval dairy hand book*, p 10-14) *il '16 De Laval separator co., New York*
- Farming in Europe. *Rural N Y* 75:115, 154, 189 Ja 22-F 5 '16
- Farmyard manure v. artificials. *Gard Chron (Lond)* 60:91 Ag 19 '16
- Feeding the next wheat crop. L. L. Rummell. *il Prac F* 113:266 Ag 1 '17
- Feeding the soil; points considered in selecting fertilizers. *J Ag (Quebec)* 19:258 Je '16
- Feeds that make for fertility. G. H. Campbell. *il Country Gent* 82:1446 S 22 '17
- Fertility of orchard—fruit garden. *Green's Fruit Grower* 36:20 Ja '16
- Fertility vs. fertilizers. C. G. Hopkins. *Am Coop J* 13:11 S '17
- Fertilization of apple orchards. J: P. Stewart. *il Pa Ag Exp B* 153:1-31 '18
- Fertilization of citrus. W. P. Kelley. *Cal Ag Exp C* 171 4p '17
- Fertilization of next wheat crop. L. L. Rummell. *Hoard's D* 54:325 O 5 '17
- Fertilization of wheat. *Am Fert* 47:44 Ag 18 '17
- Fertilize to keep more stock. H: G. Bell and S. B. Haskell. (*Soil improvement com. B. 21*) 11p *il n.d. Nat. fertilizer assn., Chicago*
- Fertilizer and green manure. R. J. Holliday. *Country Gent* 81:790 Ap 8 '16
- Fertilizer constituents and values. *Prog F* 33: 192 F 16 '18
- Tables show the number of pounds of phosphoric acid, nitrogen and potash found in a bushel, hundredweight or ton of each class of product mentioned; the value of each ingredient separately in a ton or bushel, as the case may be; and the total combined values of nitrogen, phosphoric acid and potash
- Fertilizer control. W. J. Jones, jr. *Ind Ag Exp Rep* 1917:54-6 '18
- Fertilizer division, American chemical society; chairman's address. J. E. Breckenridge. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 9:1054-5 N '17
- Fertilizer experiments on apple trees at Highmoor farm. *Maine Ag Exp B* 269:9-15 '18
- Fertilizer experiments on DeKalb soils. J. W. White. *il Pa Ag Exp B* 151:1-12 '18
- Fertilizer extravagance. H: Boyd. *Am Flor* 46:62 Ja 29 '16
- Fertilizer facts. P. F. Trowbridge. *Jersey B* 35:942 Je 14 '16
- Fertilizer facts and figures. *Prog F* 32:204 F 17 '17
- Fertilizer famine in France. W: H. Dean. *il Country Gent* 83:5+ Mr 23 '18
- Fertilizer for truck. *Country Gent* 81:572 Mr 11 '16
- Fertilizer frauds exposed; reply. J. G. Lipman. *Hoard's D* 55:653 My 3 '18
- Fertilizer from the air. E. J. Pranke. *Cornell Countryman* 14:563-4 Ap '17
- Fertilizer hastens maturity. *Nat Stock & F* 42:179 My 11 '18
- Fertilizer industry and its power requirements. J. E. Mellett. *il Gen Electrical Review (Schenectady, N.Y. 20c)* 21:96-110 F '18
- Fertilizer is supreme. W. G. Sadler. *Am Fert* 46:30 Ap 28 '17
- Fertilizer materials situation. *Am Fert* 46:29 Ap 14 '17
- Fertilizer mixtures. A. Agee. *Nat Stock & F* 41:556 S 8 '17
- Fertilizer needs of the United States. H. J. Wheeler. *Am Fert* 48:37-8+ Mr 30 '18
- Fertilizer problem; Bureau of soils conducts experiments in the production of potash, nitrogen, and phosphates. *Coop Manager & F* 6:90 F '17
- Fertilizer situation. *il Ag Digest* 1:14-15 My '16

**Fertilizers—Continued**

- Fertilizer situation. J Ag (Quebec) 20:22 J1 '16
- Fertilizer situation. F. E. Bear. Ohio F 141: 131 F 2 '18
- Fertilizer situation. G. W. Cavanaugh. Cornell Countryman 14:724-5 Je '17
- Fertilizer situation explained. M. Ryder. Hoard's D 53:618 Ap 27 '17
- Fertilizer situation is not worrying good farmers. W. F. Massey. Prog F 31:76 Ja 15 '16
- Fertilizer tests, 1914-1916. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 56-62) '17
- Fertilizer the limit of cotton acreage. J. F. Duggar. Prog F 32:1293 D 8 '17
- Fertilizers. Wallaces' F 42:1389 O 12 '17
- Fertilizers; symposium. Market Growers J 18: 18+ Ja 1 '16
- Fertilizers—an interpretation of the situation in the United States. J. E. Pogue. Am Fert 47:25-35 N 10 '17
- Fertilizers and farm efficiency. J. W. Henceroth. (*In* Am. fertilizer hdbk., 1917, p. 63-5) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Fertilizers and farm prosperity. H: G. Bell. *il* Am Coop J 12:559-60 Ap '17
- Fertilizers and food production; how a bag of commercial fertilizer is transmuted into bread, meat and milk. S. B. Haskell. (*In* Am. fertilizer hdbk., 1918, p. 36e-36f) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia; Same. Am Fert 49:50-1 J1 6 '18
- Fertilizers and manures for potatoes. E. van Alstyne. *il* N Y Ag Dept Rep 1916, pt 2:326-34 '17; Same. N Y Farms & Markets Dept Ag B 102:48-56 D '17
- From N Y Ag Dept Bulletin 77
- Fertilizers and microbes of the soil. Scientific Am (233 Broadway, N.Y. 10c) 116:129 F 3 '17
- Fertilizers and production costs. Kimball's D F 16:88 F 1 '18
- Fertilizers and their relation to the cotton industry. D. B. Osborne. Am Fert 44:36-9 F 19 '16
- Fertilizers and their use. H: G. Bell. (*In* Report, Ontario ag. and exp. union, 1916, p. 88-92) '17 Ontario ag. dept., Toronto
- Fertilizers essential for big crops. A. W. Blair. Hoard's D 55:135 F 15 '18
- Fertilizers for flowers. M. C. Blue. Ohio F 141: 198 F 9 '18
- Fertilizers for fruits. U. P. Hedrick. N Y Ag Dept B 79, pt 1:811-15 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:811-15 '17
- Fertilizers for fruits. U. P. Hedrick. N Y State Fruit Growers' Assn Pro 1916:89-97
- Fertilizers for Japanese cane. J. M. Scott. *il* Fla Ag Exp B 144:91-8 '18; Same cond. Fla Ag Exp Rep 1917:28R-32R '18
- Fertilizers for market garden and farm crops. J. B. Weems. *il* Va Ag Dept B 115:117-21 '17
- Fertilizers for 1916. F. W. Taylor. N H Ag Ext C 17:1-4 '16
- Fertilizers for small fruits. W. J. Green. Ohio F 139:554 Ap 14 '17
- Fertilizers for spring crops. J. C. Beavers. *il* Country Gent 82:583 Mr 24 '17
- Fertilizers for the vegetable growers. C. E. Durst. O Judd Farmer 60:3 F 19 '16
- Fertilizers for timothy. E. O. Fippin. N Y Ag Dept B 87:2771-9 S '16
- Fertilizers for wheat. Prac F 112:329 S 1 '16
- Fertilizers for wheat. R. R. Hudelson. Mo Ag Ext C 28:1-4 '17
- Fertilizers from industrial wastes. W: H. Ross. U S Ag Yearbook 1917:253-63
- Fertilizers from steel. F: W. Brown. Country Gent 83:32 Ja 12 '18
- Fertilizers in Argentina. W. H: Robertson. Am Fert 47:58 Ag 4 '17
- Fertilizers in Australia. Int R Sci & Prac Ag 9, no 5:546-8 My '18
- Fertilizers in war-time. Am Fert 49:48 J1 6 '18
- Fertilizers save farm labor. S. B. Haskell. Field 11 27:564 J1 '17
- Fertilizing alfalfa. H. W. Doyle. Country Gent 82:419 Mr 3 '17
- Fertilizing America's greatest cereal. C: E. Thorne. *il* Ohio F 139:573 Ap 21 '17
- Fertilizing apple orchards. F. H. Ballou. Ohio Ag Exp B v 3:125-7 Ap '18
- Fertilizing apple trees. E. T. Owen. Ohio F 141:566 Ap 20 '18
- Fertilizing Illinois apple orchards, by A. J. Gunderson; Fertilizing the orchard, by H. M. Dunlap. Ill State Hort Soc Trans 1917: 227-34, 401-6 '18
- Fertilizing lawn and garden soils. P. E. Brown. Ia Ag Exp C 24:1-15 '16
- Fertilizing mulched hill orchards. W. J. Green. Rural N Y 76:360 Mr 3 '17
- Fertilizing sugar beets for profit. J. W. Henceroth and C. A. Vaughn. (Soil improvement com. Pamph. 24) 15p *il* n.d. Nat. fertilizer assn., Chicago
- Fertilizing sugar cane. J. F. Duggar. Prog F 31:377 Mr 11 '16
- Fertilizing the farm garden. A. E. Wilkinson. *il* O Judd Farmer 64:6 Mr 2 '18
- Fertilizing the grass crop. S. B. Haskell and O. M. Kile. (Soil improvement com. B. 20) 15p *il* n.d. Nat. fertilizer assn., Chicago
- Fertilizing the home vegetable garden. J. C. Pridmore. (B. 23) 8p *il* n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Fertilizing the potato crop. C. E. Thorne. *il* Ohio Ag Exp B v 2:142-6 My '17
- Fertilizing the wheat crop. C. E. Thorne. *il* Ohio Ag Exp B v 2:215-18, 251-3; 3:199-203 J1-Ag '17, J1 '18
- Fertilizing value of rain and snow. (*In* Experimental farms, 1916. v. 1, p. 174-9) 45c '17 Canada Ag
- Few plant food wastes. Rural N Y 75:1589 D 30 '16
- Field experiments, 1917; potatoes. J Dept Ag Ireland 18, no 2:158-68 '18
- First principles of plant food; outline of essential fertilizer facts in questions and answers. C: A. Whittle. 16p n.d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Five essential factors in the use of fertilizer on grass. J. W. Lincoln. Hoard's D 54:132 Ag 24 '17
- Flax growing experiments, 1914 and 1915. J Dept Ag Ireland 17, no 1:3-19 '16
- Food and fertilizer crisis; how to meet it. S. Morgan. Fortnightly Review (249 W. 13th st, N.Y. 50c) 110:115-25 J1 '18
- Foods—corn and plant foods. H: G. Bell. Am Fert 48:72+ Ap 27 '18
- France's fertilizer problem. Am Fert 47:52 S 29 '17
- French fertilizer requirements, possibilities and resources. Am Fert 48:62+ Je 8 '18
- Frenzied fertility; the war-time fertilizer scramble and the fruit it will bear. O. M. Kile. Country Gent 82:1521 O 6 '17
- Function of organic matter in the maintenance of soil fertility. C: E. Thorne. Am Fert 48: 26-7 F 16 '18
- Future fertilizer supplies and requirements. Scientific Am (233 Broadway, N.Y. 10c) 116:449+ My 5 '17
- Garden chemistry in soil cultivation. W: S. Gillies. Gard Chron Am 21:333 S '17
- Garden fertilizers. S. B. Shaw. Md Ag Ext Letter no 28 4p n.d.
- Gas industry as a producer of fertilizing material. N. H. Humphrys. *il* Am Gas Eng J (42 Pine st., N.Y. 10c) 107:65-6 J1 21 '17
- Getting best results from crops. O Judd Farmer 63:3 S 29 '17
- Getting the soil ready for this year's crops. Country Gent 81:748 Ap 1 '16
- Good returns from muck. C. B. Cook. Rural N Y 75:1174 S 9 '16
- Grape experiments. Hawaii Ag Exp Rep 1917:13-19 '18
- Growing wheat under war conditions. J. W. Henceroth. Am Fert 47:56+ N 10 '17
- Hitting the high cost of fertilizers. H. F. But-ton. Gard M 27:145-6 Ap '18
- Hope farm notes. Rural N Y 75:84 Ja 15 '16
- How to apply fertilizer to corn. G: P. Williams. *il* Nat Stock & F 41:164 My 5 '17
- How to figure profits from fertilizer. Ag Digest 2:743 D '17



**Fertilizers—Continued**

- How to make money with fertilizers. 56p il n.d. Am. agricultural chemical co., 92 State st., Boston
- Illinois wheat yields with nature's fertilizers. C. G. Hopkins and others. Ill Ag Exp C 229 2p '18
- Importance of the fertilizer industry to other lines of business. B. Williamson. Am Fert 49:40-2 D 7 '18
- Important factors in potato production. H. J. Wheeler. (B. no. 9) 23p il n.d. Am. ag. chemical co., Ag. service bur., 92 State st., Boston
- Importation of fertilizers. B. C. Aston. J Ag New Zealand 12:368-71; 14:350-3; 17:31-4 My '16, My '17, J1 '18
- Influence of fertilizer treatment on the coloration of grapefruit. B. F. Floyd. Fla Ag Exp Rep 1917:46R-51R '18
- Influence of fineness of division of pulverized limestone on crop yield as well as the chemical and bacteriological factors in soil fertility. N. Kopeloff. bibliog il Soil Sci 4:19-69 J1 '17
- Influence of humus forming materials of different nitrogen-carbon ratios on bacterial activities. P. E. Brown and F. E. Allison. Ia Ag Exp Research B 36:1-30 '16
- Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D: A. Coleman. Soil Sci 4:345-423 N '17
- Influence of the composition and concentration of the nutrient solution on plants grown in sand cultures. A. H. Ayres. il Cal Univ Pub Ag Sci v 1 no 11 341-94p '17 (60c)
- Influence of the mechanical composition of the soil on the availability of nitrate of soda and dried blood. il N J Ag Exp Rep 1916:369-80 '17
- Insoluble phosphoric acid in organic base goods. E. O. Thomas. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:865 S '17
- Intensive farming the solution of South's problem. D. B. Osborne. Am Fert 49:46-8 J1 6 '18
- Internal action of chemicals on resistance of tomatoes to leaf diseases. J. B. S. Norton. Md Ag Exp B 192:17-30 '16; Same. Md Ag Exp Rep 1915-1916:17-30 '16
- Investigations relative to the use of nitrogenous plant-foods, 1898-1912. J. G. Lipman and A. W. Blair. N J Ag Exp B 288:1-126 '16
- Larger fertilizer orders will help save car space. Weekly N L 6:10 Ag 7 '18
- Legumes, lime, manure and prosperity. G. H. Dacy. Country Gent 81:1428 J1 29 '16
- Lime and weeds. H. W. Collingwood. il Country Life 30:44-5 My '16
- Lime sweetens sour soils. C. A. LeClair. il Country Gent 82:1821 N 24 '17
- List of fertilisers in New South Wales. F. B. Guthrie and others. Ag Gaz of New South Wales 27:254-60 Ap '16
- Live-stock and maintenance of the soil. E. O. Fippin. Rural N Y 75:910, 975, 998, 1046 Je 24, J1 15-22, Ag 5 '16
- Loss of fertilizers by leaching. S. E. Collison and S. S. Walker. Fla Ag Exp B 132:1-20 '16
- Lucerne manurial tests. State research farm, Werribee. A. E. V. Richardson. il J Dept Ag Victoria 14:449-60 Ag '16
- Lucerne manurial trials at research farm, Werribee: the value of winter topdressing and renovation. H. A. Mullett. J Dept Ag Victoria 16:497-9 Ag '18
- Lysimeter experiments: records for tanks 1 to 12 during the years 1910 to 1914 inclusive. T. L. Lyon and J. A. Bizzell. bibliog il plan Cornell Ag Exp Memoir 12:1-115 '18
- Maintaining fertility on fertilizers alone. E. G. McCloskey. (In Am. fertilizer hdbk., 1918, p. 76-7) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia
- Maintaining soil fertility largely a local problem. A. G. Craig. Better Fruit 11:7+ D '16
- Making a soil out of a dump heap. Rural N Y 76:118 Ja 27 '17
- Making available the organic nitrogen of leather, hair, wool waste and muck or peat. R. E. Rose. Am Fert 47:24-5 S 29 '17
- Making the best of what we've got. J. E. Pickett. il Country Gent 83:12-13 F 16 '18
- Management of tobacco soils. J. Johnson. il Wis Ag Exp B 277:1-29 '17
- Managing soils for profit. H: G. Bell. Am Fert 45:34-9 N 25 '16
- Manure from the sea. E. H. Jenkins and J: P. Street. il Conn State Ag Exp B 194:1-13 '17
- Manure versus fertilizer. J. F. Duggar. Prog F 31:1479 D 23 '16
- Manures and commercial fertilizers. il Country Gent 82:552 Mr 17 '17
- Manures and fertilizers. A. R. Whitson and H. B. Hendrick. U S Ag B 355:54-62 '16
- Manures in relation to vines. H. E. Laffer. Ag Gaz of New South Wales 29:491-6 J1 '18
- Manurial experiments on sugar cane, 1914-1915. J. de Verteuil. Int R Sci & Prac Ag 7 no 5:690-1 My '16
- Manurial experiments with young rubber at Kuala Lumpur F. M. S. F. G. Spring. Int R Sci & Prac Ag 7 no 5:689-90 My '16
- Manurial value of potsheds. A. Howard. Ag J of India 11:256-62 J1 '16
- Manuring experiments on fruit. Gard Chron (Lond) 63:135 Mr 30 '18
- Manuring of hevea brasiliensis. R. D. Anstead. Ag J of India 13:660-5 O '18
- Manuring of market garden crops; with special reference to the use of fertilizers. F. T. Shutt and B. L. Emslie. 36p '17 Canada Ag
- Manuring of vineyards. H. E. Laffer. J Dept Ag S Australia 20:558-63 F '17
- Manuring pasture lands. J. M. Yelland. J Dept Ag S Australia 21:931-3 Je '18
- Market-garden district of Biggleswade, Bedfordshire. T. Rigg. J Bd Ag 24:950-5 D '17
- Marlboro skimpings; county which pays its income tax with fertilizer. J: E. Pickett. Country Gent 83:13 O 5 '18
- Micro-organisms in plant chemistry and nitrogen fixation. E. Hendrick. il Chem & Metallurgical Eng (10th av at 36th st, N.Y. 25c) 19:574-6 O 1 '18
- Mineral food requirements of the wheat plant at different stages of its development. A. G. McCall and P. E. Richards. il Am Soc Agron J 10:127-34 Mr '18
- Mineral industries of the United States; fertilizers: an interpretation of the situation in the United States. J. E. Pogue. (B. 102, pt. 2) 22p U.S. National museum; 5c Supt. of doc.
- Mixing a fertilizer for cotton. T. Butler. Prog F 33:531 Ap 27 '18
- More about soft corn. Kimball's D F 16:220 Mr 15 '18
- More fertilizer facts; cottonseed meal, limestone, cover crops. Prog F 33:266 F 16 '18
- My potato patch in 1916; and some notes on the mystery manures. H. E. Durham. Gard Chron (Lond) 61:113 Mr 17 '17
- National manure pile of Germany as the decisive factor in the war. Current Opinion (63 W. 36th st., N.Y. 25c) 62:104-5 F '17
- National museum to instruct public on fertilizers. Am Fert 47:46 Ag 4 '17
- National treatment for Kentucky soils. G: Roberts. il Ky Ag Dept Rep 1916-1917:401-8 '18
- Nature's fertilizer supply. S. B. Sink. Jersey B 36:849 My 30 '17
- Necessity of fertilizing peanuts. J. N. Harper. (C. 15) 8p il n.d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- New fertilizer being used in Italy, tetraphosphate. Am Fert 49:35 S 28 '18
- New Jersey uses \$5,000,000 worth of fertilizer. Market Growers J 20:260 Mr 15 '17
- New uses for an irrigation system. R. W. De Baun. Rural N Y 76:787 Je 16 '17
- Nitrate of soda for apples. J. A. Burton. Country Gent 82:1004 Je 9 '17
- Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. bibliog Ala Ag Exp B 196:65-82 '17
- Nitrogen in plants. F. C. Robb. il Fruit-Grower 28:278 Je 1 '17
- Norway fertilizers. Am Fert 49:37 D 7 '18

**Fertilizers—Continued**

- Notes on manures in March. *Gard Chron* (Lond) 63:129 Mr 23 '18
- Notes on manures in the month. See monthly numbers of *Journal of the board of agriculture*
- Observations on the present status of the subject of the availability of nitrogen in fertilizers. C: B. Lipman. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:189-91 F '17
- On increased food production. J. A. Paice. *Gard Chron* (Lond) 62:215 D 1 '17
- Orchard fertilizers. *Green's Fruit Grower* 36: 23 Mr '16
- Orchard fertilizers. J. P. Stewart. *il Country Gent* 82:682 Ap 7 '17
- Orchard rejuvenation in southeastern Ohio. F. H. Ballou. *il Ohio Ag Exp B* 301:1-40 '16; Same cond. *Ohio Ag Exp B v* 1:313-18 O '16
- Order wheat fertilizers early. *Power F* 26:48 Ag '17
- Organic nitrogen compounds of soils and fertilizers. E. C. Lathrop. *J Franklin Institute* (Franklin Institute, Philadelphia 50c) 183:169-206, 303-21, 465-98 F-Ap '17
- Our fertility resources as bearing on the present emergency. J. G. Lipman. *N J Ag Dept B* 11:407-17 '18
- Our fertilizer needs. J: E. Pickett. *il Country Gent* 83:8-9 F 9 '18
- Our present knowledge of citrus fertilization. H. J. Webber. *Cal State Comm Hort B v* 5: 161-3 My '16
- Papa rock as a soil-dressing. *J Ag New Zealand* 12:303-4 Ap '16
- Permanent fertilizer tests, 1915. A. E. V. Richardson. *J Dept Ag Victoria* 14:148-50 Mr '16
- Permanent soil fertility. S. B. Haskell. *Am Fert* 46:21-5 Mr 3 '17
- Persistence of lawn and other grasses as influenced especially by the effect of manures on the degree of soil acidity. B. L. Hartwell and S. C. Damon. *il R I Ag Exp B* 170:1-24 '17
- Petrography of some North Carolina soils and its relation to their fertilizer requirements. J. K. Plummer. *il J Ag Research* 5:569-82 D 27 '15
- Phosphate fertilizer experiments; Fertilizer tests with alfalfa; Rotation experiments with manure; Crop residues. *il Minn Ag Exp Rep* 1917:9-21 '18
- Plant and its food. B. L. Hartwell. *Gard Chron* Am 20:273-5 Je '16
- Potato fertilizers. T. C. Johnson. *Va Truck Exp B* 21:431-52 '16
- Practical handling of swamp muck. *Rural N Y* 77:188 F 9 '18
- Practical use of fertilizer. J. B. Weems. *il Va Ag Dept B* 126:16-19 '18
- Preliminary report on muck humus as a fertilizer and carrier of beneficial soil bacteria. T: F. Manns and J. M. Goheen. *il Del Ag Exp B* 115:1-40 '16
- Profitable handling of farm soils. H: G. Bell. *Farmers' Nat Congress Pro* 1916:34-42
- Rate of seeding and fertilizer trials with wheat, Yanco experiment farm. J. M. Pitt. *Ag Gaz of New South Wales* 27:232-3 Ap '16
- Relation of the transformation and distribution of soil nitrogen to the nutrition of citrus plants. I. G. McBeth. *bibliog J Ag Research* 9:183-252 My 14 '17
- Report of economic geologist. B. Halberstadt. *Pa Ag Dept B v* 1:94-100 Ap '18
- Report of the chemist and assistant chemist. P. L. Gile and J. O. Carrero. *Porto Rico Ag Exp Rep* 1916:10-17 '18
- Residual effect of fertilizers and manure. C. E. Thorne. *Ohio Ag Exp B v* 2:48-50 F '17; Summary. *Ohio F* 139:475 Mr 31 '17
- Residual effects of fertilizers. F. E. Bear and R. M. Salter. *W Va Ag Exp B* 160:1-26 '16
- Results last season from fertilizing; our experience pool. *Prac F* 113:411 D 1 '17
- Results of fertilizer experiments conducted at the Pee Dee station. T. E. Keitt. *S C Ag Exp B* 193:1-24 '17
- Results of fertilizers. C. M. Baker. *Nat Stock & F* 41:134 Ap 28 '17
- Results of fertilizing and cropping system on college farm no. 4. *il Pa Ag Exp B* 147:29-31 '17
- Results of fertilizing experiments with cotton at the Clemson college station. T. E. Keitt. *S C Ag Exp B* 191:1-11 '17
- Right thinking concerning fertilizers. A. E. Grantham. *Prac F* 114:154 Ap 15 '18
- Rotation in the garden. W. F. Massey. *Prog F* 33:636 My 25 '18
- Rotation, manure and fertilizer experiments. V. M. Shoesmith. *Mich Ag Bd Rep* 1917:328-36
- Russian shortage of fertilizer. *Am Fert* 47:48 Ag 4 '17
- Sale of manures by co-operative societies. H. R. C. Hailey. *Ag J of India* 11:210-13 Ap '16
- Save all home-sources of fertilizer. C. B. Williams. *Prog F* 33:42 Ja 12 '18
- Seaweed as a fertilizer. B. L. Emslie. *Ag Gaz of Canada* 4:936-41 N '17
- Self-feeders in the soil. L. Ogilvy. *Breeder's Gaz* 72:1266 D 27 '17
- Shall the apple orchard be fertilized? *Prac F* 112:418 N 15 '16
- Shortage of fertilizers in Italy. *Am Fert* 49: 39-40 O 12 '18
- Should the high price of fertilizer decrease the amount used? L. A. Niven. *Am Fert* 48:70+ Ap 13 '18
- Side applications of fertilizers. J. N. Harper. *Am Fert* 48:72+ My 25 '18
- Soil. Wallaces' *F* 42:1015 Ji 13 '17
- Soil constituents which inhibit the action of plant toxins. E. Truog and J. Sykora. *bibliog il Soil Sci* 3:333-51 Ap '17
- Soil experiments on the Ozark upland. M. F. Miller and F. L. Duley. *il Mo Ag Exp B* 148: 1-28 '17
- Soil feeding or crop feeding. S. B. Haskell. *Nat Stock & F* 41:76 Ap 14 '17
- Soil fertility; its economic maintenance and increase. F. T. Shutt. 13p '16 *Canada Ag*
- Soil fertility questions; land plaster in addition to manure and rock phosphate. C. G. Hopkins. *O Judd Farmer* 65:209 S 14 '18
- Soil for winter wheat. R. E. Stephenson. *Rural N Y* 76:957 Ag 11 '17
- Soil improvement in Clinton county. A. R. Weed. *O Judd Farmer* 65:48 Ji 20 '18
- Soil management from standpoint of dairy farmers. C: E. Thorne. *J Ag (Quebec)* 21: vii S '17
- Soil reactions and sawdust manure. C. G. Hopkins. *Breeder's Gaz* 69:892 Ap 20 '16
- Soil solution as an index of the biological changes in the soil. J. F. Morgan. *Mich Ag Exp Tech B* 39:1-24 '17
- Soil tests and fertilizer increase yields and profits. *Am Fert* 48:70 My 25 '18
- Soil toxics. *O Judd Farmer* 64:20 Ja 12 '18
- Soils and fertilizers for cabbage, cauliflower, turnip, rape, and other crucifers. W: P. Brooks. *Mass Ag Ext C* 13 4p '17
- Solubility of plant-food elements as modified by fertilizers. C: A. Jensen. *Am Soc Agron J* 8:100-5 Mr '16
- Solving the million acre mystery. F. H. Demaree. *il map O Judd Farmer* 61:5 N 25 '16
- Solving the vegetable riddle. J: R. McMahon. *il Country Gent* 83:10-11 F 9 '18
- Solving this year's fertilizer problem. E. L. Worthen. *Penn State F* 9:362-3 Ap '16
- Some experiments in improving worn soils; with discussion. G: Roberts. *il Ill Farmers Inst Rep* 1917:35-51 '17
- Some experiments in manuring for double cropping (do-fasli). B. C. Burt. *Ag J of India* 12:536-42 O '17
- Some extremes in Ohio soils. C. E. Thorne. *il Ohio Ag Exp B v* 1:77-85 Mr '16
- Some factors influencing the quantitative determination of nitric nitrogen in the soil. J. E. Greaves and C. T. Hirst. *bibliog il Soil Sci* 4:179-206 S '17
- Some fertilizer problems. T. Butler. *Prog F* 32:1007 S 29 '17
- Sources of fertility and their conservation. W. H. Bowker. *Am Fert* 44:21-9 F 19 '16



**Fertilizers—Continued**

- Sources of nitrogen compounds in the United States. C. G. Gilbert. (Smithsonian Inst. Pub. 2421) 12p '16 Smithsonian Institution, Washington, D.C.
- Spring and summer garden; preparing, fertilizing and planting. W. F. Massey. *Prog F* 32: 90 Ja 27 '17
- State report from the Michigan experiment station. *Am Fert* 48:80+ My 25 '18
- Stimulation of root growth in cuttings by treatment with chemical compounds. O. F. Curtis. bibliog *il Cornell Ag Exp Memoir* 14:75-138 '18
- Striking results of lime and fertilizer. *Nat Stock & F* 42:547 S 7 '18
- Strive to know why. J. W. Henceroth. *il Coop Manager & F* 7:52, 68 Jl-Ag '18
- Studies in soil reaction as indicated by the hydrogen electrode. J. K. Plummer. bibliog *J Ag Research* 12:19-31 Ja 7 '18
- Study of Colorado wheat. W. P. Headden. *Colo Ag Exp B* 219:1-131 '16
- Study of physiological balance for buckwheat grown in three-salt solutions. J. W. Shive. bibliog *N J Ag Exp B* 319:1-63 '17
- Study of the nitrification of different leathers available for agricultural use, and sulphurated rape cakes. *Int R Sci & Prac Ag* 7,no 9:1253-6 S '16
- Substitutes for chemical fertilizers. *Rural N Y* 76:69 Ja 20 '17
- Sulfur oxidation in soils and its effect on the availability of mineral phosphates. J. G. Lipman and others. bibliog *Soil Sci* 2:499-538 D '16
- Summer treatment of greenhouse soil. *Am Flor* 46:912 My 13 '16
- Supplying crops with a balanced ration. L. L. Rummell. *Prac F* 113:346 O 15 '17
- Sweet potatoes and yams. 15p *il '18 Barrett co., Ag. dept., 17 Battery Place, N.Y.*
- Ten-year study of the effect of fertilizers on the soluble plant food in the soil and on the crop yield. W. B. Ellett and H. H. Hill. *Va Ag Exp Tech B* 13:46-72 '17; Same. *Va Ag Exp Rep* 1915-1916:46-72 '17
- Tennessee fertilizer results. C. A. Mooers. *Prog F* 33:1269 N 16 '18
- Tests of the value of stable manure, commercial fertilizers, and crimson clover for vegetable crops. T. H. White. *Md Ag Exp B* 199: 95-106 '16; Same. *Md Ag Exp Rep* 1916-1917 '17
- Theory of fertilizers. *Coop Manager & F* 7:51 S '17
- Thirty-five years' results with fertilizers. F. D. Gardner and others. *il Pa Ag Exp B* 146:1-29 '17; Same cond. *Am Fert* 47:24 Ag 4 '17
- To fertilize is patriotic and profitable. D. Hungerford and W. E. Ayres. *Ark Ag Exp C* 32 4p n.d.
- To help you select your fertilizers for different types of soil. *il Am Coop J* 12:561 Ap '17
- Top-dressing grass lands. A. E. Grantham. *il Prac F* 112:415 N 15 '16
- Top-dressing grassland and pastures. H. J. Wheeler. (B. 7) 12p *il n.d. Am. agricultural chemical co., 92 State st., Boston*
- Triangle system for fertilizer experiments. O. Schreiner and J. J. Skinner. *il Am Soc Agron J* 10:225-46 S '18
- Truck farming without manure. R. E. Allen. *Prac F* 113:198 My 15 '17
- Twenty years' fertilizer experiments; with discussion. C. G. Williams. *il Md Ag Soc Rep* 1916, v 1:227-48 '17
- Twenty years of fertilizers in an apple orchard; with discussion. R. D. Anthony. *N Y State Fruit Growers' Assn Pro* 1918:210-18; Excerpts. *Nat Stock & F* 42:13 Mr 30 '18
- Unprofitable acre. E. L. Worthen. *Penn State F* 10:170-1 N '17
- Untold wealth in the Pacific. *J Dept Ag Victoria* 16:15 Ja '18
- Use fertilizers to keep more stock. S. B. Haskell. (*In Am. fertilizer hdbk., 1917, p. 66*) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Use of fertilizer and ground limestone on gardens. H. J. Wheeler. *Am Fert* 48:54+ My 11 '18
- Use of fertilizers during the war. A. R. Whitson. *Wis Ag Ext C* 97:1-8 '18
- Use of fertilizers in New Zealand. *Am Fert* 47:29 Ag 18 '17
- Use of offal manure and dried blood from abattoirs. F. B. Guthrie. *Ag Gaz of New South Wales* 28:857-8 D '17
- Use of small amounts of fertilizer. Wallaces' *F* 42:1422 O 19 '17
- Uses of manure. *J Ag (Quebec)* 21:120 F '18
- Uses of peat in agriculture. *Coal Age* (10th av at 36th st, N.Y. 10c) 14:63 Jl 13 '18
- Using fertilizer for increasing my corn yield. F. Suhre. *il System on the Farm* 1:302-3 O '17
- Using fertilizers in the greenhouse; results of acid phosphate on lettuce, tomatoes and cucumbers. S. N. Green. *Ohio Ag Exp B v* 3:275-8 S '18
- Utilisation of waste land. F. V. Dutton. *J Bd Ag* 23:643-6 O '16
- Utilizing carcasses as fertilizer. *Rural N Y* 75:579 Ap 8 '16
- Value of manure and fertilizers. D. McKee. *Am Fert* 48:54 Ap 27 '18
- Vegetation experiment on the availability of nitrogenous fertilizers in an arid soil. C. B. Lipman and W. F. Gericke. bibliog *Soil Sci* 2:575-81 D '16
- Wasting plant food. W. C. Deming. *Rural N Y* 77:31 Ja 12 '18
- What about fertilizers? J. E. Pickett. *il Country Gent* 83:3-4 F 2 '18
- What industry owes to science. *Engineer* (33 Norfolk st., Strand, London, W. C. 2) 123: 461-2 My 25 '17
- What shall we do for fertilizers next year? *Ag Digest* 1:261 Ja '17
- What shall we do with wheat bran; is its use for human food the most efficient utilization of its mineral constituents? A. D. Holmes. *Sci Am* (233 Broadway, N.Y. 10c) 119:106 Ag 10 '18
- What you should know when buying fertilizers. *Am Coop J* 13:467+ Ag '18; Same. *Va Ag Dept B* 134:5-7 N '18
- Wheatfield in winter; improvement by use of manure, commercial fertilizers and lime. C. E. Thorne. *Ohio Ag Exp B v* 2:3-6 Ja '17
- Why Illinois produces only half a crop. C. G. Hopkins. *Ill Farmers Inst Rep* 1917:22-35 '17; Same. *Ill Ag Exp C* 193:1-16 '17
- Why not fertilize in the hill? C. E. Thorne. *Ohio Ag Exp B v* 3:182-3 Je '18
- Woburn pot-culture experiments. 1916. J. A. Voelcker (Woburn Exp. Sta. Rep., 1916:19-32; Royal Ag. Soc. of England J., 77:251-64 '16). *Exp Sta Record* 39:116-17 Ag '18

See also Agricultural chemistry; Ammoniates, Animal; Ammonification; Ammonium phosphate; Ammonium sulfate; Apple pomace as fertilizer; Ashes as fertilizer; Barium phosphate; Blood as fertilizer; Bones as fertilizer; Calcium carbonate; Calcium cyanamide as fertilizer; Carbohydrates as fertilizer; Compost; Cornstalks as fertilizer; Cottonseed meal as fertilizer; Feldspar; Ferrification; Fertilizer factories; Fertilizer industry; Fertilizers, Commercial; Fish scrap; Garbage as fertilizer; Green manuring; Guano; Guanols; Kelp; Legumes; Lime; Limestone; Magnesium nitrate; Manganese as fertilizer; Manures; Marl; Molasses as fertilizer; Mulching; Nitrates; Nitrification; Nitrogen; Nitrolim; Peat as fertilizer; Phosphates; Phosphorus; Potash; Potassium; Poultry manure; Pyrite; Radioactive substances as fertilizers; Saltpeter, Chile; Salts as fertilizers; Sheep manure; Slag as fertilizer; Soil inoculation; Straw; Sulfocation; Sulfur as fertilizer; Sulfuric acid; Water hyacinth as fertilizer; Wool waste as fertilizer

**Bibliography**

Bibliography of fertilisers and chemical products useful to agriculture. *Int Crop Report and Ag Statistics* (Int. inst. of agriculture, Rome) 7th year, no 9 676-88 S '16

**Fertilizers—Bibliography—Continued**

- Influence of ammonium sulfate on germination and growth. I. Wolkoff. *Soil Sci* 5:468-79 Je '18
- Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D: A. Coleman. *Soil Sci* 4:423-32 N '17
- Soils and fertilizers; list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 46—11th ed.) 22p '18 Supt. of doc., Washington, D.C.
- Prices**
- Prices of plant food element. S. B. Haskell. Hoard's D 55:310 Mr 8 '18
- Fertilizers, Commercial**
- Acid phosphate industry and its possibilities for growth. E. Hendrick. *Am Fert* 44:21-2 Mr 18 '16
- Action of ammoniacal salts on the growth of barley. H. G. Soderbaum. *Int R Sci & Prac Ag* 7, no 9:1275-8 S '16
- Advertising to improve war-time soil fertility. *Am Fert* 46:32 My 12 '17
- Advisory commission of the Council of national defence appoint a committee on chemicals with a sub-committee on fertilizers. *Am Fert* 46:21-2 My 12 '17
- Agricultural availability of raw ground phosphate rock. W: H. Waggaman and C. R. Wagner. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:442-4 Je '18
- Agriculture for beginners; commercial fertilizers. W. I. Chamberlain. *Nat Stock & F* 40:70, 100 Ap 15-22 '16
- Ammonifiability versus nitrifiability as a test for the relative availability of nitrogenous fertilizers. C. B. Lipman and P. S. Burgess. *bibliog Soil Sci* 3:63-75 Ja '17
- Artificial fertilizers. A. R. Ling. *Metallurgical & Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:609 My 15 '17
- Artificial fertilizers. W. C. Robertson. *J Dept Ag Victoria* 15:295-302 My '17
- Artificial fertilizers. E. J. Russell. *J Franklin Inst (Franklin Inst., Philadelphia 50c)* 183: 801-2 Je '17
- Artificial fertilizers act; unit values for 1916. P. R. Scott. *J Dept Ag Victoria* 14:1-14 Ja '16
- Artificial manures. G: H. Copley. *Gard Chron (Lond)* 63:213 My 25 '18
- British fertilizer notes. See fortnightly numbers of American fertilizer
- Buying and using commercial fertilizers. E. H. Jenkins. *Market Growers J* 18:79 F 1 '16
- Buying commercial fertilizers. C. E. Thorne. *Ohio Ag Exp B v* 3:139-41 My '18
- Century of soil improvement. H: G. Bell. *Am Fert* 45:21-5 Jl 8 '16
- Cheap fertilizer for white pine seedlings. W. D. Clark. *Soc Am For Pro* 11:336 Jl '16
- Chemical fertilizers and intensive cropping. *il Country Gent* 81:1162 Je 3 '16
- Commercial fertilizer on corn. Wallaces' F 41: 287 F 18 '16
- Commercial fertilizers. P. L. Hibbard. *Cal Ag Exp B* 286:117-66 '17
- Commercial fertilizers. J. L. Hills and others. *il Vt Ag Exp B* 206:1-72 '17
- Commercial fertilizers for farm and garden. A. R. Whitson. *il Am Fert* 48:66 Ap 27 '18
- Commercial fertilizers in Germany. H. W. Harris. *Am Fert* 45:32-3 S 2 '16
- Commercial fertilizers in 1915-16. G. S. Fraps. *Tex Ag Exp B* 193:1-23 '16
- Commercial fertilizers in war time. C. E. Thorne. *il Ohio Ag Exp B v* 3:3-7 Ja '18
- Commercial fertilizers; what they contain and their uses. W. H. Stroud. *Wis Ag Exp B* 265:1-11 '16
- Commercial stocks of fertilizer and fertilizer materials in the United States as reported for Oct. 1, 1917. *U S Ag C* 104:1-12 '18
- Comparison of the nitrifying powers of some humid and some arid soils. C. B. Lipman and others. *bibliog J Ag Research* 7:47-82 O 9 '16
- Concerning the use of commercial fertilizers in 1916. (C 10) *(In Vt Ag Exp Report, 1915-1916)* 16p '16
- Corn culture in the southeastern states. C. H. Kyle. *il Farmers' B* 729:3-8 '16
- Crop prices and fertilizer cost. S. B. Haskell. *Am Fert* 47:54+ N 24 '17
- Effect of additions on the availability of soil potash, and the preparation of sugar humus. G. S. Fraps. *Tex Ag Exp B* 190:1-30 '16
- Effects of large applications of commercial fertilizers on carnations. G. D. Beal and F. W. Muncie. *bibliog Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr)* 38:2784-804 D '16
- Experiments in manuring vines with chemical fertilisers, carried out in 1915 by the National society of agriculturists of Hungary. B. Kovácsy. *Int R Sci & Prac Ag* 7, no 5: 696-7 My '16
- Facts about fertilizers; selecting ready-mixed fertilizers. T. Butler. *Prog F* 32:443 Ap 7 '17
- Facts about fertilizers; what materials may be mixed and how to find the per cent of plant foods. T. Butler. *Prog F* 32:354 Mr 17 '17
- Fertilizer conditions and outlook; the system of valuation. W: Frear. *Pa Ag Dept B* 278:44-8 '16
- Fertilizer day at a land show. *Am Fert* 46:27 F 17 '17
- Fertilizer facts for truck gardeners. J. W. Henceroth. *Am Fert* 46:44+ Mr 3 '17
- Fertilizer for the 1919 wheat crop. *Am Fert* 48:66 Je 8 '18
- Fertilizer frauds, fakes and fancies. R. E. Rose. *Am Fert* 44:36 My 13 '16
- Fertilizer guarantees and analyses. T. Butler. *Prog F* 32:286 Mr 3 '17
- Fertilizer industry and the potato situation. H: G. Bell. *Am Fert* 47:28-30 N 24 '17
- Fertilizer manufacturers meet in Atlanta and New York for conference with the sub-committee on fertilizers. *Am Fert* 46:25-9 My 26 '17
- Fertilizer outlook. C. M. Bible. *Penn State F* 9:376 Ap '16
- Fertilizer outlook. O. M. Kile. *il Field II* 27:271+ Ap '17
- Fertilizer outlook. W. W. Reynolds. *Ohio F* 137:374 Mr 11 '16
- Fertilizer question. Wallaces' F 41:522 Mr 31 '16
- Fertilizer report. J. W. Kellogg. *Pa Ag Dept B* 288:1-71 '17
- Fertilizer situation; activities of sub-committee on fertilizers. *Am Fert* 46:21-2 Je 9: 43-5 Je 23: 47:21-5 Jl 7: 32-4 S 1: 34-6 S 15 '17
- \* Fertilizer situation in the United States. E. J. Russell. *Nature (St Martin's st, London, W. C. 6d)* 100:406-7 Ja 24 '18
- \* Fertilizers after the war. E. J. Russell. *Nature (St Martin's st, London, W. C. 6d)* 102:5-6 S 5 '18
- Fertilizers and increased production. F. T. Shutt. *Am Fert* 46:44+ My 12 '17
- Fertilizers and industrial wastes. F: W. Brown. *Am Fert* 47:58+ Jl 7 '17
- Fertilizers and soil fertility. H: G. Bell. *Am Fert* 44:44+ Ap 15 '16
- Fertilizers for next spring. O. M. Kile. *Country Gent* 82:2052 D 29 '17; Same. *Am Fert* 48:30-1 Ja 19 '18
- Fertilizers for roses. F. W. Muncie. *Am Flor* 46:420-1 Mr 18 '16
- Fertilizers for vegetable growers. R. L. Watts. *Country Gent* 81:804 Ap 8 '16
- Fertilizers give dealers double profits. M. Ryder. *Am Fert* 46:66 My 12 '17
- Fertilizers in Russia. *Am Fert* 44:31-2 My 27 '16; 46:34b F 3 '17
- Fertilizers in war time. J. W. Henceroth. *Coop Manager & F* 7:70 D '17
- Fertilizers sold in Wisconsin. W. H. Stroud. *Wis Ag Exp B* 279:1-13 '17
- Fertilizers; what they are—how to apply them. (Soil improvement com. B. 13) 18p il '16 Nat. fertilizer assn., Chicago
- Field experiments in 1915. *Maine Ag Exp B* 246:2-27 Ja '16
- Field tests of fertilizer action on soil aldehydes. J. J. Skinner and C. F. Noll. *il Am Soc Agron J* 8:273-98 S '16



**Fertilizers, Commercial—Continued**

- Good fertilizer formulas. Green's Fruit Grower 36:13 Je '16
- Government report on fertilizer materials. Am Fert 44:35-8 Ja 8 '16
- Home-mixed and ready-mixed fertilizers. T. Butler. Prog F 32:323 Mr 10 '17
- Home mixing of fertilizers. H. H. Charles. Kimball's D F 15:389 Je 1 '17
- Home mixing of fertilizers. D. K. Tressler. Kimball's D F 15:273 Ap 15 '17
- How a tenant used fertilizers. H. F. Thurston. Power F 25:25 My '16; Same. Am Fert 44:46 Je 10 '16
- How to get rich lands; commercial fertilizers—their use in soil building. T. Butler. Prog F 32:470 Ap 14 '17
- How to increase Ontario crop yields. H. G. Bell. 11p il n.d. Soil improvement committee, National fertilizer assn., Chicago
- How to know what fertilizers are worth. T. Butler. Prog F 31:71 Ja 15 '16
- Illinois system of permanent fertility. C. G. Hopkins. Hoard's D 50:820 Ja 14 '16; Same. Wallaces' F 41:218 F 11 '16
- Importance of fertilizers. Am Fert 45:29-30 Ag 19 '16
- Indiana's protection for purchasers of fertilizer. W. J. Jones, jr. Purdue Ag 10:23-4+ Je '16
- Influence of commercial fertilizer upon the bearing apple tree. C. I. Lewis and G. G. Brown. il Ore Ag Exp B 141:37-47 '17; Same cond. by G. G. Brown. Better Fruit 11:16-17 F '17; Same. (In 8th annual report, 1916, p. 36-41) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.
- Influence of energy material upon the relation of soil microorganisms to soluble plant food. C. J. T. Doryland. bibliog N D Ag Exp B 116:319-401 '16
- Influence of fertilizers and soil amendments on soil acidity. J. J. Skinner and J. H. Beattie. Am Soc Agron J 9:25-35 Ja '17
- Inspection of commercial fertilizers. H. D. Haskins and others. Mass Ag Exp Control Ser B 8:1-64 '17
- Inspection under the artificial fertilizers act; season 1914-15. P. R. Scott. J Dept Ag Victoria 14:15-18 Ja '16
- Interpretation of the results of field experiments with different phosphates. C. A. Mooers. Science (Science Press, Garrison, N.Y. 15c) n s 46:210-12 Ag 31 '17
- Investigational work with fertilizers. B. L. Emslie. (In Experimental farms, 1916. v. 1. p. 129-69) 45c '17 Canada Ag
- List of fertilizers in New South Wales. A. A. Ramsay and R. M. Petrie. Ag Gaz of New South Wales 29:189-96 Mr '18
- List of fertilizers registered under the artificial fertilizers act for the year 1918. P. R. Scott. J Dept Ag Victoria 16:39-50 Ja '18
- Long Island farmers and fertilizers. H. R. Talmage. Rural N Y 75:15, 47 Ja 1-8 '16
- Low grade fertilizer. W. D. Zinn. Nat Stock & F 42:759 N 23 '18
- Made in America: cheap water power in the West to produce fertilizers. W. H. Dean. il Country Gent 81:1011-12 My 13 '16
- Maintaining and increasing crop yields. H. G. Bell. (Soil improvement com. Pamph. 16) 12p n.d. Nat. fertilizer assn., Chicago; Same. Am Fert 44:21-5 Ap 29 '16
- Manufacture of commercial fertilizers. J. L. Hills. il Vt Ag Exp B 207:1-48 Je '17
- Manufacture of fertilizers in relation to selling. J. E. Breckenridge. Am Fert 49:25-8+ O 26 '18
- Manurial experiments in Germany with new forms of nitrogenous fertilizers. Int R Sci & Prac Ag 7,no 3:344 Mr '16
- Most profitable fertilizers for wheat. C. G. Williams. il Ohio F 138:167 Ag 26 '16
- Need of fertilizers in Alabama. W. P. Redd. Am Fert 46:29 F 17 '17
- New fertilizer from Italy; tetrphosphate. Sci Am (233 Broadway, N.Y. 10c) 119:337 O 26 '18
- New three-salt nutrient solution for plant cultures. B. E. Livingston and W. E. Tottingham. Am J Bot 5:337-46 Jl '18
- Nitro fertile—great fertilizer stuff. Rural N Y 77:69 Ja 19 '18
- Nitrogen of processed fertilizers. E. C. Lathrop. U S Ag B 158:1-24 '11
- Nitrogenous fertilizers obtainable in the United States. J. W. Turrentine. U S Ag B 37:1-12 '13
- One year with orchard fertilizers. C. Dewey. il Green's Fruit Grower 36:3 Jl '16
- Pacific Coast fish scrap. Am Fert 44:40+ Ap 1 '16
- Plan for testing efficiencies of fertilizers. P. L. Gile and J. O. Carrero. Am Soc Agron J 8:247-55 Jl '16
- Position of the fertilizer trade after the war. J Bd Ag 25:193-8 My '18
- Power development—reclamation service projects. A. P. Davis. Irr Age 31:131-5 Jl '16
- Preparation of concentrated fertilizers. W. H. Ross and A. R. Merz. Am Fert 45:32-5 O 14 '16
- Preparedness map of the United States from the farmers' standpoint. O Judd Farmer 61:16-17 D 2 '16
- Present fertilizer situation. H. Hodgson. Am Fert 44:27-9 F 5 '16
- Pribilofs can supply bone. Am Fert 44:32-3 Mr 18 '16
- Production and sale of mixed fertilizers. (In Report on the fertilizer industry, p 170-245) '16 U. S. Federal trade comm., Washington, D. C.
- Production and supply of some chemical manures in Germany. J Dept Ag Ireland 18,no 1:28-32 '18
- Rational use of commercial fertilizers. Am Fert 46:42+ F 3 '17
- Redeeming an impoverished soil. C. E. Thorne. Ohio Ag Exp B v 2:339-43 O '17
- Russia's fertilizer position. Am Fert 45:49 N 11 '16
- Sanderson's reliable and efficient fertilizers. 32p il Sanderson fertilizer & chemical co., New Haven, Conn.
- Selling fertilizers plus service. O. M. Kile. Am Fert 46:82+ Je 23 '17
- Shall we cut out commercial fertilizers this year? T. Butler. Prog F 31:107 Ja 22 '16
- Smithsonian institution to study mineral fertilizers. J. E. Pogue. Am Fert 47:22 Ag 4 '17
- So-called new fertilizer. T. Butler. Prog F 33:327 Ag 24 '18
- Soil experiment fields—a progress report. G. Roberts. il Ky Ag Exp B 199:43-93 '16
- Soil feeding or crop feeding. H. G. Bell. Am Fert 46:50-1 Je 23 '17
- Some correlations between vegetation and soils, indicated by census statistics. R. S. Harper. Am Fert 45:40-2 Ag 5 '16
- Some notes of fertilizers and the war. W. Frear. Pa Ag Dept B v 1:29-34 Ap '18
- Sources of fertilizer materials and the amount required by different crops. Va Ag Dept B 109:168-9 '16
- Sources of fertilizing materials for Illinois farms. C. G. Hopkins and F. C. Bauer. map Ill Ag Exp C 223:1-8 '18
- State fertilizer tonnage; showing the consumption, 1909-1916. Am Fert 47:25 Ag 4 '17
- Study fertilizers, and buy and use only what you need. W. F. Massey. Prog F 31:590 Ap 29 '16
- Study of Colorado wheat; effects of individual fertilizers. W. P. Headden. Colo Ag Exp B 217:21-38 '16
- Timothy fertilization and culture. N. Schmitz. il Md Ag Exp B 202:159-71 '17; Same. Md Ag Exp Rep 1916:1917 '17
- Top-dressing with commercial fertilizers. D. N. Barrow. Prog F 31:579 Ap 22 '16
- Undesirable forms of exploited so-called plant food. L. L. Van Slyke. N Y Ag Dept B 86:2292-5 Ag '16
- Use of commercial fertilizers, by H. J. Wheeler; Fertilizers and their use in Canada, by F. T. Shutt. (In Report, 1917, p. 40-56, 57-70) il '17 Canada Comm. of conservation, Ottawa
- Use of commercial fertilizers in growing roses. F. W. Muncie. Ill Ag Exp B 196:511-64 '17
- Use of commercial fertilizers in Iowa. Am Fert 48:64+ My 11 '18

**Fertilizers, Commercial—Continued**

- Use of commercial fertilizers this year. A. R. Whitson. Hoard's D 53:719 My 18 '17
- Use of 200-pound bags for fertilizers will effect needed saving in burlap. Weekly N L 5: 10 Je 19 '18
- War and the fertilizer industry. H: G. Bell. Am Fert 47:41-2 N 24 '17
- War and the fertilizers of neutrals. Fruit-Grower 27:131+ F 15 '16
- West as a field for fertilizers. S. B. Haskell. Am Fert 49:80+ Ag 3 '18
- What fertilizers to use. Prog F 31:315 Mr 4 '16
- What the fertilizer guarantee means—computing values. T. Butler. Prog F 31:216 F 12 '16
- What to do about fertilizers. J. F. Duggar. Prog F 31:92, 439 Ja 15, Mr 25 '16
- Wheat fertilizers should be ordered early. F. B. Mumford. Am Fert 46:44 Je 9 '17
- Wheat production. H: G. Bell, C. A. Waugh and J. W. Henceroth. map Am Fert 44:21-7 Je 10 '16
- Wheatfield in April. C. E. Thorne. il Ohio Ag Exp B v 2:110-12 Ap '17
- Why manufactured fertilizers? J. M. Coulter; R. J. H. DeLoach. Am Fert 46:21-3 Mr 31 '17
- Why of home mixing. K. Ludwig. Penn State F 9:375 Ap '16
- Analysis**
- Analyses of commercial fertilizer supplies and home mixtures. C: S. Cathcart. N J Ag Exp B 297:1-43 '16
- Analyses of commercial fertilizers. P. H. Wessels. R I Ag Exp Inspec B 18p O '16
- Analyses of commercial fertilizers. P. H. Wessels. R I Ag Exp Inspec B 19p O '17
- Analyses of commercial fertilizers and ground bone; analyses of agricultural lime. C: S. Cathcart. N J Ag Exp B 303:1-52 '16
- Analyses of commercial fertilizers and ground bone; analyses of agricultural lime. C: S. Cathcart. N J Ag Exp B 318:1-51 '17
- Analyses of commercial fertilizers, fertilizer supplies and home mixtures. C: S. Cathcart. N J Ag Exp B 314:1-51 '17
- Analyses of commercial fertilizers, 1915-1916. S C Ag Exp B 187:1-68 '16
- Analyses of commercial fertilizers, 1916-1917. S C Ag Exp B 194:1-66 '17
- Analyses of commercial fertilizers, season 1917-1918. S C Ag Exp B 197:1-62 '18
- Analyses of fertilizer by the Virginia Department of agriculture for 1918. Va Ag Dept B 127:17-23; 128:18-24; 129:13-19; 130:15-20; 131:25-30; 132:24-9; 133:19-26; 134:16-24 Ap-N '18
- Analyses of fertilizers. J Dept Ag S Australia 21:242-3 O '17
- Analyses of fertilizers by the Virginia department of agriculture for 1917. Va Ag Dept B 116:15-45; 117:18-26; 118:11-23; 119:14-23; 120:21-31; 121:22-32; 122:17-30; 123:13-26; 124: 8-23; 125:11-23 Ap '17-Ja '18
- Analyses of inspection samples of fertilizers. J. T. Willard and R. C. Wiley. Kan Ag Exp Inspec C 3:1-17 '16; 4:1-11 '17
- Analysis of fertilizers for 1916. B. E. Curry and T. O. Smith. N H Ag Exp B 179:1-10 '16; Same. N H Ag Dept Rep v 34 '16
- Analysis of fertilizers for 1917. B. E. Curry and T. O. Smith. N H Ag Exp B 185 9p '17
- Analysis of fertilizers, 1916. Va Ag Dept B 111:22-9 Ap '16; 112:17-25 My '16; 113:15-34 Ji '16; 114:5-32 S '16
- Annual report on result of inspection under the fertilizers act, season 1915-16. W. C. Robertson. J Dept Ag Victoria 15:65-75 F '17
- Commercial fertilizers. H. E. Curtis and others. Ky Ag Exp B 205:399-538 '16
- Commercial fertilizers. H. E. Curtis and others. Ky Ag Exp B 214:337-438 '17
- Commercial fertilizers. P. L. Hibbard. Cal Ag Exp B 272:47-99 '16
- Commercial fertilizers. P. L. Hibbard. Cal Ag Exp B 300:125-52 '18
- Commercial fertilizers. J. L. Hills and others. bibliog il Vt Ag Exp B 198:1-83 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16
- Commercial fertilizers. W. J. Jones, jr., and others. Ind Ag Exp B 186:971-1050 '16
- Commercial fertilizers. W. J. Jones, jr., and others. map Ind Ag Exp B 199:1-114 '17
- Commercial fertilizers in 1916-1917. Tex Ag Exp B 217:1-26 '17
- Commercial fertilizers inspection 1915. B. H. Hite and F. B. Kunst. W Va Ag Exp Inspec B 4:1-69 '16
- Commercial fertilizers inspection 1916. B. H. Hite and F. B. Kunst. W Va Ag Exp Inspec B 5:1-85 '17
- Commercial fertilizers, 1916. C: D. Woods. Maine Ag Exp Office Inspec 80:137-96 '16
- Commercial fertilizers, 1917. C: D. Woods. Maine Ag Exp Office Inspec 85:121-48 '17; Same. Maine Ag Exp Rep 1917:121-48 '17
- Composition of fertilizer materials. Fla Ag Dept Quar B v 26:151 Ji '16; Same. Fla Ag Dept Quar B v 26:83 O '16
- Displacement of the potash and phosphoric acid contained in certain rocks by some substances used as fertilizers. G. André. Int R Sci & Prac Ag 7,no 4:518-19 Ap '16
- Fertilizer analyses. See quarterly numbers of Florida agricultural department quarterly bulletin
- Fertilizer analyses (B. 275). A. J. Patten and others. Mich Ag Bd Rep 1916:297-319
- Fertilizer analyses, 1916. A. J. Patten and others. Mich Ag Exp B 278:1-31 '16; Same. Mich Ag Bd Rep 1917:453-81
- Fertilizer analysis, 1917. A. J. Patten and others. Mich Ag Exp B 280:1-48 '17
- Fertilizer registrations for 1916. C: S. Cathcart. N J Ag Exp B 290:1-32 '16
- Fertilizer registrations for 1917. C: S. Cathcart. N J Ag Exp B 304:1-42 '17
- Fertilizer registrations for 1918. C: S. Cathcart. N J Ag Exp B 321:1-39 '18
- Fertilizer report, Aug. 1-Dec. 31, 1917. Pa Ag Dept B 308:1-59 '18
- Fertilizer report for 1917. E. H. Jenkins and J. P. Street. Conn State Ag Exp B 204:373-422 '18
- Fertilizers, 1916. Conn State Ag Exp Rep 1916, pt 1:1-63 '16
- Fertilizing materials. (In Experimental farms, 1916. v. 1, p. 125-39) 45c '17
- Canada Ag Identification of commercial fertilizer materials. W: H. Fry. U S Ag B 97:1-13 '14
- Inspection of commercial fertilizers. H. D. Haskins and others. Mass Ag Exp Control Ser B 6:1-93 '16
- Inspection of commercial fertilizers: 1915. Mo Ag Exp B 139:1-58 '16
- Inspection of commercial fertilizers: 1916. Mo Ag Exp B 145:1-41 '17
- Inspection of fertilizers. P. R. Scott and W: C. Robertson. J Dept Ag Victoria 16:94-100 F '18
- List of fertilizers in New South Wales. F. B. Guthrie and others. Ag Gaz of New South Wales 28:171-7 Mr '17
- List of fertilizers registered under artificial fertilizers act for the year 1917. P. R. Scott. J Dept Ag Victoria 15:17-23 Ja '17
- Methods of analysis. Assn Office Ag Chem J 1, no 4, pt 2:1-15 F '16
- Report of analyses of samples of commercial fertilizers collected by the Commissioner of agriculture during 1915 (B. 410). N Y State Ag Exp Rep 1915:841-916 '16
- Report of analyses of samples of commercial fertilizers collected by the Commissioner of agriculture during 1916. N Y State Ag Exp B 425:413-71 '16
- Report of analyses of samples of commercial fertilizers collected by the Commissioner of agriculture during 1917. N Y State Ag Exp B 440:523-84 '17
- Results of fertilizer inspection. A. J. Patten. Mich Ag Exp C 33:1-3 '17
- State chemist's report, 1915; analyses of fertilizers, feed stuffs, food and drugs; rules and regulations. R. E. Rose. Fla Ag Dept Quar B v 26:1-194 Ja '16
- State chemist's report, 1916; analyses of fertilizers, feed stuffs, food and drugs; rules and regulations. R. E. Rose. Fla Ag Dept Quar B v 27:1-213 Ja '17

\* Study of sources of error incident to the Lindo-Gladding method for determining potash. T. E. Keitt and H. E. Shiver. J. Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:994-6 D '18



**Fertilizers, Commercial—Analysis—Continued**

Table of analyses for season of 1917. Ga Ag  
Dept B 73:50-149 O '17

**Bibliography**

International movement of fertilisers and  
chemical products useful to agriculture. (no.  
8) p 57-86 My '18 Int. inst. of ag., Rome

**Dictionaries**

Dictionary of fertilizer materials. T: C. Pink-  
erton. (In Am. fertilizer hdbk., 1917, p. 39-  
48) \$1 '17 Ware bros. co., 1010 Arch st., Phil-  
adelphia; Same. Am Fert 47:29-34d Ag 4  
'17; Same cond. Am Fert 44:30-7 Ap 15 '16

**Prices**

Comparison of wholesale prices and farmers'  
prices of fertilizer materials. (In Report on  
the fertilizer industry, p 161-9) '16 U. S.  
Federal trade comm., Washington, D. C.  
Fertilizer prices order, 1918. J Bd Ag 25:221-9  
My '18  
Market prices of chemicals and fertilizing  
materials at Florida seaports, October 1,  
1918. New York wholesale prices; current  
Oct. 1, 1918. Fla Ag Dept Quar B v 28:77-  
80 O '18  
Order fixing maximum prices for compound  
fertilisers in Great Britain. J Bd Ag 24:917-  
21 N '17  
Wholesale prices of fertilizer materials. (In  
Report on the fertilizer industry, p 120-60)  
'16 U. S. Federal trade comm., Washington,  
D. C.

**Sampling**

Better samples from the fertilizer factory.  
A. J. Lawrence. J Industrial and Eng  
Chemistry (Am. Chemical Soc., Easton, Pa.  
\$6 per yr) 8:1145-6 D '16  
How to legally draw, pack and transmit  
samples of fertilizers and commercial feed  
stuffs for analysis by the state laboratory.  
R. E. Rose. Fla Ag Dept Quar B v 27:59-60  
Jl '17  
Important adjunct to the fertilizer industry.  
il Am Fert 46:74 Je 23 '17  
Note on the results of analyses on fertilizer  
samples taken with different styles of  
samplers. F. B. Carpenter. J Industrial and  
Eng Chemistry (Am. Chemical Soc., Easton,  
Pa. \$6 per yr) 8:1144-5 D '16  
Regulations governing the taking and for-  
warding of samples of commercial fertilizer  
and commercial feeding stuff to the com-  
missioner of agriculture for analysis by the  
state chemist. Fla Ag Dept Quar B v 28:  
72-9 Jl '18  
Sampling of fertilizers. F. S. Lodge. il Am  
Fert 45:26-9 O 14 '16

**Fescue**

Popular descriptions of grasses; fescue grasses.  
E. Breakwell. il Ag Gaz of New South  
Wales 29:159-66 Mr '18

**Seed**

Meadow fescue or English bluegrass seed out-  
look. U S Seed Rep 2:5 Jl '18

**Festivals.** See Corn festivals; Pageants

**Feterita**

Feterita requires careful harvesting. M. Cov-  
erdell. Jersey B 35:1602 O 11 '16

Making food from fodder. O. R. Geyer. il  
Scientific Am (233 Broadway, N.Y. 10c) 117:  
177 S 8 '17

See also Feeding and feeding stuffs—  
Feterita

**Fever**

Significance of the fever complex in the cow.  
R. A. Greenwood. Am Vet M Assn J 48:709-  
18 Mr '16

See also Hay fever; Malaria; Typhoid fever

**Fiber board industry.** See Paper making and  
trade

**Fiber containers**

Fiber containers as a substitute for glass and  
tin. Scientific Am (233 Broadway, N.Y. 10c)  
118:59 Ja 12 '18

**Fiber inspection**

Resumé of the fiber-inspection work of the  
Bureau of agriculture during the year 1916.  
M. M. Saleeby. Philippine Ag R 10,no 1:64-  
88 '17

**Fiber silk.** See Silk, Artificial

**Fibers**

Carbone method for retting textile plants by  
microbiological action. D. Carbone and A.  
Tombolato. Int R Sci & Prac Ag 8,no 10:  
1417-18 O '17  
Division of economic fibre production. G. G.  
Bramhill. Ag Gaz of Canada 4:253-4 Ap '17  
Fibre and fibre-production. H. J. Boeken.  
Ag J of India 12:326-8 Ap '17  
Fibre industry of Mauritius. Int R Sci & Prac  
Ag 7,no 2:287-8 F '16  
German substitute for jute. Ag J of India  
12:322-5 Ap '17  
Indigenous fibrous plants of Victoria. J. W.  
Audas. J Dept Ag Victoria 16:600-9 O '18  
Industrial retting of textile plants by micro-  
biological action. G. Rossi. bibliog Int R Sci  
& Prac Ag 7,no 8:1067-75 Ag '16  
Miscellaneous vegetable fibers as the raw ma-  
terial for celluloid. H. Nishida. J Industrial  
and Eng Chemistry (Am. Chemical Soc.,  
Easton, Pa. \$6 per yr) 8:1096-1100 D '16  
Seven textile fibers. C. G. Baker. J Home  
Econ 8:144-7 Mr '16  
Vegetable fibres. Ag J of India 13:500-4 Jl  
'18  
Wild plants of Queensland (Australia) which  
can be used for the extraction of textile  
fibres and for the manufacture of paper.  
Int R Sci & Prac Ag 8,no 2:239-40 F '17  
See also Agaves; Cotton; Fiber inspection;  
Flax; Hemp; Jute; Kapok; Nettle fiber;  
Sisal hemp; Textile industry and fabrics;  
Wool

**Analysis**

Determination of crude fiber. C. E. Mangels  
and P. F. Trowbridge. Assn Offic Ag Chem  
J 2,no 3,pt 1:132-4 N '16  
Report on crude fiber. C. K. Francis. Assn  
Offic Ag Chem J 2,no 3,pt 1:126-31 N '16

**Grading**

Description of the standard grades of Philip-  
pine fibers. M. M. Saleeby. Philippine Ag  
R 9,no 1:21-30 '16  
Fiber-grading stations and grading establish-  
ments. M. M. Saleeby. Philippine Ag R 9,  
no 1:42-7 '16  
Grading and baling Philippine fibers. il Philip-  
pine Ag R 9,no 1:5-12 '16  
One year of the fiber-grading law. M. M.  
Saleeby. il Philippine Ag R 9,no 1:13-20 '16

**Statistics**

Statistical report of fiber production in the  
Philippine Islands during the year 1915. M.  
M. Saleeby. il Philippine Ag R 9,no 1:31-  
41 '16

**Fibers, Wood**

Staining of wood fibers for permanent micro-  
scopic mounts. H. N. Lee. Bot Gaz 62:318-  
19 O '16

**Fibrin**

Fibrin (Tech B. 41). A. W. Bosworth. N Y  
State Ag Exp Rep 1915:362-5 '16  
Nitrogen distribution of fibrin hydrolyzed in  
the presence of ferric chloride. C. A. Morrow  
and W. R. Fetzner. bibliog Soil Sci 5:163-7 F  
'18

**Ficus elastica.** See Rubber plants

**Ficus repens.** See Creeping fig

**Field crops**

Agricultural experiments; report for year  
1916-1917. W. J. Spafford. J Dept Ag S Aus-  
tralia 20:550-6, 602-3; 21:294-8 F-Mr, N '17  
Crop production. Ill Farmers Inst Rep  
1917:93-117 '17  
Cultivated farm crops—cultural notes. E. B.  
Stookey. Western Wash Ag Exp B v 5:23-6  
My '17  
Meeting the demand for more food produc-  
tion. A. E. Grantham. il Prac F 113:211 Je  
1 '17

**Field crops—Continued**

Report from the division of field husbandry for the year ending March 31, 1916. (*In* Experimental farms, 1916, v. 1, p. 187-382) il 45c '17 Canada Ag  
 Report of the committee on farm crops. D. P. Witter. N Y Farms & Markets Dept Ag B 97:86-93 Jl '17  
 Roseworthy agricultural college; harvest report, 1916-17. W. J. Colebatch. J Dept Ag S Australia 20:623-48 Mr '17

**Statistics**

\* Statistics of field crops; Hay and clover—all field crops in Ontario. (*In* Report, Bur. of industries, 1917, p. 8, 36) '18 Ontario ag. dept., Toronto

**Varieties**

Varieties of farm crops. C. A. Zavitz. Ontario Ag Dept C 10:1-4 '18

**Field crops laboratories**

Preparation of material for field crops laboratory. W. O. Whitcomb. il Am Soc Agron J 8:38-41 Ja '16

**Field experiments**

Experiments in field technic in rod row tests. H. K. Hayes and A. C. Army. bibliog J Ag Research 11:399-419 N 26 '17

Field experiments, 1916. J Dept Ag Ireland 17, no 2:242-56 '17

Grain-sorghum experiments in the panhandle of Texas. C. R. Ball and B. E. Rothgeb. bibliog il map U S Ag B 698:1-91 '18

Relation of the variability of yields of fruit trees to the accuracy of field trials. L. D. Batchelor and H. S. Reed. bibliog J Ag Research 12:245-83 F 4 '18

Relative precision of formulae for calculating normal plot yields. W. W. Stockberger. Am Soc Agron J 8:167-75 My '16

Size of plots for field experiments with crops. W. M. Jardine. bibliog Am Soc Agron J 9:402-5 D '17

Size of plots for field experiments with soils. T. L. Lyon. bibliog Am Soc Agron J 9:405-10 D '17

Studies concerning the elimination of experimental error in comparative crop tests. T. A. Kiesselbach. bibliog il Neb Ag Exp Research B 13:1-95 '18

Use of check plots in field experiments. A. T. Wiancko. bibliog Am Soc Agron J 9:410-15 D '17

See also Variety tests

**Field garlic.** See Wild garlic**Field mice**

Damage to fruit trees from mice. G. T. Powell. Rural N Y 76:514 Ap 7 '17

Décret de la lieutenance n. 795 portant des mesures pour la lutte contre les campagnols en Italie. Int Yearbook Ag Leg 1916: 887-8 '17

Field mice as farm and orchard pests. D. E. Lantz. il Farmers' B 607:1-12 O 18 (rev.)

Field mice destructive. Green's Fruit Grower 36:21 F '16

Field mice scourge. G. T. Powell. Rural N Y 76:577 Ap 21 '17

**Field of vision;** story. A. G. Steele. il Country Gent 82:1828-9 N 24 '17

**Field trials.** See Variety tests

**Field voles.** See Voles

**Fig marigolds**

Mesembryanthemum simulans. N. E. Brown. il Gard Chron (Lond) 64:145 O 12 '18

New or noteworthy plants; mesembryanthemum concinnum. N. E. Brown. Gard Chron (Lond) 60:204 O 28 '16

**Fig scale.** See Mediterranean fig scale

**Fig-tree borer, Three-lined.** See Three-lined fig-tree borers

**Fig wasps**

How the female blastophaga works. I. J. Condit. il Cal State Comm Hort B v 7:538-40 S '18

See also Sycamore-fig wasps

**Figs**

Dates, figs and raisins. J. W. Andrews. Kimball's D F 15:401 Je 1 '17

Fig in Texas. A. T. Potts. il Tex Ag Exp B 208:1-41 '17

Fig trees on walls. Gard Chron (Lond) 59: 113 F 26 '16

Figs—a market mystery. J. H. Collins. il Country Gent 81:1899 O 28 '16

Figs and muscadines for home use. W. N. Hutt. Prog F 31:1193 O 14 '16

How to dry figs. Prog F 32:846 Ag 4 '17

Make plans for a few fig trees. Prog F 31: 879 Jl 15 '16

Practical fig culture in Arizona. W. H. Lawrence. il Ariz Ag Exp B 77:1-43 '16

Smyrna fig. H. E. Zimmerman. il Am For 24: 231 Ap '18

Smyrna fig culture. G. P. Rixford. bibliog il U S Ag B 732:1-43 '18

Smyrna fig growing in California. H. Markarian. il Cal State Comm Hort B v 5:1-14 Ja '16

When you cook figs. M. H. Neil. il Country Gent 81:1779 S 30 '16

See also Sycamore figs

**Diseases and pests**

Black smut of figs. R. W. Hodgson. il Cal State Comm Hort B v 7:188-9 Ap '18

Botrytis cinerea, a disease attacking the shoots and fruit of fig trees in England. W. B. Brierley. Int R Sci & Prac Ag 8, no 2:310-11 F '17

Macrophoma disease of figs. F. A. Wolf and E. E. Stanford. il Phyt 8:24-7 Ja '18

Rhizoctonia of the fig. J. Matz. il Phyt 7: 110-18 Ap '17

Some diseases of the fig. J. Matz. il Fla Ag Exp B 149:1-10 '18

Sterigmatocystis smut of figs. R. W. Hodgson. Phyt 8:545-6 O '18

See also Mediterranean fig scale; Threelined fig-tree borers

**Filberts**

Another chance for the filbert. il J Heredity 9:158-60 Ap '18

Filbert growing for profit in the Puget sound country. A. A. Quarnberg. n. p. il 50c '17

Puget mill co., Seattle, Wash.

**Files and filing (documents)**

Filing bulletins, circulars and farm paper clippings. G. S. Beaumont and R. S. Dunham. Farm Eng 5:10 My '17

Filing of clippings and bulletins. Wallaces' F 42:289 F 16 '17

Filing other men's plans. H. P. Demarest. il System on the Farm 3:184 N '18

Filing system for the farmer. J. C. Knollin. Hoard's D 51:427 Mr 31 '16

Indexing and filing of publications. Ag Gaz of Canada 5:6-11, 24-33 Ja '18

Indexing reference matter. Wallaces' F 42:545 Mr 23 '17

Office filing system for county agricultural agents in the northern and western states. H. B. Fuller. (Doc. 34) 15p il '17 U.S. States relations service, Washington, D.C.

Proving the value of an information file. G. D. Ferrell. il System on the Farm 1:71-2 Ap '17

Vertical filing for pamphlet collections. W. L. Eikenberry. Science (Science Press, Garrison, N.Y. 15c) n s 45:64-5 Ja 19 '17

**Files and rasps**

Use of the file. Power F 26:30 Mr '17

**Filicales.** See Ferns**Filters and filtration**

Cistern filter. Country Gent 81:57 Ja 8 '16

Homemade filter. L. A. Yendes-Preston. Rural N Y 75:1136 Ag 26 '16

New apparatus for aseptic ultrafiltration. R. E. Smith. il Phyt 7:290-3 Ag '17

Practical laboratory apparatus—filtering rack for sugar solutions. C. W. Hines. il Philippine Ag R 10, no 4:434-5 '17

Pure water from cistern. M. G. Kains. Ohio F 138:615 D 23 '16

Water filter and cistern. Country Gent 81:2096 D 2 '16



**Finance.** See Agricultural credit; Banks and banking; Bonds; Capital; Forests and forestry—Finance; Income; Insurance; Investments; Loans; Prices; Roads—Finance; Single tax; Speculation; Stocks; Tariff; Taxation; also United States—Agriculture, Department of—Appropriations

**Finches.** See Indigo buntings

**Finest lesson;** Christmas story. Rural N Y 76: 1442, 1470 D 22-29 '17

**Finger prints**

Hand and foot prints. il J Heredity 7:511-22 N '16

**Finland**

See also Agricultural credit—Finland; Forests and forestry—Finland; Land tenure—Finland

#### Industries and resources

Results of interior colonization in Finland. Int R Ag Econ 71:106-22; 73:90-113 N '16, Ja '17

**Fir**

Accelerated growth of balsam fir in the Adirondacks. E. F. McCarthy. J For 16:304-7 Mr '18

Balsam fir. R. Zon. bibliog il map U S Ag B 55:1-68 '14

French fir management in the Vosges. A. Gazin. J For 16:535-49 My '18

Making the fir fly. J. A. Preston. il Am For 24:261-5 My '18

Some factors influencing the reproduction of red spruce, balsam fir, and white pine. B. Moore. J For 15:827-53 N '17

Spruce and balsam fir trees of the Rocky Mountain region. G. B. Sudworth. il maps U S Ag B 37:1-43 '16

Technical properties of the wood of the Greek fir (abies cephalonica link). G. Janka. Int R Sci & Prac Ag 8,no 5:755-6 My '17

Wood for water and air ships must be had. il Am For 24:624-5 O '18

#### Diseases and pests

Insects injurious to pine and fir trees in Sweden. Int R Sci & Prac Ag 7,no 3:464 Mr '16

**Fir, Douglas.** See Douglas fir

**Fire apparatus**

Mechanical fire-fighting equipment. G. G. Blyth. il Am For 22:171-2 Mr '16

**Fire blight**

Are bees a source of infection in the transmission of blight on fruit-trees? Gleanings 44:584 Jl 15 '16

Blight of fruit trees. C. E. Temple. (In Peninsula hort. soc. Trans., 1916, p. 65-8) '16 W. Webb, sec., Dover, Del.

Blight-resistant roots—the first step toward pear-blight control. A. L. Wisker. il Cal State Comm Hort B v 5:48-53 F '16

Controlling blight in apples and pears. J. M. Beall. Prog F 31:366 Mr 11 '16

Controlling pear blight. M. F. Barrus. Green's Fruit Grower 37:10 F '17

Controlling the fire blight of pears. C. B. Savage. il Country Life 31:90 Mr '17

Diseases of pears. M. F. Barrus. il N Y Ag Dept B 79,pt 2:1039-51 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1039-51 '17

Drive on pear blight. R. E. Jones. il Am Fruit Grower 38:3 N '18

Fight against fire blight. H. L. Lantz. il Country Gent 82:534 Mr 17 '17

Fight fire blight now. J. C. Whitten. Fruit-Grower 27:317 Je 1 '16

Fight fire blight of apple. R. E. Vaughan. il Wis Ag Ext C 70:1-7 '17

Fire blight. Fruit-Grower 28:274 My 15 '17

Fire blight. C. G. Savage. J Dept Ag S Australia 20:580-2 F '17

Fire blight in Delaware. Prac F 112:297 Ag 1 '16

Fire blight in orchards. J. C. Whitten. O Judd Farmer 60:10 My 27 '16

Fire-blight infection; rain proves an important carrier. H. A. Gossard and R. C. Walton. il Ohio Ag Exp B v 2:357-64 N '17

Fire-blight insurance. F. D. Kern. il Country Gent 81:963 My 6 '16

Fire-blight investigations. H. A. Gossard and R. C. Walton. Ohio Ag Exp B v 1:274-6 S '16

Fire blight; timely suggestions for its control. R. C. Walton. Ohio Ag Exp B v 2:78-81 Mr '17

Fruit tree blight. F. H. Sweet. Green's Fruit Grower 37:2 S '17

Further data on the relation between aphids and fire blight. J. H. Merrill. il J Econ Entom 10:45-6 F '17

Hive and honey dew mediums for distributing fire blight; with discussion. H. A. Gossard. il J Econ Entom 9:59-67 F '16

Hold-over blight. F. W. Allen. Country Gent 82:693 Ap 7 '17

Honey-bee in its relation to fireblight. J. Troop. il Purdue Ag 11:34-6 D '16

Longevity of bacillus amylovorus under field conditions. J. W. Hotson. il Phyt 6:400-8 O '16

More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. il Ontario Ag Dept B 257:15-19 '17

Observations on fire blight in the Yakima valley, Washington. J. W. Hotson. il Phyt 6: 288-92 Je '16

Pear blight. T. O. Morrison. Better Fruit 10: 9-10 Ja '16

Pear-blight control in Rogue river valley, Oregon. C. C. Cate. il Better Fruit 13:5-6 S '18

\* Pear blight wind borne. F. L. Stevens and others. Science (Science Press, Garrison, N. Y. 15c) n s 48:449-50, N 1 '18

Professor Gossard's theory on fireblight transmission. E. F. Phillips. J Econ Entom 9:362-3 Je '16

Pruning only remedy for fire blight. Fruit-Grower 28:241 Ap 15 '17

Relation between aphid infestation and blight infection. J. H. Merrill. Am Bee J 56:202 Je '16

Role of insects as carriers of fire blight. H. A. Gossard. il Gleanings 44:605-7 Jl 15 '16

Rôle of insects in the dissemination of fire blight bacteria. V. B. Stewart and M. D. Leonard. Phyt 6:152-8 Ap '16

Root blight. H. L. Lantz. Country Gent 82: 839 My 5 '17

Some new facts concerning fire blight. F. D. Heald. Better Fruit 10:21 My; 23 Je '16

Those blackened leaves. C. N. Crotzburg. Fruit-Grower 27:329 Je 15 '16

Unfortunate theory; bees as carriers of fire-blight. Gleanings 44:384-5 My 15 '16

What to do for pear blight. D. N. Barrow. Prog F 31:841 Jl 1 '16

#### Fire departments

Effective rural fire department. E. E. White-man. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:513-14 D '17

#### Fire extinction

Fire extinguishers. H. Mason. Ohio F 138:111 Ag 5 '16

#### Fire insurance. See Insurance, Fire

#### Fire prevention. See Fire protection

#### Fire protection

About lighting fires with kerosene. D. R. A. Drummond. Power F 26:30 Je '17

Annual fire loss. Wallaces' F 43:746 My 3 '18

County organization for rural fire control. W. Metcalf. il Cal Ag Exp C 202:1-23 '18

Dust explosions and fires in grain separators in the Pacific Northwest. D. J. Price and E. B. McCormick. il U S Ag B 379:1-22 '16

Elevator construction as it affects insurance rates. G. E. Traut. Am Coop J 11:969 My '16

Elevator fire escapes. Am Coop J 11:1066 Je '16

Fighting fires before they start. J. Wickre. System on the Farm 2:47 F '18

Fire-fighting plans from 6 farms. M. R. Spitz. il System on the Farm 3:178-9 N '18

Fire prevention. A. G. Tindolph. Coop Manager & F 8:49-50 O '18

Fire prevention and fire fighting on the farm. H. R. Tolley and A. P. Yerkes. il Farmers' B 904:1-16 '18

\* Fire prevention day. 14p il '18 Cal. State for-ester, Sacramento

**Fire protection—Continued**

- Fire prevention; suggestions for a creamery not fireproof in construction. N Y Prod R 46:868 O 9 '18
- Fire protection for grain fields; with special reference to fire protective appliances for grain-harvesting machinery. W. Metcalf. il Cal Ag Exp B 295:351-68 '18
- Fire protection on a farm. Field II 26:484 My '16
- Fire protection on the farm. E. W. Gage. Green's Fruit Grower 36:3 Ag '16
- Fires and preparedness. Power F 26:23 N '17
- Forest and grass fires in Louisiana. R. D. Forbes. (B. 6) 32p il map '18 La. Dept. of conservation, Court bldg., New Orleans
- Forest fire protection in New York state. W. S. Howard. Cornell Countryman 25:73-4 N '17
- Gasoline hazards. Ohio F 138:110 Ag 5 '16
- Grain dust explosion prevention campaign. D. J. Price. Coop Manager & F 7:39-40 Je '18; Same. Power F 27:49 Jl '18
- Great stumbling block to preparedness—fire. Am Fert 46:33 My 12 '17
- Handbook of forest protection, 1918. 106p il map '18 Cal. State bd. of forestry, Sacramento
- Heavy losses from barn fires. J Ag (Quebec) 21:4 Jl '17
- How to build fire-safe with wood. R. S. Whit-ting. Hoard's D 54:577 N 16 '17
- Kerosene hazards. Ohio F 138:111 Ag 5 '16
- Look out for winter fires. Wallaces' F 42:1601 N 23 '17
- Preventing and fighting fire in the home. G. E. Walsh. Country Life 32:128 My '17
- Preventing destructive fires. Mrs E. S. Taylor. Ohio F 138:110 Ag 5 '16
- Prevention and extinction of fire on farms. J Ed Ag 25:602-3 Ag '18
- Prevention of and protection from smut dust explosions and fires in grain separators. G. E. Thornton. Wash Ag Ext Ser 1,no 46: 1-8 '18
- Protecting the country home from fire. E. I. Farrington. il Fruit-Grower 27:303 My 15 '16
- Ready in case of fire. Ohio F 141:406 Mr 16 '18
- Rural fire hazards. T. A. Fleming. il Country Gent 82:1957; 83:22 D 15 '17, Ja 5 '18
- Safeguarding industry from the fire hazard. N Y Prod R 44:694-5, 730, 766 Ag 29-S 12 '17
- Some reflections from a farm fire. W. B. Jones. il Power F 27:38 S '18
- Would ground machinery to prevent cotton-gin fires. Weekly N L 6:1 N 27 '18
- See also Fire apparatus; Fire extinction; Fireproof construction

**Laws**

- Forest, field and marsh fire laws with instructions to town chairmen, road superintendents, rangers and patrolmen. 22p '17 State conservation comm. of Wisconsin, Madison

**Fire screens**

- Dressing glasses and fire screens. W. A. Dyer. il Country Life 31:72+ Mr '17

**Firebacks**

- Old firebacks. il Country Life 32:82 My '17

**Fireflies**

- Firefly's light. il J Heredity 8:368-72 Ag '17
- Firefly's light. W. E. Ringle. Country Life 34:96 S '18

**Fireless cookers**

- About a fireless cooker. Nat Stock & F 40: 382 Jl 8 '16
- \* Common-sense use of the fireless cooker. B. B. Streeter. Delineator (Spring and Mac-dougal sts, N. Y. 20c) 93:23 D '18
- Directions for making and using a fireless cooker. B. E. Hyde. il Country Gent 81: 189 Ja 22 '16
- Fireless cooker. Penn State F 10:100 My '17
- Fireless cooker; story. C. Payne. Rural N Y 75:895 Je 17 '16
- Fireless cooker history. E. Allen. Ohio F 138:265 S 16 '16
- Fireless cooker recipes. Mrs E. D. West. O Judd Farmer 63:14 Ag 18 '17

- Fireless cookers. il Ohio F 142:304 S 28 '18
- Fireless cookers for farmers' wives. il Ohio F 141:632 My 4 '18

- \* Gas appliance testing laboratory. H. M. Riley and L. B. Wilson, jr. Am Gas Eng J (42 Pine st, N. Y. 10c) 109:481-5 N 23 '18
- Homemade cooker for twenty-five cents. W. H. Dean. il Country Gent 81:611 Mr 11 '16
- Homemade fireless cooker. Rural N Y 75:867 Je 10 '16
- Homemade fireless cookers and their use. il Farmers' B 77:1-16 '18 (rev.); Same cond. J Home Econ 9:137 Mr '17
- It has been my experience. O Judd Farmer 63: 28 Jl 21 '17
- Likes her fireless cooker. E. Owen. Ohio F 142:538 N 30 '18
- Man's fireless cooker. G. Boehme. Rural N Y 75:122 Ja 22 '16
- Mother's fireless cooker. Fruit-Grower 27:482 N 1 '16
- Shank and a fireless cooker. A. W. Darling. Rural N Y 75:986 Jl 15 '16

**Fireplaces**

- Before the hearth. il Prog F 31:397 Mr 18 '16
- Fireplace in a paneled wall. J: T. Boyd, jr. il Country Life 30:24-6 O '16
- Fireplaces and personality. G. W. Harting. il Country Life 34:53-5 O '18
- Improving a smoking fireplace. Rural N Y 77:230 F 16 '18
- Informal fireplace. J: T. Boyd, jr. il Country Life 30:32-4 My '16
- Page of remarkable fireplaces. il Am For 23: 750 D '17
- Using wood in fireplaces to conserve coal. R. W. Haddon. il Am For 23:751-3 D '17
- See also Chimneys; Firebacks; Mantels; Stoves, Franklin

**Fireproof construction**

- Fireproof suburban house. J: R. McMahon. il Country Gent 81:1439-40 Jl 29 '16
- What can be done with the unburnable floor. H. D. Eberlein. il Country Life 31:28-31 Ja '17

**Fires**

- Spontaneous combustion as a cause of fires. A. R. Lamb. Ia Ag Exp C 36 4p '17
- See also Camp fires; Fire apparatus; Fire extinction; Fire protection; Forest fires; Insurance, Fire

**Firethorns. See Pyracanthas****Firing**

- Efficient firing of the furnace. Wallaces' F 43:1817 D 13 '18

**First aid in illness and injury**

- Care of the sick in the home. Mrs H. J. Shamel. il Ill Farmers Inst Household Sci 1917:16-24 '18
- Common accidents of childhood. Rural N Y 77:984 Ag 17 '18
- Cut and a burn. C. H. Lerrigo. Country Gent 82:1398 S 8 '17
- Emergency chest. E. Paige-Loomis. Country Gent 81:608 Mr 11 '16
- First aid. A. Rex. Nat Stock & F 41:225 My 19 '17
- First aid for the school. S. A. Wardlow. O Judd Farmer 63:18 S 8 '17
- First aid hints. G. H. Conn. Hoard's D 52: 211 S 8 '16
- First aid in camp. C. H. Lerrigo. Country Life 29:98 Ag '16
- First-aid preparedness for mothers. M. P. Connolly. Country Gent 81:1459 Jl 29 '16
- First aid to the injured. Mrs W. N. Hutt. Prog F 31:1106 S 16 '16
- Helen to the rescue. E. Paige-Loomis. il Country Gent 82:883 My 12 '17
- My child; emergencies. M. P. Connolly. Country Gent 81:1210, Je 10 '16
- Putting a shoulder back. C. H. Lerrigo. Country Gent 82:1583 O 13 '17
- Simple home cures. Mrs E. H. Ervin. Ohio F 137:314 F 26 '16

**Fish. See Fishes****Fish as food**

- Aquatic products as food. H. F. Moore. Pa Ag Dept Dairy B v 16:18-22 F '18



**Fish as food—Continued**

- Bowfin: an old-fashioned fish with a new-found use. R. E. Coker. (Econ. C. 26) 4p il '17 U.S. Bur. of fisheries, Washington, D.C.
- Burbot: fresh-water cousin to the cod. (Econ. C. 25) 4p il '17 U.S. Bur. of fisheries, Washington, D.C.
- Carp: a valuable food resource; with 23 recipes. (Econ. C. 31) 7p il '17 U.S. Bur. of fisheries, Washington, D.C.
- Contributions of zoology to human welfare. H. M. Smith. Science (Science Press, Garrison, N.Y. 15c) n s 47:299-301 Mr 29 '18
- Eat fish and save money. Country Gent 82:981 Je 2 '17
- Eat more fish. 14p il '17 Canada Food controller, Ottawa
- \* Eulachon—a delicious food fish. Sci Am Sup (233 Broadway, N. Y. 10c) 86:335 N 23 '18
- Experiments on the digestibility of fish. A. D. Holmes. U S Ag B 649:1-14 '18
- Fish food that we fail to utilize. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:74 F 2 '18
- Grayfish; try it. (Econ. C. 22) 8p il '16 U. S. Bur. of fisheries, Washington, D.C.
- Housewife and the fish problem. H: B. Ward. J Home Econ 9:369-72 Ag '17
- It has been officially announced by the Royal Norwegian Provisions department that recent experiments at Bergen to produce bread containing 20 per cent of fish roe have been proved successful. The state will purchase the necessary machinery for the preparation of a flour made from cod roe, which will be mixed with bread grain in order to make the rations larger. The bread prepared in this manner is said to be good and palatable
- \* Nematodes on marketable fishes. H. P. K. Agersborg. (Science Press, Garrison, N.Y. 15c) n s 48:493-5 N 15 '18
- Nutrition of oysters; glycogen formation and storage. P. H. Mitchell. (Doc. 851) 153-61p 5c '17 U.S. Bur. of fisheries, Washington, D.C.
- Possibilities of food from fish. H. F. Taylor. (Econ. C. 30) 4p '17 U. S. Bur. of fisheries, Washington, D.C.
- Push summer sea foods now. Pa Ag Dept Dairy B v 16:6-8 Je '18
- Sablefish, alias black cod. H. F. Moore. (Econ. C. 23) 6p il '17 U. S. Bur. of fisheries, Washington, D.C.
- Sharks as food; with thirty recipes. L: Radcliffe. (Econ. C. 35) 8p '18 U.S. Bur. of fisheries, Washington, D.C.
- Skates and rays. (Econ. C. 34) 7p il '18 U.S. Bur. of fisheries, Washington, D.C.
- See also Cookery—Fish

**Analysis**

- Preliminary studies on chemical methods of detecting deterioration in fish flesh. E. D. Clark and L. H. Almy. Assn Offic Ag Chem J 2:231-6 F '17

**Bibliography**

- \* Selected bibliography of papers on fish, mollusks and crustacea as food; prepared for the Food information committee of the American library association. R. MacDonald. 5p mim '18 U.S. Food administration for Illinois, Urbana

**Preservation**

- Practical small smokehouse for fish; how to construct and operate it. (Econ. C. 27) 8p il plans '17 U. S. Bur. of fisheries; Washington, D.C.
- Preserving fish for domestic use. (Econ. C. 28) 2p '17 U. S. Bur. of fisheries, Washington, D.C.

**Statistics**

- Commercial stocks of fish in brine and dried fish, July 1. U S Food Surveys 2:10-12 S 30 '18
- Commercial stocks of fresh and preserved fish, Jan. 1. U S Food Surveys 1:1-8 J1 8 '18

**Storage**

- Commercial freezing and storing of fish. E. D. Clark and others. il U S Ag B 635:1-9 '18

- Method for refrigerating fish. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:263 Ap 27 '18

**Fish canning**

- Home canning of meats and sea foods with the steam-pressure canner. F. P. Lund. (Doc. 80) 28p il '18 U.S. States relations service, Washington, D.C.

**Fish canning industry**

- Fish canning industry. C. M. Hilliard. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:202-4 Mr '18

**Fish culture**

- Artificial hybrids between pike and pickerel. G. C. Embody. il J Heredity 9:253-6 O '18
- Carajat incubator for hatching trout fry. H. Gerdil. Int R Sci & Prac Ag 8,no 10:1394-5 O '17
- Distribution of fish and fish eggs during the fiscal year ending 1915. R. S. Johnson. Int R Sci & Prac Ag 7,no 12:1806-8 D '16
- \* Examination of the policy of restocking the inland waters with fish. W. M. Smallwood. bibliog il Am Naturalist (Science Press, Garrison, N. Y. 40c) 52:322-52 Je '18
- Farming for fish. A. Marple. il Farm Eng 5:4 Ap '17
- Farming our streams. Ag Digest 1:378 Ap '17
- Fish-breeding in Switzerland during 1916. Int R Sci & Prac Ag 8,no 8:1157-8 Ag '17
- Fish culture as a means of using alkaline land in Hungary. M. Répassy. Int R Sci & Prac Ag 7,no 3:409-10 Mr '16
- Fish farming in Alaska. F. S. Morton. Rural N Y 75:998 J1 22 '16
- Fish hatching systems. A. Robertson. il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:347 D 1 '17
- \* Fish pond for the farm boy. J. G. Needham. il Nature Study (Ithaca, N. Y. 15c) 14:133-6 Ap '18
- Fish pond; what an acre of water pasture is worth. H. T. Morgan. il Farm Eng 4:59 O '16
- Fish ponds on farms. R. S. Johnson and M. F. Stapleton. (Doc. 826) 32p il plans 5c '17 U.S. Bur. of fisheries, Washington, D.C.
- Fishing and fish culture in Hungary. J. de Landgraf. Int R Sci & Prac Ag 7,no 2:180-7 F '16
- Fresh fish for farm families. il Va Ag Dept B 115:99-102 '17
- Improvement of carp and pikeperch fisheries in Lake Balaton, Hungary. M. Repassy. Int R Sci & Prac Ag 7, no 10:1502-4 O '16
- Planting a farm fish crop. S: O. Rice. il Country Gent 83:1+ J1 13 '18
- Possibilities of the farm fish pond. W: P. Doyle. il Ohio F 137:485 Ap 1 '16
- \* Principles and problems of fish culture in ponds. R. E. Coker. Sci Monthly (Science Press, Garrison, N.Y. 30c) 7:120-9 Ag '18
- Raising food fish in ponds. C: H. Townsend. il Country Life 32:54-5 Ag '17
- Researches on the digestibility of different foods used for rearing young fish. R: Wohlgemuth. Int R Sci & Prac Ag 7,no 8:1149-50 Ag '16
- Starting a fishpond. A. C. Weed. Rural N Y 77:483 Mr 30 '18
- Trout-farm and its curious processes. il Current Opinion (63 W. 36th st., N.Y. 25c) 62:134-5 F '17
- Trout farming. H. V. Davis. il Country Gent 81:128-9 Ja 15 '16
- Utility of the farm fish pond. R. C. Osburn. il Ohio F 142:189-90 Ag 31 '18
- Work of the Madras government fishery department in British India during the year 1915-1916. Int R Sci & Prac Ag 8,no 12:1258-60 D '17
- Fish hatcheries**
- New York city's biological reserve; the biological laboratory at Cold Spring Harbor, Long Island. 20p il '17 Brooklyn inst. of arts and sciences, Dept. of biological laboratory, Brooklyn, N.Y.
- Fish laws**
- Arizona fish and game law; 1918 revised edition. 24p n.d. Ariz. State game warden, Phoenix

**Fish laws—Continued**

- California laws relating to fish and game and federal game regulations, 1917-1919. 180p '17 Cal. Bd. of fish and game comrs., San Francisco
- Crab laws. Md Conservation Comm (Baltimore) Office B 2:1-24 S '17
- Digest of the game, fish and forestry laws. J. Kalbfus, ed. 338p '17 Pa. game comm., Harrisburg
- Fish and game laws of Idaho, 1917-1918. 76p n.d. Idaho State fish and game warden, Boise
- Fish and game laws of the state of New Hampshire, 1917-1918. 72p '17 N.H. fish and game comr., Milford
- Fisheries laws of Rhode Island, 1917. 37p '17 R.I. Commissioners of inland fisheries, Providence
- Game and fish laws and laws relative to destruction of noxious animals. 295p '17 Sec. of state, Lansing, Mich.
- Game and fish laws of the state of Delaware, 1917. 69p '17 Del. Bd. of fish and game comrs., Dover
- Game and fish laws of the state of Nebraska in force April 24, 1917. 55p '17 Neb. game and fish comm., Lincoln
- Game, bird and fish laws of Wyoming, 1917-1918. 93p n.d. State game warden, Lander, Wyoming
- Laws of the state of Indiana for the protection of fish, game, birds and fur-bearing animals, 1917-1918. 52p '17 Ind. Comr. of fisheries and game, Indianapolis
- Laws relating to shell fisheries, 1917. 37p '17 R.I. Commissioners of shell fisheries, Providence
- Legislation proposed providing amendments to the conservation laws. Md Conservation Comm (Baltimore) Office B 4:1-26 Ja '18
- Maine inland fish and game laws; 1917-18 revision. 109p '17 Maine Comr. of inland fisheries, Augusta
- New acts and amendments to Massachusetts fish and game laws, 1916-1917; supplement to 1915 ed. 30p '17 Mass. Comrs. on fisheries and game, State House, Boston
- New Jersey fish and game laws, 1917. 249p '17 N. J. Bd. of fish and game comrs., Trenton
- Oregon fish and game laws, 1917-1918. 204p '17 State bd. of fish and game commissioners, Oregon bldg., Portland
- Protection and development of great natural water-food resources. Md Conservation Comm (Baltimore) Office B 1:1-15 Je '17

**Fish lice**

- Fish louse: argulus foliaceus L. R. Merle, il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:373 D 15 '17

**Fish meal as feed.** See Feeding and feeding stuffs—Fish meal

**Fish moth.** See Silverfish

**Fish oil**

- \* Determination of the hexabromide and iodine numbers of salmon oil as a means of identifying the species of canned salmon. H. S. Bailey and J. M. Johnson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:999-1001 D '18
- \* Utilization of fish oil. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:487 Je '18

**Fish oil soap spray**

Miscible oil versus fish oil soap sprays for the control of Florida aleoerodids. E. A. Back and S. S. Crossman. bibliog J Econ Entom 10:453-8 O '17

Relationship between the wetting power and efficiency of nicotine-sulphate and fish-oil-soap sprays. L. B. Smith. J Ag Research 7:389-99 N 27 '16

**Fish ponds**

- Fish ponds on farms. R. S. Johnson and M. F. Stapleton. (Doc. 826) 32p il plans 5c '17 U.S. Bur. of fisheries, Washington, D. C.
- Utility of the farm fish pond. R. C. Osburn. il Ohio F 142:189-90 Ag 31 '18

**Fish scrap**

- Conservation of a neglected source of indirect food supply; with discussion. J. B. Feilding. (In Report, 1917, p. 106-18) il '17 Canada Comm. of conservation, Ottawa
- Fertilizer materials statistics. (In Am. fertilizer hdbk., 1917, p. 30-1) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Fertilizer materials statistics. (In Am. fertilizer hdbk., 1918, p. 32-3) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia
- Fish-scrap fertilizer industry of the Atlantic coast. J. W. Turrentine. U S Ag B 2:1-50 '13
- Menhaden industry of the Atlantic coast. R. L. Greer. (Doc. 811) 30p bibliog il 10c '17 U.S. Bur. of fisheries, Washington, D.C.
- Millions in fish waste. Am Fert 46:48 Ap 14 '17
- Pacific Coast fish scrap. Am Fert 44:40+ Ap 1 '16
- Production and sale of organic ammoniates; fish scrap. (In Report on the fertilizer industry, p. 79-85) '16 U. S. Federal trade comm., Washington, D. C.
- Utilization of the fish waste of the Pacific Coast for the manufacture of fertilizer. J. W. Turrentine. il maps U S Ag B 150:1-71 '15

**Fisheries**

- California fisheries in 1909 and 1915-17. Cal Ag Bd Rep 1917:305-17 '18
- Conservation of a neglected source of indirect food supply; with discussion. J. B. Feilding. (In Report, 1917, p. 106-18) il '17 Canada Comm. of conservation, Ottawa
- \* Exploitation of the sea-fisheries. Nature (St Martin's st, London, W.C. 6d) 100:514 F 28 '18
- \* Harvest of the sea. Spectator (1 Wellington st, Strand, London, W.C. 6d) 119:739-40 D 22 '17
- Ocean, the state, and the fisherman. M. Frewen. 19th Century (249 W. 13th st, 50c) 82: 1234-47 D '17
- Report of committee on fisheries, game and fur bearing animals. O. Master. (In Report, 1917, p. 249-56) '17 Canada Comm. of conservation, Ottawa
- Results and expectations of research on fishery problems. P. H. Mitchell. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 6:76-83 Ja '18
- \* Ways and means of measuring the dangers of pollution to fisheries. V. E. Shelford. (B. v. 13, Article 2) 25-42p bibliog '18 Ill. State nat. history survey, Urbana

See also Fish culture

**Fishes**

- Biological study of the more important of the fish enemies of the salt-marsh mosquitoes. F. E. Chidester. bibliog il N J Ag Exp B 300: 1-16 '17
- Blind cave fish. il J Heredity 8:448-51 O '17
- Experiments on the toxic action of acids and alkalis upon fish. Int R Sci & Prac Ag 7, no 1:111-12 Ja '16
- Inland food fish. L. Plumley. Country Life 32:64b Jl '17
- Investigations on the number of eggs produced by certain fish. H. Mart. Int R Sci & Prac Ag 7, no 10:1500-1 O '16
- Presence of the b. coli and b. welchii groups in the intestinal tract of fish (stemonum chrysops). W. W. Browne. bibliog J Bact 2: 417-22 Jl '17
- See also Fish as food; Fish culture; Fish hatcheries; Fish laws; Fisheries; Fishing; Fishing industry; also Bowfins; Burbot; Carp; Eulachon; Grayfish; Menhaden; Oysters; Rays (fish); Sablefish; Skates (fish); Trout; Whitefish

**Bibliography**

- Fishes; list of publications relating to fishes, for sale by the superintendent of documents. Washington, D. C. (Price list 21—5th ed) 27p '17 Supt. of doc., Washington, D.C.



**Fishes—Continued**

**Ecology**

- \* Fish succession in some Lake Ontario tributaries. A. H. Wright. *maps Sci Monthly* (Science Press, Garrison, N.Y. 30c) 7:535-44 D '18

**Nomenclature**

- In behalf of fishes. C: P. Cushing. *Country Life* 30:76 S '16

**Statistics**

- Commercial stocks of miscellaneous animal food products in the United States on August 31, 1917; hams, bacon and shoulders, salt pork, salt beef, salt fish, and condensed milk. U S Ag C 101:1-19 '18

**Transportation**

- Shipping fish three thousand miles to market. E. D. Clark. *il U S Ag Yearbook* 1915:155-8

**Fishing**

- Fishing in Iowa. R. C. McElravy. *il Country Life* 30:24d My '16
- Interview with a successful trout. R. T. Morris. *il Country Life* 32:53-5 My '17
- Last day of the season. G: M. Johnson. *Country Life* 32:122 My '17
- Modern fishing for trout. L. Plumley. *Country Life* 32:144 My '17
- Out in Jersey—catching frogs and things. G. T. K. Norton. *il Am For* 24:531 S '18
- Trout vagaries. L. Plumley. *Country Life* 29:82 F '16
- Way of Japanese nimrods. G. T. K. Norton. *il Am For* 24:295-6 My '18

**Fishing industry**

- Alaska fisheries; hearings before the Committee on merchant marine and fisheries on H. R. 9528; a bill for the protection, regulation, and conservation of the fisheries of Alaska. 396p '16 Apply to congressmen
- Commercial freezing and storing of fish. E. D. Clark and others. *il U S Ag B* 635:1-9 '18
- Fishing industry, Venezuela. (Commerce Reports no. 162) p 150-1 (Jl 12) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- New Jersey—Gov. Edge recommends state control of the fisheries industries, in order that consumers may buy fish under state supervision and at cost plus only the actual expense of catching and handling
- Results of American-Canadian fisheries conference. (Commerce Reports no. 82) p 100-1 (Ap 8) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Salmon—the fish of greed and plunder. *il Nonpartisan Leader* (Box 575, St Paul, Minn. \$2.50 per yr.) 6:10-11 F 4 '18
- Utilization of the fish waste of the Pacific coast for the manufacture of fertilizer. J. W. Turrentine. *il maps U S Ag B* 150:1-71 '15
- World's fisheries, with particular reference to the United States and Canada. *Economic World* (80 Wall st, N.Y. 25c) n s 15:448 Mr 30 '18

**Fisk, John Manson, 1836-**

- Prominent horticulturist and patriotic citizen of Abbottsford. *il pors J Ag* (Quebec) 21:115 F '18

**Fitting for show. See Cattle—Fitting for show; Horses—Fitting for show; Live stock—Fitting for show; Poultry—Fitting for show; Swine—Fitting for show**

**Fjord, Niels Johannes, 1825-1891**

- Work and life. J. Wilson. *por J Dept Ag Ireland* 17,no 3:451-60 '17

**Flagellata**

- Avenue and development of tissue-infection in intestinal trichomoniasis. P. B. Hadley. *bibliog il R I Ag Exp B* 168:1-64 '16
- On a species of chlamydomonas. F. E. Fritsch and H. Takeda. *Ann Bot* 30:373-7 Jl '16
- On carteria Fritschii, sp. nov. H. Takeda. *il Ann Bot* 30:369-72 Jl '16
- Rôle of the flagellated protozoa in infective processes of the intestines and liver. P. B. Hadley. *bibliog il R I Ag Exp B* 166:1-40 '16

- Significance of certain natural flagellates of insects in the evolution of disease in vertebrates. *Am Vet M Assn J* 49:850-1 S '16
- Trichomoniasis of chicks: a new and highly fatal disease. J: Weinzirl. *J Bact* 2:441-5 Jl '17

**Flags (flowers). See Irises**

**Flags**

- Our country's flag. C. A. Urann. *Ohio F* 139: 776 Je 9 '17
- Story of the flag. *il Wallaces' F* 43:847 My 24 '18

**Flame-flower. See Torch-lilies**

**Flat-headed borers**

- Biological notes on some flatheaded wood-borers of the genus buprestis. H. E. Burke. *J Econ Entom* 11:334-8 Je '18
- Flat-headed borers affecting forest trees in the United States. H. E. Burke. *U S Ag B* 437:1-8 '17 (10c Supt. of doc.)
- Notes on some southwestern buprestidæ. H. E. Burke. *J Econ Entom* 11:209-11 Ap '18
- Notes on some western buprestidæ. H. E. Burke. *J Econ Entom* 10:325-32 Je '17

**Flats (horticulture)**

- Drainage and moisture in flats. *il Gard M* 27: 204 My '18

**Flavones**

- Function of flavones in plants. K. Shibata and J. Nagai. *Int R Sci & Prac Ag* 8,no 4:569-71 Ap '17

**Flavoring essences**

**Analysis**

- Detection and determination of coumarin in factitious vanilla extracts, by H. J. Wichmann; Determination of essential oils in non-alcoholic flavoring extracts, by F. M. Boyles. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:535-7, 537-9 Jl '18
- Extracts and spirits. *Maine Ag Exp Office Inspec* 77:21-40 '16
- Flavoring extracts. *bibliog Assn Office Ag Chem J* 2,no 3,pt 2:259-69 N '16
- Flavoring extracts. C: H. Lawall and F. Forman. *Pa Ag Dept B* 285:1-34 '16
- Report on flavoring extracts. A. E. Paul. *Assn Office Ag Chem J* 2:208-13 F '17

**Flax**

- Cereal experiments at the Judith basin substation, Moccasin, Mont. N. C. Donaldson. *il U S Ag B* 398:34-9 '16
- Chemical determination of the fibre yield of flax for the purpose of studying the influence of different cultivation factors on such yield. J. Linnik. *Int R Sci & Prac Ag* 7,no 7:973 Jl '16
- Cultivation and uses of flax. W. E. H. Stokes. *Ag Gez of Canada* 5:367-8 Ap '18
- Cultivation of flax. *Ag Gaz of Canada* 5:550 Je '18
- Culture and manufacture of flax for fibre and seed. J. F: Thorne, comp. *il Ore Univ* (Eugene, Ore.) B v 13 no 13 69p Ag 1 '16
- Decorticating machine for flax. H. A. Johnson. (Commerce Reports no. 215) p 988-9 (S 13) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Development of an American linen industry. W. A. G. Clark. (Special agents ser. no. 122) 23p '16 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Earlier sowing of flax and its stacking. T: Shaw. *Coop Manager & F* 7:23-9 F '18
- Experiment with flax growing at the government farm at Guemmeiza. G. C. Dudgeon. *il Egypt Ag Tech & Sci B* 12:1-9 '17 (10c)
- Fiber and seed flax in Oregon. G: R. Hyslop. *Ore Ag Ext B* 210:1-4 '17
- Flax and hemp. (*In Geography of the world's agriculture*, p. 55-60) maps '17 U S Ag
- Flax and linen industry in Japan. W: R. Langdon. (Commerce Reports no 83) p 120-1 (Ap 10) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Flax culture in South Dakota. A. N. Hume and others. *il S D Ag Exp B* 169:464-93 '16

**Flax** —*Continued*

Flax fiber mill new Montana industry. Coop Manager & F 6:47 Ja '17

Flax for fibre: its cultivation and handling. J. Adams. 23p il '16 Canada Ag

Flax growing experiments, 1914 and 1915. J Dept Ag Ireland 17,no 1:3-19 '16

Flax not hard on land. Weekly N L 4:5 Je 27 '17

Flax studies. W. F. Washburn. N D Ag Exp B 118:43-8 '16

Flax: the fiber and seed; a study in agricultural contrasts. W. S. Barker. Quarterly J Economics (Harvard Univ. Press, Cambridge, Mass. \$3 per yr.) 31:500-29 My '17

Hints on flax cultivation when grown for both fibre and seed. J Dept Ag Victoria 16:447-8 Jl '18

Influence on linseed oil of the geographical source and variety of flax. F. Rabak. U S Ag B 655:1-16 '18

Irish flax crop. (Commerce Reports no. 233) p 56-7 (O 4) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

1918 flax crop. H. L. Bolley. N D Ag Ext C 15:1-4 '18

Notes on the cultivation of flax. J Bd Ag 24: 1241-2 F '18

Pectinobacter amylophilum, a new organism which may be of practical importance in flax retting. J. A. Macrinov. Int R Sci & Prac Ag 7,no 7:1025-6 Jl '16

Pulling of flax in Somersetshire. il J Bd Ag 23:657-60 O '16

Review of the status and possibilities of flax production and manipulation in Canada. J. A. MacCracken. 29p il '16 Canada Ag

Russian flax industry. W. C. Huntington. (Commerce Reports no 83) p 118-19 (Ap 10) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

*See also* Flax straw

**Bibliography**

List of references on the flaxseed industry. U.S. Library of Congress. 3p '17  
Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)

**Diseases and pests**

Makerua and Moutoa flax areas. D. Miller. il map J Ag New Zealand 15:25-9 Jl '17

Pests and diseases of New Zealand flax. D. Miller. il J Ag New Zealand 14:431-9 Je '17

Relation of temperature to the growth and infecting power of fusarium lini. W. H. Tisdale. il Phyt 7:356-60 O '17

*See also* Flax grubs; Flaxwilt

**Seed**

Flax seed for 1918 sowing. J Dept Ag Ireland 18, no 2:204-7 '18

Flaxseed for 1918 sowing; compulsory saving of seed in 1917. J Dept Ag Ireland 17,no 4:648-53 '17

Seed-flax production. C. H. Clark. il map Farmers' B 785:1-19 '17

**Statistics**

Flax in the United States and other countries. *See* United States Department of agriculture Yearbooks

**Varieties**

Linseed as a farm crop. J Bd Ag 22:1069-80 F '16

**Flax grubs**

Control of New-Zealand-flax grubs. D. Miller. il J Ag New Zealand 15:303-6 D '17

Control of the New Zealand flax grub. D. Miller. J Ag New Zealand 12:446-51 Je '16

New Zealand flax-grub. D. Miller. J Ag New Zealand 17:209-15 O '18

**Flax straw**

Utilization of American flax straw in the paper and fiber-board industry. J. L. Merrill. il U S Ag B 322:1-24 '16

**Flaxwilt**

Flaxwilt: a study of the nature and inheritance of wilt resistance. W. H. Tisdale. bibliog il J Ag Research 11:573-606 D 10 '17  
New wilt-resistant flax. H. D. Long. Country Gent 81:1091 My 20 '16

**Flea-beetles**

Controlling flea-beetles. Market Growers J 18:400 Je 15 '16

Flea-beetles as pests of the garden. J. R. Stead. Ohio Ag Exp B v 3:251-3 Ag '18

Life history of *haltica jamaicensis* Fabr. R. T. Cotton. J Dept Ag Porto Rico 1:173-5 Jl '17

*See also* Alder flea-beetles

**Fleas**

Fleas. F. C. Bishopp. il U S Ag B 248:1-31 '15

Fleas and their control. F. C. Bishopp. il Farmers' B 897:1-15 '17

Fleas in the mallee. J Dept Ag S Australia 22:45-6 Ag '18

Fleas; transmitters of disease. R. H. Byrd. Wallaces' F 41:1020 Jl 28 '16

Household and camp insects. E. P. Felt. il N Y State Museum (Albany) B 194:33-7 F '17

**Fleshflies.** *See* Sarcophaga**Flickers**

Flicker. E. S. Jones. Ohio F 139:594 Ap 21 '17

Flicker, the friend of the farmer. C. Carpenter. il Am Coop J 13:465 Ag '18

Northern flicker. C. J. Hawkins. il Country Life 31:94 Mr '17

**Flies**

Anticipating the fly and the mosquito. W. C. O'Kane. il Country Life 29:30-1 Ap '16

Biological studies on the house fly. Int R Sci & Prac Ag 7,no 2:188 F '16

Breeding habits of the common house-fly. A. T. Evans. bibliog J Econ Entom 9:354-62 Je '16

Control of house flies by the maggot trap. E. N. Cory. il map Md Ag Exp B 213:103-26 '18

Controlling flies; keep the pests out of the creamery. N Y Prod R 42:578 Ag 2 '16

Dispersion of *musca domestica* Linnaeus under city conditions in Montana. R. R. Parker. bibliog il maps J Econ Entom 9:325-54 Je '16

Domestic flies of New Jersey. C. H. Richardson. bibliog il N J Ag Exp B 307:1-28 '17

Don't let the children handle dead flies. Hoard's D 51:948 Jl 7 '16

Effect of certain chemicals upon oviposition in the house-fly. S. E. Crumb and S. C. Lyon. J Econ Entom 10:532-6 D '17

Effective methods of fly control. T. J. Headlee. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:150-1 Mr 9 '18

Experimental studies with muscicides and other fly-destroying agencies. E. B. Phelps and A. F. Stevenson. (Hygienic Laboratory B 108) 37p 10c '17 U.S. Public health service, Washington, D.C.

Experiments during 1915 in the destruction of fly larvae in horse manure. F. C. Cook and R. H. Hutchison. U S Ag B 408:1-20 '16

Experiments in the destruction of fly larvae in horse manure. F. C. Cook and others. U S Ag B 118:1-26 '14

Experiments on the house-fly in relation to the farm manure heap. H. Eltringham. il J Ag Sci 7:443-57 Ap '16

Fighting flies. N Y Prod R 42:652 Ag 16 '16

Fighting flies in factories. N Y Prod R 42: 520 Jl 19 '16

Fighting flies on dairy farm. J. Underwood. Prac F 114:214 Je 1 '18

Five thousand billion flies. Kimball's D F 16: 222 Mr 15 '18

Flies. il Wallaces' F 43:986 Je 28 '18

Flies and milk yield. Wallaces' F 42:1139 Ag 17 '17

Flies—prevent them. il Hoard's D 53:755 My 25 '17

Flies—prevent them. il Hoard's D 55:856 Je 7 '18

Fly control exhibit. C. W. Howard. il J Econ Entom 10:411-12 Ag '17



**Flies—Continued**

- Fly number. Minnesota Insect Life (State entomologist, St Paul) 4:1-7 My '17
- Further experiments in the destruction of fly larvæ in horse manure. F. C. Cook and others. bibliog il U S Ag B 245:1-22 '15
- Hibernation of the house-fly in Minnesota. C. W. Howard. bibliog J Econ Entom 10: 464-8 O '17
- House fly. (B. 2) 20p il '18 Ill. dept. of pub. health, Springfield
- House fly. L. O. Howard and R. H. Hutchison. il Farmers' B 851:1-23 '17
- House-fly. L. Lamb. Purdue Ag 12:565 Je '18
- House fly. J. W. McKenzie. il J Dept Ag Victoria 15:628-31 O '17
- House fly and its control. L. Haseman. il Mo Ag Ext C 16:1-11 '17
- Household and camp insects. E. P. Felt. N Y State Museum (Albany) B 194:6-25 F '17
- How flies walk on glass. A. Sibbald. il Country Life 33:84 F '18
- Insects and the national health. C; T. Brues. il Scientific Monthly (Science Press, Garrison, N.Y. 30c) 6:202-6 Mr '18
- Investigations on the prevention of nuisances arising from flies and putrefaction. F. W. Foreman and G. S. Graham-Smith. Am Vet M Assn J 52:722-6 F '18
- Keeping out the flies. A. Vincent. O Judd Farmer 61:22 Jl 15 '16
- Kill the house fly. Fruit-Grower 27:400 Ag 15 '16
- Killing flies will help conserve strength of nation. Am Coop J 12:690 Je '17
- Killing the flies. Country Gent 81:1721 S 23 '16
- Manure and house-flies. W. H. Saunders. Gard Chron (Lond) 59:319 Je 17 '16
- Menace to health—the fly. il O Judd Farmer 60:24 Ap 29 '16
- Migratory habit of housefly larvæ as indicating a favorable remedial measure; an account of progress. R. H. Hutchison. bibliog U S Ag B 14:1-11 '14
- Notes concerning overwintering of the house-fly, musca domestica, at Dallas, Texas. W. E. Dove. bibliog J Econ Entom 9:528-38 D '16
- Overwintering of the house fly. R. H. Hutchison. bibliog il J Ag Research 13:149-70 Ap 15 '18
- Preoviposition period of the house fly. R. H. Hutchison. U S Ag B 345:1-13 '16
- \* Prevention of flies. 7p il '17 Mass. State dept. of health, Boston
- Protection of dairy cattle from flies. E. N. Cory. J Econ Entom 10:111-13 F '17
- Repellents for protecting animals from the attacks of flies. H. W. Graybill. bibliog U S Ag B 131:1-26 '14
- Response of the house-fly to ammonia and other substances. C. H. Richardson. N J Ag Exp B 292:1-19 '16
- Response of the house-fly to certain foods and their fermentation products. C. H. Richardson. bibliog N J Ag Exp Rep 1916:511-19 '17; Same cond. J Econ Entom 10:102-9 F '17
- Rid cows of flies. S. R. Aldermon. Country Gent 81:1076 My 20 '16
- Sanitary engineering; the season for swatting the fly. H. C. Campbell. Farm Eng 3:262 My '16
- Shoo-fly for bossy. J. Deare. Country Gent 83:22 Jl 6 '18
- Some blood-sucking flies of Saskatchewan. A. E. Cameron. il Ag Gaz of Canada 5:556-61 Je '18; Same. Am Vet M Assn J 53:632-8 Ag '18
- Some problems in insect control about abattoirs and packing houses. F. C. Bishopp. il J Econ Entom 10:269-77 Ap '17
- Some ways to swat the fly. Prog F 32:830 Jl 28 '17
- Stop breeding flies. Weekly N L 4:3 My 9 '17; Same. J Ag (Quebec) 21:25 Ag '17
- Storage of manure and fly suppression at Durban remount depot. C. K. Brain. J Econ Entom 11:339-41 Je '18
- Suggestions for fly control in the home. J Home Econ 8:197-9 Ap '16
- Swat the fly—why? how? il Hoard's D 51:927 Jl 7 '16

- Two timely fly reminders. Prog F 31:447 Mr 25 '16
- Typhoid, or house fly. J. Troop. Purdue Ag 11:52-3 My '17
- When dairy cows fight flies their milk flow decreases. Hoard's D 56:235 S 13 '18
- Where had this house fly been? il Purdue Ag 10:32 Ja '16
- Where men are careless. Kimball's D F 14: 339 My 15 '16
- You do not need to have flies in your house. Farm Eng 3:257 My '16

See also Flytraps; also Chalcid flies; Dung flies; Fruit flies; Hessian flies; Ichneumon flies; Lacewing flies; March flies; Pine sawflies; Punkies; Sawflies; Sciara flies; Screw-worm flies; Warble flies; White flies

**Flint and steel;** story. L. B. Miller. See weekly numbers of National stockman and farmer

**Floating wood.** See Balsa tree

**Flood control**

Encroaching on our streams. Ohio F 137:400 Mr 11 '16

Flood control. H; M. Hyde. il Country Gent 81:442-3 F 26 '16

How the farmer can avert the danger of floods. Current Opinion (63 W. 36th st., N.Y. 25c) 62:61 Ja '17

Southern floods and their forestry lesson. H. H. Chapman. il Am For 22:476-9 Ag '16

See also Levees

**Flood dams and reservoirs**

Conserving flood waters in New Mexico. A. S. Tipton. il Irr Age 32:22-3 D '16

**Floodgates**

Good flood-gate. Farm Eng 5:13 Mr '17

**Floods**

Forests and Chihli floods, by D. Y. Lin. Review. J For 16:596-7 My '18

Observations on the flora and fauna of flooded fenland. F. R. Petherbridge. il J Ag Sci 7:508-11 Ap '16

Southern California; the flood. il Rural N Y 75:522 Mr 25 '16

See also Flood control; Floodgates

**Floors**

Barn floor construction. H. C. Campbell. Hoard's D 53:452 Mr 30 '17

Creosoted wood blocks for stable floors. Hoard's D 51:737 My 26 '16

Floor arrangement of the stables. C. K. Brainerd. il Hoard's D 53:428-9 Mr 30 '17

Floor covering for the farm home. Mrs C; Johnston. Rural N Y 76:1115 S 22 '17

Floor finish. Nat Stock & F 41:200 My 12 '17

Floor of the cow stable. H. H. Dean. Prac F 114:37 Ja 15 '18

Floors and floor coverings for the farm kitchen. il Purdue Ag Ext Leaflet 69:1-6 '16

Floors and their finish. G. R. Wilmot. il Country Gent 81:1059 My 13 '16

Floors for hog houses. A. D. Burke. Nat Stock & F 41:1039 Ja 19 '18

Sanitary dairy barn floors. W. W. Smith. Hoard's D 51:738 My 26 '16

Still the question of floors. Nat Stock & F 40:84 Ap 15 '16

Sub-committee on barn floors; with discussion. H. H. Niemann. Am Soc Ag Eng Trans 10,no 1:28-34 '17

What can be done with the unburnable floor. H. D. Eberlein. il Country Life 31:28-31 Ja '17

Wood blocks for stall floors. W. E. Frudden. Hoard's D 51:758 My 26 '16

See also Carpets; Linoleum; Rugs

**Floors, Concrete**

Concrete floors for poultry. Power F 27:56 F '18

Economy of concrete floors. Farm Eng 7:12 Ap '18

Making a dry concrete floor. J. L. Justice. Hoard's D 55:1025 Jl 12 '18

**Floral decoration**

Decorating the church. M. K. Cox. Country Gent 81:913 Ap 22 '16

Early fall wedding. il Am Flor 47:440 S 16 '16

**Floral decoration—Continued**

Floral Sundays at church. F. R. Arnold. Ohio F 137:748 My 27 '16  
June wedding. Am Flor 46:1034 Je 3 '16

**Floral designs**

Debutante; flowers for coming out teas. Am Flor 47:1038 D 2 '16  
Foliage in design work. il Am Flor 51:434-5 S 21 '18  
Magnolia wreath. il Am Flor 46:928 My 20 '16  
Summer wreaths and sprays. il Am Flor 49:146 Ag 11 '17

**Floriculture**

Acre of outdoor flowers. il Am Flor 49:52 JI 28 '17  
Commercial and amateur flower production. E. A. White. il N Y Ag Dept B 86:2578-84 Ag '16  
Dates for sowing flower seed under glass; table. Country Gent 83:57 Ja 26 '18  
Experimental work in floriculture. P. A. Lehenbauer. Am Flor 50:349 Mr 9 '18  
Favorite flowers of the garden. W. R. Fowkes. Gard Chron Am 20:117-18 Mr '16  
Fertilizers for flowers. M. C. Blue. Ohio F 141:198 F 9 '18  
Floricultural advancement. E. Williams. Am Flor 50:298 Mr 2 '18  
Floriculture fifty years ago. Gard Chron (Lond) 59:113 F 26 '16  
Flower garden. See weekly numbers of Gardeners' chronicle (London)  
Flower garden; annual climbers for quick results where vines are required. il Country Gent 83:36 My 25 '18  
Flower growing for profit. E. N. Ward. Ag Gaz of New South Wales 27:63-5 Ja '16  
Flower notes. W. F. Massey. Prog F 31:4 Ja 1 '16  
Flowers for the garden. E. Kelford. Green's Fruit Grower 37:32 Ap '17  
Flowers for the home. O. F. Taylor. il Fruit-Grower 27:145 F 15 '16  
Getting an early start with annuals. F. Spring. il Gard M 23:23-4 F '16  
Gladioli for market. J. H. Sperry. il Country Gent 82:777 Ap 21 '17  
Good friends for the flower patch. il Country Gent 81:268-9 F 5 '16  
Growing flowering plants. R. Pearce. Market Growers J 18:6 Ja 1 '16  
Growing flowers. A. C. Hottes. il Cornell Ag Exp Rep 1916, v 2:925-9 '17  
Hardy flowering plants; names and descriptions. Rural N Y 75:374, 433, 467 Mr 4-18 '16  
July in the flower garden—shrub pruning—bulbs and perennials. il Country Gent 81:1412 JI 22 '16  
Late flowers for the fall garden. Country Gent 81:1660 S 9 '16  
Looking forward and looking backward. A. M. Herr. Am Flor 46:986-7 My 27 '16  
Millions in the flower industry. E. I. Farrington. Ohio F 141:152 F 2 '18  
Opportunities of the garden. E. Loines. il Gard Chron Am 20:388-9 S '16  
Our summer blossoms. B. L. Putnam. il Ohio F 137:438 Mr 18 '16  
Plant notes; genistas; verbenas; pelargoniums; antirrhinums. Am Flor 46:170 F 12 '16  
Plant notes; sweet peas, chrysanthemum stock, stocks, hydrangeas. Am Flor 50:148-9 F 9 '18  
Plants under glass. J. G. Weston. Gard Chron (Lond) 62:109 S 15 '17  
Prepare in May for winter flowers. W. C. McCollom. il Gard M 25:238 My '17  
Rose culture. M. Frydholm. il Minn Hort 44:162-4 Ap '16  
Specific varieties of flowers to plant. il Country Gent 81:330-1 F 12 '16  
Suggestions for plant growers. Am Flor 50:621 Ap 13 '18  
What science has done and will do for floriculture. E. A. White. Gard Chron Am 21:11-14 Ja '17  
Wm. Sim, expert in crop succession. il Am Flor 47:152-3 Ag 12 '16  
Wintering the tender flower roots. E. V. Wilson. il Gard M 26:162-3 D '17  
See also Annuals (plants); Bulbs; Flower pots; Flowers; Gardening; Greenhouses—Flower growing; House plants; Perennials;

Plant breeding; Plant propagation; Window gardening; also names of flowers, e.g. Carnations, Irises, Roses

**Study and teaching**

Floriculture at Iowa state college. Am Flor 48:1012 My 26 '17  
Home floriculture and home-ground improvement; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 62) 12p '17 U.S. States relations service, Washington, D.C.  
What the universities are doing for floriculture. H. B. Dorner. Gard Chron Am 22:59-60 F '18  
Yearbook; the Florist's and gardener's club, Massachusetts agricultural college. 40p il '17  
M. A. C. florists' & gardeners' club, 101 Pleasant st., Amherst, Mass.  
**Florida**  
Information about Florida. Reliable P J 23:143 Mr '16  
Report on some allocthonous peat deposits of Florida. C. C. Forsaith, bibliog il Bot Gaz 62:32-52; 63:190-208 JI '16, Mr '17  
See also subhead Florida under special subjects, e.g. Agriculture—Florida; Dairying—Florida

**Agriculture, Department of**

14th biennial report of the prison division, 1915 and 1916. il Fla Ag Dept Rep (Prison Division) 1915-1916:1-85 '17

**Description and travel**

Month in Florida. il Am Bee J 58:229-30 JI '18  
Observations in Florida. J. S. Burns, Nat Stock & F 42:7 Mr 30 '18

**Education**

Florida's first home demonstration center. S. W. Partridge. J Home Econ 8:414-16 Ag '16

**Industries and resources**

Florida's neglected products. J. H. Collins. il Country Gent 81:375-6 F 19 '16  
Market under federal reserve. J. H. Collins. Country Gent 82:862 My 12 '17

**Plant board, State**

Quarterly bulletin; contents and index to volume I & II; 1916-'17, 1917-'18. Fla State Plant Bd B v 1:iii-iv,179-210 '17; v 2:199-240 '18

Report for the year ending April 30, 1916 and supplemental reports. Fla State Plant Bd Quar B v 1:57-158 Ag '17

**Florida agricultural experiment station**

Report for the fiscal year ending June 30, 1916. il Fla Ag Exp Rep 1916:1-118 '17  
Report for the fiscal year ending June 30th, 1917. il Fla Ag Exp Rep 1917:1R-102R, i-xi '18

**Florida citrus exchange**

Lesson from Florida in successful co-operative marketing. R. C. Gano. Prog F 33:918 Ag 17 '18  
Something more about the organization. Prog F 33:933 Ag 24 '18

**Florida horticultural society**

Annual meeting, Arcadia, April 27-29, 1916. W. G. Sadler. Am Fert 44:36-7 My 13 '16

**Florida state fair**

Florida state fair. Breeder's Gaz 73:553 Mr 14 '18

**Florida university****Agricultural extension, Division of**

Report of general activities for 1917 with financial statement for the fiscal year ending June 30, 1917. il map Fla Ag Ext Rep 1917:1-95 '18

**Florists**

Accounts and credit of retailers. W. K. Hardt. Am Flor 48:954 My 19 '17  
Call for Memorial day preparedness. Am Flor 48:949-50 My 19 '17  
Canadian florists optimistic; trade recovers from early war conditions. W. W. Gammage. Am Flor 50:393 Mr 16 '18  
Christmas trade in New York and Chicago stores. Am Flor 45:1264 Ja 1 '16



**Florists—Continued**

- Defending the growing of flowers in war time. Gard Chron Am 22:12 Ja '18
- Economics of the flower business. A. J. Guttman. il Am Flor 46:880-1 My 13 '16
- Featuring in the retail store. Am Flor 47:492 S 23 '16
- Florist business as an occupation. Am Flor 48:1259 Je 30 '17
- Florists and wartimes. Gard M 28:133 D '18
- Flower sentiment and publicity. E. G. Wilson. Am Flor 48:225 F 17 '17
- Germany's flower trade in Europe. Am Flor 49:1349 Ja 5 '18
- History of the Florists' club of Philadelphia. Am Flor 46:588-9 Ap 8 '16
- Hotel flower stands. il Am Flor 50:295 Mr 2 '18
- House of Penn. il Am Flor 46:1083-4 Je 10 '16
- How wholesaler helps retailer. Am Flor 48:1357 Jl 14 '17
- J. H. Small & sons, New York. pors il Am Flor 46:876 My 13 '16
- Labor problem. Am Flor 49:202 Ag 18 '17
- Looking forward and looking backward. A. M. Herr. Am Flor 46:986-7 My 27 '16
- Managing a flower shop. Am Flor 46:876 My 13 '16
- Modern flower shop methods. A. Lange. il Am Flor 51:392 S 14 '18
- Modern methods in retailing flowers. Am Flor 48:504 Mr 24 '17
- Name as a trade mark. Am Flor 49:383 S 8 '17
- National publicity for flowers. Am Flor 49:641-4 O 13 '17
- National publicity for flowers; promotion bureau report. Am Flor 51:348-51 S 7 '18
- Newark newspaper called; pickled flowers. Am Flor 46:848 My 6 '16
- Next week in the flower shop. Am Flor 49:982, 1034-6 N 24-D 1 '17
- Opportunity. Am Flor 48:1260 Je 30 '17
- Organization publicity. R. P. Eckstrom. Am Flor 48:228 F 17 '17
- Present day cost of production. Am Flor 51:306 Ag 31 '18
- Publicity pointers for florists. Am Flor 48:902 My 12 '17
- Publicity via Red cross. E. J. Weaver. Am Flor 50:974 Je 1 '18
- Retail trade. See weekly numbers of American florist
- Solving some problems of the retailer. F. McKenna. Am Flor 49:195-6 Ag 18 '17
- Store economies. Am Flor 48:1353 Jl 14 '17
- Street merchant. E. J. McCallum. Am Flor 47:1387 Ja 13 '17
- Summer time attractions. Am Flor 49:194 Ag 18 '17
- War and June weddings. il Am Flor 48:1009-11 My 26 '17
- Wholesale house of future. J. E. Pollworth. Am Flor 51:174 Ag 17 '18
- Winning the trade. E. Wenninghoff. Am Flor 48:1059 Je 2 '17
- Writing retail ads. Am Flor 51:396 S 14 '18

See also Burpee, W. Atlee, co.

**Florists' associations.** See names of associations, e.g. American carnation society; American dahlia society; American gladiolus society; American peony society; American rose society; American sweet pea society; California dahlia society; Chicago florists' club; Florists' hail association; Florists' telegraph delivery; Illinois state florists' association; National rose society (English); New York florists' club; Society of American florists

**Florists' hail association**

Report for year ending August 1st, 1916. Am Flor 47:242-3 Ag 19 '16

**Florists' plants**

- Bedding plants. C. W. Johnson. Am Flor 46:821; 48:55, 950; 50:525-6 My 6 '16, Ja 27, My 19 '17, Mr 30 '18
- California plants and bulbs. Am Flor 49:150 Ag 11 '17
- Christmas and Easter plants. W. E. Tricker. Am Flor 46:371-2, 421-2 Mr 11-18 '16
- Christmas plants in New York stores. il Am Flor 47:1284-5 D 30 '16

Damage to greenhouse plants; smoke. il Gard Chron Am 22:19-20 Ja '18

Descriptive list of greenhouse primulas for indoor decoration. H. J. Moore. (In Ontario horticultural societies, 11th annual report, 1916, p. 96-103) '17 Ontario ag. dept., Toronto, Canada

Easter preparations. Am Flor 46:472 Mr 25 '16

Eustoma russellianum. il Gard Chron (Lond) 62:96 S 8 '17; Same. Gard Chron Am 21:374 O '17

Holiday foliage plants. W. H. Taplin. Am Flor 45:1311-12 Ja 8 '16

Imported plants for Christmas replaced. J. McKenna. Am Flor 51:394 S 14 '18

Plant notes. Am Flor 50:921-2 My 25 '18

Plants as Christmas gifts. Am Flor 47:1089 D 9 '16

Stock plants. C. W. Johnson. Am Flor 48:1360 Jl 14 '17

What the florists will offer in holiday plants. R. Kift. il Gard M 26:133 N '17

Winter treatment of greenhouse plants. Gard Chron (Lond) 60:252 N 25 '16

See also Greenhouses; House plants; also names of plants, e.g. Acacias, Cantua buxifolia, Cyclamens, Eupatoriums, Eustoma, Peperomia

**Diseases and pests**

See also Greenhouse pests

**Prices**

Wholesale plant prices at New York December 15, 1916. Am Flor 47:1289 D 30 '16

**Florists' telegraph delivery**

Annual convention, Cleveland, O., Oct. 8-9, 1918; advance notice. Am Flor 51:473-4 S 28 '18

Annual meeting, Detroit, Mich., Oct. 2-3, 1917. Am Flor 49:589-94, 644-8 O 6-13 '17

Big meeting anticipated at annual convention, Detroit, Mich., Oct. 2-3, 1917. Am Flor 49:485 S 22 '17

Meeting, St Louis. Am Flor 51:250 Ag 24 '18

Special meeting, Chicago, Oct. 11-12, 1916; with new constitution and by-laws. Am Flor 47:653-9, 705-7 O 14-21 '16

**Flour**

Answering wheat and flour questions. E. E. Cross. Nat Stock & F 41:646 O 6 '17

Bread and flour. F. Fox. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:169-70 S 15 '17

Catalase activity of American wheat flours. C. H. Bailey. Int R Sci & Prac Ag 9,no 4:502-3 Ap '18

Degree of bolting: food value of digestibility of bread, better utilisation of wheat. L. Lapique; G. Bertrand. Int R Sci & Prac Ag 8,no 11:1143-4 N '17

Effect of the density of a wheat upon its flour yield. Int R Sci & Prac Ag 7,no 1:139-41 Ja '16

Flour and wheat in the Montana gold camps, 1862-1870. H. A. Trexler. 20p '18 Dunstan ptg. and stationery, Missoula, Mont.

Flour from wheat of different test weights. T. Sanderson. N D Ag Exp Spec Food B v 5,no 3 37-73p '18

"G.R." flour. T. Johnson. il J Dept Ag Ireland 17,no 2:264-77 '17

Home-ground flour. A. H. Pulver. Rural N Y 77:7 Ja 5 '18

Home-mixed flour. Prog F 32:721 Je 23 '17

Home preparation of breakfast foods and flour from whole grain. G. A. Olson. il Wash Ag Exp Pop B 112:1-15 '17

Homemade war flours. J. L. Ashlock. il Country Gent 83:52 Ap 20 '18

Improving war bread with lime-water. Scientific Am (233 Broadway, N.Y. 10c) 118:131 F 9 '18

Milling and baking tests of wheat containing admixtures of rye, corn cockle, kinghead, and vetch. R. C. Miller. il U S Ag B 328:1-24 '15

Mixed flour. J Home Econ 10:469-70 O '18

New practical and scientific experiments in the selection of German wheats rich in gluten. Int R Sci & Prac Ag 8,no 5:711-12 My '17

**Flour—Continued**

- Nitrogen in amino form as determined by formol titration, in relation to some other factors measuring quality in wheat flour. C. O. Swanson and E. L. Tague. *Am Chemical Soc J* (C): L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39:482-91 Mr '17
- Shall we eat whole-wheat bread? R. A. Dutcher. *Science* (Science Press, Garrison, N.Y. 15c) n s 47:228-32 Mr 8 '18
- Specific conductivity of water extracts of wheat flour. C. H. Bailey. *Science* (Science Press, Garrison, N.Y. 15c) n s 47:645-7 Je 28 '18
- Standard flour and bread in Europe. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:295 My 12 '17
- Toxic bread and flour; detection and estimation of saptotoxins. L. Stoecklin. *Int R Sci & Prac Ag* 9, no 4:410-11 Ap '18
- Wheat and flour questions. W. W. Hunter. *Nat Stock & F* 41:605 S 22 '17
- Where our wheat goes. *Am Coop J* 11:837 Ap '16

See also Banana flour; Barley flour; Buckwheat flour; Corn flour; Emmer flour; Graham flour; Potato flour; Rye flour; Soybean flour; Sweet potato flour; Wheat conservation

**Analysis**

- Cereal foods. *Assn Offic Ag Chem J* 2, no 2, pt 2:187-91 Ag '16
- Chemical analysis of wheat-flour substitutes and of the breads made therefrom. J. A. Le Clerc and H. L. Wessling. *il U S Ag B* 701:1-10 '18
- Chemical and physical constants for wheat and mill products. E. F. Ladd. *N D Ag Exp B* 114:273-97 '16
- Milling and baking quality and chemical composition of wheat and flour. *il Kan Ag Exp Tech B* 1:1-83 '16

**Gluten content**

- Hydration capacity of gluten from strong and weak flours. R. A. Gortner and E. H. Doherty. *bibliog J Ag Research* 13:389-418 My 20 '18

**Laws**

See Flour industry—Laws and regulation

**Moisture content**

- Capacity of wheat and mill products for moisture. W. L. Stockham. *N D Ag Exp B* 120:97-131 '17
- Intrinsic values of grain, cottonseed, flour, and similar products, based on the dry-matter content. E. G. Boerner. *U S Ag B* 374:1-32 '16
- Special flask for the rapid determination of water in flour and meal. J. H. Cox. *il U S Ag B* 56:1-7 '14

**Prices**

- City opinion of farm profits; how it is manufactured. *Rural N Y* 77:609 Ap 27 '18
- Plans are announced for wheat and flour control for the 1918 wheat crop. *Weekly N L* 5:8 Jl 31 '18; Same. *Wallaces' F* 43:1120 Ag 2 '18; Same. *Coop Manager & F* 7:32-3 Ag '18
- Price of wheat and flour compared. *Power F* 27:28 Mr '18
- Wheat and flour prices. *Kimball's D F* 15:888 D 15 '17

**Storage**

- Report on insects injurious to flour and grain in the province of Ekaterinoslav (South Russia) in 1915. N. Witkowskij. *Int R Sci & Prac Ag* 7, no 5:774-5 My '16
- Some problems in the control of insects in stored foods in California. R. W. Doane. *J Econ Entom* 11:313-19 Je '18

**Testing**

- Special flask for the rapid determination of water in flour and meal. J. H. Cox. *il U S Ag B* 56:1-7 '14
- Thermostat or constant-temperature cabinet for the flour-testing laboratory. C. H. Bailey. *il J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 8:1142-4 D '16

Wheat and flour investigations. G: A. Olson. *bibliog il Wash Ag Exp B* 144:1-86 '17

See also Wheat—Milling and baking tests

**Flour, Substitutes for.** See Wheat conservation

**Flour bins**

Storing the flour. H. A. Roberts. *Country Gent* 81:242 Ja 29 '16

**Flour industry**

- Argentina's flour-milling industry. W. H. Robertson. (Commerce Reports no. 83) p 123-4 (Ap 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Flour milling in Argentina. L. E. Elliott. *Pan Am Magazine* (70 5th av, N.Y. 25c) 26:339-40 Ap '18
- Report of the Federal trade commission on flour milling and jobbing. 27p '18 U.S. Federal trade comm., Washington, D.C.

**Laws and regulation**

- Décret relatif à l'application de la loi du 25 avril 1916 complétant la loi du 16 octobre 1915 concernant le ravitaillement de la population civile en blé et farine en France. *Int Yearbook Ag Leg* 1916:103-5 '17
- Law of October 16th, 1915, on the purchase and sale of wheat and flour for the supply of the civil population in France. *Int R Ag Econ* 61:118-27 Ja '16
- Mill sales of wheat flour to farmers. *mim* 3p '18 U.S. Food administration, Washington, D.C.
- New milling plan in brief. *Hoard's D* 56:233 S 13 '18
- Regulation of flour sales. *Wallaces' F* 43:572 Mr 29 '18
- United States food administration; policies and plan of operation; wheat flour and bread. 171p '17 U. S. Food administration, Washington, D.C.

**Statistics**

- Commercial stocks of grain, flour and miscellaneous food products in the United States on May 1, 1918. *U S Food Surveys* 1:1-8 My 21 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on June 1, 1918. *U S Food Surveys* 1:1-8 Je 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on July 1, 1918. *U S Food Surveys* 2:1-8 Jl 29 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on August 1, 1918. *U S Food Surveys* 2:1-8 Ag 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States, Sept. 1. *U S Food Surveys* 2:1-8 S 25 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on Oct. 1, 1918. *U S Food Surveys* 2:1-11 O 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on November 1, 1918. *U S Food Surveys* 2:1-7 N 25 '18
- Commercial stocks of important grains and grain food-products in the United States on April 1, 1918. *U S Food Surveys* 1:2-7 Ap '18
- Commercial stocks of mixed flour, July 1. *U S Food Surveys* 2:24-6 S 9 '18
- Commercial stocks of wheat and flour in the United States on August 31, 1917. *U S Ag C* 100:1-37 '18
- Commercial stocks of wheat, flour, and other wheat food products such as wheat breakfast foods, macaroni, and spaghetti, July 1. *U S Food Surveys* 2:1-12 S 6 '18
- Commercial stocks of wheat, wheat flour, and miscellaneous wheat food products. *U S Food Surveys* 1:3-15 My 18 '18
- Production and shipment of Argentine flour. W. H: Robertson. (Commerce Reports no. 233) p 54-5 (O 4) '18 U.S. Bur. of foreign and domestic commerce, Washington, D. C.
- Wheat and flour. *Weekly N L* 5:6 Mr 20 '18



**Flour mills**

Old-fashioned flour mill. H. Snyder. il Bellman (118 S. 6th st, Minneapolis, Minn. 10c) 24: 207-9 F 23 '18  
Our Bungtown mill. J. A. King. il Farm Eng 5:6 J1 '17

**Flour mills, Cooperative**

Self supporting community. E. H. Sherwood. Am Coop J 13:478 Ag '18; Same. Green's Am Fruit Grower 38:9 Ag '18

**Flour moths**

\* Hydrocyanic acid gas treatment for the flour moth. F. L. Washburn. (C. 46) 13p il '18 Minn. State entomologist, St Paul

**Flower boxes.** See Porch boxes

**Flower flies.** See Syrphidae

**Flower gardening.** See Floriculture

**Flower gardens.** See Gardening

**Flower holders**

Flower holders and flower arrangement. R. Kift. il Gard M 28:106-7 N '18  
Shallow flower bowl. il Am Flor 45:1310-11 Ja 8 '16  
Tumbler basket. il Am Flor 46:1234 J1 1 '16  
See also Rose fountains

**Flower pots**

Flower pot. A. H. Walker. Am Flor 46:1058 Je 3 '16  
Flower-pots in England. Am Flor 50:628 Ap 13 '18  
Making and using paper pots. Gard M 25:116 Mr '17  
Making paper pots. Gard M 27:66 Mr '18  
Paper pots. Rural N Y 76:111 Ja 27 '17  
Pot making up-to-date. Am Flor 48:904 My 12 '17  
Stenciled pots for gifts. K. M. Adams. il Country Gent 81:2102 D 2 '16

**Flower shows**

American rose society, finished flower show. Am Flor 48:489-90 Mr 24 '17  
Annual meeting and exhibition of the American sweet pea society, Bar Harbor, Me., July 15-16, 1916; with list of awards. il Am Flor 47:1-4 J1 22 '16  
Annual spring flower shows. il Gard Chron Am 21:153-5 Ap '17  
Boston outdoor show. il Am Flor 48:1105-8 Je 9 '17  
Boston spring show. Gard Chron Am 22:89 Mr '18  
Boston spring show, March 21-25, 1917. il Am Flor 48:573-5 Mr 31 '17  
Boston spring show; with list of awards. il Am Flor 46:929-32 My 20 '16  
California dahlia society exhibition, San Francisco, Sept. 5. Am Flor 49:491, 649 S 22, O 13 '17  
Chicago novelty show. Am Flor 48:439 Mr 17 '17  
Cleveland flower show. il Am Flor 49:905-9 N 17 '17  
Country flower show. J. H. Burdett. Country Gent 81:1045 My 13 '16  
Daffodil show in London. Am Flor 46:1035 Je 3 '16  
Daffodils in 1916. Gard Chron (Lond) 59:258 My 13 '16  
Des Moines autumn flower show. il Am Flor 49:910-12 N 17 '17  
Economics of the flower business. A. J. Guttman. il Am Flor 46:880-1 My 13 '16  
Fall exhibitions. Am Flor 49:853-7 N 10 '17  
First fall exhibition of the Illinois state florists' association. il Am Flor 47:913-15 N 18 '16  
Impressions of the big spring shows. il Gard M 23:301-2 Je '16  
Impressions of the flower shows. il Gard Chron Am 20:184-6 Ap '16  
London's wartime flower show. Am Flor 46: 1178-9 Je 24 '16  
Menlo Park hort. society's show, Oct. 27-29. Am Flor 47:864 N 11 '16  
Menlo Park horticultural society show, June 9-10, 1917. Am Flor 48:1207 Je 23 '17  
Metropolitan show of the National rose society. il Gard Chron (Lond) 60:22-3 J1 8 '16  
New York flower show, Grand Central Palace, March 15-22, 1917. il Am Flor 48:490-8, 576 Mr 24-31 '17

New York spring show, Grand Central Palace, April 5-12; with list of awards. il Am Flor 46:661-70 Ap 15 '16

New York spring show, March 14-21. il Am Flor 50:470-4 Mr 23 '18

New York summer show of the International garden club, Pelham bay park, June 1-4, 1916. il Am Flor 46:1085 Je 10 '16

Philadelphia show. Am Flor 47:861 N 11 '16  
Report of the committee on plants and flowers for the year 1916. W: Anderson. Mass Hort Soc Trans 1916, pt 2:159-88 '17

Royal horticultural society exhibition at Chelsea, May 23-25, 1916. il Gard Chron (Lond) 59:285-92 My 27 '16

Royal horticultural society exhibition at Holland House, July 4-6, 1916. il Gard Chron (Lond) 60:18-22 J1 8 '16

St Louis spring flower show. il Am Flor 48: 498-500 Mr 24 '17

San Francisco show. il Am Flor 46:1179 Je 24 '16

Scranton flower show, April 6-8, 1916. Am Flor 46:671 Ap 15 '16

Successful spring flower shows in New York & Boston. W: Turner. il Gard Chron Am 22: 80-2 Mr '18; Excerpt. Am Flor 5:531 Mr 30 '18

See also National flower show

**Flowering cypress.** See Tamarisks

**Flowers**

Always a flower in the garden. S. H. Evans. Gard Chron Am 21:15 Ja '17  
Autumn kings. Gard Chron Am 21:405 N '17  
Beauty of common flowers. L. H. Cobb. Nat Stock & F 41:94 Ap 14 '17  
Bees and flowers. J. D. Thomas. Gard Chron Am 20:312 J1 '16  
Bird flowers often listed as honey-plants. J: H. Lovell. il Gleanings 46:20-1 Ja '18  
Bumblebee flowers. J: H. Lovell. il Am Bee J 57:264-6 Ag '17  
Cedar Hill, the country estate of T. A. Havemeyer. il Gard Chron Am 21:231-3 Je '17  
Collarette flowers. T. D. A. Cockerell. il J Heredity 7:428-31 S '16  
Color in the garden. L. B. Wilder. il Country Life 33:27-40 Mr '18  
Conservation of American wild flowers. R. W. Shufeldt. il Am Flor 22:654-7 N '16  
Cultivation and marketing of flowers and early produce on the Riviera from Toulon to Mentone. M. Foncin. Int R Sci & Prac Ag 7,no 11:1623-4 N '16  
Daisies, corn cockle, bugloss, and other summer flowers. R. W. Shufeldt. il Am Flor 23: 285-9 My '17  
Danger of white in the flower garden. A. N. Dawes. il Country Life 30:84 S '16  
Defending the growing of flowers in war time. Gard Chron Am 22:12 Ja '18  
Double flowers. Gard Chron (Lond) 61:254 Je 23 '17  
Early spring and summer flowers. R. W. Shufeldt. il Am Flor 23:161-5 Mr '17  
Early spring flowers. W. R. Dykes. il Gard Chron (Lond) 63:75 F 23 '18  
Easter flowers. Am Flor 50:528 Mr 30 '18  
Fall planting for spring flowers. I. Pendleton. Gard M 28:88 O '18  
Favorite flowers of the garden. W: R. Fowkes. Gard Chron Am 20:117-18 Mr '16  
Flower a symbol of triumph. Am Flor 49:1268 D 29 '17  
Flower and other studies for the summer of 1918. R. W. Shufeldt. il Am Flor 24:433-8 J1 '18  
Flower garden; annual climbers for quick results where vines are required. il Country Gent 83:36 My 25 '18  
Flower in the hardy perennial border. Gard Chron Am 22:189 J1 '18  
Flowers and gardens of Japan. E. H. Wilson. Mass Hort Soc Trans 1916, pt 1:17-24 '16; Same cond. Gard Chron Am 20:21 Ja '16; Same cond. Am Flor 46:594-5 Ap 8 '16; Abstract. Gard Chron (Lond) 59:279 My 27 '16  
Flowers and man. H. Caine. Gard Chron Am 22:54 F '18  
Flowers as well as vegetables are essentials in war gardens. A. Smith. Gard Chron Am 22:77-8 Mr '18

## Flowers—Continued

- Flowers essential. A. R. Jones. *Am Flor* 50: 1142 *Je* 22 '18
- Flowers, feathers and fins. R. W. Shufeldt. *il Am For* 23:669-73 *N* '17
- Flowers for next summer. L. E. Hurst. *il Ohio F* 141:154 *F* 2 '18
- Flowers for shady spots. H. Green. *Ohio F* 137:658 *My* 6 '16
- Flowers for the home. O. F. Taylor. *il Fruit-Grower* 27:145 *F* 15 '16
- Flowers for the July garden. F. Spring. *il Gard M* 26:201-2 *Ja* '18
- Flowers for the war time garden. E. Strang. *Gard M* 27:137-9 *Ap* '18
- Flowers for winter. *Nat Stock & F* 41:633 *S* 29 '17
- Flowers from frost to frost from fall planting. C. H. Irvine. *il Gard M* 24:94-5 *O* '16
- Flowers of California. W. A. Ryall. *Am Bee J* 58:129 *Ap* '18
- Flowers of late spring and early summer. R. W. Shufeldt. *il Am For* 24:289-94 *My* '18
- Flowers pumping and exploding. *il Gard Chron Am* 20:350 *Ag* '16
- Flowers that best suit the grounds of northern Ontario. Mrs L. McDougall. (*In Report, Horticultural societies of Ontario, 1917, p. 67-70*) *il '18 Ontario ag. dept., Toronto*
- Flowers that bloom in June. R. W. Shufeldt. *il Am For* 23:340-2 *Je* '17
- Forcing native plants. H. E. Downer. *Gard Chron Am* 22:215 *Ag* '18
- Forest flowers. B. L. Putnam. *il Am For* 23: 343-5 *Je* '17
- Fragments of the flower biology of Westralian plants. O. H. Sargent. *Ann Bot* 32:215-31 *Ap* '18
- Garden flowers that beautify the home and many of which provide a wealth of pollen for the bees. W. J. Sheppard. *Am Bee J* 58: 123 *Ap* '18
- Grasses, sedges and some September flowers. R. W. Shufeldt. *il Am For* 24:551-5 *S* '18
- Growing flowers a profitable business. H. W. Fegley. *il Fruit-Grower* 27:499 *N* 15 '16
- Herbaceous perennials for cut flowers: with discussion. W. Toole. *Wis Hort Soc Rep* 1917:57-64
- Home flowers for beauty and sale. *Prac F* 114: 53 *F* 1 '18
- Home garden; August care of vegetables and flowers. *il Country Gent* 83:30 *Ag* 3 '18
- How to know wild flowers. M. Merritt. *O Judd Farmer* 60:18 *My* 13 '16
- Indoor decorations from the garden. A. D. Evans. *il Gard M* 27:269 *Jl* '18
- Lion's foot, the jewel weeds, and other autumn plants. R. W. Shufeldt. *il Am For* 24:693-9 *O* '18
- Making the home beautiful. W. F. Massey. *Prog F* 32:331 *Mr* 10 '17
- Midsummer flower-hunts. R. W. Shufeldt. *il Am For* 24:489-96 *Ag* '18
- Midsummer flowers. R. W. Shufeldt. *il Am For* 23:403-6 *Jl* '17
- Mother's garden. Mrs W. Quackenbush. *il Rural N Y* 75:390 *Mr* 4 '16
- National publicity for flowers; promotion bureau report. *Am Flor* 51:348-51 *S* 7 '18
- New flowers for the home garden. E. I. Farrington. *il Rural N Y* 77:410 *Mr* 16 '18
- Newer iris and other hardy perennials. F. M. Thomas. *il Gard M* 26:17-19 *Ag* '17
- Notes from Kew. *il Gard Chron (Lond)* 63:51-2 *F* 9 '18
- Notes on novelties and plants not well known. F. E. Buck. (*In Ontario horticultural societies. 11th annual report, 1916, p. 95-6*) '17
- Ontario ag. dept., Toronto, Canada
- Novelties in summer flower-roots and bulbs. *il Gard M* 25:240-2 *My* '17
- Novelties of 1915. *Gard Chron (Lond)* 59:2-3, 24 *Ja* 1-8 '16
- Old-fashioned flowers and fence corners. *il Touchstone* (118 E. 30th st, N.Y. 35c) 1:153-9 *Je* '17
- Our disappearing wild flowers. A. A. Hansen. *Penn State F* 9:392-3 *My* '16
- Outdoor summer cut flowers. *Am Flor* 47:55 *Jl* 29 '16
- Phlox; cannas; roses. *Rural N Y* 75:234 *F* 12 '16
- Planting a garden for autumn; descriptive list of flowers. N. Taylor. *Gard M* 23:165-6 *Ap* '16
- Preservation of our wild flowers. *Gard Chron Am* 20:277 *Je* '16
- Prolonging the life of cut flowers. E. I. Farrington. *Country Life* 32:76 *Ag* '17
- Queen Anne's lace, the papaw tree, and self-heal. R. W. Shufeldt. *il Am For* 23:543-8 *S* '17
- Roots and bulbs for winter flowering. W. Sheward. *il Gard M* 28:76 *O* '18
- Selecting flower seeds for definite objects. G. W. Kerr. *il Gard M* 24:211-13 *Ja* '17
- Some flowering plants for the cool greenhouse. H. E. Downer. *il Gard Chron Am* 22:231 *S* '18
- Specific varieties of flowers to plant. *il Country Gent* 81:330-1 *F* 12 '16
- Spring flowers. W. R. Dykes. *Gard Chron (Lond)* 63:163 *Ap* 20 '18
- Summer flower-roots for present planting. G. W. Kerr. *il Gard M* 25:225-7 *My* '17
- Summer-flowers for cutting. *Rural N Y* 76: 546 *Ap* 14 '17
- Tickling profits with cut flowers. F. F. Rockwell. *il Gard M* 23:90 *Mr* '16
- Wayside flowers of England. *Gard Chron Am* 22:10 *Ja* '18
- What's new in roses, shrubs, summer flower-roots and plants. *il Gard M* 27:141-4 *Ap* '18
- What's new in vegetable and flower seeds? *il Gard M* 27:74-5 *Mr* '18
- When flowers mean more than medicines; service of flowers among the soldiers in our hospitals. S. Kerr. *il Gard M* 28:129-32 *D* '18
- Which flowers will you grow? *il Gard M* 28:136-7 *D* '18
- White flower garden. G. W. Kerr. *il Country Gent* 83:37 *Mr* 30 '18
- Wild-flower corner. M. R. James. *il Country Gent* 81:1733 *S* 23 '16
- Wild flowers and their preservation. R. H. Kaufman. *Ill State Hort Soc Trans* 1916: 365-75 '17
- Wild flowers in danger. *Am Flor* 48:690 *Ap* 14 '17
- Wild flowers of Glacier park. W. P. Eaton. *il Country Life* 32:36-9 *Jl* '17
- Wild flowers that boys and girls should know. R. W. Shufeldt. *il Am For* 23:474-80 *Ag* '17
- Witch's shrub and other November flowers. *Rural N Y* 77:1336 *N* 30 '18
- Yellow flower garden; with low blue borders for the golden beds. J. H. Sperry. *il Country Gent* 83:45 *Ap* 6 '18
- Yellow garden. *Gard M* 27:42 *F* '18
- See also Annuals (plants); Botany; Buds; Bulbs; Color of flowers; Fertilization of plants; Floral decoration; Floriculture; Flower holders; Flower pots; Flower shows; Flowers, Arrangement of; Gardening; Honey plants; National flowers; Nectar secretion; Perennials; Plants; Pollen; Window gardening; also names of flowers, e.g. Acacias, Amaryllis, Anemones, Arisaemas, Asters, Balsams, Begonias, Bloodroot, Calceolarias, Campanulas, Cannas, Canterbury bells, Cape primroses, Carnations, Centaureas, Chrysanthemums, Columbines, Coreopsis, Cosmos, Crocuses, Cyclamens, Daffodils, Dahlias, Delphiniums, Dipladenias, Easter lilies, Freesias, Fuchsias, Gaillardias, Gladioli, Gloxinias, Hollyhocks, Hyacinths, Irises, Jack-in-the-pulpit, Larkspurs, Lilies, Marguerites, Mignonette, Moccasin flowers, Morning-glories, Narcissus, Nerines, Orchids, Pansies, Pelican flowers, Peonies, Petunias, Phlox, Pinks, Primroses, Roses, Salvias, Saxifrage, Skunk cabbage, Snap-dragons, Spireas, Statice, Stocks (flowers), Sweet peas, Torch-lilies, Trillium, Tulips, Violets

## Marketing

- Department stores vs. retail flower shops. A. Zech. *Am Flor* 47:441 *S* 16 '16
- How to sell your surplus flowers. J. H. Sperry. *Country Gent* 81:1448 *Jl* 29 '16
- Modern methods in retailing flowers. *Am Flor* 48:504 *Mr* 24 '17



**Flowers—Continued**

**Measurement**

Apparatus for flower measurement. T. H. Goodspeed and R. E. Clausen. *il Cal Univ Pub Bot v 5, no 14: 435-7p '18 (5c)*

**Transportation**

Packing and shipping cut flowers. W: Cotter. *Am Flor 49:439 S 15 '17*  
Parcel post solves shipping trouble. *il Am Flor 51:433-4 S 21 '18*

**Flowers, Arrangement of**

Arranging flowers. H. Tachau. *il Country Gent 81:1565 Ag 19 '16*  
Arranging summer flowers. C. H. Hendricks. O Judd Farmer 61:21 J1 22 '16  
Flower holders and flower arrangement. R. Kift. *il Gard M 28:106-7 N '18*  
Japanese flower grouping. *Gard Chron Am 21: 56 F '17*  
Simplicity in flower arrangement. *il Gard Chron Am 21:435-6 D '17*

**Flowers, Color of. See Color of flowers**

**Flowers, National. See National flowers**

**Flowers** Fadden's bouquets; story. N. T. Brown. O Judd Farmer 64:32 Mr 2 '18

**Flukes**

Investigations in Egypt on bilharzia haematobia, a parasite of man. *Int R Sci & Prac Ag 7, no 1:35 Ja '16*  
Mode of infection in pulmonary distomiasis. M. C. Hall. *Am Vet M Assn J 49:407-9 Je '16*  
New fluke from the dog. M. Wigdor. *il Am Vet M Assn J 54:254-7 D '18*  
Two new flukes from the dog. M. C. Hall and M. Wigdor. *il Am Vet M Assn J 53:616-26 Ag '18*

*See also Liver flukes; Trematodes*

**Flumes**

Advantages of metal flumes. *Irr Age 31:105 My '16*  
Flow conditions in irrigation flumes unstable. J: S. Longwell. *Eng News-Record (10th av at 36th st, N.Y. 15c) 80:38-9 Ja 3 '18; Discussion. S. M. Woodward. 80:574 Mr 21 '18*  
Flumes and fluming. E. S. Bruce. *il U S Ag B 87:1-36 '14*  
Practical and durable sheet metal flumes. *il Irr Age 31:136-7 J1 '16*  
Venturi flume. V. M. Cone. *J Ag Research 9: 115-29 Ap 23 '17*

**Fluorine**

Fluorine in the vegetable kingdom. A. Gautier and P. Clausmann. *Int R Sci & Prac Ag 7, no 6:812-17 Je '16*

**Fluorspar slag**

Solubility of fluorspar slag and mineral phosphates in citric acid. G. S. Robertson. *Int R Sci & Prac Ag 7, no 7:948-50 J1 '16*

**Flushing, Long Island**

Trees of Flushing. C: H. Murch. *il Country Life 33:88 N '17*

**Fly. See Flies**

**Fly poison (plant)**

Stagger grass (*chroserma muscætoxicum*) as a poisonous plant. C. D. Marsh and others. *il U S Ag B 710:1-14 '18*

**Flycatchers. See Flytraps**

**Flycatchers (birds)**

Classification of birds. *Am For 22:467 Ag '16*  
Traill's flycatcher. C: Carpenter. *il Am Coop J 14:7 S '18*

**Flying foxes. See Bats**

**Flying squirrels. See Squirrels**

**Flytraps**

Flytraps and their operation. F. C. Bishopp. *il Farmers' B 734:1-14 '16; Same cond. Am Flor 46:1230 Je 24 '16; Same cond. N Y Prod R 42:478 J1 12 '16*  
Home-made flytrap. *il Prog F 31:572 Ap 22 '16; Same. J Home Econ 8:451-2 Ag '16*  
Homemade fly-trap. *il Rural N Y 75:468 Mr 18 '16; Same. J Ag (Quebec) 20:43 Ag '16*  
Maggot trap in practical use; an experiment in house-fly control. R. H. Hutchison. *U S Ag B 200:1-15 '15*

Simple type of blow-fly trap. J: L. Froggatt. *il Ag Gaz of New South Wales 28:626 S '17*

Twenty-five cent fly trap. *Kimball's D F 15: 426 Je 15 '17*

**Foliage. See Leaves**

**Food**

A. P. H. A. convention. *Creamery 6:42-3 N '17*  
Amounts of food equivalent in fuel value to one glass of milk, 157 calories. *la Ag Ext Home Econ C 12 1p '17-'18*  
Animals as factories. *Wallaces' F 42:812 My 18 '17*  
Apples vs. potatoes. Mrs H. M. Dunlap. *Better Fruit 12:22 N '17; Same. J Ag (Quebec) 22: 35 S '18*  
Avocados as food in Guatemala. W. Popenoe. *il J Heredity 9:99-107 Mr '18*  
Bearing of recent experiments in animal nutrition on the food value of milk. J. L. Lyman. *Creamery 6:19-20 D '17; 7:30-2 Ja '18*  
Bread, meat, fat and sugar. *Nat Stock & F 41:488 Ag 18 '17*  
Burning question. *Nat Stock & F 42:252 Je 1 '18*  
Buttermakers' duty to nation. *N Y Prod R 45:122-3+ N 28 '17*  
Calories. *Gard Chron (Lond) 63:173, 184 Ap 27-MY 4 '18*  
Calories in the edible portion of a number of foods. *J Home Econ 8:82-3 F '16*  
Can we afford to use less milk? *Jersey B 36: 1988 D 19 '17*  
Care of food in warm weather. B. Bell. *Fruit-Grower 27:367 J1 15 '16*  
Changes in the character of food consumption in Sweden. *Monthly R (U.S. Bur. of labor statistics, Washington, D.C.) 6:1157-60 My '18*  
Cheap food from soy beans. G: H. Dacy. *il Country Gent 82:863 My 12 '17*  
Cheese and its value as a food. C. D. Francis. *Hoard's D 52:772 D 22 '16*  
Classification of food principles. B. Bell. (*In* Suggestions for food conservation, p 34-7) '17  
Women's central committee on food conservation, St Louis  
Comparative cost and fuel value of foods. *J Home Econ 9:519-20 N '17*  
Comparative sustenance value of certain staple foods. R. Harcourt. *Ag Gaz of Canada 4:309-11 Ap '17*  
Conserving milk for food. *Wallaces' F 43:312 F 15 '18*  
Cooking rules. *Prog F 33:412-13 Mr 30 '18*  
\* Cost of living in the District of Columbia. *Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 5:1073-90 D '17*  
Country appetite changes. H. Richmond. O Judd Farmer 63:18 D 8 '17  
Cowpeas as food. *Weekly N L 4:10 My 16 '17; Same. Jersey B 36:811 My 23 '17*  
Dairy products and their food value. *la Ag Ext Short Course Notes 16:1-12 '17-'18*  
Disease-resisting influence of milk. *Ohio F 142:315 O 5 '18*  
Disease resisting influence of milk. O. Erf. *Kimball's D F 16:516 S 15 '18*  
Economic value of certain vegetables. F. Stoker. *Royal Hort Soc J 42, pts 2-3:355-7 S '17*  
Economic war foods and war-food production. S. Morgan. *Fortnightly Review (249 W. 13th st., N.Y. 50c) 109:270-7 F '18*  
Economical and healthful war time foods. *Prog F 33:419 Mr 30 '18*  
Economy in diet. G. Lusk. *Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917:231-40*  
Economy in food. T. B. Wood. *J Bd Ag 23: 17-21 Ap '16*  
Economy in its relation to the conservation of health. E. B. Rutter. *J Ag (Quebec) 21: 48 S '17*  
Edible fruits of the forests. *Gard Chron Am 21:434 D '17; Same. Am For 23:687 N '17; Same. Weekly N L 5:6 Mr 13 '18*  
Eggs and their uses as food. *Nat Stock & F 40:264 Je 3 '16*  
Eggs as food. *J Ag (Quebec) 20:199 Mr '17*

**Food—Continued**

- Experiments in teaching food values. M. C. deGarmo and M. Freeman. Ill Univ (Urbana) B v 14:1-22 Ag 6 '17
- Facts regarding butter fat for food. J. H. Frandsen. Jersey B 37:244 F 13 '18
- Fats and their economical use in the home. A. D. Holmes and H. L. Land. U S Ag B 469:1-26 '16; Excerpts. Ohio F 139:335 Mr 3 '17
- Feeding children from two to seven years old; for the use of visiting nurses, social service workers and teachers. 8p '17 Bur. of pub. health educ., Dept. of health, 139 Centre st., N.Y.
- Fertilizers and food production; how a bag of commercial fertilizer is transmuted into bread, meat and milk. S. B. Haskell. (In Am. fertilizer hdbk., 1918, p. 366-36f) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia: Same. Am Fert 49:50-1 J1 6 '18
- Food and common sense. E. Lyttelton. Fortnightly Review, (249 W. 13th st., N.Y. 50c) 109:398-407 Mr '18
- Food and efficiency. H. W. Wiley. (In Pan American scientific congress Pro., 1915, v. 8, p. 84-91) '17
- Food and its relation to health. E. Clark. Health News (N.Y. State Dept. of Health, Albany) n s 12:264-72 N '17
- Food and nutrition. (Keep well leaflet no. 9) 8p n.d. Bur. of pub. health educ., Dept. of health, 139 Centre st., N.Y.
- Gives food value of some common dishes
- Food and work. Ag J of India 12:295-301 Ap '17
- Food color fads. J Ag (Quebec) 19:151 Ja '16
- Food combinations. Power F 26:27 Je '17
- Food control and pure food propagandists. H. L. Johnson. Assn Am Dairy Food & Drug Offic Pro 1916:131-44
- Food crusade. T. H. Dickinson. Bookman (4th av and 30th st., N.Y. 25c) 47:196-8 Ap '18
- Food economy ideas. Ohio F 139:459 Mr 24 '17
- Food efficiency. Ia Ag Rd Yearbook 1916:335-9
- Food for the family. 15p 5c '17 N.Y. Assn. for improving the condition of the poor, 105 E. 22d st., N.Y.
- Food for the family. A. G. Johnson. Ore Ag Ext B ser 3, no 10:1-13 '16
- Food prejudice. G. E. Wentworth. Breeder's Gaz 72:938 N 22 '17
- Food problem. Wallaces' F 42:406 Mr 2 '17
- Food question. 96p il n.d. Pacific press pub. assn., Mountain View, California
- Food selection for rational and economical living. C. F. Langworthy. J Home Econ 8:313-18 Je '16
- Food standards. Ga Ag Dept B 66:79-125 n.d.
- Food standards. M. E. Jaffa. Cal Ag Exp 4p '17
- Food supply in families of limited means; a study of present facts of the food problem in Boston families. M. M. Davis, jr. (Pub. no. 3) 24p '17 League for preventive work, 44 Bromfield st., Boston
- Food thrift series is the name of a new series published by the U.S. Department of agriculture. Information concerning the economical uses of different foods is given in short articles, being résumés for the most part of Department bulletins
- Food value of American cheese. Creamery 6:69 O '17
- Food value of apples. Better Fruit 12:25 N '17
- Food value of cheese. Kimball's D F 15:520 Ag 1 '17
- Food value of dairy products. E. H. Farrington. Creamery 7:25-6 Ja; 27-9 F '18
- Food value of fruits. E. S. Gill. Better Fruit 12:5-6 Ja '18
- Food value of some common package foods. F. C. Gephart. Safety (New York \$1 per yr) 5:200 S '17
- Food value of the banana. 35p '17 United Fruit company, 131 State st., Boston
- Food value of the potato; facts and superstitions. Gard Chron (Lond) 62:250 D 22 '17; Same. Gard Chron Am 22:56 F '18
- Food values. A. Chinn. Ky Ag Ext C 41:1-8 '16
- Food values. R. Harcourt. Ontario Ag Dept B 245:1-14 '16
- \* Food values. J. Hortvet. (B. 65) 18p n. d. Minn. Dairy and food dept., St Paul
- \* Food; what it is and what it does. 6p '18 Mass. State dept. of health, Boston
- Food; what to buy, how to cook it, how to eat it. E. L. Fisk. 77p 25c '17 Life extension institute, 25 W. 45th st., N.Y.
- Foods and food preparation. F. E. Campbell. J Ag (Quebec) 19:154-5, 202, 225, 247 Ja, Mr-May '16
- Foods and food values. E. B. Rutter. J Ag (Quebec) 19:269; 20:19, 42, 83, 113, 133, 177, 198, 231, Je-Ag, O-D '16, F-Mr, My '17
- Foods we need, and the foods to use. M. G. Phillips. Am Bee J 58:126-7 Ap '18
- For the homemaker; course in food economies for the housekeeper. bibliog J Home Econ 9:329-32 J1 '17
- Fresh fruits and vegetables as conservers of other staple foods. C. L. Hunt. Farmers' B 87:1-11 '17
- Fuel and food values of different vegetables. Prog F 32:658 Je 2 '17
- Fuel values of foods. C: F. Bolduan. il Safety (New York \$1 per yr) 5:192-6 S '17; Same. Scientific Am (233 Broadway, N.Y. 10c) 117:62 J1 28 '17
- Great American waste; losses on the farm and at country shipping points. L. D. H. Weld. il Country Gent 82:1254 Ag 11 '17
- Growth-promoting properties of foods derived from corn and wheat. C. Voegtlin and C. N. Myers. bibliog Pub Health Reports (U.S. Pub. health service, Washington, D.C.) 33: 843-68 My 31 '18
- Hints on what to eat during the war. E. V. McCollum. Wis Ag Ext C 100:1-19 '18
- Home economics circulars 1-6. '17 B. R. Murphy, Business men's club, Memphis, Tenn.
- Titles are: What every home-maker should know about foods; Sweet potato as a food; Peanuts for breakfast, dinner and supper; Legumes—peas—beans; Rice for breakfast, dinner and supper; Corn meal
- Honey and good health. Am Bee J 58:240 J1 '18
- Hope farm notes; food economies. H. W. Collingwood. Rural N Y 77:524 Ap 6 '18
- Horse flesh as human food. L. Price. bibliog Am Vet M Assn J 51:679-92 Ag '17
- How baking, broiling, boiling, frying, etc., affect food values. Mrs W. N. Hutt. Prog F 31:88-9 Ja 15 '16
- How much shall I eat? (Ser. 3, no. 1) 20p '18 Winthrop normal and industrial college, Rock Hill, S.C.
- How to economize in preparing foods. Mrs W. N. Hutt. Prog F 31:190 F 5 '16
- How to feed the family. M. S. Liftman. (Keep well leaflet no. 2) 16p n.d. Bur. of pub. health educ., Dept. of health, 139 Centre st., N.Y.
- Contains strictly Kosher recipes and menus in both English and Yiddish. Author is visiting housekeeper and dietitian of United Hebrew charities
- How to plan meals in war time. M. S. Rose and others. (Technical educ. B 33) 15p '17 Teachers college, Columbia univ., N.Y.
- How to select foods. C. L. Hunt and H. W. Atwater. il Farmers' B 808:1-13 '17
- How to select foods; foods rich in protein. C. L. Hunt and H. W. Atwater. il Farmers' B 824:1-18 '17
- Human food from an acre of staple farm products. M. O. Cooper and W. J. Spillman. Farmers' B 877:1-10 '17; Excerpt. O Judd Farmer 63:6 D 1 '17
- Ice cream food value. T. D. Cutler. N Y Prod R 42:588 Ag 2 '16
- Ideas for the cook. Ohio F 140:411 N 3 '17
- Immunochemical studies of the plant proteins of the wheat seed and other cereals. R. P. Wodehouse. bibliog Am J Bot 4:417-29 J1 '17
- Increased food production. See weekly numbers of Gardeners' chronicle (London)
- Information and recipes on war-time foods and cooking. Ontario Ag Dept C 11:1-32 '18
- Interchangeable foods; let cost determine what source of starch to use. Weekly N L 4:8 Je 20 '17
- Is honey a luxury? J. A. Brown. Gleanings 45:686-7 S '17



Food—Continued

- Is milk a cheap food? *Ag Digest* 3:17 J1 '18
- Laboratory control of food industry. H. E. Barnard. *Assn Am Dairy Food & Drug Offic Pro* 1916:210-12
- League of three dishes. *Nat Stock & F* 41:120 Ap 21 '17
- Leblebii, a food made from the chick pea (*cicer arietinum*) in the eastern Balkans. A. Zlataroff. *Int R Sci & Prac Ag* 8,no 6: 932-4 Je '17
- Leftover foods. *Ia Ag Ext Home Econ C* 2:1-4 '17-'18
- Lesson in foods. Mrs W. N. Hutt. *Prog F* 31: 52 Ja 8 '16
- Lessons in food values and economical menus. A. Bradley. 29p 25c '17 Miss Farmer's school of cookery, 30 Huntington av., Boston
- Make the best of food. *Wallaces' F* 41:1444 N 3 '16
- Making real use of the garden's crops. I. M. K. Allison. *Gard M* 26:132 N '17
- Malnutrition through errors in the combination of foods; with discussion. E. V. McCollum. *Assn Am Dairy Food & Drug Offic Pro* 1916:61-8
- Meat substitutes. *Nat Stock & F* 41:308 Je 16 '17
- Medical aspect of food conservation. A. M. Burgess. *R I State Bd Health B* (Providence) 3:19-31 J1 '17
- Menu making. M. R. McPheeters. *Okla Ag Ext C* 61:1-8 '17
- Milk: a cheap food. F. Rose. bibliog Cornell Reading Course Farm Home 111:73-86 '17; Same. *il Minn Farmers' Lib Ag Ext B* 63: 1-7 '17; Same. *N Y Farms & Markets Dept Ag B* 97:261-70 J1 '17; Same. *Jersey B* 36: 1335-4 Ag 29 '18; Same. *Mass Ag Ext B* 15: 1-15 '17; Excerpts. *J Ag* (Quebec) 21:44 S '17
- Milk, a food for everybody. J. H. Kellogg. *N Y Ag Dept B* 93:19-36 Mr '17
- Milk a great food. *Prog F* 32:680 Je 9 '17
- Milk and the human animal. H. Mason. *Ohio F* 142:410 O 26 '18
- Milk as a food. *Weekly N L* 4:6 Ap 18 '17; Same. *Creamery* 5:18 Ap '17; Same. *Hoard's D* 53:525 Ap 13 '17; Same. *Kimball's D F* 15:290 Ap 15 '17; Same. *Jersey B* 36:598 Ap 18 '17; Same. *Wallaces' F* 42:767 My 4 '17; Same. *N Y Prod R* 44:64 My 9 '17
- Milk as a food. J. J. Hooper. *Nat Stock & F* 41:264 Je 2 '17
- Milk as a food and a source of fat. F. Rose. *Hoard's D* 52:769+ D 22 '16
- Milk-fed Americans; milk a natural necessity to promote growth. *il Rural N Y* 77:891 J1 20 '18
- Milk the cheapest animal food. A. J. Reed. *Prog F* 32:696 Je 16 '17
- Milk versus eggs. *il Ohio F* 140:332 O 13 '17
- Misguided appetite and the high cost of living. A. E. Perkins. *il Ohio Ag Exp B v* 1:363-70 D '16; Summarized by J. Marsh. *Ohio F* 139: 291 F 24 '17
- New form of food-chart: the inometer. T. Johnson. *J Dept Ag Ireland* 17,no 3:443-50 '17
- Nutritive ratios of food. *Prog F* 31:235 F 12 '16
- Nutritive value of dairy products. W. B. Barney. *il Kimball's D F* 15:620 S 15 '17
- On the store room shelves. M. G. Phillips. *Am Bee J* 58:380 N '18
- One week's budget for a family of five. 4p '18 *Canada Food bd., Ottawa*
- Our club diary; we study what's what in food and then decide to start a dairy. M. C. Hessler. *Country Gent* 82:1858 N 24 '17
- Our food page. S. Puerden. See monthly numbers of *Gleanings* in bee culture beginning March 1917
- Overloaded table. E. C. Morgan. *Kimball's D F* 15:534 Ag 1 '17
- Palate of civilized man and its influence on agriculture. D. Fairchild. *il J Fr Inst* (Franklin Inst., Philadelphia 50c) 185:299-316 Mr '18
- Peanut as a human food. T. E. Browne. *Prog F* 33:52 Ja 12 '18
- Planning liberty meals. A. L. Garvin. *il Purdue Ag* 12:166-7 D '17
- Planning of meals. L. McGuire. *Ohio Ag Ext B v* 12,no 3 16p '16-'17
- Planning the farm food. N. K. Jones. *Country Gent* 81:1491 Ag 5 '16
- Plans for community club work in the study of foods and household conveniences. *N C Ag Ext C* 7:1-51 '16
- Potatoes, sweet potatoes, and other starchy roots as food. C. F. Langworthy. *U S Ag B* 468:1-28 '17
- Practical suggestions regarding food values and the proper selection of a nutritious and economical diet. A. M. G. Soule. *Maine Ag Dept B v* 16:1-36 Mr '17
- Preserved blood for food. *Scientific Am* (233 Broadway, N.Y. 10c) 116:175 F 17 '17
- Principles of nutrition and nutritive value of food. W. O. Atwater. *Farmers' B* 142:1-46 '18 (rev.)
- Producing food for the family. H. L. Blanchard. *Western Wash Ag Exp B v* 5:18-20 Mv '17
- Publicity for milk. *Hoard's D* 55:1055 J1 19 '18
- \* Questions alimentaires. C. Nordmann. *Revue Deux Mondes* (15 rue de l'Université, Paris 3fr) 6 per 43:935-46 F 15 '18
- Recent contributions to our knowledge of food preparation. L. Stanley. *J Home Econ* 9:587-45 D '17
- Relation of food economics to the nutritive value of the diet. L. H. Gillet. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:227-31
- Relation of the dairy industry to the public health. E. V. McCollum. *Hoard's D* 54:756 D 21 '17
- Relative cost of foods. *Am Coop J* 12:772 Ag '17
- Report of committee on the food value of milk and milk products. L. L. Van Slyke. *N Y Farms & Markets Dept Ag B* 97:20-3 J1 '17
- Report of the governors' tri-state milk commission; the food value of milk in its relation to price. *Pa Ag Dept B* 287:62-5 '17
- Sanitation in food control; with discussion. G. G. Frary. *Assn Am Dairy Food & Drug Offic Pro* 1916:101-15
- Shall skim milk be used as human food? R. W. Washburn. *Hoard's D* 54:178 S 7 '17
- Skim milk; its value as a food. *N Y Prod R* 44:976 O 10 '17
- Solving the food problem. A. M. Soule. *Ga Ag Coll (Ext) B* 124:1-13 '17
- Some essential facts regarding nutrition. J. P. Street and E. H. Jenkins. *Conn State Ag Exp B* 196:1-15 '17
- Stop food waste. *Weekly N L* 4:6 Ap 11 '17
- Studies on the digestibility of the grain sorghums. C. F. Langworthy and A. D. Holmes. *U S Ag B* 470:1-30 '16
- Superiority of milk as a food. J. B. Newman. *il Field II* 27:445-6 Je '17
- Talk of the hour. H. G. Gates. *il Purdue Ag* 11:49-50 Je '17
- Teaching uses of milk. F. J. Koch. *Kimball's D F* 15:646 S 15 '17
- Ten lessons on food conservation. Lessons 1-10 64p '17 U.S. Food administration, Washington, D.C.
- Three dishes. *Nat Stock & F* 41:224 My 19 '17
- Three meals a day. H. G. Gates. *Purdue Ag Ext Leaflet* 74:1-6 '17
- To plan three meals. *Weekly N L* 4:7-8 My 9 '17
- To stretch the food supply. *Creamery* 5:18-19 Ag '17
- Town allotments and productive thrift. G. Fletcher. *J Dept Ag Ireland* 17,no 3:433-41 '17
- Turnips, beets, and other succulent roots, and their use as food. C. F. Langworthy. *U S Ag B* 503:1-18 '17
- United States food leaflets 1-20. 4p ea '18 U.S. Food administration, Washington, D.C.
- Use of milk as food. R. D. Milner. *Farmers' B* 363:1-40 '16
- Using fruits and vegetables wisely. *il Gard M* 26:87-8 O '17
- Utilization of food. 44p n.d. Council of national defense, Ohio branch, State house, Columbus

**Food—Continued**

- Value of milk and its products. R. M. Washburn. Jersey B 36:1825-6 N 21 '17; Same. Kimball's D F 15:856 D 1 '17
- Values of milk and its products. R. M. Washburn. Kimball's D F 16:109 F 15 '18
- Victory foods. Nat Stock & F 42:206 My 18 '18
- War time dairying. J. H. Frandsen. il Jersey B 37:341-2+ Mr 6 '18; Excerpts. Kimball's D F 16:156 Mr 1 '18
- War-time pleasures of the table. H. T. Finck. Century (353 4th av, N.Y. 35c) 95:899-904 Ap '18
- Well-planned meals. J. Vance. Neb Ag Ext B 48:1-20 '17
- What shall I eat? (Ser. 2, no. 12) 11p '18 Winthrop Normal and Industrial College, Rock Hill, S.C.
- What starch foods shall we eat? Prog F 32: 804 JI 21 '17
- What to eat in war time. G. Lusk. World's Work (Garden City, N.Y. 25c) 34:446-52 Ag '17
- Wheatless meals. Weekly N L 4:8 Mv 30 '17
- Why is milk our cheapest animal food? Ag Digest 2:660 O '17
- Women's municipal league leaflets. ea 5c '17 Women's municipal league of Boston, Nottingham Chambers, Copley Square
- Titles follow: Balanced menus for children; Breakfasts that nourish; Attractive and inexpensive salads; Recipes for sandwiches; Use of economical fats; Drying of fruits and vegetables; Fifteen ways of serving rice; Home preservation of eggs; Use of milk as a food; Fifteen recipes for fruits and vegetables; Meat substitutes; Preparation of inexpensive meats and meat substitutes; Cold pack method for canning fruits and vegetables; Canning and preserving fruits; Food as an energy producer

See also Alum in food; Bark as food; Beverages; Bread; Butter; Calorimeters and calorimetry; Canned food; Cereal foods; Cheese; Cookery; Corn as food; Cream; Dairy products; Diet; Digestion; Dinners; Eating; Eggs; Fish as food; Fruit; Greens; Edible; Honey; Ice cream; Iron in foods; Liquors; Marketing; Meat; Metals in food; Milk; Minerals (food); Mushrooms; Nutrition; Oils and fats; Oleomargarin; Poultry; Proteins; Salads; Sorghum meal; Soup; Soybeans as food; Substitute foods; Vegetables; Vitamines; Whale meat; White grubs as food; also Association of American dairy, food and drug officials; Minnesota—Dairy and food commissioner, State; also headings beginning Food

**Analysis**

- Coloring matters in foods. bibliog Assn Offic Ag Chem J 2,no 2,pt 2:155-69 Ag '16
- Determination of fat in certain milk products. C. K. Francis and D. G. Morgan. Okla Ag Exp B 114 4p '17
- Determination of saccharin in foods. C. B. Gnadinger. Assn Offic Ag Chem J 3:25-32 My '17
- Food products and drugs, 1916. J. P. Street. Conn State Ag Exp Rep 1916, pt 4:185-229, 293-304 '17
- Foods and feeding stuffs; methods of analysis. bibliog Assn Offic Ag Chem J 2,no 2,pt 1:79-119 Ag '16
- How much food does it take to supply us with the calcium we need? M. C. Denton. J Home Econ 10:168-70 Ap '18
- Iodine content of foods. E. B. Forbes and others. Ohio Ag Exp B 299:487-546 '16; Same summarized by E. B. Forbes. Ohio Ag Exp B v 1:219-20 JI '16
- List of the analyses of samples of butter and other food products made under the direction of the Dairy and food commissioner with the approval of the Secretary of the Department of agriculture. See monthly bulletins of the Pennsylvania Department of agriculture, Dairy and food bureau
- Metals in foods. Assn Offic Ag Chem J 2,no 2, pt 2:171-6 Ag '16
- Miscellaneous food materials. C. D. Woods. Maine Ag Exp Offic Inspec 87:33-60 '18

- Modification of Price's method for the separation of the seven permitted coal-tar dyes to include tartrazine. C. Estes. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 8:1123-4 D '16
- Report on food products and drugs, 1917. J. P. Street. Conn State Ag Exp B 200:101-98 '17
- Report on heavy metals in foods, 1916; with discussion. E. L. P. Treuthardt. Assn Offic Ag Chem J 1,no 4,pt 1: 580-9 F '16
- Report on heavy metals in foods, 1917. E. L. P. Treuthardt. Assn Offic Ag Chem J 3: 43-52 My '17
- Separation and identification of food coloring substances. W. E. Mathewson. U S Ag B 448:1-56 '17
- 16th biennial report of the Minnesota State dairy and food commissioners, 1917. 114p il '17 Minn. State dairy and food comr., St Paul
- Special food analyses, 1917. R. E. Rose and A. M. Henry. Fla Ag Dept Quar B v 27:36-92; 28:148-76 JI '17, Ja '18
- Special food analyses, 1918. Fla Ag Dept Quar B v 28:105-10 JI '18
- State chemist's report, 1916; analyses of fertilizers, feed stuffs, food and drugs; rules and regulations. R. E. Rose. Fla Ag Dept Quar B v 27:1-213 Ja '17
- Testing the things the nation needs. C. L. Alsberg. il Cornell Countryman 14:465-8 Mr '17; Same. il Purdue Ag 11:10-13 Ap '17; Same. il Penn State F 10:47-8+ Mr '17
- 13th annual report of the dairy, food and oil commissioner; report of the state agronomist; a few words on food conservation; bulletin of analyses. (v. 2 no. 8) 61p '17 Wyo. Dairy, food and oil dept., Cheyenne
- Includes list of food products examined
- Water in foods and feeding stuffs. W. J. McGee. Assn Offic Ag Chem J 2,no 3,pt 1:120-3 N '16

**Bacteriology**

- Bacterial count in foods. E. O. Jordan. Pa Ag Dept Dairy B v 15:14-17 O '17

**Bibliography**

- Bibliography of food economy. State Coll of Washington Lib (Pullman) B (Home econ.) sup no 1:1-8 '17 (Mim.)
- Supplement to accompany Bulletin 3, entitled Food economy for the housewife
- Bibliography of food economy for the housewife. il Wash State Coll Lib (Pullman) B 5:1-55 Mr '18 (2d ed 25c)
- Books for housewives in war time. Mass Ag Ext Lib Leaflet 28 1p '17
- Foods and cooking; canning and cold storage; publications relating to the above subjects, for sale by the superintendent of documents. (Price list 11—8th ed) 16p '17 Supt. of doc., Washington, D.C.
- Libraries and the food campaign. H. W. Sewall. Minn Lib Notes and News (Pub. lib. comm., St Paul) 5:112-15 D '17
- \* List of references on food in relation to health, food rationing, dietetics, etc. 15p mim '18 U.S. Lib. of Congress, Division of bibliography, Washington, D.C.
- Publications on food in foreign languages. 4p typew '18 U.S. Food administration, Washington, D.C.
- Report of committee to assemble current literature on subject of nutritional disorders, the result of so-called devitalized foods. S. J. Crumbine. Assn Am Dairy Food & Drug Offic Pro 1916:80-6

**Prices**

See Food, Cost of

**Statistics**

- \* America's part in feeding our allies; exports of foodstuffs to the western allies. (In Official statement no. 3, p. 3-5) '18 U. S. Food administration, Washington, D. C.
- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, Jan. 1. U S Food Surveys 1:1-22 Je S '18



**Food—Statistics—Continued**

- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, July 1. U S Food Surveys 2:1-28 S 9 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on May 1, 1918. U S Food Surveys 1:1-8 My 21 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on June 1, 1918. U S Food Surveys 1:1-8 Je 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on July 1, 1918. U S Food Surveys 2: 1-8 Ji 29 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on August 1, 1918. U S Food Surveys 2:1-8 Ag 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on September 1, 1918. U S Food Surveys 2: 1-8 S 25 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on Oct. 1, 1918. U S Food Surveys 2:1-11 O 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on November 1, 1918. U S Food Surveys 2:1-7 N 25 '18
- Commercial stocks of miscellaneous cereal and vegetable foodstuffs in the United States on August 31, 1917; corn, corn food products, beans, rice, rolled oats, sirup and molasses, vegetable oils, and vegetable fats. U S Ag C 99:1-28 '18
- Exports of breadstuffs, oils, etc., for eight months. (Commerce Reports no. 225) p 1148 (S 25) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- \* Exports of domestic merchandise (food); July. (*In* Official statement no. 2, p. 10+) '18 U. S. Food administration, Washington, D. C.
- \* Exports of domestic merchandise (food); July 1917-June 1918. (*In* Official statement no. 3, p. 11-13) '18 U. S. Food administration, Washington, D. C.
- \* Exports of domestic merchandise (food); July 1917-July 1918. (*In* Official statement no. 4, p. 14-16) '18 U. S. Food administration, Washington, D. C.
- \* Exports of domestic merchandise (food); July 1917-Sept. 1918. (*In* Official statement no. 5, p. 23-6) '18 U. S. Food administration, Washington, D. C.
- \* Exports of domestic merchandise (food); 1917-1918. (*In* Official statement no. 7, p. 26-8) '18 U. S. Food administration, Washington, D. C.
- \* Feeding the world; progress of world feeding from the United States. (*In* Official statement no. 7, p. 8) '18 U. S. Food administration, Washington, D. C.
- Food survey and food prices in Brazil. R: P. Monsen. (Commerce Reports no. 254) p 397-9 (O 29) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Larger commercial stocks of wheat shown in reports. Weekly N L 6:6 D 11 '18
- October survey sees wheat again triple figures of 1917; corn also shows big gain, with increases in oats, barley and rye, wheat, and other flours and food commodities. Weekly N L 6:2 N 6 '18
- Reference handbook of food statistics in relation to the war. R. Pearl and E. P. Macchett. 124p '18 U. S. Food administration, Washington, D. C.
- \* September exports of breadstuffs, oils, cotton, etc. (Commerce Reports no. 251) p 350 (O 25) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Storage**

- Some problems in the control of insects in stored foods in California. R. W. Doane. J Econ Entom 11:313-19 Je '18

**Terminology**

- Report of the joint committee on definitions and standards. Assn Am Dairy Food & Drug Offic Pro 1917:114-25
- Food, Cost of**
- Advance in food prices. J Home Econ 9:184 Ap '17
- Averting famine. A. C. Laut. New Republic (421 W. 21st st, N.Y. 10c) 14:254-7 Mr 30 '18
- Cause of high-priced foodstuffs. J. T. Campbell. Ohio F 138:567 D 9 '16
- Cause of \$3 wheat and 20-cent hogs. W. S. Anderson. Breeder's Gaz 72:48 Ji 12 '17
- \* Causes for increase of prices of certain commodities in Great Britain. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 6:364-8 F '18
- Chain grocery store. Ag Digest 1:217 D '16
- Comparative cost of home prepared and commercially prepared foods. L. C. Frechtling and M. R. Betz. J Home Econ 8:133-6 Mr '16
- Conservation and the food budget. J. Krueger. J Home Econ 10:363-8 Ag '18
- Cost of food. Jersey B 37:1816 O 30 '18
- \* Cost of living in the District of Columbia. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 5:1073-90 D '17
- \* Course of retail prices of food in the United Kingdom, 1914 to 1917. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 6:363-4 F '18
- Economy in food. T. B. Wood. J Bd Ag 23: 17-21 Ap '16
- \* Effect of restricted railroad transportation on the price of staple commodities. (*In* Official statement no. 2, p. 8+) '18 U. S. Food administration, Washington, D. C.
- \* Fair price publication. (*In* Official statement no. 2, p. 4-5) '18 U. S. Food administration, Washington, D. C.
- Farmer and the high cost of living. Jersey B 35:1952 D 13 '16; Same. Hoard's D 52:736 D 15 '16
- Federal inquiry to be conducted by Trade commission and Department of agriculture. N Y Prod R 43:597 F 14 '17
- Flour and wheat in the Montana gold camps, 1862-1870. H. A. Trexler. 20p '18 Dunstan ptg. and stationery, Missoula, Mont.
- Food agitation; a general review of the week's developments in the trade. N Y Prod R 43: 261+ D 13 '16
- Food and the budget. H. L. Johnson. J Home Econ 9:75-80 F '17
- Food and the people; the problem of the high cost of living in the New York legislature. L: Waldman. 45p '18 Rand school of social science, 7 E. 15th st, N.Y.
- Food in families of limited means. M. M. Davis, jr. Survey (112 E. 19th st, N.Y. 10c) 39:413-16 Ja 12 '18
- Food prices; a warning. H. Cox. Edinburgh Review (249 W. 13th st., N.Y. \$2) 225:196-208 Ja '17
- Food prices and food supply. A. Shadwell. 19th Century (249 W. 13th st., N.Y. 50c) 81: 726-47 Ap '17
- Food prices vs. wage increases in Philadelphia. R. T. Bye and C. Reiffell. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:235-45 N '17
- \* Food shortage and high prices. Sci Am Sup (233 Broadway, N. Y. 10c) 86:346 N 30 '18
- Food situation. D. F. Houston. Weekly N L 4:1-3 Mr 7 '17
- Food supplies and prices. E: A. Rumeley. Ag Digest 1:376-7 Ap '17
- Food survey and food prices in Brazil. R: P. Monsen. (Commerce Reports no. 254) p 397-9 (O 29) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- \* General indices of wholesale and producers' prices. (*In* Official statement no. 1, p. 6-7) '18 U. S. Food administration, Washington, D. C.
- \* General price indices; wholesale and producers' general price indices to date. (*In* Official statement no. 2, p. 8+) '18 U. S. Food administration, Washington, D. C.
- High cost of living. G. V. Gray. il Farm Eng 5:20+ Mr '17

**Food, Cost of—Continued**

- High food prices and their causes. D: S. Kennedy. Review of Reviews (30 Irving Place, N.Y. 25c) 55:75-7 Ja '17
- High food prices, middlemen, and speculation. L. D. H. Weld. North Am Review (171 Madison av., N.Y. 35c) 206:586-94 O '17
- How can we lower the cost of food? G: W. Perkins. *il* Field *il* 26:317-18 Ap '16
- How food-prices have advanced here and in other countries. Literary Digest (354 4th av, N.Y. 10c) 56:126-8 Mr '18
- How the high cost of living is reduced in Australia; state butcher shops and bakeries. W: Notz. Survey (112 E. 19th st., N.Y. 10c) 38:544-5 S 22 '17
- How to cut down your food bill. G. Schermerhorn. Am Magazine (Crowell Publishing Co., Springfield, O. 20c) 86:118-20 S '18
- Increase in price of food in France. (Commerce Reports no. 230) p 5 (O 1) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Increased prices of foodstuffs in Norway. E. H. Denison. (Commerce Reports no. 103) p 440 (My 3) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Lesson in economical buying. G. Gray. J Home Econ 10:177-80 Ap '18
- Look for leaks these days of high prices. G. V. Gray. *il* Farm Eng 4:68-9 O '16
- Maximum prices for certain foods in Uruguay. Monthly Labor Review (U.S. Bur. of labor statistics, Washington, D.C.) 7:355-6 Ag '18
- \* Maximum prices for certain foodstuffs in Brazil. R. P. Monsen. (Commerce Reports no. 249) p 316 (O 23) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Meat supply and the high cost of living. H. R. Smith. City Club Bulletin (315 Plymouth Court, Chicago) 10:159-62 My 5 '17
- More food price talk. N Y Prod R 43:225 D 6 '16
- New index price of foods. O Judd Farmer 64:9 Mr 23 '18
- Planning the farm food. N. K. Jones. Country Gent 81:1491 Ag 5 '16
- Price changes, wholesale and retail, in the United States. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 5:907-9; 7:74-8 N '17, J1 '18
- Price of food in 1917. Living Age (6, Beacon st, Boston 15c) 297:124-6 Ap 13 '18
- Prices in 1914 and 1917. Current History Magazine, N Y Times (Times Square, N.Y. 25c) 6,p12:99 J1 '17
- \* Prices of food in New Zealand. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 6:370-3 F '18
- Regulating the prices of foodstuff, Uruguay. W: Dawson. (Commerce Reports no. 173) p 326-7 (J1 25) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- \* Regulation of food prices. J: L. Payne. Scribner's M (597 5th av, N. Y. 35c) 64:581-6 N '18
- Retail prices of food in foreign countries. Monthly Review (U.S. Bureau of Labor Statistics, Washington, D.C.) 4:361-73 Je '17
- Some problems of food control. C. L. Harlan. Breeder's Gaz 72:140 Ag 2 '17
- Statement by Food administrator Hoover. Coop Manager & F 8:44 D '18
- Study of amounts spent for food materials. J Home Econ 9:234-5 My '17
- War-hogs. J: B. Mitchell. Forum (286 5th av, N.Y. 25c) 58:649-62 D '17
- Waste of meat in the home. S. Usher. *il* Cornell Reading Course 109:1-40 '16
- We learn why food prices are so high. M. C. Hessler. Country Gent 82:821 Ap 28 '17
- What cooperation can do and is doing in lowering food costs. P: Hamilton. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:268-80 N '17
- Who gets the money? H. E. C. Bryant. Country Gent 82:1189-90 J1 28 '17
- Why of the cost of food; with discussion. Mrs C. Fredericks. *il* Ill Farmers Inst Household Sci 1917:86-105 '18
- Why the era of cheap farm products is over. C. Poe. Review of Reviews (30 Irving Place, N. Y. 25c) 58:178-81 Ag '18
- See also Domestic finance

**Statistics**

- \* Comparison of price changes, wholesale and retail, in the United States. See monthly numbers of Monthly review of the U. S. Bureau of labor statistics, Washington, D. C.
- \* Cost of living in the District of Columbia. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 7:588-90 S '18
- Food. (B. no. 228, Retail prices, 1907-1916, p. 6-24) '17 U.S. Bur. of labor statistics, Washington, D.C.
- \* Food control and prices. H. C. Hoover. (In Official statement no. 7, p. 4-7) '18 U.S. Food administration, Washington, D. C.
- \* Nation's food bill; increase in cost of food during the past year. (In Official statement no. 5, p. 5) '18 U.S. Food administration, Washington, D. C.
- Prices and cost of living. 20p '18 U.S. Bur. of labor statistics, Washington, D.C.
- From the Monthly Review of Feb. 1918
- Prices and cost of living; retail prices of food in the United States. See monthly numbers of Monthly review of the U. S. Bureau of labor statistics, Washington, D. C.
- Retail prices of the principal articles of food on the 15th of each month, Jan. to Dec., 1915, and Jan. to Dec., 1916, by cities and by firms. (B. no. 228, Retail prices, 1907-1916, p. 50-347) '17 U.S. Bur. of labor statistics, Washington, D.C.

**Food, Digestibility of. See Digestion****Food, Dried**

- Evaporated and dehydrated food products. E. L. Kirkpatrick. (In Ohio vegetable growers' assn. directory, 1918, p. 14-18) n.d. Ohio vegetable growers' assn., Columbus
- Indirect economies in dried foods. Scientific Am (233 Broadway, N.Y. 10c) 117:110 Ag 18 '17
- Practical aspects of dehydrated foods. L. P. Brown. Am Pub Health J (126 Massachusetts av, Boston 30c) 8:372-3 My '18

**Food, Substitutes for. See Substitute foods****Food adulteration and inspection**

- City health officer's function in food control; with discussion. J. W. Wright. Assn Am Dairy Food & Drug Offic Pro 1918:70-6
- Co-operation; with discussion. W. C. Dumas. Assn Am Dairy Food & Drug Offic Pro 1918: 42-6
- Dairy products, pure and adulterated. T. J. McInerney. Cornell Countryman 15:466+ My '18
- Décret-loi de la lieutenantance n. 1254 portant des mesures pour combattre les fraudes dans la préparation et le commerce des vins en Italie. Int Yearbook Ag Leg 1916:657-8 '17
- Egg savers now looting New York, have been driven from Pennsylvania. A. W. McCann. Pa Ag Dept Dairy B v 16:21-5 Ag '18
- Factory inspection. J. R. Garner. Assn Am Dairy Food & Drug Offic Pro 1918:166-70
- Food and drug control in the United States. C. L. Alsberg. Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917: 240-1
- Food inspection; with discussion. J. W. McFarlin. Ia Ag Coll Offic Pub v 14,no 36:190-205 '16
- Food inspection decision 170; promulgates standards for condensed, dried and malted milks. D F. Houston. N Y Prod R 44:556 Ag 1 '17
- Food inspection in New York. Municipal J (243 W. 39th st., N.Y. 10c) 42:829-30 Je 21 '17
- Fraudulent egg substitutes and egg savers. C: H. LaWall. Pa Ag Dept Dairy B v 15:3-7 Je '17
- Hebe in California; dairy commissioner of that state worried over sale of condensed milk substitute. A. R. Bates. N Y Prod R 46:384 J1 3 '18
- Impure foods seized. Weekly N L 5:8 D 12 '17
- Label legend lapses. Weekly N L 4:3 Ja 24 '17



**Food adulteration and inspection—Continued**

- Manual of laws pertaining to the Department of farms and markets; adulterated vinegar. N Y Farms & Markets Dept Ag B 108:96-8 Je '18
- Manual of laws pertaining to the Department of farms and markets; sale, adulteration or misbranding of food and food products. N Y Farms & Markets Dept Ag B 108:144-7 Je '18
- Merchandise control laboratories. E. Hendrick. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:1133-5 D '17
- Organisation for the prevention of fraud in France. M. Toubeau. Int R Sci & Prac Ag 8,no 3:319-26 Mr '17
- Organization of food products inspection service in the markets. (Service and regulatory announcements—Markets 28) 6p '17 U S Ag
- \* Protection against food contamination. C. E. McCombs. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:644-50 S '18
- Rules and regulations of the secretary of agriculture under the food products inspection law of Aug. 10, 1917. U S Ag C 82:1-8 '17
- Rules and regulations of the Secretary of agriculture under the food products inspection law of October 1, 1918. U S Ag C 120:1-8 '18
- Safeguarding foods. Weekly N L 4:1 Ja '17 '17
- Sanitary control of food manufacturing plants. L. M. Tolman. Assn Am Dairy Food & Drug Offic Pro 1918:149-52
- Sanitary control of food producing and distributing establishments. G. G. Frary. Assn Am Dairy Food & Drug Offic Pro 1918:138-41
- Sanitation of food stores and markets. D. B. Armstrong. J Home Econ 8:577-83 N '16
- Substitutes, adulterations, preservatives, misleading labels, laboratory tests. M. P. Ravel. (In Suggestions for food conservation, p 54-61) '17 Women's central committee on food conservation, St Louis
- Use of inferior ingredients and cheap substitutes. H. L. Eskew. Assn Am Dairy Food & Drug Offic Pro 1917:89-94
- See also Dairy inspection; Freight inspection

**Directories**

- Directory of federal and state dairy, food, drug, and feeding stuffs officials. 10p '18 U.S. Bur. of chemistry, Washington, D.C.

**Food chemistry**

- \* Food chemistry in the service of human nutrition. H. C. Sherman. bibliog J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:383-90 My '18
- Practical suggestions from the American chemical society. L. Stanley. J Home Econ 9:257-61 Je '17
- See also Food—Analysis; Food adulteration and inspection

- Food conference, Southeastern.** See Southeastern food conference

**Food conservation**

- \* A-B-C of foods and cookery. M. L. Palmer. Delineator (Spring and MacDougal sts, N.Y. 20c) 93:27 D '18
- Accomplishments of boys' and girls' clubs in food production and conservation. O. H. Benson. Annals Am Acad (36th st, and Woodland av., Philadelphia \$1) 74:147-57 N '17
- Address at meeting of Wisconsin state horticultural society. A. L. Marlatt. Wis Hort Soc Rep 48:73-86 '18
- Agricultural preparedness and food conservation. 31p n.d. A. H. Chamberlain, chm., Committee on thrift educ., National council of educ., Monadnock bldg., San Francisco
- Army of workers. Weekly N L 5:4 D 26 '17
- Bogus food conservation. Bellman (118 S. 6th st, Minneapolis, Minn. 10c) 23:482-3 N 3 '17
- Business man's viewpoint. Nat Stock & F 42:538 S 7 '18

- Can, dry and store for victory, conserve fruits and vegetables for home consumption, and release wheat, beef and bacon for export. il (F. C. Pamph. 2) 15p n.d. Canada Food controller, Ottawa
- Conservation and club work. L. Wheeler. J Home Econ 10:120-2 Mr '18
- Conservation and regulation in the United States during the world war; an outline for a course of lectures to be given in higher educational institutions. C: R. Van Hise. 2 pts 63; 233p '17 U.S. Food administration, Washington, D. C.
- Conservation and the food budget. J. Krueger. J Home Econ 10:363-8 Ag '18
- Conservation of breeding stock. Am Sheep B & W 37:406-10 Jl '17
- Conservation of fats. H. T. Vulté. 10p 10c '17 Am. home economics assn., Emergency committee, 19 W. 44th st, N.Y.
- Conservation of food. Wallaces' F 43:253 F 8 '18
- Conservation of meats and food products. (Service and regulatory announcements—Bur. of animal industry 125) p 100-2 U S Ag
- Conservation recipes and suggestions. il map Minn Ag Ext B 64:1-16 '18
- Conservation; save everything from a slice of bread to your last winter's coat. G. V. Gray. Farm Eng 5:12 D '17
- Conservation week—Dec. 1-7. Wallaces' F 43:1750 N 29 '18
- Conserving our food supply. C: L. Pack. il Am For 24:401-7 Jl '18
- \* Dinner-tables of the nation. E. M. King. Harper's (Franklin sq., N. Y. 35c) 138:38-45 D '18
- Distribution and utilization of the garden surplus. (Markets 6) 10p '17 U.S. Bur. of markets, Washington, D.C.
- Economy and thrift. I. S. Harrington. R I State Bd Health B (Providence) 3:31-8 Jl '17
- Everything to win the war. A. E. Taylor. Pa Ag Dept Dairy B v 16:17-21 Ag '18
- Fairs converted into food training camps. R. P. Speer. il Breeder's Gaz 72:171 Ag 9 '17
- Farmer's wife on food conservation. Rural N Y 76:1015 Ag 25 '17
- Favors use of lamb. F. M. Rothrock. Nat Wool Grower 7:24 Ag '17
- Few food problems. M. L. Requa. (B. 9) 12p '17 U.S. Food administration, Washington, D.C.
- Fifteen lessons in food conservation. (B. 71) 9p bibliog '17 Tex. Dept. of educ., Austin
- Fighting it out in the food trenches. J: B. Mitchell. Forum (286 5th av., N.Y. 25c) 58:323-31 S '17
- First act of food administrator. Wallaces' F 42:1141 Ag 17 '17
- Flying wedge of bankers and farmers. Am For 23:590-1 O '17
- Food. A. D. Wilson. Minnesota Municipalities (Univ. of Minnesota, Minneapolis 25c) 3:3-9 F '18
- Food administration cafeteria. C. Fitzgerald. J Home Econ 10:411-13 S '18
- Food administration says. Country Life 33:68 D '17
- Food and the obligation it places upon you and your institution. L. H. Gillett, comp. 5p n. d. N. Y. assn. for improving the condition of the poor, 105 E. 22d st, N. Y.
- Charts are sold at \$2.50 per set: photographic sets at \$1 per set
- \* Food and the schools. School and Soc (Science Press, Garrison, N. Y. 10c) 8:385-6 S 28 '18
- \* Food and the war: a textbook for college classes, prepared with the co-operation of the Department of agriculture and the Bureau of education. 379p bibliog 80c '18 U. S. Food administration, Washington, D. C.
- Food conservation. J Ag (Quebec) 21:187 Je '18
- Food conservation. O Judd Farmer 64:30 Ja 12 '18
- Food conservation. R I State Bd Health B (Providence) 3:16-19 Jl '17
- Food conservation. R. L. Wilbur. 5p typew n.d. U.S. Food administration, Washington, D.C.

**Food conservation—Continued**

- Food conservation and the war. H. C. Hoover. Am J Pub Health (126 Massachusetts av., Boston 50c) 7:922-7 N '17
- Food conservation and the women. Unpopular Review (18 W. 45th st, N.Y. 75c) 9:373-84 Ap '18
- \* Food conservation by reduction of rations; abstract. F. G. Benedict. Nature (St Martin's st, London, W. C. 6d) 101:355-7 Jl 4 '18
- Food conservation drive in a high school. I. Gross. J Home Econ 10:71-2 F '18
- Food conservation in Indiana. G. I. Christie. Purdue Ag 12:14-16 O '17
- Food conservation in New York city. L. P. Brown. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:140-6 N '17
- Food conservation in North Carolina. S. R. Winters. il Review of Reviews (30 Irving place, N.Y. 25c) 56:504-6 N '17
- Food conservation in the home. E. Vermilye. Minn Hort 46:221-3 Je '18
- Food conservation is practiced in cantonments. E. F. Forbes. New Republic (421 W. 21st st, N.Y. 10c) 14:355-6 Ap 20 '18
- Food conservation movement. Purdue Ag 12:99-100 N '17
- Food conservation pledges. Survey (112 E. 19th st., N.Y. 10c) 39:145 N 10 '17
- Food conservation program for 1919. Swine World 6:35-6 O '18
- Food conservation programs for meetings of women of farmers' clubs. L. Cordiner. Minn Ag Ext Spec B 20:1-8 '18
- Food conservation to help win the war; recipes for saving wheat, sugar, meat, and fat. M. M. Lawrence. Tex Univ (Austin) B 1756:1-47 '17
- Food conservation; what we can do to help Uncle Sam. Ill Ag Dept B 40:1-28 '17
- Food control. H. Hoover. J Home Econ 10:245-54 Je '18
- Food f. o. b. the kitchen door must be America's slogan for next year. C: L. Pack. il Banker-F 4:6 N '17
- Food facts bureau of Boston. J Home Econ 9:451-4 O '17
- Food News Notes for Libraries is the title of a series of bulletins issued monthly by the United States food administration. The bulletins contain suggestions for library service in the food conservation campaign, lists of books and magazines on food, menus and recipes, etc. The first bulletin appeared in October, 1917
- \* Food program for the coming year. (In Official statement no. 5, p. 1-2) '18 U. S. Food administration, Washington, D. C.
- Food questions answered. 40p '18 U. S. Food administration, Washington, D.C.
- Food supply and the war, as shown by the report of the New York state food supply commission. 32p '18 N. Y. State food supply commission, Agricultural hall, Albany
- Food thrift. Mrs A. E. Harvey. Mass Bd of Educ (Boston) B v 2:1-11 S '17 (2d ed rev)
- For the homemaker; modifying your cook book to meet present conditions. A. Bradley. J Home Econ 10:219-22 My '18
- Great American waste. L. D. H. Weld. il Country Gent 82:1223-4, 1308-9 Ag 4, 25 '17
- Have you saved your ounce? Prog F 33:76 Ja 19 '18
- Help the housewife. L. P. Russell. J Home Econ 10:129-30 Mr '18
- Hints on the conservation of food; some practical suggestions which will be useful to the patriotic housewife who is trying to help save food. M. M. Haynes. Colo Ag Ext B 135 4p '18
- Household conservation; food. Ia Ag Ext Emergency Leaflet 4:1-8 '17
- Housekeeping in war time. M. Aldis. J Home Econ 10:73-9 F '18
- How American food conservation has aided the allies. G. M. Sauvage. Assn Am Dairy Food & Drug Offic Pro 1918:18-21
- How the war came to our home. E. Watts. Hoard's D 55:641 My 3 '18
- How three nations save food. Ag Digest 2:741 D '17
- How to increase production. J. Lipman. Banker-F 4:5 N '17
- Hurting the sheep business. J. E. Poole. Nat Wool Grower 7:17 Ag '17
- John Bowman—food conservationist de luxe. J: B. Mitchell. Forum (118 E. 28th st, N. Y. 25c) 60:216-23 Ag '18
- Kitchen camouflage. M. R. Warren. Country Gent 83:50-1 Mr 23 '18
- Lamb boycott. Nat Wool Grower 7:35 Ag '17
- Lambs should be eaten. F. A. Ellenwood. Nat Wool Grower 7:23-4 O '17
- Learning the lesson of food conservation. S. L. Arnold. J Home Econ 10:255-9 Je '18
- Liberty cook book. 27p n.d. City teachers club, Trinity auditorium, Los Angeles, Cal.
- Measures taken by the food production department to prevent the waste of surplus fruit and vegetables. J Bd Ag 24:593-4 Ag '17
- Medical aspect of food conservation. A. M. Burgess. R I State Bd Health B (Providence) 3:19-31 Jl '17
- Milk conservation urged. H. D. Wendt. Creamery 5:19 Je '17
- National plans to increase food products. Reliable P J 24:569 S '17
- New food card. H. Hoover. J Home Econ 10:21-2 Ja '18
- New freedom of food. N. C. McLoud. il Am For 23:465-72 Ag '17
- New year's resolutions by a patriotic housewife. Country Life 33:53 Ja '18
- No conservation in cantonments? New Republic (421 W. 21st st, N.Y. 10c) 14:145-6 Mr 2 '18
- One wheatless day each week and one wheatless meal each day is necessary. G. V. Gray. Farm Eng 6:17 Ja '18
- Ourselves or the allies. A. E. Taylor. J Home Econ 10:260-3 Je '18
- Patriotism and food. J Home Econ 10:123-4 Mr '18
- Perishable foods. Weekly N L 4:6 Je 13 '17
- Plans for conducting a county-wide food conservation campaign. il Ia Ag Ext Emergency Leaflet 19:1-8 '17
- Polish women learn conservation of food; Americanization helped. Weekly N L 6:2 D 11 '18
- Practical suggestions for food conservation. I. Bevier. Ill Univ (Urbana) B v 15, no 22 4p Ja 23 '18
- Production and conservation of food supplies. P. H. Bryce. Am Pub Health J (126 Massachusetts av., Boston, Mass. 50c) 8:185-90 Mr '18
- \* Public school and food conservation. Ping Ling. Pedagogical Seminary (Worcester, Mass. \$1.50) 25:191-210 Je '18
- Relation of the housewife to the food problem. N. D. Hitchcock. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:130-40 N '17
- Saving the fats. G. V. Gray. il Country Gent 83:34-5 D 21 '18
- Some achievements in food. N. C. McLoud. il Am For 23:593-9 O '17
- Somewhere in New England; the chronicle of a Hoover recruit in the rural districts. House Beautiful (3 Park st, Boston 25c) 43:151-2, 219-20, 275-6 F-Ap '18
- Squeamishness and waste. Nat Stock & F 41:308 Je 16 '17
- Suggestions for food conservation. 100p '17 Women's central committee on food conservation, St Louis
- Suggestions sent to the state institutions of California for food conservation in accordance with the proclamation of the United States Food administration. M. E. Jaffa. Cal State Bd Health Monthly B (Sacramento) v 13:417-21 Mr '18
- Ten lessons on food conservation. Lessons 1-10 64p '17 U.S. Food administration, Washington, D.C.
- United States food administration act and food conservation act of August 10, 1917; New York state food commission law of August 29, 1917; and Agreement for a Federal food board for New York state of November 27, 1917. 53p '17 N.Y. State food supply comm., Agricultural hall, Albany



**Food conservation—Continued**

- Unpatriotic women. Ohio F 142:282 S 21 '18  
Urban and suburban food production. C. L. Pack. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:203-6 N '17  
Use of fruits and vegetables as a conservative measure for wheat and meat. E. C. Lange. Minn Hort 46:202-3 My '18  
Visit to the Food administration. M. G. Phillips. Am Bee J 58:164-5 My '18  
Voluntary ration. J Home Econ 10:85-6 F '18  
Wanted: a program of consumption. E. Davenport. Country Gent 83:3-4+ Ap 27 '18  
War and the food problem. N. C. McLoud. il Am For 23:521-30 S '17  
War gardens and the helping hand of women. C. L. Pack. Gard M 27:228 Je '18  
War meals; practical suggestions to save beef, bacon, wheat and flour to meet the war-needs overseas. 12p '17 Canada Food controller, Ottawa  
War service through food conservation. S. L. Arnold. Mass Ag Bd Yearbook 1917, pt 2:112-21 '18  
Waste no food. Country Gent 82:915 My 19 '17  
Waste no food this summer. M. C. Blue. O Judd Farmer 63:16 Ag 25 '17  
Ways and means of helping in war time. M. C. Brackett. R I State Bd Health B (Providence) 3:38-42 Jl '17  
We do not advocate boycotting lamb. Am Sheep B & W 37:470-1 Ag '17  
What about Katie. M. Aldis. J Home Econ 9: 515-19 N '17  
What retail merchants are doing for food conservation. S. Merrill. J Home Econ 10: 264-5 Je '18  
What the food situation is. J Home Econ 9: 522-4 N '17  
What you are asked to do for your country. Better Fruit 12:17 N '17  
Wheat conservation program for the United States. (B. 12) 15p U. S. Food administration, Washington, D.C.  
Why and wherefore of the Food administration. 14p '18 Mass. Com. on pub. safety, Boston  
Widespread activity in home food thrift. C. L. Pack. Am For 23:519 S '17  
Woman's work in food conservation. M. G. Phillips. Am Bee J 58:90 Mr '17  
Women and the war. M. G. Phillips. Am Bee J 58:342 O '18  
Women's municipal league slips. 35c per hundred '18 Women's municipal league of Boston. Nottingham Chambers, Copley Square  
Titles follow: Corn products; Oils and substitute fats; Meat substitutes; Are you eating sea food; Cereals; Milk as a food; Use these instead of cane sugar; War candies  
Work of the library in food conservation. E. Guerrier. J Home Econ 10:266-7 Je '18  
*See also* Canning and preserving; Drying (fruits and vegetables); Food waste; Substitute foods; Wheat conservation
- Bibliography**  
Bibliography of food economy. State Coll of Washington Lib (Pullman) B (Home econ.) sup no 1:1-8 '17 (Mim.)  
Supplement to accompany Bulletin 3, entitled Food economy for the housewife  
Bibliography of food economy for the housewife. Wash State Coll Lib (Pullman) B 5:1-59 Mr '18 (2d ed 25c)  
Books and bulletins on food conservation; supplementing the list on economical cookery. E. L. Bascom. Wis Lib (Madison) B v 14:115-17 Ap '18  
Bulletins on food conservation. (Home economics letter no. 26) 3p mim (Ag 31) '17 U. S. Bur. of educ., Washington, D.C.  
Course in food economies for the housekeeper. (Home Econ. C. 6) 8p '18 U. S. Bur. of educ., Washington, D. C.  
Food conservation bibliography. 8p '18 U. S. Food administration, Washington, D. C.
- Food conservation exhibits**  
Chicago patriotic food show; brief review of its main features. M. S. Routzahn. 7p plan '18 Dept. of surveys and exhibits, Russell Sage Foundation, New York city  
First patriotic food show ever held in the United States. G. V. Gray. Farm Eng 6:22 F '18  
Food exhibit. E. W. Magoon. R I State Bd Health B (Providence) 3:56-8 Jl '17  
Food exhibition at the American museum of natural history. il Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:94-6 Jl '17  
Graphic exhibits on food conservation at fairs and expositions. 52p il '17 U. S. food administration, Washington, D.C.  
Handbook for Pennsylvania train exhibit; food conservation car. J. H. Cover. 32p mim n.d. U. S. Food administration, Washington, D.C.  
National food show at Chicago. Am Coop J 13:239 F '18  
Patriotic food show given at the University of Illinois; and recipes used. 2 pts mim 11p; 13p '18 Library publicity committee, ill. food administration, Univ. of Ill., Urbana
- Food containers.** See Containers
- Food control**  
City health officer's function in food control; with discussion. J. W. Wright. Assn Am Dairy Food & Drug Offic Pro 1918:70-6  
Commerce des fruits oléagineux. Int Yearbook Ag Leg 1916:238-43 '17  
Control of cheese. Creamery 7:36 O '18  
Cost of agricultural production. Wallaces' F 42:1681 D 14 '17  
Food and fuel control. C. F. Stoddard. Monthly Review (U.S. Bureau of labor statistics, Washington, D.C.) 5:914-25 N '17  
Nasty thing called famine. H. Hoover. Am Sheep B & W 38:172-3 Mr '18  
New ideas in food control. H. E. Barnard. Am J Pub Health (126 Massachusetts av., Boston 50c) 7:960-1 N '17  
Pooling the world's food supply. H. Hoover. Country Gent 82:1133 Jl 14 '17  
Present campaign; food administration, the world's food shortage, the American way. H. Hoover. (B. 7) 16p '17 U. S. Food administration, Washington, D.C.  
Under the crust of the French war loaf. W. H. Dean. il Country Gent 83:13 Ag 17 '18  
What food control really means. Pa Ag Dept Dairy B v 15:5-7 O '17  
What food control really means. J. H. Collins. Coop Manager & F 7:46 N '17
- Austria-Hungary**  
Commerce de semences en Allemagne et en Autriche. Int Yearbook Ag Leg 1916:219-23 '17  
Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:75-88 '17
- Brazil**  
Department of food administration. R: P. Monsen. (Commerce Reports no. 191) p 612 (Ag 15) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- California**  
Work of the food administration in California. R. Merritt. Cal State Comm Hort B v 7: 88-94 Ja '18
- Canada**  
Bread-substitutes order, Canada. Better Business (605 Ashdown blk., Winnipeg, Manitoba 15c) 2:39-40 Ag '18  
British and Canadian food regulation. (U.S. 65th Cong. 1st sess. S. Doc. 47) 35p '17 Apply to congressmen  
Food conservation. J Ag (Quebec) 21:187 Je '18  
Food control. J Ag (Quebec) 21:126 F '18  
Food control. B. M. Philp. J Ag (Quebec) 21: 94 D '17  
Food control commission. Ag Gaz of Canada 4:988 N '17  
Food control or famine. E. B. Roberts. 4p '18 Canada food bd., Ottawa; Same abr. Am Sheep B & W 38:346 My '18; Same abr. Better Fruit 12:12 Je '18

**Food control—Canada—Continued**

Food laws; manual of orders relating to the production, conservation and distribution of food. 72p '18 Canada food bd., Ottawa

Government notice of Canada food board (Order no. 25) applicable to public eating houses. Canada Gaz (Ottawa) Extra 5p Mr 27 '18

Government regulation of the prices of food and vegetables. Int R Ag Econ 9, no 3:252-4 Mr '18

\* Newfoundland fixes maximum prices. J. S. Benedict. (Commerce Reports no. 255) p 413 (O 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Report of the food controller. W. J. Hanna. 48p '18 Canadian food controller, Ottawa, Ontario

Work of the fruit and vegetable committee of the food controller's office, by D. Johnson; Licensing of the fruit and vegetable trade, by J. R. Hastings. (In Report, Ontario fruit growers' assn., 1917, p. 26-30, 30-33) '18 Ontario ag. dept., Toronto

See also Canada food board

**Chicago**

Ordinance relating to a loan (\$200,000) from traction funds to Municipal food staples association for purchase, storage and distribution of potatoes. (In Journal of Proceedings, Oct. 15, p. 1226-7) '17 City Council, Chicago

**Denmark**

Denmark and Scandinavia. O. Molgaard. Kimball's D F 16:670 S 1 '18

**Europe**

\* Government control of food supplies in European countries. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 4:390-407 Mr '17

**France**

Bread cards in France. C. W. A. Veditz. (Commerce Reports no. 5) p 79 (Ja 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

\* Bread rationing in France. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:368-70 F '18

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:99-111 '17

Food control in France. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:95-104 Jl '18

\* Food regulations in France. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:607-10 S '18

\* Government control of food supplies in France. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 4:525-33, 915-21 Ap, Je '17

Translation of French laws, decrees, and instructions, 1915-1917, on regulation of food supplies; translated from the original French. A. J. F. Van Laer and M. K. Pidgeon, tr. 72p '17 N.Y. (state) Lib. Legislative reference section

Obtainable only thru Public affairs information service, 938-964 University av, N.Y. (Typew \$3.60)

**Germany**

Arrêté n. 5121 relatif au relevé des approvisionnements de pommes de terre et des produits de la féculerie. Int Yearbook Ag Leg 1916:14-15 '17

Commerce de semences en Allemagne et en Autriche. Int Yearbook Ag Leg 1916:218-19 '17

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:33-75 '17

Commerce des produits végétaux alimentaires autres que les céréales. Int Yearbook Ag Leg 1916:170-98 '17

\* Food control in Germany and Great Britain. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:1171-3 D '17

Government control of food supplies in Germany. Monthly Review (U.S. Bur. of labor statistics, Washington, D.C.) 4:703-27, 921-8; 5:66-9 My-Jl '17

Government food control in Germany. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:91-5 Ja '18

**Great Britain**

British and Canadian food regulation. (U.S. 65th Cong., 1st sess. S. Doc. 47) 35p '17 Apply to congressmen

\* British food control and registration scheme. R. P. Skinner. (Commerce Reports no. 253) p 369-75 (O 28) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

British food regulations. Nat Stock & F 41: 489 Ag 18 '17

Cereals (restriction) order, 1918. J Bd Ag 25: 745-6 S '18

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:111-13 '17

Commerce des produits végétaux alimentaires autres que les céréales. Int Yearbook Ag Leg 1916:204-5 '17

Distribution of the potato crop. Gard Chron (Lond) 64:208 N 23 '18

\* Fixed food prices in England. (In Official statement no. 1, p. 7) '18 U.S. Food administration, Washington, D.C.

\* Food control in Germany and Great Britain. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:1171-3 D '17

Food control in Great Britain. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:925-38; 7:84-94 N '17, Jl '18

Food control in Great Britain. Wallaces' F 43:394 Mr 1 '18

\* Food policy framed by National committee of British workers. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:78-80 Jl '17

Government control of food supplies in Great Britain. Monthly Review (U.S. Bur. of labor statistics, Washington, D.C.) 4:928-45; 5:69-78 Je-Jl '17

Great Britain's measures for control of food. P. C. Williams. (Commerce Reports no. 101) p 407-10 (My 1) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Leaflet on the cereals (restriction) order, 1918. J Bd Ag 25:746-7 S '18

National Food Journal is issued semi-monthly by the British minister of food. The first number, dated Sept. 12, 1917, contains a supplement giving statutory rules and regulations from Aug. 22, 1917, and also includes a summary of orders issued before this date in order to make a complete record for reference. '2d King

1918 potato crop: details of the distribution scheme. J Bd Ag 25:708-13 S '18

Pig (sales) order, 1918. J Bd Ag 25:883-6 O '18

Prohibition of the lifting and use of hay and straw in England and Wales. J Bd Ag 25: 747-51 S '18

Supply of game for food. J Bd Ag 25:756-9 S '18

See also League of national safety

**Greece**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:116-24 '17

**Italy**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. Int Yearbook Ag Leg 1916:127-36 '17

Commerce des produits végétaux alimentaires autres que les céréales. Int Yearbook Ag Leg 1916:208-10 '17



**Food control—Italy—Continued**

Décret de la lieutenantance n. 4 fixant les règles à suivre pour la déclaration du blé et du maïs conformément au décret royal du 31 janvier 1915. *Int Yearbook Ag Leg* 1916:19-20 '17

Décret de la lieutenantance n. 654 relatif au recensement du blé. *Int Yearbook Ag Leg* 1916:20-2 '17

Décret n. 1685 de la lieutenantance portant des dispositions pour réglementer la consommation de la viande. *Int Yearbook Ag Leg* 1916:304-7 '17

Government control of food supplies in Italy. *Monthly Review* (U.S. Bur. of labor statistics, Washington, D.C.) 5:727-44 My '17

**Netherlands**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:137-41 '17

\* Hôtel conditions in the Netherlands. P. L. Edwards. (Commerce Reports no. 254) p 387-90 (O 29) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**New York city**

City empowered to buy food. *N Y Prod R* 45:18 N 7 '17

**New York (state)**

Proposed state control. *N Y Prod R* 44:457+ JI 18 '17

State food control bill, New York. *Rural N Y* 76:1059 S 8 '17

State food control; New York legislature passes bill. *N Y Prod R* 44:677 Ag 29 '17

**Norway**

Denmark and Scandinavia. O. Molgaard. Kimball's D F 16:670 S 1 '18

**Portugal**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:141-55 '17

Décret n. 2274 ordonnant le recensement des vins et des huiles de la production 1915 ainsi que des stocks disponibles pour la consommation. *Int Yearbook Ag Leg* 1916:23 '17

**Russia**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:155-66 '17

Food control committees. *Int R Ag Econ* 84:82-3 D '17

Loi approuvée par le conseil de l'empire et par la Douma, concernant les mesures à prendre pour la réduction de la consommation de la viande et des produits de la viande du gros bétail bovin, des veaux, des moutons, des agneaux, des porcs et des cochons de lait. *Int Yearbook Ag Leg* 1916:309-10 '17

**Spain**

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:89-99 '17

**Sweden**

Denmark and Scandinavia. O. Molgaard. Kimball's D F 16:670 S 1 '18

**Switzerland**

Arrêté du conseil fédéral concernant l'alimentation du pays en lait et en produits laitiers. *Int Yearbook Ag Leg* 1916:311-16 '17

Arrêté du conseil fédéral concernant l'enquête sur les stocks de pommes de terre et la culture des pommes de terre en l'année 1917. *Int Yearbook Ag Leg* 1916:23-5 '17

Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:167-9 '17

Commerce des produits végétaux alimentaires autres que les céréales. *Int Yearbook Ag Leg* 1916:211-17 '17

**United States**

\* Address at special conference of food administration. H. C. Hoover. (*In* Official statement no. 7, p. 1-4) '18 U.S. Food administration, Washington, D.C.

Address delivered at conference of grain dealers and representatives of the Food administration. H. Hoover. *Coop Manager & F* 7:60-3 JI '18

Are prices too high. Wallaces' F 42:836 My 25 '17

As Mr Hoover sees it. D: Lawrence. *Country Gent* 82:2041-2+ D 29 '17

Chicago milk reduced to \$3.22. J. M. Carroll. *Hoard's D* 54:586 N 16 '17

Cold storage industry; its relation to the public welfare during and after the war. F. A. Horne. *N Y Prod R* 44:1090-1+ O 24 '17

Commerce des produits végétaux alimentaires autres que les céréales. *Int Yearbook Ag Leg* 1916:201-3 '17

Commission merchants and the new food control bill. *Coop Manager & F* 6:22-4 JI '17

Committee organizes; advisory body of citizens representing food producers meets in Washington. *Weekly N L* 5:7-8 Ap 10 '18

Conscription or confiscation? P. T. Woods. *Wallaces' F* 42:1066 JI 27 '17

Conservation and regulation in the United States during the world war; an outline for a course of lectures to be given in higher educational institutions. pt 2 C: R. Van Hise. 65-233p '17 U. S. Food administration, Washington, D. C.

Control food, feed and fuel prices. map O Judd Farmer 63:19 Ag 4 '17

Controlling foods and fuels. O Judd Farmer 63:15 Ag 11 '17

Creation of United States Food administration; plans for wheat, flour, and bread control; personnel announcements; food, an international problem. (B. 6) 32p '17 U.S. Food administration, Washington, D.C.

Dairy products and Food administration. *Hoard's D* 55:690 My 10 '18

Domestic food control since armistice. *Creamery* 7:32b D '18

Don't tie the hands that feed us. *Am Coop J* 12:651-2 Je '17

Drastic food law amendment makes storing or holding of food a felony. *N Y Prod R* 44:217 Je 6 '17

Farmer and food control. Wallaces' F 42:1034 JI 20 '17

Farmers appeal for a square deal. *Am Coop J* 12:707-8 JI '17

Feeding the world. B. W. Currie. *il Country Gent* 82:990-1 Je 9 '17

First hand report of conference of 126 farm paper and live stock journal editors. G. M. Curtis. *Reliable P J* 24:635+ O '17

Food administration. H. H. Lyon. *Hoard's D* 55:47 F 1 '18

Food administration and fruit and vegetable industry. G. H. Powell. *Better Fruit* 12:5+ O '17

Food administration and the coffee market. A. R. Marsh. *Econ World* (128 Water st, N.Y. 25c) n s 15:183-4 F 9 '18

Food administration and the farmer. H. Hoover. *il Cornell Countryman* 15:14-17 O '17; Same. *Penn State F* 10:133-4+ O '17; Same. *Purdue Ag* 12:11-13 O '17

\* Food administration and the liquor question. H. Hoover. (*In* Official statement no. 2, p. 3) '18 U.S. Food administration, Washington, D.C.

\* Food administration and the nation's response. L. Hatch. *Sci Am* (233 Broadway, N.Y. 10c) 119:390 N 16 '18

Food administration announces increase in basis wheat prices. *Weekly N L* 5:10 JI 24 '18

**Food control—United States—Continued**

- Food administration at work. Current History Magazine, N Y Times (Times sq., N.Y. 25c) 7, pt 1:236-7 N '17
- Food administration bill. Breeder's Gaz 72: 213 Ag 16 '17
- Food administration cafeteria. C. Fitzgerald. J Home Econ 10:411-13 S '18
- Food administration explains poultry edict. Am P J 49:472 Ap '18
- Food administration; legal period of termination. N Y Prod R 47:118 N 27 '18
- Food administration matters; some interesting poultry and egg questions. N Y Prod R 45:109 N 28 '17
- Food administration program. Breeder's Gaz 72:249 Ag 23 '17
- Food administration work. C. W. Sims. Coop Manager & F 8:66 O '18
- Food and food administration. C. J. MacKay; H. C. Hoover. Assn Am Ag Coll & Exp Pro 1917:131-4, 151-5 '18
- \* Food and fuel control. C. F. Stoddard. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:914-25 N '17
- Food and victory to be gained only by co-operation. H. C. Hoover. Power F 26:7-8 O '17; Same cond. Banker-F 4:2-3 S '17; Same cond. Hoard's D 54:188-9 S 7 '17; Same cond. Wallaces' F 42:1212 S 7 '17; Excerpts. Jersey B 36:1370B-1370C S 5 '17
- Food bill passes; provisions. Wallaces' F 42: 1134 Ag 17 '17
- Food control a war measure; address to Pittsburgh Press club, April 18. H. Hoover. 25p mim '18 U.S. Food administration, Washington, D.C.; Same. Coop Manager & F 7:46-9 Je '18
- Food control and lower prices. Current History Magazine, N Y Times (Times sq., N.Y. 25c) 7, pt 1: 428-9 D '17
- \* Food control and prices. H. C. Hoover. (In Official statement no. 7, p. 4-7) '18 U.S. Food administration, Washington, D.C.
- Food-control bill. Nat Stock & F 41:315 Je 16 '17
- Food control bill. N Y Prod R 44:173 My 30 '17
- Food control bill. Weekly N L 4:1 My 16 '17
- Food control bill. J. H. Barnes. (In Pro., Grain dealers nat. assn., 1917, p. 12-14) '17
- Charles Quinn, sec-treas., Toledo, O.
- Food control bill as signed by the President, August 10th, 1917. Coop Manager & F 7: 27-33 S '17
- Food-control bill; conference report on the bill (H. R. 4961). (65th Cong. 1st sess. Doc. no. 70) 10p '17 U.S. Congress, Washington, D.C. Apply to congressmen
- Food control bill passed. Ag Digest 2:565 Ag '17
- \* Food control in the United States. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:357-60; 599-604, 960-3 Ag-O '18
- Food control in the United States. C. W. Holman. Pa Ag Dept B v 1:78-83 Ap '18
- Food control law. Nat Stock & F 41:480-1 Ag 18 '17
- Food control law and contracts. Rural N Y 76:1077 S 15 '17
- Food control legislation. F. A. Horne. N Y Prod R 44:257 Je 13 '17
- Food control muddle in New York. New Republic (421 W. 21st st, N.Y. 10c) 12:65-7 Ag 18 '17
- Food control; report no 117 of the Joint conference committee to accompany H. R. 4961. (U.S. 65th Cong. 1st sess.) 19p '17 Apply to congressmen
- Food control situation. Wallaces' F 42:1152 Ag 24 '17
- Food control talk. N Y Prod R 44:1 My 2 '17
- Food crisis and the farmer. J. G. Schurman. Cornell Countryman 15:328-9 Mr '18
- Food dictator for the United States. Current History Magazine, N Y Times (Times sq., N.Y. 25c) 6, pt 2:389-92 S '17
- Food for all—a fundamental war problem. H. C. Hoover. Il Scientific Am (233 Broadway, N.Y. 10c) 118:310-11 Ap 6 '18
- Food policy and the organization of agricultural production. Int R Ag Econ 9, no 1:60-74 Ja '18
- Food-preparedness for the United States. C. O'Brien. Atlantic (3 Park st, Boston 35c) 119:839-45 Je '17
- Food production, conservation, and distribution; hearings before the House Committee on agriculture 65th Cong., 1st sess. on H. J. Res. 75, H. R. 4125, H. R. 4188, and H. R. 4360. 538p '17 Apply to congressmen
- Food questions answered. 40p '18 U. S. Food administration, Washington, D. C.
- \* Food regulation in the District of Columbia. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 7:963-5 O '18
- Food regulations in war time as compared to times of peace. G. L. Flanders. Assn Am Dairy Food & Drug Offic Pro 1918:118-23
- Food situation and coming crops. Il maps Ag Digest 2:481-2 Je '17
- Food situation and speculation. Rural N Y 76:775 Je 9 '17
- Forerunners of famine. F. C. Walcott. Il map Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D.C. \$2.50 per yr.) 33:336-47 Ap '18
- Government control of the wheat trade in the United States. W. M. Duffus. Am Econ Review (Ithaca, N.Y. \$1.25) 8:62-87 Mr '18
- Government food control. O Judd Farmer 63: 4 Ag 25 '17
- Government, the speculators and the food supply. A. P. Usher. Cornell Countryman 14:726-7 Je '17
- Grain for distilling purposes; hearing before the Senate committee on agriculture and forestry on prohibiting the use of grain for distilling purposes. 19p '17 Apply to congressman
- Grain trade representatives meet with Food administration. Coop Manager & F 7:30-2+ Je '18
- Great injustice to patriotic poultrymen. P. T. Woods. Am P J 49:361 Mr '18
- Here's the plan of the Food administration—cooperate! G. H. Powell. Banker-F 4:7 N '17
- Hints and helps from Hoover. R. W. Boyden. Rural N Y 77:367 Mr 9 '18
- Hoover and his food organization. D. Wilhelm. Review of Reviews (30 Irving place, N.Y. 25c) 56:283-6 S '17
- Hoover food-control failure. A. W. McCann. Forum (286 5th av, N.Y. 25c) 58:331-90 O '17
- Hoover mobilizes food control forces for embargo and for war on profiteers. Current Opinion (63 W. 36th st, N.Y. 25c) 63:149-51 S '17
- How the food control law will affect the Northwest. Coop Manager & F 7:21 S '17
- In the food trenches. Il Ag Digest 2:654-5 O '17
- Incubators are farm machinery. Am P J 49: 306 Mr '18
- Instead of revolution. G. Soule. New Republic (421 W. 21st st, N.Y. 10c) 14:142-4 Mr 2 '18
- Lever food control bill. Coop Manager & F 6:35-8 Jl '17
- Marketing our first war crop. A. E. Richter. Il Country Gent 82:1442-3 S 22 '17
- Meat producing industries of United States to be saved from ruin. Reliable P J 25: 334-5 My '18
- Meat situation. Wallaces' F 43:640 Ap 12 '18
- Milk prices and dairy labor. H. H. Lyon. Hoard's D 54:330 O 5 '17
- Mill feed standards and situation. S. Sosland. Hoard's D 55:322 Mr 15 '18
- Mill sales of wheat flour to farmers. mim 3p '18 U.S. Food administration, Washington, D.C.
- Mr Hoover and the American hen; a defense of criticism. J. P. Henry. Am P J 49:410-12 Ap '18
- Must the farmer lose? Ag Digest 2:519 Jl '17
- New food control. Nation (20 Vesey st, N.Y. 10c) 105:502-3 N 8 '17
- New food control proposition. N Y Prod R 45: 424 Ja 23 '18
- New milling plan in brief. Hoard's D 56:233 S 13 '18
- New rules for sugar consumption. Creamery 7:42+ Jl '18



**Food control—United States—Continued**

- New sugar ruling; ice cream makers to get normal supply. N Y Prod R 46:48 My 8 '18
- New zones; rearrangement from the existence of interests common to the states now grouped together, map. (*In* Official statement no. 2, p. 7) '18 U. S. Food administration, Washington, D.C.
- Office of home economics and the United States Food administration. J. G. MacKinnon. J Home Econ 10:280-1 Je '18
- Outright control of prices by the United States government. O Judd Farmer 63:9 Ag 18 '17
- Plans are announced for wheat and flour control for the 1918 wheat crop. Weekly N L 5:8 Jl 31 '18; Same. Wallaces' F 43:1120 Ag 2 '18; Same. Coop Manager & F 7:32-3 Ag '18
- Policy and scope of Food administration with relation to price fixing. H. Hoover. Weekly N L 5:7-8 Mr 6 '18
- Poultry world events and progress; effect of food control law. Reliable P J 24:563+ S '17
- Power and limitations of the U. S. Food administration. W. F. Priebe. Reliable P J 25:209 Ap '18
- Powers of the U. S. Food administration are limited. Reliable P J 25:475+ Jl '18
- President puts 1919 wheat at same price as this year; proclamation and memorandum. Weekly N L 6:1+ S 11 '18; Same (memorandum). Nat Stock & F 42:561 S 14 '18
- President Wilson's appeal for food commissioner. Breeder's Gaz 71:1073 My 24 '17
- Price fixing and food control. J. I. Falconer. Ohio F 140:3 Jl 7 '17
- Price of bread. Wallaces' F 42:1081 Ag 3 '17
- Prices that stay put. L. A. Schuler. Country Gent 82:1599 O 20 '17
- Problem of the Food administration. T. H. Dickinson. il World's Work (Garden City, N.Y. 25c) 36:103-10 My '18
- Problems of the Food administration. H. Hoover. Am Fert 49:38+ N 23 '18
- \* Proclamation forbidding the use of any food-stuffs to produce malt liquors after December 1, 1918. W. Wilson. (*In* Official statement no. 5, p. 5) '18 U. S. Food administration, Washington, D.C.
- Prohibitive poultry order. L. E. Card. Rural N Y 77:527 Ap 6 '18
- Reasons for higher prices. W. S. Moore. N Y Prod R 44:318+ Je 20 '17
- Regulation of flour sales. Wallaces' F 43:572 Mr 29 '18
- Relation of farmers and the Food administration. C. J. Tyson. Prac F 114:169 My 1 '18
- \* Report as of October 31, 1918, of the enforcement division United States Food administration. (*In* Official statement no. 7, p. 19) '18 U. S. Food administration, Washington, D.C.
- Report of legislative committee. A. E. Reynolds. (*In* Pro., Grain dealers nat. assn., 1917, p. 11-12) '17 Charles Quinn, sec.-treas., Toledo, O.
- \* Report of the activities of the enforcement division, United States Food administration. (*In* Official statement no. 1, p. 1-3) '18 U. S. Food administration, Washington, D.C.
- Report submitted by Minneapolis commission merchants on food administration. L. D. Godfrey and others. Coop Manager & F 7:36 O '17
- Restricting wholesome food. N Y Prod R 44:658 Ag 22 '17
- Revised food-control bill introduced. Weekly N L 4:1 Je 6 '17
- \* Rules and regulations, IV-XXVII, of the United States Food administration. (*In* Official statement no. 7, p. 20-4) '18 U. S. Food administration, Washington, D.C.
- Rules and regulations governing the importation, manufacture, storage and distribution of food commodities for domestic trade by persons subject to license. (Ser. B) 29p '17 U. S. Food administration, Washington, D.C.
- Shortage of sugar; hearings before the subcommittee of the Senate Committee on manufacturers, pursuant to S. Res. 163; a resolution to investigate the causes of the shortage of coal and sugar. 1048p '18 Apply to congressmen
- Some problems of food control. C. L. Harlan. Breeder's Gaz 72:47 Jl 12 '17
- Spirit of '18. M. E. Dean. Rural N Y 77:335 Mr 2 '18
- Statement by the president. Weekly N L 4:1 My 30 '17
- Statement on food bills. D. F. Houston. Weekly N L 4:1-2 Je 13 '17
- Statements outlining administration's food-control policy. (B. 1) 32p '17 U. S. Food administration, Washington, D.C.
- \* Steps to victory. D. F. Houston. Academy Political Sci Pro (Columbia Univ. N.Y. \$1.50) 7:673-97 F '18
- Stockman and the food administration. J. P. Cotton. Wallaces' F 42:1714 D 21 '17
- Sugar for manufacturers. Creamery 7:49 My '18
- To force poultry sales. N Y Prod R 45:37 N 14 '17
- United States food administration act and food conservation act of August 10, 1917; New York state food commission law of August 29, 1917; and Agreement for a Federal food board for New York state of November 27, 1917. 53p '17 N.Y. State food supply comm., Agricultural hall, Albany
- United States Food administration; policies and plan of operation; wheat, flour and bread. 171p '17 U. S. Food administration, Washington, D.C.
- Not available for general distribution
- U. S. Food administration will help stimulate consumption. il Reliable P J 25:479+ Jl '18
- Urge no government interference with normal movement of live fowls to market. N Y Prod R 45:431 Ja 30 '18
- Visit to the Food administration. M. G. Phillips. Am Bee J 58:164-5 My '18
- War and our meat supply. J. P. Cotton. Am Sheep B & W 38:81-2 F '18; Same. Wallaces' F 43:124 Ja 25 '18; Excerpt. O Judd Farmer 64:14 F 2 '18
- Washington and the farmer. Am Coop J 12:656-8, 713+, 759+ Je-Ag '17
- Washington in war time. W. C. Barnes. il Breeder's Gaz 72:1031+ D 6 '17
- What the food control bill means to the farmer. Ag Digest 2:520-1 Jl '17
- Why and wherefore of the Food administration. 14p '18 Mass. Com. on pub. safety, Boston
- Why we hate the food speculator. J. R. Smith. il Country Gent 82:1049-50 Je 23 '17
- Work of Food administration. Hoard's D 55:614 Ap 26 '18
- Work of the Food administration. J. F. Fielder. N J Ag Dept B 11:448-55 '18
- Working plan for the Food administration. il Ag Digest 2:871-2 Mr '18
- World's greatest wheat dealer. W. H. Dean. Country Gent 82:1441-2 S 22 '17

**License system**

- \* Amended coarse grain rules. (*In* Official statement no. 4, p. 7-8) '18 U. S. Food administration, Washington, D.C.
- Amendments and additions to rules and regulations governing the importation, manufacture, storage and distribution of food commodities and feeds for domestic trade by persons subject to license. (Ser. B) 27p '17 U. S. Food administration, Washington, D.C.
- Basis and form of returns; effort to obtain more explicit understanding of Food administration regulations. N Y Prod R 46:431+ Jl 17 '18
- Basis of returns; Food administration issues a further statement as to relations of shippers and receivers. N Y Prod R 46:708 S 11 '18
- \* Butter. (*In* Official statement no. 5, p. 17-19) '18 U. S. Food administration, Washington, D.C.

**Food control—U.S.—License system—Continued**  
 Butter and cheese trade representatives discuss restrictive regulations with Food administration. N Y Prod R 46:37 My 8 '18  
 Butter rules criticized; text of letter of New York mercantile exchange to U. S. Food administration. N Y Prod R 46:499 Jl 31 '18  
 \* Change in corn products regulations. (In Official statement no. 2, p. 5) '18 U.S. Food administration, Washington, D.C.  
 \* Cheese. (In Official statement no. 5, p. 17) '18 U.S. Food administration, Washington, D.C.  
 Cheese profits rule. E. Rickard. N Y Prod R 47:224 D 18 '18  
 Cheese rules revised; original rules amplified and extended to cover certain foreign types. N Y Prod R 46:563+ Ag 14 '18; Same. Creamery 7:23-5 S '18; Hoard's D 56:223 S 13 '18  
 Cold storage butter rules; special regulations of profits imposed by United States Food administration. Creamery 7:20-1 Jl '18; Same. N Y Prod R 46:355 Jl 3 '18  
 Cold storage rates; maximum charges fixed by United States Food administration. N Y Prod R 46:691 S 11 '18  
 Commodity licensing; the President's proclamation of Oct. 10, 1917; Mr Hoover's accompanying statement. (B. 8) 8p '17 U.S. Food administration, Washington, D.C.  
 Controlling our food by license. Ag Digest 2: 692 N '17  
 Explains licensing of farm-equipment industry; Secretary Houston states department's policy. Weekly N L 5:1 Je 12 '18; Same. Power F 27:61 Jl '18; Excerpts. Prog F 33: 758 Je 29 '18  
 Federal rulings on mill feeds. O Judd Farmer 64:553 My 25 '18  
 Feed rules and regulations. Market News & Exchange (Ohio ag. dept., Columbus) B v 1, no 40:1-2; 47:1-2 S 14, N 2 '18  
 Fertilizer trade under license. Am Fert 48: 32-3 Mr 2 '18  
 Food administration notice in regard to trading without license or with unlicensed persons. N Y Prod R 45:455 Ja 30 '18  
 Food board cases; number of charges pending against dealers. C. C. Miller. N Y Prod R 47:1-4 N 6 '18  
 Food dealers to be licensed. O Judd Farmer 63:6 O 20 '17  
 Food situation; a general consideration of conditions and the objects of government control. G. H. Powell. N Y Prod R 44:1066 O 24 '17  
 Fresh butter included; limitation of profits in selling storage butter applied to fresh. N Y Prod R 46:467 Jl 24 '18  
 General regulations governing licensees doing business as or with cold storage houses. H. Hoover. N Y Prod R 45:579 F 27 '18  
 General regulations governing licensees operating stock yards, or handling or dealing in live stock in or in connection with stock yards. U S Ag C 116:1-14 '18; Same cond. Coop Manager & F 7:90 Ag '18  
 Government and feed control. Hoard's D 55: 989 Jl 5 '18  
 Government control of farm machinery. P. S. Rose. Country Gent 83:32 Jl 20 '18  
 Important administration rulings affecting sales of poultry and eggs. N Y Prod R 46: 112 My 15 '18  
 Important egg rulings by Food administration. N Y Prod R 45:843 Ap 10 '18  
 Lateral trading in food. N Y Prod R 44:932 O 10 '17  
 License rule amendments. N Y Prod R 45:496 F 13 '18  
 Licensed millers of corn, corn starch, barley, oats, rice; compiled to Feb. 1, 1918. (Ser. M) 40p '18 U.S. Food administration, Washington, D.C.  
 This list has been compiled chiefly with a view to assisting wholesalers, retailers, bakers and other licensees in securing wheat flour substitutes, as required by the wheat conservation rules  
 Licensing of the fertilizer industry. Am Fert 48:21-8 Mr 16 '18

Licensing system and the farmer. T. W. Yocum. Ohio F 140:474 N 24 '17  
 Looking into exchange calls; federal food administration confers with butter men. N Y Prod R 45:425 Ja 30 '18  
 Manager Seibels replies to criticism from Food administration of statements in regard to minimum car-lot loading of eggs. N Y Prod R 45:856 Ap 10 '18  
 Meat markets, delicatessen stores, meatfood products establishments, etc; repeal of superseded provisions. Ip '17 Committee on license, Chicago city council  
 More placarding rules; kind, grade and price of food must be affixed to goods. N Y Prod R 45:289 Ja 2 '18  
 Net return rule adopted; U. S. Food administration adopts suggestion of federal food board. N Y Prod R 46:395 Jl 10 '18  
 New feed regulations. Market News & Exchange (Ohio ag. dept., Columbus) B v 1, no 46:1-2 O 26 '18  
 New general rules and interpretations which will govern those operating under federal license. N Y Prod R 45:550 F 20 '18  
 New profit regulations. N Y Prod R 47:6 N 6 '18  
 New rules governing dealers in cold storage eggs and frozen poultry as amended and formally adopted by Food administration. H. Hoover. N Y Prod R 45:631+ Mr 6 '18  
 Packers' license. Wallaces' F 42:1616 N 30 '17  
 Permissible profits; summary of effect of various rulings governing sales of refrigerator eggs and poultry. N Y Prod R 46:627+ Ag 28 '18  
 Perplexing decision; findings in case of Franz against Read & Garrison of much importance to wholesale receivers. N Y Prod R 46:355 Jl 3 '18  
 Points on licensing farm equipment industry explained by Department. Weekly N L 5:7 Jl 24 '18  
 President places farm-implement industry under license system. Weekly N L 5:1 My 29 '18  
 \* President's proclamation licensing small millers, operators of general storage warehouses, and others. W. Wilson. (In Official statement no. 7, p. 7) '18 U.S. Food administration, Washington, D. C.  
 President's proclamation requires buyers for packers to obtain federal licenses. Weekly N L 6:3 S 25 '18  
 \* Proclamation requiring stockyard firms to secure trade license on or before September 19. W. Wilson. (In Official statement no. 5, p. 2-3) '18 U.S. Food administration, Washington, D.C.  
 Profits on cold storage eggs. N Y Prod R 46: 566 Ag 14 '18  
 Regulations for stockyards prohibit deceptive dealing. W. Wilson. Coop Manager & F 8: 96-7 S '18  
 Revised rules and regulations governing licensees manufacturing bakery products, effective Feb. 1, 1918, and superseding series C. (Ser. D.) 20p '18 U.S. Food administration, Washington, D.C.  
 Rules and regulations governing the conduct of persons engaged in the storage and distribution of dairy and poultry products. N Y Prod R 45:1 N 7 '17  
 Rules and regulations governing the importation, manufacture, storage and distribution of food commodities for domestic trade by persons subject to license. (Ser. B) 29p '17 U.S. Food administration, Washington, D.C.  
 \* Rules and regulations of the Food administrator governing licensing of dealers in certain staple food commodities. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:1167-71 D '17  
 Rules for retailers of butter. Creamery 7:46 O '18  
 Rules which are to govern butter trading for the coming season. N Y Prod R 46:70 My 8 '18  
 Seeking for clarity; a study of butter profit restrictions with suggestions of certain needs for elucidation. N Y Prod R 46:787+ O 2 '18



**Food control—U.S.—License system—Continued**  
Special regulations governing licensees engaged in business as cold storage warehousemen and others. N Y Prod R 46:659 S 4 '18

Special regulations governing manufacturers, dealers, brokers and commission merchants in butter. Creamery 7:24-24a N '18

Special regulations governing manufacturers, dealers, brokers and commission merchants in cheese. H. Hoover. Creamery 7:22-6 Je '18; Same. N Y Prod R 46:279 Je 19 '18

\* Special regulations of certain corn products. (In Official statement no. 1, p. 5) '18 U.S. Food administration, Washington, D.C.

Swift & co. penalized for buying storage eggs at price higher than the seller (C. H. Zinn & co.) was justified in charging. N Y Prod R 45:843 Ap 10 '18

United States Food administration license requirements affecting seedsmen. U S Seed Rep 2:1 Ag '18

Various cheese decisions; answers to questions pertaining to Food administration regulations. N Y Prod R 46:470 Jl 24 '18

### Uruguay

Regulating the prices of foodstuff, Uruguay. W. Dawson. (Commerce Reports no. 173) p 326-7 (Jl 25) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Food demonstration work.** See Home economics extension work

### Food departments, Municipal

Municipal food departments in modern war. O. Salthe. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:197-201 Mr '18

### Food distribution

Averting famine. A. C. Laut. New Republic (421 W. 21st st, N.Y. 10c) 14:254-7 Mr 30 '18  
Business talk for farmers. Rural N Y 76:899 Jl 21 '17

Cantaloupe marketing in the larger cities with car-lot supply, 1914. Int R Sci & Prac Ag 7, no 2:295-7 F '16

Car-lot distribution. J. S. Crutchfield. (In Pan American scientific congress Pro., 1915, v. 3, p. 425-30) '17

Distributing food stuffs. Wallaces' F 42:685 Ap 20 '17

Distribution as the farmer sees it. E. Davenport. Il Country Gent 82:1314-15 Ag 25 '17

Distribution of fruit and vegetables through the London and provincial markets. J Bd Ag 25:706-7 S '18

Distribution: what do you know about it? P. Fassig. J Home Econ 9:33-4 Ja '17

Efficiency in marketing. R. L. Greene. Rural N Y 77:973 Ag 17 '18

Food administration and fruit and vegetable industry. G. H. Powell. Better Fruit 12:5+ O '17

Food distribution. S. Jordan. Mo Ag Bd Year-book 1917:223-6

Food distribution in the United States. R. G. Gould. (In Suggestions for food conservation, p 12-18) '17 Women's central committee on food conservation, St Louis

Food problem. F. G. Uner. N Y Prod R 44:310 Je 20 '17

Food problem and distribution. Rural N Y 77:589 Ap 20 '18

Food production report submitted to the Senate; the secretary of agriculture submits proposals. Weekly N L 4:2 My 2 '17

Government, the speculators and the food supply. A. P. Usher. Cornell Countryman 14:726-7 Je '17

Great American waste; most of it comes in careless shipping and retailing. L. D. H. Weld. Country Gent 82:1281 Ag 18 '17

Hearing on the Wicks bill. Rural N Y 76:495 Mr 31 '17

Hearings on food control legislation before War committee of Senate at Albany concluded. N Y Prod R 44:533+ Ag 1 '17

How can we lower the cost of food? G. W. Perkins. Il Field Il 26:317-18 Ap '16

Lateral trading in food. N Y Prod R 44:932 O 10 '17

Legislative propositions as affecting the marketing of food. G. H. Stege. N Y Prod R 43:538 Ja 31 '17

Methods of wholesale distribution of fruits and vegetables on large markets. J. H. Collins and others. Il U S Ag B 267:1-27 '15

\* Municipal responsibility for the purveying of foods. E. P. Harris. Nat Municipal R (North American bldg., Philadelphia \$1) 7: 284-5 My '18

Needs and duties of a market commission. A. Hobson. Hoard's D 54:180 S 7 '17

New York milk situation. Rural N Y 76:465 Mr 24 '17

New York state legislature and its treatment of farmers. Rural N Y 76:733 My 26 '17

Organizing city distributors. N Y Prod R 44: 457+ Jl 18 '17

Overhead costs; how women can help themselves by helping to reduce these costs now. F. Coste. (In Suggestions for food conservation, p. 19-26) '17 Women's central committee on food conservation, St Louis

Peach supply and distribution in 1914. map Int R Sci & Prac Ag 7, no 2:297-301 F '16

Plain words to the public; the Wicks and Perkins report. Rural N Y 76:45 Ja 13 '17

Poultry men confer with Chief C. J. Brand. N Y Prod R 44:417 Jl 11 '17

Problems of distribution and the middlemen. Ag Digest 1:331-2 Mr '17

Producer-consumer problems. Ag Digest 2: 650 O '17

Remedy to curtail the enormous waste of food stuffs. G. Hildebrand. Prac F 113:197 My 15 '17

Retail distribution and marketing. M. Talbot. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:208-11 Mr '18

Scientific distribution of fruit; with discussion. H. Weinstock; J. L. Nagle; A. L. Wislaker. Cal State Comm Hort B v 6:159-75 My '17

Second Wicks bill. Rural N Y 76:587 Ap 21 '17

Studying the market problem. J. J. Dillon. Wallaces' F 41:1660 D 22 '16

System for state of New York potato crop. J. J. Dillon. Rural N Y 76:987 Ag 18 '17

Terminal market in New York; cutting out the profitless parasites. Rural N Y 76:15 Ja 6 '17

Thirty million meals a day. Kimball's D F 16:446 Je 1 '18

To the New York legislature; defective legislation. Rural N Y 76:945 Ag 4 '17

Waste in distribution. Rural N Y 76:859 Jl 7 '17

\* Waste in food distribution in New York. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:507-10 S '17

We are opposed to the Wicks bill because. Rural N Y 76:421 Mr 17 '17

What's wrong with the middleman? E. P. Miller. Il Country Gent 82:1594+ O 20 '17

Where are we at; on New York market legislation? Rural N Y 76:81 Ja 20 '17

See also Apples—Distribution; Farm produce—Distribution; Marketing; Markets; Milk—Distribution; Peaches—Distribution; also New York food distributors' association

**Food for children.** See Children—Care and hygiene

**Food for invalids.** See Cookery for the sick; Diet

**Food handlers**

Health of food handlers. (Monograph ser. no. 17) 24p '17 N.Y. city Dept. of health

Reports of committee on diseases of man—their relation to the milk supply and to the public health. A. F. Stevenson. Int Assn Dairy & Milk Inspec Rep 1917:75-84

**Food industry**

\* Conditions of trade in food products. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:256-9 Ag '17

Food protection in commercial handling—what it means to do away with waste. R. G. Gould. (In Suggestions for food conservation, p. 27-33) '17 Women's central committee on food conservation, St Louis

\* Profits in food in Canada. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:260 Ag '17

**Food inspection.** See Food adulteration and inspection

# **Food labels**

Food labels. J Home Econ 9:36-7 Ja '17

# **Food law**

Agricultural law, 1916. N Y Ag Dept B 83: 1959-2006 My '16; Same. N Y Ag Dept Rep 1916, pt 3:1959-2006 '17

Agricultural law, 1916; sale, adulteration or misbranding of food and food products. N Y Ag Dept B 83:2036-8 My '16; Same. N Y Ag Dept Rep 1916, pt 3:2036-8 '17

Canning compounds under the ban. Pa Ag Dept Dairy B v 16:9-12 Ag '18

Concurrence déloyale, fraudes dans le commerce et mesures pour les combattre. Int Yearbook Ag Leg 1916:399-407 '17

Dairy and pure food laws of the state of Connecticut; corrected to the close of the legislative session of 1917. 56p n.d. Conn. Dairy and food comr., Hartford

Definitions and standards for foods and drugs enacted into law by the legislative bodies of the several states; comp., by J. S. Abbott and H. S. Bailey. 109p '17 U.S. Bur. of chemistry, Washington, D.C.

Distinctive names, artificial products, imitation products, synthetic products and substitutes. C: F. McKinley. Assn Am Dairy Food & Drug Offic Pro 1918:141-9

Food and drug laws of the state of Rhode Island. 32p '17 R. I. Food and drug comm., Providence

Food laws; manual of orders relating to the production, conservation and distribution of food. 72p '18 Canada food bd., Ottawa

Foodstuffs. (Reprint no. 410 Pub. health reports) p 115-33 '18 U. S. Pub. health service, Washington, D. C.

Foodstuffs—production, care and sale. (In Municipal ordinances, 1916, p. 75-99) '17 U.S. Pub. health service, Washington, D.C.

Hearings on food control legislation before War committee of Senate at Albany concluded. N Y Prod R 44:533+ Ag 1 '17

Law as laid down in the Iowa and Pennsylvania department of ice cream cases. G: L. Flanders. Assn Am Dairy Food & Drug Offic Pro 1917:63-76

\* Laws relating to the adulteration and misbranding of foods, drugs and feeding-stuffs, narcotic and poison laws, sanitary law; indexed information with revised rules, regulations and food standards of the state of Georgia. Ga Ag Dept Quar B 75:1-199 '18

Laws relating to the adulteration and misbranding of foods, drugs and feeding-stuffs, narcotic and poison laws, sanitary law; revised rules, regulations and food standards of Georgia. R. E. Stallings. Ga Ag Dept B 66:1-141 n.d.

Laws relating to the manufacture and sale of food products including dairy products, food products, concentrated commercial feed stuffs, illuminating oil, linseed oil, and agricultural seeds. 84p '17 Ore. State printing dept., Salem

Manual of laws pertaining to the Department of farms and markets; adulterated vinegar. N Y Farms & Markets Dept Ag B 108:96-8 Je '18

Manual of laws pertaining to the Department of farms and markets; sale, adulteration or misbranding of food and food products. N Y Farms & Markets Dept Ag B 108:144-7 Je '18

Manufacturer liable for ice cream poisoning. Creamery 7:38+ Ag '18

Milk-blended butter; should the prohibitive tax and branding laws against it be modified? N Y Prod R 45:366 Ja 16 '18

Municipal ordinance on the hygienic care of foodstuffs. (Editor's easy chair). W. D. Howells. Harper's (Franklin sq., N.Y. 35c) 136:906-9 My '18

Need of uniform food laws. Penn State F 9: 350 Mr '16

New model sanitary law. N Y Prod R 42:835 S 20 '16

New York city board of health rulings concerning the sale of foods of mixed condition. N Y Prod R 42:257 Je 7 '16

Plan to control food trade. N Y Prod R 41: 1072 Ap 19 '16

Regulating package weight; text of a recent supreme court decision. N Y Prod R 42:522 Jl 19 '16

Regulations as to declarations of net weight and measure of food products. 3p '16 R. I. food and drug comm., Providence

Relation of the wholesale grocers to food control departments. A. Davies. Assn Am Dairy Food & Drug Offic Pro 1918:124-7

Report of pure food and legislative committee. (In Pro. Nat. wholesale grocers assn. of the U.S., 1917, p. 95-133) '17 Nat. wholesale grocers assn., A. H. Beckmann, sec., 6 Harrison st., N.Y.

Restricting wholesome food. N Y Prod R 44: 658 Ag 22 '17

Rules and regulations issued under the sanitary food law, together with copy of this law. 15p '16 S. D. State food and drug dept., Vermillion

Rules and regulations of the secretary of agriculture under the food products inspection law of Aug. 10, 1917. U S Ag C 82:1-8 '17

Rules and regulations of the Secretary of agriculture under the food products inspection law of October 1, 1918. U S Ag C 120: 1-8 '18

\* Supplement to Wisconsin Dairy and food laws of August 1913. 21p '17 Wis. Dairy and food comr., Madison

Synopsis of the laws of the Dominion of Canada respecting the sale of food and other commodities. 16p '16 Dept. of trade and commerce, Ottawa

To push food legislation; bill providing for a food dictatorship in New York. N Y Prod R 44:53 Ag 1 '17

See also Food control

## **Bibliography**

Brief list of references on pure food and drugs legislation in the United States. U.S. Library of Congress. 3p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)

**Food plants.** See Plants, Food

## **Food poisoning**

Food-borne infections. E. O. Jordan. Science (Science Press, Garrison, N.Y. 15c) n s 47: 80-6 Ja 25 '18; Same cond. Current Opinion (63 W. 36th st, N.Y. 25c) 64:262 Ap '18

## **Food preservation and preservatives**

Bacteria and food preservation. D. H. Jones. Ontario Ag Dept B 265:19-21 '18

Care and preservation of food in the home. J. R. Bear. il Tex Univ B (Austin) 48:1-16 Ag 25 '16

Coloring matter of raw and cooked salted meats. R. Hoagland. bibliog il J Ag Research 3:211-26 D '14

Drying, salting and preserving fruits and vegetables; and Canning and preserving. E. E. Scholl; Mrs E. M. Marrett. Tex Ag Dept B 56:1-36 Ap '17

New York state college of agriculture; home economics thrift campaign. R I State Bd Health B (Providence) 3:49-56 Jl '17

Preservation of food; storing, canning, drying and fermentation. Ohio Ag Ext B v 14, no 1 1-20 '18-'19

Preservation of foods; canning and drying of fruits and vegetables. Mrs E. B. Binz. Pa Ag Dept B 298:1-18 '17

Preventing food spoilage by warring on the guilty micro-organisms. Scientific Am (233 Broadway, N.Y. 10c) 116:99 Ja 27 '17

Report on preservatives, 1916. A. F. Seeker. Assn Offic Ag Chem J 1, no 4, pt 1:556-61 F '16

Report on preservatives, 1917. A. F. Seeker. Assn Offic Ag Chem J 3:33-42 My '17

Save garden surplus. Weekly N L 4:5 Jl 4 '17

See also Bread—Preservation; Canning and preserving; Cold storage; Drying (fruits and vegetables); Eggs—Preservation; Fish as food—Preservation; Meat—Preservation; Refrigeration and refrigerating machinery; Refrigerators; Tin cans



**Food preservation and preservatives—Cont.**

**Analysis**

Food preservatives; methods of analysis. bibliog Assn Offic Ag Chem J 2,no 2,pt 1: 141-54 Ag '16

**Bibliography**

Canning, preserving, drying, and storage of fruits, vegetables, and meats. G: A. Deveneau. 3p mim '18 U.S. Food administration for Illinois, Urbana

**Food-products inspection service.** See United States—Food inspection service

**Food purchase board.** See United States—Food purchase board

**Food research laboratories**

Useful institution. N Y Prod R 43:902 Mr 28 '17

**Food riots**

Food riots in America. L. Marcy. il Int Socialist Review (341 E. Ohio st., Chicago 10c) 17:582-7 Ap '17

**Food supply**

\* Address at special conference of food administration. H. C. Hoover. (In Official statement, no. 7, p. 1-4) '18 U. S. Food administration, Washington, D. C.

Avoidance of diversion of foodstuffs. M. P. Ravanel. (In Suggestions for food conservation, p. 62-5) '17 Women's central committee on food conservation, St Louis

\* Back yard and vacant lot gardens a national necessity. Playground (1 Madison av, N. Y. 25c) 12:113-15 Je '18

Changes in the food supply and their relation to nutrition. L. B. Mendel. (In Pan American scientific congress Pro., 1915, v. 10, p. 112-26) '17

Chickens may win this war. G: Cugley. Am P Advocate 25:610 S '17

Cold storage; its capabilities and how to best utilize and extend them. F. A. Horne. Am Pub Health J (126 Massachusetts av, Boston, Mass. 50c) 8:221-7 Mr '18

Conserve the dairy cow. M. D. Munn. Creamery 5:34 Je '17

Consumers' co-operation during the war. A. Sonnichsen. 15p 5c '17 Co-operative league of Am., 2 W. 13th st, N.Y.

Crops we must raise next year. J. C. Marquis. Country Gent 83:5-6 S 7 '18

Dairy and food situation of the world. H. Hoover. Creamery 7:27-31 Je '18; Same. Jersey B 37:933-4+ Je 12 '18; Same. Hoard's D 55:890, 920 Je 14-21 '18; Excerpts. Nat Stock & F 42:299 Je 15 '18

Dominating policy of the food administration. H. C. Hoover. Swine World 5:5 S '17

\* Duty to dig. D. L. Sharp. Atlantic (41 Mt Vernon st, Boston 35c) 122:598-606 N '18

\* Economics of peace. Sci Am (233 Broadway, N. Y. 10c) 119:476 D 14 '18

Engineering work in food supply. F. H. Newell. Am Soc Ag Eng Trans 11:163-71 '18 Europe and the food crisis. Review of Reviews (30 Irving place, N.Y. 25c) 57:321-2 Mr '18

Extension in government's food production work. Weekly N L 5:1 Ag 22 '17

Farmer and food supply. A. F. Woods. Kimball's D F 15:864 D 1 '17

Farmers and the food problem. Rural N Y 76: 587 Ap 21 '17

\* Feeding the family: a problem and a method for social workers in war time. M. M. Davis, jr. (Pamph. 166) 8p 5c '18 Nat. conference of social work, Kansas City, Mo.

Few food problems. M. L. Regua. (B. 9) 12p '17 U.S. Food administration, Washington, D.C.

\* First international task—food. Survey (112 E. 19th st, N. Y. 10c) 41:228 N 23 '18

Food administration review. Hoard's D 56:15 Jl 26 '18

Food after the war; we must have more of it. C. W. Ackerman. il Country Gent 83:5-6 Ag 31 '18

Food and crop situation. D. F. Houston. Jersey B 36:429 Mr 21 '17

Food and war. P. G. Holden. Banker-F 4:3 My '17

Food boycotts. E. S. Bayard. N Y Ag Dept B 92:147-54 F '17

Food conservation. H. A. Wheeler. 10p '17 Nat. assn. of commercial organization secretaries, F. C. Butler, sec., Chamber of commerce of the Tonawandas, Tonawanda, N.Y.

Food control a war measure; address to Pittsburgh Press club, April 18. H. Hoover. 25p mim '18 U.S. Food administration, Washington, D. C.; Same. Coop Manager & F 7:46-9 Je '18

Food crisis and the farmer. J. G. Schurman. Cornell Countryman 15:328-9 Mr '18

Food exports. Wallaces' F 43:1111 Ag 2 '18

Food is the greatest necessity. W. C. Lasseter. 15p n.d. Ark Ag Ext

Food needs for 1918; agricultural programme for the period beginning with the autumn of 1917. U S Ag C 75:1-14 '17; Same. Nat. Wholesale Grocers' Assn B (6 Harrison st., N.Y. \$5 per yr) v 2:31-6 O '17

Food prices: a warning. H. Cox. Edinburgh Review (249 W. 13th st., N.Y. \$2) 225:196-208 Ja '17

Food problem and its challenge. J Ag (Quebec) 21:80 N '17

Food problems of the world. F. W. Hagelthorn. J Dept Ag Victoria 15:195-7 Ap '17

\* Food shortage and high prices. Sci Am Sup (233 Broadway, N. Y. 10c) 86:346 N 30 '18

Food situation. J: W. Hallowell. il Stone & Webster J (Stone & Webster bldg., Boston Mass. \$1 per year) 22:257-67 Ap '18

Food supply. Wallaces' F 43:228 F 8 '18

Food supply and prices. Ohio F 139:662 My 12 '17

Food supply and the human submarine. H: W. Farnam. Rural Manhood 8:283-5 S '17

Food supply problems and the veterinarian's responsibility. L. M. Steckel. Am Vet M Assn J 54:231-4 D '18

Food survey at once; Department to gather statistics on nation's food supply. Weekly N L 5:3 Ag 22 '17

Food that we must furnish. H. Hoover. O Judd Farmer 65:343 O 19 '18

Great food situation. H. C. Hoover. Jersey B 37:2025 D 4 '18

High cost of living and the farmer. Ag Digest 1:255 Ja '17

\* How America has fed the allies. H. C. Hoover. Current History M—N Y Times (Times sq., N.Y. 25c) 8,pt2:450-1 S '18; Same cond. Creamery 7:23 Ag '18

How to make food abundant and cheap. T: F. Hunt. Country Gent 83:15 Je 29 '18

\* If thine enemy hunger. Nation (20 Vesey st, N. Y. 10c) 107:615-16 N 23 '18

Interrelations of animals and plants and their influence upon the food supply of man. R. W. Hegner. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 6:467-73 My '18

\* Is there an abundance of food? L. E. Theiss. Outlook (381 4th av, N. Y. 10c) 120:424-5 N 13 '18

Learn to eat corn, says Uncle Joe Cannon. Country Gent 82:1077-8 Je 30 '17

\* Letter to the President; shipments of foodstuffs from the United States to the allied countries during the fiscal year just closed. H. Hoover. (In Official statement no. 3, p. 1) '18 U.S. Food administration, Washington, D. C.

Malthusianism. Wallaces' F 41:1448 N 3 '16

Message of the Food administration; with discussion. H. C. Culbertson. N Y Farms & Markets Dept Ag B 104:86-107 F '18

Mighty problem: can it be solved? G. H. Alford. Prog F 33:1371 D 14 '18

New horticultural crops for our scant food supply. U. P. Hedrick. Mass Hort Soc Trans 1918,pt 1:51-64 '18

New world food situation. H. Hoover. Banker-F 6:4-5 D '18

Not enough to eat? Ag J of India 12:646-9 O '17

Organizing city distributors. N Y Prod R 44: 457+ Jl 18 '17

Our food substitution army. Ohio F 140:358 O 20 '17

Over here and over there. L. Burbank. il Gard M 28:15-16 Ag '18

**Food supply—Continued**

- \* Peace to make food scarcer. *Literary Digest* (354 4th av, N.Y. 10c) 59:11-12 N 9 '18
- Population and food supply. J. O. P. Bland. *Edinburgh Review* (249 W. 13th st, N. Y. \$2) 227:232-52 Ap '18
- \* Present and prospective food supplies. *Nature* (St Martin's st, London, W. C. 6d) 101:154-5 Ap 25 '18
- Present campaign; food administration, the world's food shortage, the American way. H. Hoover. (B. 7) 16p '17 U. S. Food administration, Washington, D.C.
- Present world food situation. *Hoard's D* 56:620 N 29 '18
- Price the regulator of supply. C. L. Harlan. *Breeder's Gaz* 72:174 Ag 9 '17
- Problem of the Food administration. T. H. Dickinson. *il World's Work* (Garden City, N.Y. 25c) 36:103-10 My '18
- Proclamation for the conservation of the dairy cow. J. M. Cox. *Kimball's D F* 15:348 My 15 '17
- \* Rationing system. T. S. Woolsey. *Am J Int Law* (35 W. 32d st, N. Y. \$1.25) 11:844-7 O '17
- Reference handbook of food statistics in relation to the war. R. Pearl and E. P. Matchett. 124p '18 U.S. Food administration, Washington, D.C.
- Relation between food conservation and our share in the war. H. C. Culbertson. *N Y Farms & Markets Dept Ag B* 105:101-14 Mr '18
- \* Report of the Committee on production and conservation of food supplies. *Am J Pub Health* (126 Massachusetts av, Boston 50c) 8:780-4 O '18
- Requisites of a national food policy. W. H. Hamilton. *J Political Economy* (Univ. of Chicago Press, Chicago 35c) 26:612-37 Je '18
- \* Science and the world's food. G. Lusk. *Scribner's* (597 5th av, N. Y. 35c) 64:710-17 D '18
- Scientific basis of rationing. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:35 Jl 20 '18
- Shall the world starve? J. R. Smith. *maps Country Gent* 82:987-8+ Je 9 '17
- Shall we have enough to eat next winter? W. O. Thompson. 12p '17 *Chamber of commerce*, Cleveland, O.
- Situation serious—staple products needed—farmers will increase production if people respond by saving. W. H. Tomhave. *Penn State F* 11:123-5 Ap '18
- \* Specter of famine over Europe. *Literary Digest* (354 4th av, N. Y. 10c) 59:15-16 N 23 '18
- Statements by agricultural authorities and statistics regarding the food shortage of the world. *Ore Ag Ext B* 206:1-4 '17
- Statements outlining administration's food-control policy. (B. 1) 32p '17 U. S. Food administration, Washington, D.C.
- Steady! hysteria may mean waste! D. H. McAlpin. *Rural Manhood* 8:187-9 My '17
- Strengthen at home. *Banker-F* 6:7 D '18
- Uncle Sam at the head of the table. Mrs T. G. Winter. *Minn Hort* 46:138-40 Ap '18
- \* U. S. drawing new food from all over the world. *Business Digest and Investment Weekly* (241 W. 37th st, N. Y. 15c) 22:234 N 12 '18
- Urban and suburban food production—its past and its future. C. L. Pack. *Am For* 23:676-7 N '17
- Value of agriculture in time of war. E. M. K. Geiling. *Scientific Am* (233 Broadway, N.Y. 10c) 116:391+ Ap 21 '17
- War and food problems. *Rural N Y* 76:819 Je 23 '17
- War time food forces in action. *Power F* 27:36 N '18
- We must save more food. *Am Fert* 48:39 F 2 '18
- Wheat needs of the world. A. Taylor. 8p '17 U.S. Food administration, Washington, D.C.
- Who gets the money? H. E. C. Bryant. *Country Gent* 82:1189-90 Jl 28 '17
- Will famine follow war. M. Enos. *il Field* 11 23:78-9+ F '18
- World famine into which we are hurrying. S. Webb. *Contemporary Review* (249 W. 13th st., N.Y. 50c) 112:380-5 O '17
- World is hungry. *il Banker-F* 5:16 Ag '18
- World shortage of food, the war and the consequences for the United States. A. R. Marsh. *Economic World* (128 Water st, N. Y. 25c) n s 13:616-21 My 5 '17
- World starvation—is it possible? F. F. Rockwell. *Country Life* 34:54-5 My '18
- World's food. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:1-313 N '17
- In 4 pts. pt. 1, The world's food; pt. 2, Food utilization and conservation; pt. 3, Production and marketing plans for next year; pt. 4, Price control
- World's food. *Wallaces' F* 42:875 Je 1 '17
- \* World's food and world politics. J. Addams. (Pamph. 128) 6p 5c '18 Nat. conference of social work, Kansas City, Mo.
- World's food needs. *Weekly N L* 5:4 S 5 '17
- See also Fisheries; Meat supply; Milk supply; Wheat

**Bibliography**

- Bibliography on public markets. C. C. Williamson. (*In* Summary of the market situation in Boston, p 143-70) '16 City planning bd., Boston, Mass.
- List of references on boycott of foodstuffs. U.S. Library of Congress. 2p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 10c)

**Austria-Hungary**

- Food shortage in Central Empires. *Current History Magazine*, N Y Times (Times sq., N.Y. 25c) 8, pt 1:134-5 Ap '18
- Food situation, Austria-Hungary. A. Halstead. (Commerce Reports no. 184) p 504-5 (Ag 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Food situation in Austria-Hungary. W. von Schierbrand. *North Am Review* (171 Madison av., N.Y. 35c) 205:46-52 Ja '17

**Belgium**

- Food of Belgium. V. Kellogg. *J Home Econ* 10: 293-4 Jl '18
- \* Saving Belgium from starvation. *Current History M—N Y Times* (Times sq., N. Y. 25c) 8,pt2:521-2 S '18

**Boston**

- Summary of the market situation in Boston. 175p '16 City planning bd., Boston, Mass.

**Brazil**

- \* War and Brazilian foodstuffs. (Commerce Reports no. 256) p 419-25 (O 31) '18 U.S. Bur. of foreign and domestic commerce, Washington, D. C.

**Bulgaria**

- Food shortage in Central Empires. *Current History Magazine*, N Y Times (Times sq., N.Y. 25c) 8, pt 1:135-6 Ap '18

**Canada**

- Canada and the food problem. H. L. Pangborn. *Outlook* (381 4th av, N.Y. 10c) 118:443-4 Mr 20 '18
- Cold storage in Canada. *Int R Ag Econ* 84:53-65 D '17
- Food control. B. M. Philp. *J Ag (Quebec)* 21: 109 Ja '18
- Foods in cold storage in Canada, July, 1917 to Jan. 1918. *Labour Gazette* (Canada Department of Labour, Ottawa 3c) 18:50-1 Ja '18
- Increased crop production. *Ag Gaz of Canada* 4:268-74 Ap '17
- Production and preservation of food supplies. P. H. Bryce. (*In* Report, 1917, p. 123-54) '17 Canada Comm. of conservation, Ottawa
- Production and thrift. *Ag Gaz of Canada* 3: 494-500 Je '16
- Production and thrift; agricultural war book 1916. 250p '16 Canada Ag
- See also Canada food board

**Central Europe**

- Enemy lands supervise farms rigidly; food shortage talk may be propaganda. *Weekly N L* 6:2 N 27 '18



**Food supply—Central Europe—Continued**

Food situation in Central Europe, 1917. A. Maylander. (B. 242, Misc. ser.) 128p '18 U.S. Bur. of labor statistics, Washington, D.C.

Privations endured in enemy countries. Current History Magazine N Y Times (Times sq., N.Y. 25c) 7,pt 2:157-60 Ja '18

**China**

China as a source of food supply. (Commerce Reports no. 152) p 1224-5 (Je 29) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Connecticut**

Marketing survey of New Haven. L. D. H. Weld and others. map 50p '17 New Haven chamber of commerce, New Haven, Conn.

**District of Columbia**

\* Supply of food in the District of Columbia. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 4:957-9 Je '17

**Europe**

Food situation in Europe. Creamery 7:32c D '18

Forerunners of famine. F: C. Walcott. il map Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D.C. \$2.50 per yr.) 33:336-47 Ap '18

How the world food-shortage comes home to the European. Current Opinion (63 W. 36th st, N.Y. 25c) 61:34-5 Ja '18

Only advancing general. Nation (20 Vesey st, N.Y. 10c) 106:174-5 F 14 '18

**France**

Camouflaged food; science and invention as displayed in the daily menu in France. il Sci Am (233 Broadway, N.Y. 10c) 119:152 Ag 24 '18

Food for France and its public control. F. Monod. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:84-91 N '17

Food situation in France. F. B. Pitney. Creamery 6:47-8 N; 36 D '17; 7:48 Ja '18; Same. Power F 26:31 N; 34 D '17; 27:32 Ja '18; Same (pt. 3). Purdue Ag 12:67-8 N '17; Same cond. Ag Digest 2:699-700 N '17

French solution of the bread problem. E. Sellers. 19th Century (249 W. 13th st., N.Y. 50c) 81:1028-42 My '17

Law of October 16th, 1915, on the purchase and sale of wheat and flour for the supply of the civil population. Int R Ag Econ 61:118-27 Ja '16

My friend in France tells me—. J Home Econ 10:268-71 Je '18

Not by bread alone. S. Dewey. Nation (20 Vesey st, N.Y. 10c) 105:504-5 N 8 '17

\* Restrictions et ravitaillement en 1793. H. Stein. Revue de Paris (85 faubourg Saint-Honoré, Paris 2fr 50) 25,pt2:190-206 Mr 1 '18

Will American corn feed France? W: H. Dean. il Country Gent 83:17 F 16 '18

**Germany**

Bread and the battle. T: H. Dickinson. Atlantic (41 Mt Vernon st, Boston 35c) 122: 123-8 Jl '18

Can't possibly starve Germany: food situation all over the world best since 1915. P. Clay. Forbes Magazine (120 Broadway, N.Y. 15c) 2:312-13 Ag 10 '18

Clothing and food control in the Central Empires. Current History Magazine, N Y Times (Times sq., N.Y. 25c) 7, pt 1:448-51 D '17

Contribution of forestry to the problem of public nutrition during the war, in Germany. Int R Sci & Prac Ag 8,no 8:1127-30 Ag '17

Economic conditions in Germany. A. K. Dawson. il Scientific Am (233 Broadway, N.Y. 10c) 116:102-3 Ja 27 '17

Food shortage in Central Empires. Current History Magazine, N Y Times (Times sq., N.Y. 25c) 8, pt 1:132-4 Ap '18

Food situation in Germany November 1, 1917, to January 31, 1918. A. Maylander. Monthly R (U.S. Bur. of labor statistics, Washington, D.C.) 6:1093-1101 My '18

German grain supply. I. Caoul. Scientific Am (233 Broadway, N.Y. 10c) 116:373 Ap 14 '17

\* Germany is insured against starvation. Current Opinion (63 W. 36th st, N. Y. 25c) 65: 268-71 O '18

\* Germany's food policy. Review of Reviews (30 Irving Place, N. Y. 25c) 58:546 N '18

\* Germany's food problem. J. A. F. Ozanne. 19th Century (249 W. 13th st, N. Y. 50c) 84:442-54 S '18

Great fat drive. B. J. Hendrick. World's Work (Garden City, N.Y. 25c) 35:321-6 Ja '18

Ham \$2.40 to \$3.60 pound. Swine World 5:17 Ja '18

Oils and fats in Germany. Scientific Am (233 Broadway, N.Y. 10c) 116:518 My 26 '17

Reduction of the bread ration. Monthly Labor Review (U.S. Bur. of labor statistics, Washington, D.C.) 7:366-8 Ag '18

\* Shall we go without to feed Germany? Literary Digest (354 4th av, N. Y. 10c) 59:7-9 N 30 '18

\* Starveling's belt—the pause before harvest. (In Official statement no. 5, p. 22-3) '18 U.S. Food administration, Washington, D.C.

Triumph of scientific housekeeping. S. T. Barrows. J Home Econ 8:495-8 S '16

War and dietetics. R. Wheeler. J Home Econ 8:488-91 S '16

**Great Britain**

Britain as an agricultural country. F. L. Morgan. Engineer (33 Norfolk st, Strand, London, W.C. 2) 124:360 O 26 '17

\* Cold comfort. Living Age (41 Mt Vernon st, Boston 15c) 299:309-11 N 2 '18

\* Consequences of food control. Spectator (1 Wellington st, Strand, London, W. C. 6d) 120: 31-2 Ja 12 '18

Drama of Dorset. Living Age (6 Beacon st, Boston 15c) 297:244-5 Ap 27 '18

Early phases of food control. Edinburgh Review (249 W. 13th st, N.Y. \$2) 227:108-30 Ja '18

\* Food hoarding order, 1917. Spectator (1 Wellington st, Strand, London, W. C. 6d) 120: 201-2 F 23 '18

Food money. F. Morris. 19th Century (249 W. 13th st, N.Y. 50c) 83:996-1006 My '18

Food prices and food supply. A. Shadwell. 19th Century (249 W. 13th st., N.Y. 50c) 81:726-47 Ap '17

Food problem 1914-1916. 'G. E. Underhill. Quarterly Review (249 W. 13th st, N.Y. \$2) 230:145-65 Jl '18

Food problem of Great Britain: the shipping problem of the world. A. Pollen. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:91-4 N '17

Food production societies. J Bd Ag 24:202-5 My '17

\* Food queue. New Statesman (10 Great Queen st, Kingsway, London, W.C. 6d) 10:273-4 D 22 '17

Food queue. E. Sharp. Living Age (6 Beacon st, Boston 15c) 297:122-4 Ap 13 '18

Food situation. Monthly Labor Review (U.S. Bur. of labor statistics, Washington, D.C.) 7:364-6 Ag '18

Food supplies and prices in war time, with special reference to imports. J Bd Ag 23: 955-65 Ja '17

Food supplies in war time. R. H. Rew. (Oxford pamphlets 1914) 26p 8c n.d. Oxford univ. press, 35 W. 32d st., N.Y.

Food supply of the United Kingdom. J Bd Ag 23:1046-52 F '17

How to solve the food problem. A. W. Gattie. 19th Century (249 W. 13th st, N.Y. 50c) 83: 734-43 Ap '18

Ireland as a food supplier of Great Britain. J Bd Ag 25:444-8 Jl '18

\* Lord Rhondda's difficulties. New Statesman (10 Great Queen st, Kingsway, London, W. C. 6d) 10:418-19 F 2 '18

\* Milky way. R. H. Tetley. English R (19 Garrick st, London, W.C. 18s per yr.) 26:347-55 Ap '18

\* National food policy. Nature (St Martin's st, London, W.C. 6d) 100:445-6 F 7 '18

National food supply in peace and war. J Bd Ag 24:615-20 S '17

**Food supply—Great Britain—Continued**

- \* Our agrarians. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 10: 586-8 Mr 23 '18
- \* Potatoes and pigs. *Spectator* (1 Wellington st, Strand, London, W.C. 6d) 120:278-9 Mr 16 '18
- Public elementary schools and food supply in war time. *J Bd Ag* 23:33-40 Ap '16
- Revolutionary ideas. *Hoard's D* 53:856 Je 15 '17
- \* Short commons. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 10:372-3 Ja 19 '18
- \* Success of food control. *New Statesman* (10 Great Queen st, Kingsway, London, W. C. 6d) 11:204-5 Je 15 '18
- War food societies. *J Bd Ag* 23:965-9 Ja '17

**Ireland**

- \* Food of Ireland. *New Statesman* (10 Great Queen st, Kingsway, London, W.C. 6d) 11: 226-7 Je 23 '18

**Italy**

- Italian ministry reviews food situation. *P. A. Jay*. (Commerce Reports no. 241) p 182-3 (O 14) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- New organization of supply. *Int R Ag Econ* 72:136-8 D '16

**Japan**

- How Japan meets its food problem. *K. Ishii*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:81-4 N '17

**Netherlands**

- Case for Holland. *A. G. A. Van Eelde*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:74-8 N '17
- Food producing and rationing measures in Holland. *P. L. Edwards*. (Commerce Reports no. 103) p 433-4 (My 3) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**New England**

- Food supply in New England. *E. F. McSweeney*. 14p '17 Mass. State commission on the high cost of living, Boston

**New York**

- Foods and markets bill. *N Y Prod R* 43:637- F 21 '17
- Market bill completed; food and market bill in New York legislature. *N Y Prod R* 43: 597- F 14 '17
- Market commission's report; recommendations for N. Y. state legislation. *N Y Prod R* 43:412 Ja 3 '17
- New markets bill being prepared to take the place of Wicks-Grant measure. *N Y Prod R* 43:961 Ap 11 '17
- 3d annual report for year ending Dec. 31 1916. 26p '17 N.Y. Dept. of foods and markets, Albany
- Wicks bill features. *N Y Prod R* 43:868-9 Mr 21 '17
- Wicks bill hearing. *N Y Prod R* 43:760 Mr 7 '17
- Wicks bill hearing; local trade goes to Albany to protest. *N Y Prod R* 43:833 Mr 21 '17

**New York city**

- Feeding the metropolis. *J. P. Mitchel*. *Country Gent* 82:1255 Ag 11 '17
- Food conservation in New York city. *L. P. Brown*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:140-6 N '17
- Food prices create disorder. *N Y Prod R* 43:677 F 28 '17
- New York's food problem; report of exhaustive studies by the food problem committee of the merchants' association. *N Y Prod R* 45:826 Ap 3 '18
- Report of the food problem committee. 39p '18 Merchants' assn. of N.Y., Woolworth bldg., 233 Broadway, N.Y.

**New Zealand**

- \* Prices of food in New Zealand. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:370-3 F '18

**Norway**

- Food situation of Norway. *F. Nansen*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:44-53 N '17

**Peru**

- \* War and Peruvian foodstuffs. (Commerce Reports no. 249) p 305-13 (O 23) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Russia**

- Food supply of Russia. *H. C. Sherman*. *Political Sci Quarterly* (Columbia Univ., N.Y. \$1) 33:210-29 Je '18
- What next in Russia? *R. Lewis*. *World's Work* (Garden City, N.Y. 25c) 35:600-2 Ap '18

**South America**

- Food supply of South America available in time of war; excerpts. *G. B. Roorbach*. *Pan-Am Union B* (17th and B sts, N.W., Washington, D.C. 25c) 46:79-82 Ja '18
- South America's available food supply. *D. I. Calderon*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:53-6 N '17

**South Carolina**

- Survey of food and feed conditions in the state. *E. J. Watson*. *S C Ag Dept B* 61: 1-16 '17

**Sweden**

- \* Changes in the character of food consumption in Sweden. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1157-60 My '18
- Sweden's food supply. *A. R. Nordvall*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:57-65 N '17

**Switzerland**

- Switzerland and the American food supply. *W. E. Rappard*. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:66-74 N '17

**Turkey**

- Food shortage in Central Empires. *Current History Magazine*, N Y Times (Times 25c) 8, pt 1:135-6 Ap '18

**United States**

- Agricultural preparedness is necessary—production is patriotic and profitable. *Banker-F* 4:2 Ap '17
- Another appeal to farmers; proclamation by Gov. Philipp of Wisconsin. *Hoard's D* 53: 599 Ap 27 '17
- Arms and agriculture. *Mo Ag Bd B v* 15:1-31 Ap '17
- Biology and the nation's food. *W. J. Spillman*. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 4:220-5 Mr '17
- Bread bullets. *R. S. MacElwee*. (Columbia war papers, ser. 1, no. 11) 34p '17 Division of intelligence and publicity, Columbia University, N.Y.
- Bureau of markets in its relation to the grain trade. *C. J. Brand*. (*In Pro.*, Grain dealers nat. assn., 1917, p. 21-4) '17 Charles Quinn, sec.-treas., Toledo, O.
- Bureaucracy and food control. *W. C. Edgar*. *Review of Reviews* (30 Irving place, N.Y. 25c) 55:625-8 Je '17
- Children in food production: a summary of the results of the use of children in food production in the United States in 1917 with suggestions for the coming year. (Pamph. 277 rev.) 8p 5c '17 Nat. child labor com., 105 E. 22d st, N.Y.
- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, Jan. 1. *U S Food Surveys* 1:1-22 Je 8 '18
- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, July 1. *U S Food Surveys* 2:1-28 S 9 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on May 1, 1918. *U S Food Surveys* 1:1-8 My 21 '18



**Food supply—United States—Continued**

Commercial stocks of grain, flour and miscellaneous food products in the United States on June 1, 1918. U S Food Surveys 1:1-8 Je 26 '18

Commercial stocks of grain, flour, and miscellaneous food products in the United States on July 1, 1918. U S Food Surveys 2: 1-8 Jl 29 '18

Commercial stocks of grain, flour, and miscellaneous food products in the United States on August 1, 1918. U S Food Surveys 2:1-8 Ag 26 '18

Commercial stocks of miscellaneous cereal and vegetable foodstuffs in the United States on August 31, 1917; corn, corn food products, beans, rice, rolled oats, sirup and molasses, vegetable oils, and vegetable fats. U S Ag C 99:1-28 '18

Congress, grappling with the food problem, is playing with dynamite. Current Opinion (63 W. 36th st, N.Y. 25c) 62:381-3 Je '17

Conserving the food supply. H. C. Hoover. Eng & Mining J (10th av. at 36th st., N.Y. 15c) 104:125-7 Jl 21 '17

Department of agriculture and the food situation. D. F. Houston. Science (Science Press, Garrison, N.Y. 15c) n s 46:528-9 N 30 '17

Distribution and utilization of the garden surplus. (Markets 6) 10p '17 U.S. Bur. of markets, Washington, D.C.

Enlistment for the farm. J. Dewey. (Columbia war papers, ser. 1, no. 1) 10p '17 Division of intelligence & publicity, Columbia university, N.Y.

Era of new food resources. il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:8 Jl 7 '17

Essentials to a food program for next year. G. Pinchot. Annals Am Academy (36th st. and Woodland av, Philadelphia \$1) 78:156-63 Jl '18; Reprint. 8p '18 Gifford Pinchot, Milford, Pa.; Same. Swine World 6:7-8 S '18; Same. Purdue Ag 13:7-10 O '18

Fallacy of price bidding. S. N. Patten. Annals Am Academy (36th st and Woodland av, Philadelphia \$1) 78:129-43 Jl '18

Farmers and food regulation. Outlook (381 4th av., N.Y. 10c) 116:51 My 9 '17

Features of new food production law. Jersey B 36:1757 N 7 '17

Feeding the world. B. W. Currie. Country Gen 82:891-2, 954-5, 1022-3 My 19, Je 2, 16 '17

Food administration. A. D. Wilson. Minn Hort 46:57-60 F '18

Food administration and the farmer. H. Hoover. il Penn State F 10:133-4+ O '17

Food and farm labor. Independent (119 W. 40th st., N.Y. 10c) 90:145 Ap 14 '17

Food and the future. New Republic (421 W. 21st st, N.Y. 10c) 11:348-50 Jl 28 '17

Food control and democracy: an article proposing the organization of chambers of agriculture to regulate the equitable distribution of farm products at fair prices both for the producer and the consumer. D. Lubin. (U.S. 65th Cong., 1st sess. S. Doc. 120) 13p '17 Apply to Congressmen

From the Atlantic monthly for August 1917

Food crops must be increased. D. F. Houston. Weekly N L 4:1-3 Ap 18 '17; Same cond. Jersey B 36:630 Ap 25 '17

Food first. O. K. Davis. il Everybody's (Spring & Macdougall sts, N.Y. 15c) 37:304-15 S '17

Food, labor and war. Municipal J (243 W. 39th st., N.Y. 10c) 42:561 Ap 19 '17

Food now in storage. Fruit-Grower 28:238 Ap 15 '17

Food outlook. Nation (20 Vesey st, N.Y. 10c) 105:557-8 N 22 '17

Food preparedness. H. R. Seager and R. E. Chaddock. (Columbia war papers, ser. 1, no. 6) 23p '17 Division of intelligence & publicity, Columbia university, N.Y.

Food production. E. S. Candler and others. Congressional Record (Washington, D. C.) 56:7247-54 My 17 '18

Food production, conservation, and distribution: hearings before the House Committee on agriculture 65th Cong., 1st sess. on H. J. Res. 75, H. R. 4125, H. R. 4188, and H. R. 4360. 538p '17 Apply to congressmen

Food production report submitted to the Senate; the secretary of agriculture submits proposals. Weekly N L 4:1-2 My 2 '17

Food questions answered. 40p '18 U.S. Food administration, Washington, D.C.; Excerpts. Creamery 7:33-4 Je '18; Excerpts. N Y Prod R 46:258 Je 12 '18; Excerpts. Hoard's D 55: 987 Jl 5 '18

\* Food scarcity is real. Bankers M (253 Broadway, N.Y. 50c) 96:42 Ja '18

Food situation. J Home Econ 9:185-6 Ap '17

Food situation. D. F. Houston. Weekly N L 4:1-3 Mr 7 '17

Food situation of the country, with some remarks on the urgent necessity for a national food commission. H. E. Lewis. 29p '17 H. E. Lewis, 20 E. 41st st., N.Y.

Food supply. J Home Econ 9:34-6 Ja '17

Food survey bill. Wallaces' F 42:1162 Ag 24 '17

Food wastes—some causes and remedies. L. P. Brown. il J Franklin Inst (Franklin Inst., Philadelphia 50c) 185:585-610 My '18

Grain and live stock; national policy touching vital food elements indicated by factors of war period. H. Hoover. (B. 10) 16p '17 U. S. Food administration, Washington, D.C.

Great American waste. L. D. H. Weld. il Country Gen 82:1308-9 Ag 25 '17

Hon. P. P. Claxton's constructive suggestion in relation to the food shortage. Education (120 Boylston st., Boston 35c) 37:526-8 Ap '17

Hoover practically food dictator. Eng & Mining J (10th av at 36th st, N.Y. 15c) 104:888-9 N 17 '17

\* Housewife and the marketing problem. C. B. Crane. Nat Municipal R (North American bldg., Philadelphia \$1) 7:349-54 Jl '18

Housing of foodstuffs in small provision stores. Boston. il Women's municipal league of Boston B v 8, no 4:1-40 Mr '17

Increasing the food supply. Wallaces' F 42: 645 Ap 13 '17

International and national food control. A. E. Taylor. Annals Am Academy (36th st and Woodland av, Philadelphia \$1) 78:149-56 Jl '18

Million and more food gardens. il Am For 23: 262-8 My '17

Mobilize the country-home garden. R. C. E. Brown. (Columbia war papers, ser. 1, no. 3) 6p '17 Division of intelligence & publicity, Columbia university, N.Y.

National plans to increase food products. Reliable P J 24:569 S '17

New Jersey—Gov. Edge recommends the regulation of food distribution, by purchasing certain staples daily in municipalities thru-out the state under supervision of the state bureau of markets, and retailing them at cost plus freight and shrinkage at municipal food depots to be established for that purpose

Official statement of U.S. food administration on present war-time food situation in the United States, also in the allied and neutral countries of the world. Reliable P J 24:664-5 O '17

Our food supply. Weekly N L 4:1-3 Ja 10 '17

Our mobilization of food. Scientific Am (233 Broadway, N.Y. 10c) 116:424+ Ap 28 '17

Our waning food supply. il Scientific Am (233 Broadway, N.Y. 10c) 116:84 Ja 20 '17

Permanent food problem. New Republic (421 W. 21st st, N.Y. 10c) 12:8-10 Ag 4 '17

Produce greater crops. il Fruit-Grower 28:233 Ap 15 '17

Production and conservation of food supplies; hearing before the Senate Committee on agriculture and forestry relative to the proposal for increasing the production, improving the distribution, and promoting the conservation of food supplies in the United States. 5pts 1-73; 74-198; 199-316; 317-442; 443-507p '17 Apply to congressmen

Production and marketing plans for next year. C. J. Brand. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74: 164-81 N '17

Profiteers win in New York. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:23 D 24 '17

**Food supply—United States—Continued**

- Program for food production and conservation. Weekly N L 4:1-4 Ap 25 '17
- Put agriculture on a war footing. H. Myrick. *il O Judd Farmer* 62:1+ Ap 21 '17
- Question of food supply. N Y Prod R 43:1016 Ap 18 '17
- Requisites of a national food policy. W. H. Hamilton. *J Political Econ* (Univ. of Chicago Press, Chicago 35c) 26:612-37 Je '18
- Retailers hold up food prices. H. C. Hoover. *Eng & Mining J* (10th av at 36th st, N.Y. 15c) 104:765 O 27 '17
- Rhode Island—Gov. Beeckman urges the use of every means to provide for a larger food production in the state; that there be made an effort to secure permanent farmers
- \* School children and food production. Ping Ling. *Pedagogical Seminary* (Worcester, Mass. \$1.50) 25:163-90 Je '18
- Secretary Houston's plan to stimulate food production and regulate distribution. N Y Prod R 43:1041 Ap 25 '17
- Some facts to be considered in connection with the food problem. H. Heinz. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:119-23 N '17
- Some fundamental considerations affecting the food supply of the United States. T: F. Hunt. *Cal Ag Exp C* 163:1-13 '17
- \* Steps to victory. D. F. Houston. *Academy Political Sci Pro* (Columbia Univ., N.Y. \$1.50) 7:673-97 F '18
- Stimulation of food production: report no. 107 of the House Committee on irrigation of arid lands, to accompany H. R. 4431. 11p '17 Apply to congressmen
- Stimulation of food production under reclamation projects: hearings before the House Committee on irrigation of arid lands on H. R. 2913 (reintroduced H. R. 4431). 6pts '17 Apply to congressmen
- Stop food-crop wastes by improving methods. D. F. Houston. *Weekly N L* 4:1 Ap 4 '17; Same. *Jersey B* 36:530 Ap 4 '17
- Swords or plowshares? J. C. Marquis. *Country Gent* 82:827-8 My 5 '17
- To assist growers: secretary of agriculture favors helping producers of perishables. *Weekly N L* 4:5 Ag 1 '17
- Truth about the food situation. C. J. Brand. *Forum* (286 5th av. N.Y. 25c) 59:43-50 Ja '18
- Uncle Sam takes stock. F. Crissey. *Country Gent* 82:1832-3 N 24 '17
- United States food administration: policies and plan of operation; wheat flour and bread. 171p '17 U.S. Food administration, Washington, D.C.
- We're all in the same boat. C. Vrooman. *J Home Econ* 9:367-8 Ag '17
- Wherewith shall we be fed? *Prac F* 113:178 My 1 '17
- Word from the deans; food resources, production, and marketing. *Field H* 27:530-1 J1 '17
- Work of the Food administration. *J Home Econ* 9:419-20 S '17
- World's food supply and woman's obligation. J. Addams. *J Home Econ* 10:389-400 S '18
- See also Food control—United States; Southeastern food conference
- West Virginia**
- Statement to the people of West Virginia by Governor John J. Cornwell. 7p '17 Executive dept., Charleston, W. Va.
- Food surveys**
- Another food survey. N Y Prod R 46:884 O 9 '18
- Counties and cities in which the supply of provisions in retail stores has been determined. *Weekly N L* 5:3 S 5 '17
- Food survey at once; department to gather statistics on nation's food supply. *Weekly N L* 5:3 Ag 22 '17
- Food survey bill. Wallaces' F 42:1162 Ag 24 '17
- Nation wide food survey. N Y Prod R 44:711 Ag 29 '17
- Nation's food survey. *Weekly N L* 5:1 D 26 '17

- Plans and purposes of the more comprehensive food surveys undertaken by the United States Department of agriculture, as explained by the chief of the Bureau of markets in a letter to Hon. A. F. Lever. U S Food Surveys 1:1-2 My 18 '18
- Reports of storage holdings of certain food products. J: O. Bell and I. C. Franklin. *maps U S Ag B* 709:1-43 '18
- Stocks of grain, flour, and meal in U.S. April 1, 1918. *Weekly N L* 5:1 My 22 '18
- Sugar supply of the United States: its extent and distribution on August 31, 1917. U S Ag C 96:1-55 '18
- Survey shows wheat stocks nearly triple 1917 figures. *Weekly N L* 6:13 O 9 '18
- Uncle Sam takes stock. F. Crissey. *Country Gent* 82:1832-3 N 24 '17
- Uncle Sam takes stock of national larder. R. H. Moulton. *Hoard's D* 55:877 Je 14 '18
- The United States Bureau of markets is publishing a monthly report, Food Surveys, which will contain information regarding the commercial stocks of wheat and wheat flour, other important cereals and wheat flour substitutes, reported by elevators and grain warehouses, general warehouses, grain mills and wholesale grain dealers. In addition, reports showing the holdings of other important food products, such as condensed and evaporated milk, dairy products, meat, fish, animal and vegetable fats, canned goods, vegetables, fruit, sugar, etc., will be given from time to time in a series of special issues.
- War emergency food survey: instructions. Nat Wholesale Grocers' Assn B (6 Harrison st., N.Y. \$5 per yr) v 2:10-16 S '17

**Laws**

- Statistique des stocks. *Int Yearbook Ag Leg* 1916:14-25 '17

**Food values. See Diet; Food****Food waste**

- Food salvage in New York. M. H. Kittredge. *New Republic* (421 W. 21st st., N.Y. 10c) 12:43-5 Ag 11 '17
- Food wastes—some causes and remedies. L. P. Brown. *il J Franklin Inst* (Franklin Inst., Philadelphia 50c) 185:585-610 My '18
- Partial analysis of food-waste problem. L. P. Brown. *J Home Econ* 9:503-4 N '17
- Waste in food distribution in New York. *Monthly Review* (U.S. Bur. of labor statistics, Washington, D.C.) 5:95-8 S '17

See also Food conservation

**Foot, Major Lawrence**

- Come-back of Major Foot: ice-making plants and hog products. H. Quick. *por il Country Gent* 81:1023 My 13 '16

**Foot**

- Your poor feet. M. H. Talbott. *Country Gent* 81:610 Mr 11 '16

**Foot (animals)**

- Foot wounds of horses. A. L. Danforth. *Am Vet M Assn J* 51:374-9 Je '17
- Horse: level feet prevent trouble and loss. J. Seiter. *il Nat Stock & F* 40:74 Ap 15 '16
- Horse's feet and their care. C. W. Brodhead. *il N Y Ag Dept Rep* 1916,pt 2:167-82 '17
- From Bulletin 76

**Foot-and-mouth disease**

- Blame where it belongs. *Country Gent* 81:1229 Je 17 '16
- Control of foot-and-mouth disease. J: R. Mohler. *Int Assn Dairy & Milk Inspec Rep* 1915:128-38
- Country free of foot and mouth disease. *Hoard's D* 51:557 Ap 21 '16
- Enquiries and experiments in connection with the immunity of cattle against epizootic foot-and-mouth disease. C. Terni. *Int R Sci & Prac Ag* 7,no 7:989-91 J1 '16
- Exit foot and mouth disease. Wallaces' F 41:606 Ap 14 '16
- Federal plan adopted; Swiss government exterminates by slaughtering infected animals. *Weekly N L* 4:4 Ja 31 '17



**Foot-and-mouth disease—Continued**

- Fighting the foot and mouth disease in Denmark. J. J. Dunne. Hoard's D 50:781-2 Ja 7 '16
- Foot-and-mouth disease. U. G. Houck. N Y Ag Dept B 94:51-61 Ap '17
- Foot and mouth disease. C. H. Stange. map Ia Ag Col Offic Pub v 14, no 36:227-39 '16
- Foot and mouth disease, mastitis and tuberculosis and the milk consumer. H. Young and others. Creamery 4:27-8 Ja '16
- Foot and mouth disease resolution. Hoard's D 51:755 My 26 '16
- Foot-and-mouth disease with special reference to the outbreak of 1914-1915; with discussion. J. R. Mohler. Am Vet M Assn J 48:402-19, 532-52 Ja-F '16
- Getting to the root of the foot-and-mouth trouble. Country Life 29:47 F '16
- Illinois and the federal foot-and-mouth policy. Breeder's Gaz 69:498 Mr 2 '16
- Lessons and suggestions of the recent foot-and-mouth epidemic. W. C. Jeffries. Ohio F 137:210 F 12 '16
- Lessons of the livestock plague. C. E. Gapen. il Country Gent 81:7-8 Ja 1 '16
- Not foot and mouth disease. Hoard's D 52:730 D 15 '16
- Outbreak of foot and mouth disease in 1914-15. Ia Ag Bd Yearbook 1916:489-501
- Prevalence of foot-and-mouth disease in England. Am Vet M Assn J 48:475-6 Ja '16
- Review of foot-and-mouth disease. W. E. Skinner. Jersey B 35:20-1 Ja 5 '16
- Rules in fixing periods of quarantine against foot-and-mouth disease. V. A. Moore. Am Vet M Assn J 48:442-50 Ja '16
- Serum inspection confirmed. Breeder's Gaz 69:497-8 Mr 2 '16
- Treatment of foot-and-mouth disease by means of hellebore. L. Sanfelice. Int R Sci & Prac Ag 7, no 4:548 Ap '16
- Unceasing watch demanded for foot-and-mouth disease. Weekly N L 6:1 O 23 '18
- United States Senate investigation. Kimball's D F 14:11 Ja 15 '16
- Foot rot**
- Cures for foot rot. F. Kleinheinz. Country Gent 81:1228 Je 17 '16
- Forage plants**
- Algaroba tree. A. J. Ewart. J Dept Ag Victoria 15:749-50 D '17
- Annual hay and pasture grass. Hoard's D 55:862 Je 7 '18
- Australian fodder shrub; the salt bush. J. W. Audas. il J Dept Ag Victoria 15:499-504 Ag '17
- Carrying capacity of grazing ranges in southern Arizona. E. O. Wooton. bibliog il U S Ag B 367:1-40 '16
- Challenge to the dairyman. W. J. Fraser. il Hoard's D 55:683 My 10 '18
- Crops for planting in the last half of the summer. J. F. Duggar. Prog F 31:914 Jl 22 '16
- Crops to grow with corn. P. Tabor. Ga Ag Ext C 56 4p '17
- Cultural experiments conducted in Denmark with different mixtures of the seeds of forage plants. Int R Sci & Prac Ag 7, no 2:224-5 F '16
- Dairy feed supply. W. A. Linklater. Western Wash Ag Exp B v 5:181-3 Mr '18
- Dead wheat fields and meadows. Wallaces' F 42:717 Ap 27 '17
- District grasses and their relative feeding values. A. B. Feuerherdt. J Dept Ag S Australia 20:521-4 Ja '17
- Dry-matter content of field-cured and green forage. A. C. Arny. il Am Soc Agron J 8:358-63 N '16
- Early grazing crops. T. Butler. Prog F 33:159 F 9 '18
- Economic feeding of the dairy herd. D. H. Watts. il Prac F 113:253 Jl 15 '17
- Emergency crops. J. Hillis. il Country Gent 82:928 My 26 '17
- Emergency hay crops. G. B. Mortimer. Hoard's D 55:645 My 3 '18
- Eragrostis of the Argentine and Uruguay; their value as fodder plants. C. D. Girola. Int R Sci & Prac Ag 9, no 2:190-1 F '18
- Facts about forage crops. Prog F 33:200 F 16 '18

- Farmers' experiment plots; green winter fodder experiments, 1917. H. Wenholz. il Ag Gaz of New South Wales 29:101-4 F '18
- Farmers' experiment plots; winter green fodder experiments, 1915. il Ag Gaz of New South Wales 27:1-14 Ja '16
- Feed from summer cover crops. G. H. Dacy. Country Gent 82:1141 Jl 14 '17
- Fodder crops in the mallee. J. M. Braithwaite. J Dept Ag S Australia 21:212-15 O '17
- Fodder crops on reclaimed swamp lands. W. J. Spafford. J Dept Ag S Australia 21:480-92 Ja '18
- Forage and green manuring crops; Forage crops at Glenwood substation, by J. B. Thompson; Forage-crop problems at Castner, Oahu. il Hawaii Ag Exp Rep 1917:29-33, 42-6, 52-5 '18
- Forage and root crops. C. S. Knight. il Nev Ag Exp B 86:1-15 '17
- Forage crops. N J Ag Exp Rep 1916:114-20 '17
- Forage crops. S. H. Shinkel. J Dept Ag S Australia 20:930-3 Je '17
- Forage crops for hogs. W. J. Carmichael and J. B. Rice. il Ill Ag Ext C 23:1-8 '18
- Forage crops for hogs. J. M. Evvard. il Field il 27:272-3 Ap '17
- Forage crops for New York; with discussion. H. H. Wing. N Y Ag Dept B 80:1554-66 F '16; Same. N Y Ag Dept Rep 1916, pt 3: 1554-66 '17
- Forage crops for South Carolina. W. R. Elliott. S C Ag Ext B 32:1-44 n.d.
- Forage crops for swine. W. L. Robison. il Ohio Ag Exp B v 1:201-5 Jl '16
- Forage crops for the dairy farm. Prac F 113:8 Ja 1 '17
- Forage crops for the pigs. W. W. Smith. il Purdue Ag 10:26-7+ Ap '16
- Forage crops in central Washington. M. A. McCall. il Wash Ag Exp B 128:1-11 '16
- Forage for swine. J. J. Yoke. W Va Ag Exp C 28 4p '18
- Forage plants that feed and fertilize. A. Kruhm. il Country Life 34:60-1 My '18
- Forage problem. Prog F 33:243 F 23 '17
- Forage problem of the coastal plain area. C. V. Piper. (In Cut-over land conf. of the South, 1917, p. 86-93) \$2.50 '17 Southern pine assn., New Orleans, La.
- Forage utilization. M. Anderson. il Nat Wool Grower 8:17-18 Mr '18
- Grasses and other fodder plants of Victoria, Australia. J. W. Audas. Int R Sci & Prac Ag 9, no 4:452-4 Ap '18
- Grasses, clovers, and lucerns under irrigation. E. Breakwell. il Ag Gaz of New South Wales 27:112-26 F '16
- Grazing crops for hogs. L. W. Osborn. Ark Ag Exp C 36 4p n.d.
- Grazing crops for hogs—permanent pastures. A. L. French. Prog F 33:243 F 23 '18
- Green crops for dairy feed. J. G. Morse. Rural N Y 77:224 F 16 '18
- Grow a variety of roughage. R. B. Rushing. Prac F 113:230 Je 15 '17
- Growing crops to reduce the feed bill. W. L. Slate, jr. il Conn Ag Ext C 13 4p '17
- Harvesting emergency hay crops for hay or seed. G. B. Mortimer. il Hoard's D 55:947 Je 28 '18
- Hay and forage. (In Geography of the world's agriculture, p. 103-8) maps '17 U S Ag
- High-altitude forage crops. T. S. Parsons. il Country Gent 81:208 Ja 29 '16
- Hog pastures and feeds. A. P. Spencer. Swine World 5:8 My '18
- How much milk per acre? J. H. McKenny. Hoard's D 54:50 Ag 3 '17
- How to grow and use forage crops for hogs. J. R. Wiley. il Purdue Ag Ext B 66:1-8 '18
- Identification of grasses by their vegetative characters. L. Carrier. il U S Ag B 461:1-30 '17 (5c Supt. of doc.)
- Important range plants; their life history and forage value. A. W. Sampson. il U S Ag B 545:1-63 '17
- Improvement and management of farm pastures. A. W. Sampson. il Breeder's Gaz 69:1287-8 Je 22 '16
- Increasing the forage on western range. M. A. Smith. Nat Wool Grower 8:27-8 Mr '18

**Forage plants—Continued**

- Late feed crops. E. F. Cauthen. *Prog F* 32: 713 Je 23 '17
- Maintenance of supplies of hay and other fodder crops. *J Bd Ag* 24:649-53 S '17
- Make a summer pasture for hogs. J. C. McAmis. *il Tenn Ag Ext Pub* 55 4p '18
- Midsummer forage crops. C. G. Williams. *il Ohio Ag Exp B v 3:169-72 Je '18*
- Moisture content and shrinkage of forage. H. N. Vinall and R. McKee. *bibliog Am Soc Agron J* 8:92-9 Mr '16
- Moisture content and shrinkage of forage and the relation of these factors to the accuracy of experimental data. H. N. Vinall and R. McKee. *U S Ag B* 353:1-37 '16
- Natural revegetation of range lands based upon growth requirements and life history of the vegetation. A. W. Sampson. *il J Ag Research* 3:33-148 N '14
- New forage plant; Russian sunflower. F. B. Linfield. *il J Heredity* 9:135-8 Mr '18
- Paspalum* spp., forage plant in Argentina. *Int R Sci & Prac Ag* 7, no 9:1289-90 S '16
- Pasture and forage crops for south Mississippi. E. B. Ferris. *il Miss Ag Exp B* 180:1-32 '17
- Pasture and grain crops for hogs in the Pacific Northwest. B. Hunter. *il U S Ag B* 68:1-27 '14
- Pasture crops in the prairie provinces; Manitoba and Saskatchewan. T. J. Harrison. *il Ag Gaz of Canada* 3:419-30 My '16
- Pea aphid (*macrosiphum pisi* Kalt.) with relation to forage crops. J. J. Davis. *il U S Ag B* 276:1-67 '15
- Plant beans or peas with corn for hogs. J. C. McAmis. *il Tenn Ag Ext Pub* 54 4p '18
- Pork production and patriotism. C. M. Vestal. *il Purdue Ag* 13:109-10 D '18
- Possibilities of fodder plants in South-Africa. I. B. Pole Evans. *Int R Sci & Prac Ag* 8, no 2:237-8 F '17
- Preparation for forage crops for the 1918 pork crop. *Swine World* 5:5 Ap '18
- Preparing for fall seeding. E. B. Stookey. *Western Wash Ag Exp B v 5:80-3 S '17*
- Principal forage crops of the Philippines. F. C. Kingman and E. D. Doryland. *il Philippine Ag R* 10, no 3:261-71 '17
- Producing protein on the farm. C. G. Williams. *il Ohio F* 139:437-8 Mr 24 '17
- Progress report of Texas substation no. 12; experiment work with forage crops. *il Tex Ag Exp B* 202:10-30 '16
- Raise more poultry feed in the South. H. F. Reils. *Reliable P J* 25:95-7 Mr '18
- Remember the clover. W. W. Reynolds. *il Rural N Y* 77:851 Jl 6 '18
- Reseeding of depleted grazing lands to cultivated forage plants. A. W. Sampson. *il map U S Ag B* 4:1-34 '13
- Right forage crop in the right place. H. P. Cooper. *il Penn State F* 9:454-5+ N '16
- Roughage from small grain and millet. H. G. Van Pelt. *Kimball's D F* 14:344 My 15 '16
- Saving late roughage. J. F. Duggar. *Prog F* 32:1127 O 27 '17
- Seed-mixtures for pastures. *J Ag New Zealand* 12:56-62 Ja '16
- Silage and soiling crops for dairy cattle. T. Butler. *Prog F* 33:732 Je 22 '18
- Silage crops for Nevada. C. S. Knight. *il Nev Ag Exp B* 91:1-16 '18
- Silage crops for western Washington. E. B. Stookey. *Western Wash Ag Exp B v 5:148-52 Ja '18*
- Soiling. *il Hoard's D* 55:744 My 17 '18
- Soiling crops. H. G. Van Pelt. *Kimball's D F* 14:233, 278, 314 Ap 1-My 1 '16
- Soiling crops and summer silage. W. H. Tomhave. *il Field* 11 26:508-9 Je '16
- Soiling crops for dairy cows. *J Bd Ag* 25: 141-4 My '18
- Soiling crops for the dairy. J. Marsh. *il Hoard's D* 51:373 Mr 24 '16
- Soiling crops to supplement pastures. H. H. Kildee. *Hoard's D* 53:528 Ap 13 '17
- Soiling crops will reduce production costs. J. Day. *Prac F* 114:153-4 Ap 15 '18
- Some problems in the growth of silage crops. A. Amos. *J Bd Ag* 24:162-70 My '17

- Southern pastures. E. E. Miller. *Country Gent* 81:392 F 19 '16
- Spring, summer and fall feed for the dairy herd. H. H. Dean. *il Prac F* 112:supl+-Mr 1 '16
- Substitute hay; new seeding. *Rural N Y* 75: 229 F 12 '16
- Summer fodder experiments, 1917-18. H. C. Stening. *il Ag Gaz of New South Wales* 29: 717-23 O '18
- Summer forage crops for northern districts. J. Brown. *J Ag New Zealand* 13:200-4 S '16
- Tree planting for fodder purposes. *Ag Gaz of New South Wales* 29:158 Mr '18
- Trials with California silage crops for dairy cows. F. W. Woll and E. C. Voorhies. *Cal Ag Exp B* 282:19-40 '17
- Useful facts about forage crops. *Prog F* 32: 202-3 F 17 '17
- Utilizing the sorghums. T. F. Hunt. *Cal Ag Exp C* 187:1-7 '17
- When clover and grass seedings fail. H. D. Hughes. *il Wallaces' F* 43:1595+-N 1 '18
- Winter forage crops. P. B. Kennedy. *Cal Ag Exp C* 189:1-11 '18
- Wireworms attacking cereal and forage crops. J. A. Hyslop. *il U S Ag B* 156:1-34 '15
- Work of the Yuma experiment farm in 1916; miscellaneous forage crops. R. E. Blair. (W. I. A. C. 20) p 25-32 '18 U S Ag
- See also* Alfalfa; Beans; Clover; Corn; Cowpeas; Feeding and feeding stuffs; Grass-peas; Grasses; Grazing; Hay; Japanese sugar cane; Kafir corn; Kudzu; Millet; Napier's fodder grass; Natal grass; Pastures and meadows; Peas, Field; Rape (plant); Silage; Sorghum; Sudan grass; Sulla; Tagasaste; Teosinte; Vetch; Water grass; Western wheat grass

**Analysis**

- Estimation of calcium in ash of forage plants and animal carcasses. S. B. Kuzirian. *la Ag Exp Research B* 32:99-110 '16

**Diseases and pests**

- Diseases of grains and forage crops. M. T. Cook and J. P. Helyar. *N J Ag Exp C* 51: 1-8 n.d.

**Seed**

- Field seeds; commercial stocks and receipts by geographic divisions; seed survey of July 1, 1918. *U S Seed Rep* 2:4-5 S '18
- Imports of forage plant seed permitted entry into the U.S. See monthly numbers of United States seed reporter
- Movement of forage crop seeds from first hands. *U S Seed Rep* 2:6-7 Jl '18; Same abr. *Coop Manager & F* 7:77 Ag '18
- Production and commerce of forage plant seeds in Canada. *Int R Sci & Prac Ag* 7, no 2:217-18 F '16
- Production of forage plant seeds in Denmark. *Int R Sci & Prac Ag* 9, no 5:560 My '18
- Stocks, quality, demand and prices of seeds of late-sown crops. *U S Seed Rep* 1:4 My '18
- Timothy, red and alsike clover, and alfalfa seed shipments. *U S Seed Rep* 1:5 Ja '18

**Statistics**

- Incomplete report of field seed stocks for the United States; for Canada. *U S Seed Rep* 2:4 Ag '18

**Forage poisoning**

- Accidental poisoning of live-stock. B. C. Aston. *J Ag New Zealand* 15:251-2 N '17
- Bracken poisoning in cattle. *Ag Gaz of New South Wales* 29:665-6 S '18
- Cerebrospinal meningitis (forage poisoning). J. R. Mohler. *U S Ag B* 65:1-14 '14
- Clover poisoning. D. F. Luckey. *Mo Ag Bd Yearbook* 1916:466-70
- Cockle-burs poison hogs. *Coop Manager & F* 7:87 S '17
- Department of research chemistry; plant poisons. *Nev Ag Exp Rep* 1917:58-61 '18
- Effect of climatic factors on the hydrocyanic acid content of sorghum. J. J. Willaman and R. M. West. *bibliog J Ag Research* 6: 261-72 My 15 '16



**Forage poisoning—Continued**

Eradicating tall larkspur on cattle ranges in the national forests. A. E. Aldous. *il maps Farmers' B* 826:1-23 '17

Eradication of poisonous plants. (*In Report*, 1916, p. 112-23) *il* '17 Oregon state livestock sanitary board, Salem

Eupatorium ageratoides, the cause of trembles. R. S. Curtis and F. A. Wolf. *bibliog il J Ag Research* 9:397-404 *Je* 11 '17

Eupatorium urticaefolium as a poisonous plant. C. D. Marsh and A. B. Clawson. *bibliog il J Ag Research* 11:699-716 *D* 24 '17; Excerpts. (A. I. 26) 6p *il* '18 U S Ag

Experimental feeding with two poison plants. J. B. Cleland and A. H. E. McDonald. *Ag Gaz of New South Wales* 28:735-9 *O* '17

Fagopyrismus (buckwheat poisoning) and similar affections. E. A. Bruce. *Am Vet M Assn J* 52:189-94 *N* '17

Feeding experiments with wild melon fruit. S. Dodd. *Ag Gaz of New South Wales* 28: 815-19 *N* '17

Field investigations of forage poisoning in cattle and horses. H. P. Rusk and H. S. Grindley. *il Ill Ag Exp B* 210:163-76 '18

Forage poisoning. C. T. Fake. *Am Vet M Assn J* 51:89-92 *Ap* '17

Forage poisoning and a serum treatment. R. Graham. *Breeder's Gaz* 73:1142 *My* 30 '18

Goat's-rue (galega officinalis); a recently gazetted noxious weed. A. H. Cockayne. *il J Ag New Zealand* 12:125-30 *F* '16

Horse forage poison conquered. *il O Judd Farmer* 63:1 *Jl* 28 '17

Injurious weed seeds in feeding stuffs. H. B. Sifton. *il Ag Gaz of Canada* 5:951-7 *O* '18

Isotoma petrea—a suspected poison plant. T. G. B. Osborn. *il J Dept Ag S Australia* 22:50-2 *Ag* '18

Larkspur poisoning of live stock. C. D. Marsh and others. *bibliog il U S Ag B* 365:1-90 '16

Lupine poisoning avoidable. W. H. Lytle. *Am Sheep B & W* 36:682 *N* '16

Lupines as poisonous plants. C. D. Marsh and others. *bibliog il U S Ag B* 405:1-44 '16; Same cond. *Nat Wool Grower* 7:51 *Ja* '17

Monograph on trembles or milksickness and white snakeroot. F. A. Wolf and others. *bibliog il N C Ag Exp Tech B* 15:1-74 '18; Abstract. *Am Vet M Assn J* 52:820-7 *Mr* '18

Note on the poisoning effect of the Johnson grass sorghum halepense. *J Dept Ag Victoria* 14:653 *N* '16

Notes on larkspur eradication on stock ranges. C. D. Marsh and A. B. Clawson. (A. I. 34) 5p '18 U S Ag

Oak poisoning result of pasturing cattle too early. *Weekly N L* 5:6 *My* 15 '18

Paddy melon for horses. F. E. Place. *J Dept Ag S Australia* 20:865-6 *Je* '17

Plants poisonous to domestic animals. *Ag Gaz of Canada* 5:981-7 *O* '18

Plants poisonous to sheep. C. D. Marsh. *Am Sheep B & W* 38:176-7 *Mr* '18

Poisoning by larkspur. G. H. Glover. *il Colo Ag Ext B* 142 4p '18

Poisoning of stock by sorghum plant. *Hoard's D* 51:186 *F* 25 '16

Poisonous and suspected plants of New Zealand. B. C. Aston. *J Ag New Zealand* 16: 324-8; 17:6-9 *Je-Jl* '18 (to be cont)

Poisonous plants and stock poisoning on the ranges of Montana. D. B. Swingle and H. Welch. *il Mont Ag Exp C* 51:73-95 '16

Poisonous plants of Idaho; some suggested remedies. F. W. Gail; A. R. Hahner. *il Idaho Ag Exp B* 86:1-16 '16

Poisonous properties of the two-grooved milk vetch. O. A. Beath and E. H. Lehnert. *il Wyo Ag Exp B* 112:59-67 '17

Preliminary report on the relation of anaerobic organisms to forage poisoning. J. S. Buckley and L. P. Shippen. *bibliog Am Vet M Assn J* 50:809-16 *Mr* '17

Prevention of losses of live stock from plant poisoning. C. D. Marsh. *bibliog Farmers' B* 720:1-11 '16

Range plants poisonous to sheep and cattle in Nevada, by C. E. Fleming, with Spanish translation, by B. F. Schappelle. *il Nev Ag Exp B* 95:1-51 '18

Sheep losses due to poisonous plants. C. D. Marsh. *Am Sheep B & W* 36:136 *Mr* '16

Sheep poisoned by western goldenrod. S. Lockett. *Am Vet M Assn J* 51:214-21 *My* '17

So-called staggers in horses caused by the ingestion of pteris aquilina, the common bracken. S. Hadwen. *Am Vet M Assn J* 50: 702-4 *F* '17

Stagger grass (chrosperma muscætoxicum) as a poisonous plant. C. D. Marsh and others. *il U S Ag B* 710:1-14 '18

Stock-poisoning plants in the provinces. *Ag Gaz of Canada* 5:867-9 *S* '18

Stock-poisoning plants of the range. C. D. Marsh. *il U S Ag B* 575:1-24 '18

Studies in forage poisoning. R. Graham and L. R. Himmelberger. *bibliog il Am Vet M Assn J* 51:164-87 *My* '17

Studies in forage poisoning (Extracts from *Ky Ag Exp B* 207 & 208); with discussion. R. Graham and others. *il Am Vet M Assn J* 53:161-92 *My* '18

Studies in forage poisoning; a preliminary report on an anaerobic bacillus of etiologic significance. R. Graham and others. *il Ky Ag Exp B* 207:49-113 '17; Abstract. *O Judd Farmer* 63:6 *Ag* 18 '17; Abstract. *Am Vet M Assn J* 51:748-9 *S* '17

Studies in forage poisoning; an aerobic organism isolated from ensilage of etiologic significance. R. Graham and others. *il Ky Ag Exp B* 208:117-33 '17

These plants and materials are poisonous—keep live stock away. *Weekly N L* 5:15 *Jl* 31 '18

Trouble from rape. H. H. Havner. *Nat Stock & F* 42:516 *Ag* 31 '18

Turning poison into mutton. S. Riley. *il Nat Wool Grower* 7:19-21 *Ap* '17

Tutu poisoning in cattle. A. R. Young. *J Ag New Zealand* 15:307-8 *D* '17

Veterinary problems; sorghum poisoning—feeding frosted forage. *Prog F* 33:1363 *D* 14 '18

White snakeroot a poisonous plant. A. D. Selby. *il Ohio Ag Exp B v* 2:13-14 *Ja* '17

Woody aster poisoning. O. A. Beath. *il Nat Wool Grower* 7:19-20 *F* '17

Zygadenus, or death camas. C. D. Marsh and others. *bibliog il U S Ag B* 125:1-46 '15

*See also* Ragwort; Sorghum—Hydrocyanic acid content; Water hemlock

**Foramen of Botal**

About the foramen of Botal. *Am Vet M Assn J* 49:787-8 *S* '16

**Forcing (plants)**

Breaking of the rhythm. F. W. Keeble. *Gard Chron (Lond)* 60:34-5; 47-8 *Jl* 15-22 '16

Cultural notes on forcing bulbs. *Gard Chron Am* 21:396 *N* '17

Forcing head lettuce. C. W. Skinner. *il Country Gent* 82:1795 *N* 17 '17

Forcing native plants. H. E. Downer. *Gard Chron Am* 22:215 *Ag* '18

Forcing of plants by means of warm water immersions. W. G. Bodine. *Vt Ag Exp B* 203:9-10 *Mr* '17

Forcing of strawberries. F. I. Kinnison. *il Colo Ag Exp B* 222:1-8 '17

Forcing plants and twigs. *Gard Chron Am* 21:395 *N* '17

Forcing rhubarb for market. G. W. Kerr. *Country Gent* 82:1795 *N* 17 '17

Forcing vegetables. R. W. Thatcher. *Gard Chron (Lond)* 63:9 *Ja* 5 '18

Forcing vegetables for home use. C. Watson. *il Purdue Ag* 11:41 *Ja* '17

Hotbeds, cold frames and plant forcers. B. S. Brown and R. T. Muller. *Maine Ag Ext B* 115:1-13 '18

Lettuce and radish in 30 days. W. N. Hutt. *Prog F* 33:163 *F* 9 '18

Outlook for vegetable forcing. C. W. Waid. *Market Growers J* 22:345 *My* 1 '18

Vegetables for forcing. G. H. Copley. *Gard Chron (Lond)* 63:105 *Mr* 9 '18

\* Winter garden in the cellar. E. I. Farrington. *il Independent* (119 W. 40th st, N.Y. 10c) 96:168 *N* 9 '18

*See also* Cold frames; Hotbeds

**Forecasts**

- Remarkable prediction. W. I. Chamberlain. *il Nat Stock & F* 42:364 J1 13 '18  
 Trucker, jr., looks 25 years ahead to south Jersey in 1940. *Rural N Y* 75:271 F 19 '16  
 Visit to Optimistic farm. N. J., in the good year 1940. O. W. Mapes. *Rural N Y* 75:1229, 1254 S 23-30 '16

**Forest administration**

- Cost of forest improvement systems. P. S. Lovejoy. *For Quar* 14:238-54 Je '16  
 Failure of Louisiana's forestry policy and its remedy. *Am For* 22:304-5 My '16  
 Farmer and the forester. H. S. Graves. *il Purdue Ag* 11:11-13 Ja '17  
 Forest pathology in forest regulation. E. P. Meinecke. *U S Ag B* 275:1-62 '16  
 Forest policy for California. D. T. Mason. *J For* 15:424-30 Ap '17  
 Forest system in China. *Int R Ag Econ* 68:118-19 Ag '16  
 Italian forest policy and the results obtained in relation to the conservation and restoration of forests. *bibliog Int R Ag Econ* 69:108-17; 70:104-13 S-O '16  
 Make state forests productive. A. B. Recknagel. *Paper* (117 E. 24th st. N. Y. 25c) 21:22-4 F 27 '18  
 National forest enterprises. D. Houston. *Am For* 22:750-1 D '16  
 Notes on French forestry in Africa and Corsica. T. S. Woolsey, jr. *Soc Am For Pro* 11:338-44 J1 '16  
 Situation; what has been accomplished in forestry as a policy, a science, and an art. B. E. Fernow. *J For* 15:3-14 Ja '17

*See also* Forest valuation; Forestry law; United States forest supervisors

**Forest conservation**

- Conservation at the Pan-American scientific congress. *Am For* 22:117-19 F '16  
 Conservation congress and national forest conservation. C. L. Pack. *Am For* 22:353 Je '16  
 Conservation of our forests. T. N. Vail. *Am For* 22:547-9 S '16  
 Continuous forest production of privately owned timberlands as a solution of the economic difficulties of the lumber industry. E. P. Kirkland. *tables J For* 15:15-64 Ja '17  
 Example in conservation work; Berks county conservation association of Pennsylvania. *il Am For* 22:480-1 Ag '16  
 Forest conservation for states in the southern pine region. J. G. Peters. *U S Ag B* 364:1-13 '16  
 Interdependence of forest conservation and forestry education. J. W. Toumey. *bibliog (In Pan American scientific congress Pro., 1915, v. 3, p. 350-60)* '17  
 Resolutions on forestry. *Am For* 22:358 Je '16  
 Suggestions as to possibilities of silviculture in America. B. E. Fernow. *Soc Am For Pro* 11:171-6 Ap '16

**Forest diseases and pests. See Trees—Diseases and pests****Forest ecology**

- Ecological investigations upon the germination and early growth of forest trees. R. H. Boerker. 89p *bibliog il '16 Univ. of Nebraska, Lincoln*: Same. *University Studies (Nebraska Univ., Lincoln)* v 16, nos 1, 2:1-59 Ja-Apr '16  
 Ecology and silviculture in the southern Appalachians: old cuttings as a guide to future practice. E. H. Frothingham. *J For* 15:343-9 Mr '17  
 Forest succession and rate of growth in sphagnum bogs. G. B. Riggs. *il J For* 15:726-39 O '17  
 Forest succession in the central Rocky mountains. C. G. Bates. *J For* 15:587-92 My '17  
 Historical study of forest ecology; its development in the fields of botany and forestry. R. H. Boerker. *bibliog For Quar* 14:380-432 S '16  
 Leaf-structure as related to environment. H. C. Hanson. *bibliog il Am J Bot* 4:533-60 N '17  
 Notes on succession from pine to oak. B. Moore. *Bot Gaz* 61:59-66 Ja '16

Osmotic pressure as an index of habitat. B. Moore. *J For* 15:1010-13 D '17

*See also* Botany—Ecology

**Forest experimentation**

- First season's growth and mortality of white-pine and red-pine plantations. C. H. Guise. *J For* 16:308-18 Mr '18  
 Great Basin experiment station. A. W. Sampson. *il Nat Wool Grower* 8:19-21 Ap '18  
 Report of Cloquet forest experiment station. W. H. Kenety. *il Minn Ag Exp B* 169:1-64 '17

**Forest fires**

- Adequate protection of forest resources is true economy. *J Ag (Quebec)* 20:118 D '16  
 Agency of fire in propagation of longleaf pines. E. F. Andrews. *il Bot Gaz* 64:497-508 D '17  
 Blue Mesa forest fire. H. L. Spencer. *il Am For* 23:560-2 S '17  
 California forest fire protection. G. R. Rhodes. *Am For* 22:409 J1 '16  
 Canada's deadly forest fires. R. Black. *il Am For* 22:521-4 S '16  
 Cause of the fire—and future prevention. C. Leavitt. *il Am For* 22:524-8 S '16  
 Costs and values of forest protection. P. S. Lovejoy. *For Quar* 14:24-38 Mr '16  
 Diplomatic forest ranger. W. G. Morison. *Am For* 23:435 J1 '17  
 Effect of the weather on forest fires. A. H. Palmer. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:88-9 Ag 11 '17  
 Fighting a forest fire. J. Brown. *il Am For* 22:593 O '16  
 Fighting forest fires. A. L. Dahl. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:200-1 S 29 '17  
 Finder locates fire on single observation. *Engineering Record* (10th av. at 36th st., N.Y. 15c) 74:749 D 16 '16  
 Fire danger in feather grass. R. T. Morris. *Am-For* 24:627 O '18  
 Fire in the woods. B. Adams. *il Am For* 22:292-3 My '16  
 Fire protection on the national forests of the United States. J. L. Cobbs, jr. *Fire Protection* (100 William st., N.Y. \$1.50 per yr.) 6:39 Mr; 7 Ap '17  
 Fire risk in Massachusetts. H. O. Cook. *For Quar* 14:268-9 Je '16  
 Fire-season forecasts of a California forest. R. W. Ayres. *For Quar* 14:595-8 D '16  
 Fire warden's handbook; Oregon forest fire laws. 46p '18 Ore. State bd. of forestry, Salem (rev. 1918)  
 Flying boat to guard forests of British Columbia. *Am Industries* (30 Church st., N.Y. 10c) 19:39 S '18  
 Forecasts of weather favorable to an increase of forest fires. E. A. Beals. *maps (In Pan American scientific congress Pro., 1915, v. 2, p. 257-68)* '17  
 Forest and grass fires in Louisiana. R. D. Forbes. (B. 6) 32p *il map '18 La. Dept. of conservation, Court bldg., New Orleans*  
 Forest, field and marsh fire laws with instructions to town chairmen, road superintendents, rangers and patrolmen. 22p '17 State conservation comm. of Wis., Madison  
 Forest fire fighting in the United States. *il Pan Am Union B* (17th and B sts. N. W., Washington, D.C. 25c) 46:655-62 My '18  
 Forest fire plan for protection of headwaters of Wisconsin and Chippewa rivers. (*In Biennial report, 1915 and 1916, p. 123-38*) '16 Wis. State conservation comm., Madison  
 \* Forest fire tactics. J. B. Mowry. *il 12p '18 R. I. Dept. of forestry, Providence*  
 Forest fires burn much timber. *Am For* 23:520 S '17  
 Forest fires in the United States in 1915. J. G. Peters. *U S Ag C* 69:1-6 '17  
 \* Forest fires take heavy toll in lives and property. *il Railway Age* (Woolworth Bldg., N.Y. 15c) 65:726-8 O 25 '18  
 Girl who guards the forests from fire. *por Am For* 24:484 Ag '18  
 Grass and woodland fires in Texas. J. H. Foster. *il Tex Ag Coll B v* 2:1-16 My '16  
 Great Minnesota fire. J. F. Hayden. *il Am For* 24:648-52 N '18



**Forest fires—Continued**

- Handbook of forest protection, 1918. 106p il map '18 Cal. State bd. of forestry, Sacramento
- Holocaust in Minnesota. E. G. Cheyney. il Am For 24:642-7 N '18
- How forest fires are discovered and reported. Scientific Am (233 Broadway, N.Y. 10c) 117: 166 S 1 '17
- \* Inadequate patrol and dry peat raise fire loss. map Eng News-Record (10th av at 36th st, N.Y. 15c) 81:841-2 N 7 '18
- \* Manual of instructions for county forest wardens and district forest wardens and information in regard to the prevention and suppression of forest fires. rev ed 36p '16 Ky. State forester, Frankfort
- \* Maryland forest fire laws and fire protection. (Forestry leaflet no. 2) 4p Md. State bd. of forestry, Baltimore
- Mechanical fire-fighting equipment. G. G. Blyth. il Am For 22:171-2 Mr '16
- New forest fire lookout map. E. Fritz. il Sibley J (Cornell univ., Ithaca, N.Y. 20c) 31: 150-3 Mr '17
- 1915 forest fire season. A. S. Peck. il Am For 22:225-7 Ap '16
- \* Plan of forest fire protection for Virginia. R. C. Jones. (Forestry leaflet no. 3) 3p '18 (rev) Va. State forester, Univ. of Va. Charlottesville
- Press comments on the forest fires. Am For 24:654-5 N '18
- Prevention of forest fires. Int R Ag Econ 80: 26-8 Ag '17
- Prevention of forest fires in Canada. (Commerce Reports no. 79) p 54 (Ap 5) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Protecting our timber resources; using the heliograph to fight forest fires. A. L. Dahl. il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:36 Jl 21 '17
- Protection from forest fires. W. D. Ludwig. Country Gent 82:1154 Jl 14 '17
- Protection from railway fires in Sweden. J For 15:1050-2 D '17
- Removing growth from fire lanes. N. R. McNaughton. For Quar 14:270-2 Je '16
- Report of the chief forest fire warden for the year 1916. (B. 16) 123p il map '17 Pa. Dept. of forestry, Harrisburg
- \* Report of the chief forest fire warden of Pennsylvania for the year 1917. (B. 17) 111p maps. '18 Penn. Dept. of forestry, Harrisburg
- 200 dead in forest fires. Am For 22:492 Ag '16
- What shall we do to prevent our enormous forest-fire losses. R. S. Hosmer. Scientific Am (233 Broadway, N.Y. 10c) 116:405+ Ap 21 '17
- See also Washington forest fire association
- Forest Hills Gardens, New York**
- What a suburban community can do for the birds. A. Fearing. il Country Life 34:80 Je '18
- Forest insurance.** See Insurance, Forest
- Forest management**
- Ashes: their characteristics and management. W. D. Sterrett. il map U S Ag B 299: 1-88 '15
- Aspen reproduction in relation to management. F. S. Baker. J For 16:389-98 Ap '18
- Control of the gipsy moth for forest management. G. E. Clement; W. Munro. map U S Ag B 484:1-51 '17
- Disease control and forest management. F. H. Millen. J For 15:974-7 D '17
- Forest management of loblolly pine in Delaware, Maryland, and Virginia. W. D. Sterrett. il map U S Ag B 11:1-59 '14
- Forest management on the national forests. E. I. Terry. J For 16:565-6 My '18
- Forest succession in the central Rocky mountains. C. G. Bates. J For 15:587-92 My '17
- Forest taxation as a factor in forest management. G. W. Hutton and E. E. Harpham. Soc Am For Pro 11:330-5 Jl '16
- French fir management in the Vosges. A. Gazin. J For 16:535-49 My '18

- Hewn-tie versus saw-timber rotations. C. F. Korstian. Soc Am For Pro 11:315-29 Jl '16
- How lumbermen in following their own interests have served the public. A. Cary. J For 15:271-89 Mr '17
- Investigations of the rotting of slash in Arkansas. W. H. Long. U S Ag B 496:1-14 '17
- Laissez faire vs. foresight in forest management. B. P. Kirkland. J For 15:290-306 Mr '17
- National forest organization. S. W. Wynne. For Quar 14:589-94 D '16
- Northern hardwood forest; place of the northern hardwoods in forest management. E. H. Frothingham. il U S Ag B 285:33-44 '15
- Possibilities of private forest management in New York state. C. H. Guise. Cornell Ag Exp B 375:697-746 '16; Same. Cornell Ag Exp Rep 1916:697-746 '17
- Red spruce; its growth and management. L. S. Murphy. il U S Ag B 544:1-100 '17
- Relations between forest valuation and management. P. Frey. Int R Sci & Prac Ag 7, no 9:1298-9 S '16
- Shortleaf pine: its economic importance and forest management; essentials of forest management. W. R. Mattoon. il U S Ag B 303:24-55 '15
- Silviculture for British India. S: T. Dana. Soc Am For Pro 11:359-65 Jl '16
- Some social aspects of forest management. B. MacKaye. J For 16:210-14 F '18
- Spruce management in France. J For 16:603-5 My '18
- Swiss method of regulating the cut in practice. C. H. Guise. J For 15:564-73 My '17
- Utilization and management of lodgepole pine in the Rocky mountains. D. T. Mason. il map U S Ag B 234:1-54 '15
- Waipoua Kauri forest; its demarcation and future management. D. E. Hutchins. J Ag New Zealand 16:136-41 Mr '18
- White pine under forest management. E. H. Frothingham. il U S Ag B 13:1-70 '14
- Working plan for forest lands of Peninsula state park, Door county, Wis. (B. 3) 45p il map '17 Wis. conservation comm., Madison
- Forest mensuration**
- Absolute form quotient. H. Claughton-Wal-lin. J For 16:523-34 My '18
- Assortment tables. For Quar 14:752-8 D '16
- Biltmore stick and the point of diameter measurements. D. Bruce. Soc Am For Pro 11:226-9 Ap '16
- Computing volumes in period allotment. T. S. Woolsey, Jr. J For 15:431-4 Ap '17
- Determination of increment by stem analysis. W. A. W. De Beuzeville. (B. 13) 14p '18 New South Wales Forestry comm., Sydney
- Determining the quality of standing timber. S. Berry. J For 15:438-41 Ap '17
- Factor of top diameters in construction and application of volume tables based on log lengths. H. H. Chapman. Soc Am For Pro 11:221-5 Ap '16
- Growing stock as a criterion of normality. A. B. Recknagel. Soc Am For Pro 11:308-14 Jl '16
- Helps in estimating. For Quar 14:338-42 Je '16
- Logarithmic cross-section paper in forest mensuration. D. Bruce. J For 15:335-42 Mr '17
- Measuring and marketing woodlot products. W. R. Mattoon and W. B. Barrows. il Farmers' B 715:1-48 '16; Same cond. Am For 22: 618 O '16
- Mensuration methods compared. For Quar 14: 521-3 S '16
- Notes on a method of studying current growth percent. E. A. Chandler. For Quar 14:453-60 S '16
- Practical application of Pressler's formula. A. B. Recknagel. For Quar 14:260-7 Je '16
- Preliminary volume table for Scots pine. J Bd Ag 25:326-7 Je '18
- Preliminary volume tables for larch. J Bd Ag 24:1430-5 Mr '18
- Problem of making volume tables for use on the national forests. T. T. Munger. J For 15:574-86 My '17

**Forest mensuration—Continued**

- Problems in Appalachian timber appraisal. W. W. Ashe. J For 15:322-34 Mr '17  
Simplified method of stem analysis. T. W. Dwight. J For 15:864-70 N '17  
System for computing timber estimates. C. E. Dunston and C. R. Garvey. For Quar 14: 1-2 Mr '16  
Timber cruising in the Pacific Northwest. H. H. Chapman. il Am For 23:270-1 My '17  
Timber estimating in the southern Appalachians. R. C. Hall. J For 15:310-21 Mr '17  
Top diameters as affecting the frustum form factor for longleaf pine. H. H. Chapman. Soc Am For Pro 11:185-91 Ap '16  
Volume of western yellow pine logs from an actual mill tally. S. Berry. J For 15:615-18 My '17

See also Dendrometers; Timber—Mensuration; Xylometers

**Forest models**

- Model of a regulated forest. D. Y. Lin. il For Quar 14:471-3 S '16

**Forest planting**

- \* Afforestation question in Britain. E. P. Stebbing. Nature (St Martin's st, London, W. C. 6d) 101:466-7 Ag 15 '18  
Cultural experiments in spacing. For Quar 14:118-19 Mr '16  
Does it pay to plant a forest? S: J. Record. il Country Gent 81:1188-9 Je 10 '16  
Economic afforestation in Nelson. H. G. Kingsland. il J Ag New Zealand 15:145-50 S '17  
Effect of planting method upon growth of western yellow pine. H. C. Turner. J For 16:399-403 Ap '18  
Forest planting. S. J. Record. Country Gent 81:196 Ja 29 '16  
Forest planting in the eastern United States. C. R. Tillotson. il map U S Ag B 153:1-38 '15  
Forest planting in Wisconsin. W. D. Barnard. (B. 1) 34p il '16 Wisconsin conservation comm., Madison  
Forest tree nurseries for private estates. A. Smith. Gard Chron Am 22:271-2 N '18  
Forest trees worth planting. E. Secrest. il Ohio Ag Exp B v 1:54-60 F '16  
Forestation practice in Norway. J For 16:90-9 Ja '18  
Importance of source of seed in forestation. N. E. Eckbo. Soc Am For Pro 11:240-3 Ap '16  
\* L'influence du reboisement sur l'abondance des eaux. P. Descombes. Revue Scientifique (41 rue de Châteaudun, Paris 90c) 56:490-2 Ag 17 '18  
Need for reafforestation discussed by Royal English arboricultural society. Gard Chron (Lond) 64:122 S 21 '18  
Nursery practice on the national forests. C. R. Tillotson. il U S Ag B 479:1-86 '17  
Planting experiments on the sand dunes of the Oregon coast. T. T. Munger. J For 15: 1007-9 D '17  
Practical reforestation policy. G. A. Retan. J For 16:335-40 Mr '18  
Problem of erosion. R. S. Maddox. Am For 23:724-5 D '17  
Reforestation of hills and farmed-out lands. B. H. Paul. N Y Ag Dept B 86:2366-72 Ag '16  
Reforestation on the national forests. C. R. Tillotson. il U S Ag B 475:1-63 '17  
Reforesting methods and results of forest planting in New York state. B. H. Paul. il map Cornell Ag Exp B 374:649-92 '16; Same. Cornell Ag Exp Rep 1916:649-92 '17  
Reforesting Pennsylvania's waste land: what and how to plant. W. G. Conklin. (B. 15) 34p il '16 Pa. dept. of forestry, Harrisburg  
Report of Cloquet forest experiment station. W. H. Kenety. il Minn Ag Exp B 169:40-59 '17  
Role of artificial regeneration in the re-enforcement of hardwood woodlots. E. Secrest. J For 16:329-34 Mr '18  
Sand-hill forest. R. P. Crawford. il Country Life 32:100 O '17  
Tree planting for forests. S. W. Allen. Sci Am Sup (233 Broadway, N. Y. 10c) 85:327 My 25 '18

- Turning sand hills into pine forests. R. P. Crawford. il Sci Am (233 Broadway, N.Y. 10c) 118:447 My 18 '18  
Utilization and reforesting of chestnut-blighted lands. L. C. Barnes. J For 15:854-8 N '17

**Forest planting camps**

- Forest tree planting camps. J. S. Illick. J For 15:394-409 Ap '17

**Forest products**

- By-products of the forest. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 4:286-8 Mr '17  
Chemical products from the forests. A. W. Schroger. il Scientific Am (233 Broadway, N.Y. 10c) 117:173 S 8 '17  
Chemical research as a directing aid in the efficient utilization of pine forests. C. H. Herty. (In Pan American scientific congress Pro., 1915, v. 8, p. 385-7) '17  
Contribution of forestry to problem of public nutrition during war, in Germany. Int R Sci & Prac Ag 8, no 8:1127-30 Ag '17  
Edible fruits of the forests. Gard Chron Am 21:434 D '17; Same. Am For 23:687 N '17; Same. Weekly N L 5:6 Mr 13 '18  
\* Forest products of Canada, 1916. (Forestry Branch—B. 62) 64p '18 Canada Dept. of the interior, Ottawa  
Forest products of Costa Rica. C. D. Mell. il Am For 24:238-41 Ap '18  
Forest products widely used. Gard Chron Am 20:480 N '16  
How warfare taxes the forests. Am For 23: 716-17 D '17  
Increased yield of turpentine and rosin from double chipping. A. W. Schorger and R. L. Pettigrew. il U S Ag B 567:1-9 '17  
Little-known forest products. Am For 22:730 D '16  
Present and possible products from Canadian woods, by J. S. Bates. Review. J For 15: 1030-2 D '17  
Reviving woodland industries. A. D. Webster. Gard Chron (Lond) 60:259 N 25 '16  
Some uses and abuses of our forests. C. E. Chidsey. il Am Lumberman (431 S. Dearborn st, Chicago 15c) 2265:52-3 O 12 '18  
Value and care of a farm woodlot. Prac F 113: 13 Ja 1 '17  
War-time uses of forest products. A. W. Schorger. Am For 22:614-16 O '16  
See also Birch oil; Gums and resins; Lumber; Pine oil; Timber; also United States forest products laboratory

**Marketing**

- Marketing farm timber at a profit. il Power F 27:46 D '18  
Marketing farm woodland products in Georgia. G. N. Lamb. il map Ga Ag Coll (Ext) B 129:1-32 '17  
Marketing farm woodlot products in Maine. G. N. Lamb. Maine Ag Ext B 113:1-38 '17  
Marketing of woodlot products. J. W. Calland. Ohio Ag Exp B 302:41-69 '16; Excerpt. Ohio Ag Exp B v 2:17-18 Ja '17  
Measuring and marketing woodlot products. W. R. Mattoon and W. B. Barrows. il Farmers' B 715:1-48 '16  
Pointers on marketing woodlot products. S. L. Wolfe. il U S Ag Yearbook 1915:121-30  
Selling woodlot products on Michigan farms. E. H. Frothingham. 49p il maps '16 Public domain commission, Lansing, Mich.

**Statistics**

- Our foreign trade in farm and forest products. P. Elliott. U S Ag B 296:1-50 '15  
Forest products laboratory. See United States forest products laboratory  
Forest rangers  
Use of motorcycles in forest patrols. J: L. Cobbs, jr. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:507-8 D '17  
Forest reserves  
Adaptation of national forests to the grazing of sheep. W. C. Barnes. Am Sheep B & W 36:73-5 F '16  
Alnus Oregona: its value as a forest type on the Siuslaw national forest. H. M. Johnson. J For 15:981-7 D '17



**Forest reserves—Continued**

Appalachian purchase. Am For 22:611 O '16  
Assisting to handle the forests. A. F. Potter.  
Nat Wool Grower 7:26 My '17  
Big demand for national forest ranges. Nat  
Wool Grower 8:15 Ja '18  
Children's playgrounds in parks and forests.  
S. Riley. il Am For 23:680-2 N '17  
Conservation congress and national forest  
conservation. C. L. Pack. Am For 22:353  
Je '16  
Conservation of game in the national forests  
and national parks. E. W. Nelson. il Am For  
23:139-45 Mr '17  
Consolidation of forest lands; hearing before  
a subcommittee of the House Committee on  
public lands on S. 5539. 37p '17 Apply to  
congressmen  
Cut sheep 200,000 in forest reserves. W. C.  
Barnes. Agard Sheep B & W 37:178 Mr '17  
Decision regarding grazing fees. D. F. Hous-  
ton. Nat Wool Grower 7:27 F '17  
Effects of grazing upon western yellow-pine  
reproduction in the national forests of Ariz-  
ona and New Mexico. R. R. Hill. il map  
U S Ag B 580:1-27 '17  
Extension of national forests in Colorado.  
H. H. Chapman. il Am For 23:399-402 Jl '17  
Fire protection on the national forests of the  
United States. J. L. Cobbs, jr. Fire Pro-  
tection (100 William st., N.Y. \$1.50 per yr.)  
6:9 Mr; 7 Ap '17  
Forest grazing allowances. 1918; tabulation.  
Nat Wool Grower 8:24 My '18  
Forest management on the national forests.  
E. I. Terry. J For 16:565-6 My '18  
Forest provisions of New York state consti-  
tution. C. R. Pettis. For Quar 14:50-60  
Mr '16  
Forest road apportionments—1917, 1918. 1919.  
Oregon Voter (Worcester bldg., Portland,  
Ore. 10c) 9:433 Je 23 '17  
Forest service and the stockmen in 1917.  
W. C. Barnes. Am Sheep B & W 38:88-9  
F '18; Same. Nat Wool Grower 8:15-18 F '18  
Forest service silviculture plans. T. S. Wool-  
sey, jr. Soc Am For Pro 11:1-16 Ja '16  
Forestry and game conservation. A. Leopold.  
J For 16:404-11 Ap '18  
Further appropriations needed. maps Am For  
22:48-50 Ja '16  
Grass as food and clothing. C. H. Shattuck.  
Nat Wool Grower 7:49 My '17  
Grazing allowances increased. W. C. Barnes.  
Am Sheep B & W 38:316-17 My '18  
Grazing experiments on the federal range re-  
serves. W. C. Barnes. Am Sheep B & W  
36:74-5 F '16  
Grazing fees in national forests. A. F. Potter.  
Nat Wool Grower 7:21-3 Ja '17  
Grazing on forests. Weekly N L 5:8 Ja 2 '18  
Great Basin experiment station. A. W. Samp-  
son. il Nat Wool Grower 8:19-21 Ap '18  
Harmonizing lumbering and esthetics. C. M.  
Granger. il Am For 23:299-302 My '17  
Homesteads in the national forests. (Misc.  
L-4) 12p '17 U.S. Forest service, Washing-  
ton, D.C.  
How the forest service has helped the stock-  
men. A. F. Potter. il Am For 24:165-9 Mr  
'18  
Land classification gives national forests per-  
manence. Irr Age 32:39 Ja '17  
Landscape engineering in the national fore-  
sts. F. A. Waugh. 38p plans '18 U.S. For-  
est service, Washington, D.C.  
Landscape and forestry. S. Riley. il Modern  
City (43 Franklin bldg., Baltimore 35c) 3:  
22-6 F '18  
May revoke permits. Weekly N L 5:5 Ja 30  
'18  
Mining claims in the Grand canyon. H. H.  
Chapman. il Am For 23:225-7 Ap '17  
Minnesota state forests. W. T. Cox. il Am  
For 24:285-8 My '18  
Municipal use of the national forests for  
public recreation. H. S. Graves. il Am  
City—Town and County ed (87 Nassau st.,  
N.Y. 35c) 16:1-4 Ja '17  
National forest enterprises. D: Houston. Am  
For 22:750-1 D '16  
National forest finances. T. S. Woolsey, jr. J  
For 15:597-604 My '17

National forest receipts increase. Nat Wool  
Grower 7:58 Ag '17  
National forest timber sale and its purposes.  
H. H. Chapman. il Am For 24:25-8 Ja '18  
National forests. Weekly N L 4:1-2 Ja 3 '17  
National forests. D. F. Houston. il Am For  
22:153-7 Mr '16  
National forests and the grazing situation.  
For Quar 14:157-60 Mr '16  
National forests in California and the lumber  
industry. Cal Ag Bd Rep 1917:247-59 '18  
Nursery practice on the national forests.  
C. R. Tillotson. il U S Ag B 479:1-86 '17  
Opening up the national forests by road  
building. O. C. Merrill. il U S Ag Yearbook  
1916:521-9; Same. Separate 69c  
Playgrounds on national forests. il Am For  
22:712-17 D '16  
President establishes three new national fore-  
sts in the East. Am For 24:346 Je '18;  
Same. Weekly N L 5:1 Je 12 '18  
Private property no camping. S. Riley. il Am  
For 23:358-60 Je '17  
Problem of making volume tables for use on  
the national forests. T. T. Munger. J For  
15:574-86 My '17  
Progressive cattle range management. A.  
Leopold. Breeder's Gaz 71:919 My 3 '17  
Receipts from national forests show increase  
for year 1917-18. Weekly N L 6:11 S 4 '18  
Recreation in the federal forest reserves.  
I. A. Baker. il Am For 23:459-64 Ag '17  
Recreational use of public forests in New  
England. A. Chamberlain. Soc Am For  
Pro 11:271-80 Jl '16  
Recreational uses of the national forests.  
H. S. Graves. il Am For 23:133-8 Mr '17  
Reforestation on the national forests. C. R.  
Tillotson. il U S Ag B 475:1-63 '17  
Report of the forester for the fiscal year  
ended June 30, 1917. 36p '17 U S Ag  
Roads of our lives. S. Riley. il Am For 24:  
232-5 Ap '18  
Silvicultural problems of Canadian forest re-  
serves. B. E. Fernow. For Quar 14:14-23  
Mr '16  
Use of the national forests of the West for  
public recreation. E. A. Sherman. Soc Am  
For Pro 11:293-6 Jl '16  
Use of the New York state forests for public  
recreation. G: D. Pratt. Soc Am For Pro  
11:281-5 Jl '16  
Use of the southern Appalachian forests for  
recreation. J. S. Holmes. Soc Am For Pro  
11:286-92 Jl '16  
Victory for small flockowners in Idaho. Am  
Sheep B & W 36:144 Mr '16  
Water-power on national forests. il Am For  
23:42 Ja '17  
Western public lands and national forests.  
H. H. Chapman. Am For 22:619-20 O '16  
Will increase charges for grazing on national  
forests. Weekly N L 6:2 D 18 '18  
Working plans on national forests. W. B.  
Greeley. Soc Am For Pro 11:84-5 Ja '16  
Year with the forest service. Am For 24:47-8  
Ja '18

See also Caribou national forest; Penin-  
sula state park; Sevier national forest

**Regulations**

Pisgah national game preserve; regulations.  
14p U.S. Forest service, Washington, D.C.

**Statistics**

National forest areas. January 1, 1918. (Misc.  
O-11) 8p map '18 U.S. Forest service,  
Washington, D.C.

Timber disposed of, quantity, price, and num-  
ber of users, revenue under specified heads,  
and details of grazing privileges, and area  
of national forest lands. See United States  
Department of agriculture Yearbooks, also  
published as Separates

**Forest service (United States)**

Appropriation to continue investigations on  
forestry, national forests, forest fires, and  
lumbering. Congressional Record (Wash-  
ington, D.C.) 56:1475-80 Ja 29 '18  
Farmer and the forester. H: S. Graves. il  
Penn State F 9:472-3+ D '16; Same. Purdue  
Ag 11:11-13 Ja '17

**Forest service (United States)—Continued**

- Forest service and the stockmen in 1917. W. C. Barnes. *Am Sheep B & W* 38:88-9 F '18; Same. *Nat Wool Grower* 8:15-18 F '18
- Forest service reveals lumber industry conditions. *Am For* 23:105-6 F '17
- Forest service revenue and organization. T. S. Woolsey, jr. *For Quar* 14:188-235 Je '16
- Forest service silviculture plans. T. S. Woolsey, jr. *Soc Am For Pro* 11:1-16 Ja '16
- Forest service work. *Weekly N L* 5:4 Ja 9 '18
- How forest fires are discovered and reported. *Scientific Am* (233 Broadway, N.Y. 10c) 117:166 S 1 '17
- January field program, 1918. (No. 12) 63-94p '18 U.S. Forest service, Washington, D.C.
- Protecting the nation's forests. St Nicholas (353 4th av., N.Y. 25c) 44:168-9 D '16
- \* Publications of the Forest service, classified for teachers and students. F. Burns. *School Sci and Math* (2059 E. 72d Place, Chicago 30c) 18:716-22 N '18
- Report of the forester for the fiscal year ended June 30, 1917. 36p '17 U S Ag
- Situation; what has been accomplished in forestry as a policy, a science, and an art. B. E. Fernow. *J For* 15:3-14 Ja '17
- Technical forester in national forest administration. L. F. Kneipp. *J For* 16:155-62 F '18; Discussion. J. W. Toumey; S. N. Spring; R. H. Boerker. 16:163-7, 377-82 F, Ap '18
- Trails constructed by National forest service. *il Eng News-Record* (10th av at 36th st, N.Y. 15c) 81:539-40 S 19 '18
- Uncle Sam—range cowman. W. C. Barnes. *il Breeder's Gaz* 72:203-4 Ag 16 '17
- Wartime work of the forest service. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:632-3 D 28 '17
- Year with the forest service. *Am For* 24:47-8 Ja '18

**Forest supervisors, United States.** See **United States forest supervisors**

**Forest surveys**

- Forest disease surveys. J. R. Weir and E. E. Hubert. *il map U S Ag B* 658:1-23 '18
- Forest survey of the town of Redding, Conn. A. E. Moss. *Conn State Ag Exp Rep* 1916, pt 6:383-427 '17
- Forest surveys on the Michigan state forests. R. Watson. *J For* 16:567-75 My '18
- Forests of Worcester county; results of a forest survey of 59 towns in county and a study of their lumber industry. H. O. Cook. 88p *il* '17 Mass. State forester, Boston

**Forest taxation**

- Forest taxation and the farmer. P. W. Ayres. *National Tax Assn B* (Lancaster, Pa. \$2 per yr.) v 3:167-9 Ap '18
- Forest taxation as a factor in forest management. G. W. Hutton and E. E. Harpham. *Soc Am For Pro* 11:330-5 Jl '16
- Forest taxation in France. *J For* 16:123-6 Ja '18
- Forest taxation in the United States. J. E. Barton. (*In Biennial report, 1917*, p. 26-30) Ky. State forester, Frankfort
- New Massachusetts forest taxation law, explained and printed in full. 35p '16 Mass. state forester, 6 Beacon st, Boston
- What is a basis for yield tax? F. Roth. *J For* 15:886-90 N '17

**Forest valuation**

- Business rate of interest and rate made by the forest. F. Roth. *For Quar* 14:255-9 Je '16
- Forest service stumpage appraisals. J. W. Girard. *J For* 15:708-25 O '17
- Forest valuation. H. H. Chapman. *Soc Am For Pro* 11:251-4 Ap '16
- Forest valuation and organization. *For Quar* 14:342-4 Je '16
- New forest valuation formula. *For Quar* 14:139-40 Mr '16
- Problems in Appalachian timber appraisal. W. W. Ashe. *J For* 15:322-34 Mr '17
- Relations between forest valuation and management. P. Frey. *Int R Sci & Prac Ag* 7, no 9:1298-9 S '16
- Simplified practical forest valuation. *For Quar* 14:127-9 Mr '16
- Valuation of damages to immature timber. W. N. Sparhawk. *J For* 16:176-91 F '18

**Foresters**

- American forester; his opportunities. C. DuBois. *Soc Am For Pro* 11:48-51 Ja '16
- American forester; what the society has done and may do for him. D. T. Mason. *Soc Am For Pro* 11:59-65 Ja '16
- American foresters in military service; list. *Am For* 23:754-7 D '17
- Baldy Dan in France. S. M. Saunders. *il Am For* 24:619-20 O '18
- Experience of a forestry engineer officer in France. F. R. Barnes. *il Am For* 24:586-9 O '18
- Fighting with axe and saw; a regiment of American lumber jacks and foresters for European service. C. H. Claudy. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:204 S 22 '17
- First forest regiment goes across. *Am For* 23:517-18 S '17
- Forest battalions for service in France. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:306-7 S 28 '17; Same, *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 5:477 N '17
- Foresters and woodsmen in war work. *il Am For* 23:718-23 D '17
- Forester's duty toward lumbering. G. M. Cornwall. *Soc Am For Pro* 11:66-74 Ja '16
- Foresters for national defense. *Am For* 23:268-9 My '17
- Foresters in world's largest regiment. *il Am For* 23:644-54 N '17
- Foresters to the front. B. Adams. *il Am For* 23:453-7 Ag '17
- Forestry as a profession for young men in the United States. *Am For* 23:691-2 N '17
- Professional and economic situation of the technical forester in Switzerland. R. H. Campbell. *For Quar* 14:61-5 Mr '16
- Professional ethics. B. E. Fernow. *Soc Am For Pro* 11:52-8 Ja '16
- Professional ethics. T. S. Woolsey, jr. *Soc Am For Pro* 11:215-20 Ap '16
- Technical forester in national forest administration. L. F. Kneipp. *J For* 16:155-62 F '18; Discussion. J. Toumey; S. N. Spring; R. H. Boerker; B. P. Kirkland. 16:163-7, 377-82, 550-64 F, Ap-My '18
- What is a forester? F. E. Olmsted. *Soc Am For Pro* 11:230-2 Ap '16
- With the forest regiments in the field. *il Am For* 24:267-9 My '18

See also **Society of American foresters**

**Foresters, Society of American.** See **Society of American foresters**

**Forestry.** See **Forests and forestry**

**Forestry, Farm.** See **Woodlots**

**Forestry and the war**

- American lumberjacks doing their bit in France. *Literary Digest* (354 4th av, N.Y. 10c) 56:72-8 F 9 '18
- Americans in the French forests. H. S. Graves. *Am For* 24:141-3 Mr '18
- Another forest regiment for France. *il Am For* 24:688-90 N '18
- Baldy Dan in France. S. M. Saunders. *il Am For* 24:619-20 O '18
- Barracks A. R. C.—American Red cross. P. L. Buttrick. *il Am For* 24:458-62 Ag '18
- Biggest regiment becomes bigger. *Am For* 24:13-15 Ja '18
- Experience of a forestry engineer officer in France. F. R. Barnes. *il Am For* 24:586-9 O '18
- Fighting with axe and saw; a regiment of American lumber jacks and foresters for European service. C. H. Claudy. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:204 S 22 '17
- Forest battalions for service in France. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:306-7 S 28 '17; Same, *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 5:477 N '17
- Forester at the fighting front. P. L. Buttrick. *il Am For* 23:710-16 D '17
- Foresters and woodsmen in war work. *il Am For* 23:718-23 D '17
- Foresters for national defense. *Am For* 23:268-9 My '17



**Forestry and the war—Continued**

- Foresters in world's largest regiment. *il Am For* 23:644-54 N '17
- Forestry after the war. *J For* 16:131-2 Ja '18
- Forestry and the war. B. E. Fernow. *J For* 16:149-54 F '18
- Forestry and the war. C. L. Pack. *Am For* 23:559 S '17
- Forestry regiment in action. *il Am For* 23:325-6 Je '17
- Forestry troops in France. F. Kiefer. *il Am For* 24:394-6 JI '18
- Forests indispensable in war. J. W. Toumey. *il Am For* 24:16-20 Ja '18
- How warfare taxes the forests. *Am For* 23:716-17 D '17
- Maritime pine operation in France. J. D. Guthrie. *il Am For* 24:657-63 N '18
- Our forest resources and the war. E. A. Sterling. *Am For* 23:689-90 N '17
- Our lumber operations in France. G. E. Lammers. *il Am For* 24:691 N '18
- Sawmill units for England's need. *Am For* 23:327 Je '17
- Shot, shell and soldiers devastate forests. P. S. Ridsdale. *il Am For* 22:333-9 Je '16
- Spruce for airplanes—the eyes of the allied armies. *il Am For* 24:323-8 Je '18
- War forestry in France. W. H. Dean. *il Country Gent* 83:1+ O 12 '18
- War, forests and lumber. *Am For* 23:328-30 Je '17
- War lumbering in France. R. H. Faulkner. *il Am For* 24:392-3 JI '18
- War materials from French forests; foresters in France. *il Am For* 24:69-76 F '18
- War-time uses of the woodlot. A. F. Hawes. *il Am For* 23:332-3 Je '17
- Wartime work of the forest service. *Science* (Science Press, Garrison, N.Y. 15c) n s 46: 632-3 D 28 '17
- With the American lumberjacks in France. W. B. Greeley. *il Am For* 24:387-91 JI '18
- With the forest regiments in the field. *il Am For* 24:267-9 My '18
- Wood for water and air ships must be had. *il Am For* 24:624-5 O '18
- Forestry association, American.** See American forestry association
- Forestry law**
- Administrative report of the Virginia State forester for the calendar years, 1916-1917; with suggestions for extensions of state forestry work, and recommendations for additions to the present forestry laws. 81p '18 Va. State forester, Univ. of Va., Charlottesville
- Algerian forest code. T. S. Woolsey, jr. *For Quar* 14:66-80 Mr '16
- Chapter 8, being laws relating to forestry. (*In* Maine Forest comr's report, 1916, p 1-27) '17 Forest com'r., Augusta, Me.
- China's forest laws. F. Sherfese. *For Quar* 14:650-61 D '16
- Conservation law in relation to lands and forests; chapter 451, laws of 1916, as amended, 1918. 41p '18 N.Y. State conservation comm., Albany
- Fire warden's handbook; Oregon forest fire laws. 46p '18 Ore. State bd. of forestry, Salem (rev. 1918)
- Forest act and forest fires act of New Brunswick. 23p '18 New Brunswick Minister of lands and mines, Fredericton
- Forest legislation in America prior to March 4, 1789. J. P. Kinney. bibliog Cornell Ag Exp B 370:361-405 '16; Same. Cornell Ag Exp Rep 1916:361-405 '17
- Laws relative to forest fires in district; instructions to wardens; list of wardens appointed, etc. 56p '17 Maine Forest comr., Augusta
- Législation forestière. *Int Yearbook Ag Leg* 1916:597-611 '17
- Louisiana forestry law goes into effect. *Am For* 24:298 My '18
- New Louisiana forestry law. *Am For* 22:479 Ag '16
- New Massachusetts forest taxation law, explained and printed in full. 35p '16 Mass. state forester, 6 Beacon st., Boston

- North Carolina's forestry laws. (Press B 152) 10p '16 N. C. Geological and economic survey, Chapel Hill
- Oregon forest fire laws, 1917-1918. 16p '18 Ore. State bd. of forestry, Salem
- Roadside tree law. (Forestry leaflet no. 16) 3p '16 Md. State bd. forestry, Baltimore
- State forestry laws; a parallel classification showing the comparative progress of each state in forestry legislation. J. S. Peyton. (Misc. S. 22) 21p '17 U.S. Forest service, Washington, D. C.
- State forestry laws; a parallel classification showing the comparative progress of each state in forestry legislation; Colorado. J. S. Peyton, comp. (Misc. S.—25) 9p '17 U.S. Forest service, Washington, D.C.
- State forestry laws; a parallel classification showing the comparative progress of each state in forestry legislation; West Virginia. J. S. Peyton, comp. (Misc. S.—26) 10p '18 U.S. Forest service, Washington, D.C.
- State forestry laws; Connecticut. (Misc. ser. 21) 12p '16 U. S. Forest service, Washington, D. C.
- State forestry laws; New Hampshire. (Misc. ser. 24) 13p '17 U.S. Forest service, Washington, D.C.
- \* State forestry laws; New York. J. S. Peyton, comp. (Forestry laws leaflet no. 23). 40p '18 U. S. Forest service, Washington, D. C.
- State forestry laws; Ohio. (Misc. ser. 20) 4p '16 U. S. Forest service, Washington, D. C.
- What thirty-nine states are doing in forestry. C. C. Andrews. 11p n.d. Minnesota Forestry bd., St Paul

**Forestry literature**

See also Forests and forestry—Bibliography

**Classification**

- Comments on Korstian's classification of forestry literature. *J For* 16:203-9 F '18
- Decimal classification for forestry literature. C. F. Korstian. *J For* 15:449-62 Ap '17

**Forestry research**

- Correlation of American forest research. E. H. Clapp. *J For* 15:165-75 F '17
- Forest research and the war. E. H. Clapp. *Am For* 24:439 JI '18
- Program for the triennial period 1915-17 arranged by the Swedish state institute of experimental forestry. *Int R Sci & Prac Ag* 7,no 7:985-7 JI '16
- Relation of forestry to science. B. Moore. *For Quar* 14:375-9 S '16
- Station for forestry research in Denmark. *Int R Sci & Prac Ag* 8,no 7:969-70 JI '17
- Thirty-seven years of spruce selection, in Austria. *Int R Sci & Prac Ag* 8,no 8:1116-18 Ag '17
- \* Value of scientific research in forestry. C. F. Korstian. 9p '17 C. F. Korstian, Ogden, Utah

**Forestry schools and education**

- Census of students and their employment made by the Yale forest school. *For Quar* 14:170-1 Mr '16
- Forest ranger course for the southern Appalachians. *Am For* 23:275 My '17
- Forest supervisors and technical training in forestry. *J For* 15:1061-3 D '17
- Georgia state forest school. *il Am For* 22:169 Mr '16
- Interdependence of forest conservation and forestry education. J. W. Toumey. bibliog (*In* Pan American scientific congress Proc., 1915, v. 3, p. 350-60) '17
- Lecturing in Chekiang. D. Y. Lin. *il Am For* 22:94-6 F '16
- Model of a regulated forest. D. Y. Lin. *il For Quar* 14:471-3 S '16
- New home of forestry at the University of California. *il Am For* 24:173-6 Mr '18
- News notes from district 1, forest service. J. F. Preston. *For Quar* 14:283-5 Je '16
- Opportunities in the profession of forestry and the business of lumbering. *il Ga Ag Coll* (Ext) C 55:1-8 '17
- State forest camp in the Adirondacks, held every year in August by the New York state college of forestry. *il N Y State Coll For B v* 16,no 22:1-19 '16

**Forestry schools and education—Continued**

Technical man's shortcomings. R: H. Boerker. J For 16:377-82 Ap '18

See also Forests and forestry—Study and teaching; also Syracuse university—New York state college of forestry

**Forests, Municipal**

City foresters' and municipal forests. E. G. Cheney. Minn Hort 44:372-4 O '16

County, city, town and school forests. J. W. Toumey. Am For 22:428-9 Jl '16

Forests of Worcester county; results of a forest survey of 59 towns in county and a study of their lumber industry. H. O. Cook. 88p il '17 Mass. State forester, Boston

Town forests and the Lincoln highway. H. A. Reynolds. Am For 22:174-5 Mr '16

**Forests and forestry**

Aspen as a permanent forest type. J. M. Fetherolf. J For 15:757-60 O '17

Basic problems in forest pathology. E. P. Meinecke. J For 15:215-24 F '17

Chasms of erosion and forest defense. C: A. Whittle. il Am For 23:492-3 Ag '17

Composition of soils and the formation of humus. J For 16:115-19 Ja '18

Concerning site. C. G. Bates. J For 16:383-8 Ap '18

Concerning site. F. Roth. For Quar 14:3-13 Mr '16

Economic aspects of reforestation. J. W. Toumey. Paper (117 E. 24th st, N.Y. 25c) 22: 14-17 Je 5 '18

Effect of fertilizers on woody plants, by L. Chancere. Review. J For 15:1024-7 D '17

Forest. H. S. Graves. il Mentor (114 E. 16th st, N.Y. 20c) 6:1-11 Je 1 '18

Forest biology. P. S. Lovejoy. J For 15:203-14 F '17

\* Forest club annual. 96p il 75c '18 College of forestry, Univ. of Wash., Seattle

Forest growth on abandoned agricultural land. P. L. Buttrick. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:80-91 Jl '17

Forestry and the public health. H: R. Hopkins. Am For 22:417-18 Jl '16

Forestry upon the private estate and its landscape possibilities. A. Smith. Gard Chron Am 21:329-30, 375-6 S-O '17

Heresies regarding normal stock. For Quar 14:524-6 S '16

Improving the farm forest. W: L. Hall. il Prog F 31:674 My 20 '16

\* Indiana state board of forestry has offered prizes for the best essays on Relation of forests to national defense, written by children in the eighth and ninth grades, and the high school classes. The essays must not exceed 2,000 words and must be handed in to the board by May 15, 1919

Landscape forestry. R. B. Maxwell. il Am For 22:680-1 N '16

Landscape and forestry. S. Riley. il Am For 23:727-8 D '17

Lumberman's duty toward forestry. F: E. Olmsted. Soc Am For Pro 11:79-83 Ja '16

Natural reproduction from seed stored in the forest floor. J. V. Hofmann. bibliog il J Ag Research 11:1-26 O 1 '17; Abstract. J For 15:1046-9 D '17

New grounds not signs of progress. R. S. Maddox. Prog F 31:689 My 20 '16

Northern hardwood forest: its composition, growth, and management. E. H. Frothingham. il map U S Ag B 285:1-79 '15

Optima of thinnings. J For 15:486-8 Ap '17

Problems in light as a factor of forest growth. R. Zon. J For 15:225-32 F '17

Relation between evaporation and plant succession in a given area. F. C. Gates. il Am J Bot 4:161-78 Mr '17

Role of light in natural and artificial reforestation. C. G. Bates. J For 15:233-9 F '17

Science of forestry. C. E. C. Fischer. Ag J of India Sci Congress No 1917:38-42

Site determination, classification, and application. R. Watson. J For 15:552-63 My '17

Study of reforested chestnut cut-over land. E. C. M. Richards. J For 15:609-14 My '17

Taking care of our forests. Prog F 31:1019 Ag 19 '16

Value production. For Quar 14:520-34 S '16

Woodland development and its by-product of fuel. H. J. Kochler; F. F. Moon. il Country Life 33:50-2 Ap '18

Woodland succession from soil exhaustion. J For 15:500-2 Ap '17

Yield of volunteer second growth as affected by improvement cutting and early weeding. R. T. Fisher. il J For 16:493-506 My '18

See also Arbor day; Foresters; Landscape gardening; Lumber; Lumbering; Pruning; Timber; Timber-line; Tree planting; Trees; Wood; Woodlots; also headings beginning Forest, Forestry, and Forests

**Bibliography**

\* Bibliography of books and periodicals on trees, forestry and conservation. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:722-5 N '18

Current literature: books and periodicals indexed in the library of the United States Forest service. See monthly numbers of American forestry

Forestry: tree planting, wood tests, and lumber industries, list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 43—11th ed) 19p '17

Supt. of doc., Washington, D.C.

Forests and forestry; a selected list of the more important books in the library, Carnegie Lib of Pittsburgh B 22:372-84 My '17

\* Forests and lumbering references. W. M. Gregory. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:44-5 Ja '18

\* List of books on forestry for a small library. 14p mim '18 U. S. Forest service, Washington, D. C.

\* Publications of the Forest service, classified for teachers and students. F. Burns. School Sci and Math (2059 E. 72d Place, Chicago 30c) 18:716-22 N '18

**Finance**

Continuous forest production of privately owned timberlands as a solution of the economic difficulties of the lumber industry. B. P. Kirkland. tables J For 15:15-64 Ja '17

Loaning money on timber limits. E. Wilson. Paper (117 E. 24th st, N.Y. 25c) 21:17-18 F 27 '18

**Laws**

See Forestry law

**Mensuration**

See Forest mensuration

**Study and teaching**

Shall forestry be taught in the public schools? J. W. Toumey. il Am For 24:103-8 F '18

**Terminology**

Comments on terminology. J For 15:350-3 Mr 17

Forest terminology; report of committee; with list of terms. J For 15:68-101 Ja '17; Same. 34p 25c '17 Society of American foresters, Washington, D.C.

Forest terminology; terms used in the lumber industry; prepared by a committee of the Society of American foresters. J For 16:1-75 Ja '18

**Alabama**

Forest census of Alabama by geographical divisions. R. M. Harper. map Soc Am For Pro 11:208-14 Ap '16

Preliminary soil census of Alabama and west Florida. R. M. Harper. map Soil Sci 4:91-107 Ag '17

**Alaska**

Forests of Alaska. H: S. Graves. il Am For 22:24-37 Ja '16

**Algeria**

Notes on French forestry in Africa and Corsica. T. S. Woolsey, jr. Soc Am For Pro 11:340-3 Jl '16

**Arizona**

Studies of yield and reproduction of western yellow pine in Arizona and New Mexico. G. A. Pearson. J For 16:273-93 Mr '18



**Forests and forestry—Continued**

**Australia**

- Afforestation. W. Gill. J Dept Ag S Australia 21:351-4 N '17  
 Afforestation. H. R. Meyer. J Dept Ag S Australia 22:229-41 O '18  
 Developing Australian timber: killing the thin growth in the Australian forest. R. H. Harrowell. Am Sheep B & W 38:145 F '18  
 Forestry handbook, pt. 2; Some of the principal commercial trees of New South Wales. J. H. Maiden. 224p il '17 Forestry comr., 25 O'Connell st, Sydney, New South Wales  
 Sylvicultural notes on forest trees of Queensland. (Forestry B. 3) 27p il '17 Queensland Dept. of public lands, Brisbane  
 Sylviculture. 16p '18 New South Wales Forestry comrs., Sydney  
*See also* Queensland—Forestry service

**Bosnia**

- Question of forestry in Bosnia and Herzegovina. Int R Ag Econ 72:104-15 D '16

**Brazil**

- Brazilian woods; their utilization for the manufacture of wood pulp. J For 15:624-7 My '17

**Bulgaria**

- Bulgarian forestry. For Quar 14:497-8 S '16

**California**

- Del Monte forest. D. T. Mason. il Am For 24:365-8 Je '18  
 Forest policy for California. D. T. Mason. J For 15:424-30 Ap '17  
 National forests in California and the lumber industry. (In Statistical report, 1916, p. 230-40) '17 Cal. State bd. of ag., Sacramento  
 Pack rat as an enemy of natural reproduction on the Angeles national forest. E. N. Munns. J For 15:417-23 Ap '17  
*See also* California—Forester, State

**Canada**

- Case for New Brunswick's forests. R. Black. 9p il n.d. Canadian forestry assn., Ottawa  
 Co-operative forest protection, by H. Sorgius; Classification of the crown lands of New Brunswick, by P. Z. Caverhill; Report of Committee on forests, by C. Leavitt. (In Report, 1917, p. 75-80, 81-91, 193-208) '17 Canada Comm. of conservation, Ottawa  
 57th annual report for the year ended 31st October, 1917. 206p il map '18 New Brunswick Crown land dept., Fredericton  
 Forest regeneration on certain cut-over pulpwood lands in Quebec. C. D. Howe. (Reprinted from the 9th annual report) 15p '18 Canada Comm. of conservation, Ottawa; Abstract. J For 16:587-9 My '18  
 Forest regeneration on certain cut-over pulpwood lands in Quebec, by C. D. Howe. Review. J For 16:587-9 My '18  
 Forestry studies in Canada. (Commerce Reports no. 203) p 804 (Ag 29) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Historical review of Canada's timber industry. J. Lawler. Int R Sci & Prac Ag 7:no 9:1227-34 S '16  
 Report of the director of forestry for the year 1917, by R. H. Campbell. Review. J For 16:594-6 My '18  
 Studies on the relation of forest insects and other factors to forest regeneration. J. M. Swaine. Ag Gaz of Canada 5:860-1 S '18  
*See also* Quebec—Lands and forests, Department of

**China**

- Agriculture and forestry in China. J. Baillie. J For 15:1014-15 D '17  
 China's forest laws. F. Sherfess. For Quar 14:650-61 D '16  
 Forestry progressing in China. il Am For 23:407-12 Jl '17  
 Forests and Chihli floods, by D. Y. Lin. Review. J For 16:596-7 My '18  
 Lecturing in Chekiang. D. Y. Lin. il Am For 22:94-6 F '16

- Magna charta of China's forestry work. J. Baillie. il Am For 22:268-72 My '16

**Colorado**

- Timber, grazing, recreation in Colorado's forests. Commercial (Denver civic and commercial assn. 5c) 9:31 Ja 24 '18

**Corsica**

- Notes on French forestry in Africa and Corsica. T. S. Woolsey, jr. Soc Am For Pro 11:343-4 Jl '16

**Costa Rica**

- Exploitation of Costa Rica's timber resources. C. D. Mell. il Am Lumberman (431 S. Dearborn st, Chicago 15c) 2260:72 S 7 '18  
 Forest products of Costa Rica. C. D. Mell. il Am For 24:238-41 Ap '18

**Europe**

- Shot, shell and soldiers devastate forests. P. S. Ridsdale. il Am For 22:333-9 Je '16

**Finland**

- \* Finland and the world's next paper supply. C. A. Player. Sci Am (233 Broadway, N. Y. 10c) 119:411 N 23 '18  
 Finland's state forests. S: T. Dana. Soc Am For Pro 11:254-8 Ap '16  
 Forest insurance in Finland. E. F. Wrede. bibliog Int R Ag Econ 65:53-60 My '16  
 Forests of Finnish towns. Int R Ag Econ 75:121-3 Mr '17

**Florida**

- Evaporation records from the Gulf Coast. L. Gano and J. McNeill. Bot Gaz 64:318-29 O '17  
 Inventory of Florida's forests and the outlook for the future. R. M. Harper. il Fla Ag Dept Quar B v 26:5-24 Ap '16  
 Preliminary soil census of Alabama and west Florida. R. M. Harper. map Soil Sci 4:91-107 Ag '17

**France**

- Americans in the French forests. H: S. Graves. Am For 24:141-3 Mr '18  
 Conversion methods—a visit to the forests of Chaux and Faye de la Montrond, France. H. R. McMillan. For Quar 14:599-604 D '16  
 Forest taxation in France. J For 16:123-6 Ja '18  
 Forestry regiment in action. il Am For 23:325-6 Je '17  
 French fir management in the Vosges. A. Gazin. J For 16:535-49 My '18  
 French forest destruction. U. Gohier. il Am For 23:30-1 Ja '17  
 French forestry after war. J For 15:493-5 Ap '17  
 French forests and forestry, by T. S. Woolsey, jr. Review. J For 15:1017-21 D '17  
 Mézenc forestation difficulties. For Quar 14:511:13 S '16  
 Restoration of forests devastated by the operations of war. A. Jolyet. Int R Sci & Prac Ag 8:no 2:255-6 F '17  
 Spruce management in France. J For 16:603-5 My '18  
 War demands threaten historic forest of Fontainebleau. il Am For 24:471 Ag '18  
 War forestry in France. W: H. Dean. il Country Gent 83:1+ O 12 '18  
 Will forests be planted on the old battle fields? il Am For 24:548-50 S '18

**Germany**

- Forests of Germany. J: T. Gunn. il Purdue Ag 11:20-1 D '16  
 Has the Black forest gone? J: B. Woods. il Am For 23:481-3 Ag '17  
 Treatment and yield. For Quar 14:135-7 Mr '16

**Great Britain**

- England's future forests. Am For 24:398 Jl '18  
 Forestry. J Bd Ag 24:1101-2 Ja '18  
 Forestry in Great Britain. J For 15:498-500 Ap '17  
 Forestry work for women: raising forest-tree seedlings. M. Sutherland. J Bd Ag 24:60-2 Ap '17

**Forests and forestry—Great Britain—Continued**  
 Report of the forestry sub-committee of the Reconstruction committee. J Bd Ag 24:1251-4 F '18  
 Sawmill units for England's need. Am For 23: 327 Je '17  
 War consuming Britain's forests. il Am For 22:594-7 O '16

#### Greece

Législation forestière. Int Yearbook Ag Leg 1916:601-5 '17

#### Hawaiian islands

Oahu rain forest. V. MacCaughy. il Am For 23:276-8 My '17

#### Herzegovina

Question of forestry in Bosnia and Herzegovina. Int R Ag Econ 72:104-15 D '16

#### Honduras

Forest treasures of Honduras. il Pan Am Magazine (70 5th av, N.Y. 25c) 24:184-91 F '17

#### Idaho

Developments in the marking of western white pine (*pinus monticola*) in northern Idaho. C. K. McHarg and others. J For 15: 871-85 N '17

#### India

Afforestation in the United Provinces. E. Benskin. Ag J of India 13:685-94 O '18

Commercial development of forests in British India. Int R Sci & Prac Ag 7,no 6:846-8 Je '16

Day in an irrigated plantation. Chunga Munga. Punjab, India. H. R. MacMillan. For Quar 14:277-82 Je '16

Forestry in India from a Canadian point of view. H. R. MacMillan. For Quar 14:624-49 D '16

Importance of soil-aeration in forestry. R. S. Hole. il Ag J of India Sci Congress No 1916:27-32 '16

Note on an enquiry by the government of India into the relation between forests and atmospheric and soil moisture. M. Hill. (Forest B. 33) 41p map ls 6d '16 Supt. of govt. printing, Calcutta, India

Recent investigations on soil-aeration; with special reference to forestry. R. S. Hole. il Ag J of India 13:430-40 J1 '18

Relation between forests and atmospheric and soil moisture in India. M. Hill. Int R Sci & Prac Ag 8,no 4:554-6 Ap '17

See also India—Forest department

#### Indiana

Why Indiana should have more trees. E. A. Gladden. Purdue Ag 11:20-1 Ja '17

See also Indiana—Forestry, State board of

#### Ireland

Limited timber resources of Ireland. (Commerce Reports no. 230) p 6-8 (O 1) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Notes on state forestry in Ireland. H. R. MacMillan. For Quar 14:461-6 S '16

Present and future timber supplies of Ireland. A. C. Forbes. J Dept Ag Ireland 17,no 1:20-9 '16

#### Italy

Législation forestière. Int Yearbook Ag Leg 1916:606-9 '17

#### Kentucky

See also Kentucky—Forester, State

#### Louisiana

Failure of Louisiana's forestry policy and its remedy. Am For 22:304-5 My '16

How Louisiana is solving the reforestation problem. M. L. Alexander. (In Cut-over land conf. of the South, 1917, p. 169-72) \$2.50 '17 Southern pine assn., New Orleans, La.

#### Maine

Forest protection and conservation in Maine, 1917. 202p il maps n.d. Maine Dept. of forestry, Augusta

Forest trees of Maine and how to know them. 72p il '17 Maine forestry dept., Augusta.

See also Maine—Forest commissioner

#### Maryland

Forests of Maryland. F. W. Besley. 152p il maps '16 Md. State bd. of forestry, Baltimore

\* Plan of co-operation between woodland owners and the state forester. (Forestry leaflet no. 18) 2p '18 Md. State bd. of forestry, Baltimore

See also Maryland—Forestry, State board of

#### Massachusetts

Commercial forest trees of Massachusetts: how you may know them; a pocket manual. D. A. Clarke. 4th ed 66p il '16 Massachusetts state forester, Boston

Forests of Plymouth county. J. J. Morris. 48p il maps '18 Mass. state forester, Boston

Recent troubles with our forest trees. F. W. Rane. Mass Hort Soc Trans 1917,pt 1:57-69 '17

See also Massachusetts—Forester, State

#### Mexico

Mexican forests afford many valuable woods. Am For 24:590 O '18

#### Michigan

Biennial report of the Public domain commission from July 1, 1914 to June 30, 1916. 179p il '17 Mich. Public domain commission, Lansing

Forest surveys on the Michigan state forests. R. Watson. J For 16:567-75 My '18

Proceedings of the Public domain commission, 1916-1917. 400p '16 Michigan Public domain commission, Lansing

#### Minnesota

Minnesota state forests. W. T. Cox. il Am For 24:285-8 My '18

#### Nebraska

See also Nebraska state forestation commission

#### New England

Changes in the forest area of New England in three centuries. R. M. Harper. J For 16:442-52 Ap '18

Reproduction in the coniferous forests of northern New England. B. Moore. bibliog Bot Gaz 64:149-58 Ag '17

Studies in tolerance of New England forest trees. G. P. Burns. bibliog il Vt Ag Exp B 193:1-23 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16

#### New Mexico

Hewn-tie versus saw-timber rotations. C. F. Korstian. Soc Am For Pro 11:315-29 J1 '16

Studies of yield and reproduction of western yellow pine in Arizona and New Mexico. G. A. Pearson. J For 16:273-93 Mr '18

#### New York

Conservation law in relation to lands and forests; chapter 451, laws of 1916, as amended, 1918. 41p '18 N.Y. State conservation comm., Albany

Economic side of New York state woodlands. H. P. Baker. N Y Ag Dept B 86:2373-9 Ag '16

Make state forests productive. A. B. Recknagel. Paper (117 E. 24th st, N.Y. 25c) 21: 22-4 F 27 '18

Possibilities of private forest management in New York state. C. H. Guise. Cornell Ag Exp B 375:697-746 '16; Same. Cornell Ag Exp Rep 1916:697-746 '17

Reforestation methods and results of forest planting in New York state. B. H. Paul. il map Cornell Ag Exp B 374:649-92 '16; Same. Cornell Ag Exp Rep 1916:649-92 '17

Reforestation water-supply land on Catskill system. F. F. Moore. il Eng News-Record (10th av. at 36th st., N.Y. 15c) 79:59-60 J1 12 '17



**Forests and forestry**—New York—*Continued*  
Silviculture at Axton and in the Adirondacks generally. R. C. Bryant. J For 15:891-5 N '17

Use of the New York state forests for public recreation. G: D. Pratt. Soc Am For Pro 11:281-5 J1 '16

Water-works plant 3,600,000 trees in New York state. Eng News-Record (10th av. at 36th st., N.Y. 15c) 79:463-4 S 6 '17

#### New Zealand

Forestry work in New Zealand. A. A. Winslow. (Commerce Reports 57) p 924-5 (Mr 10) '17  
U.S. Bureau of foreign and domestic commerce, Washington, D.C.

New Zealand forests and forestry. W: Schlich. J For 16:612-15 My '18

Private forestry. J. H. Simmonds. il J Ag New Zealand 16:334-53 Je '18

Scientific national forestry for New Zealand. D. E. Hutchins. il J Ag New Zealand 13: 295-317, 375-96 O-N '16

Waipoua Kauri forest; its demarcation and future management. D. E. Hutchins. J Ag New Zealand 16:136-41 Mr '18

#### North Carolina

Ash in North Carolina. (Press B 156) 8p '17  
N.C. Geological and economic survey, Chapel Hill

North Carolina's contribution to the winning of the war. C. Hutchinson. il Am For 24:675-8 N '18

Use of the southern Appalachian forests for recreation. J. S. Holmes. Soc Am For Pro 11:286-92 J1 '16

Year of progress in forestry in North Carolina. (Press B 151) 4p '16 N. C. Geological and economic survey, Chapel Hill

#### Norway

Evolution of forest types. For Quar 14:504-8 S '16

Forestation practice in Norway. J For 16:90-9 Ja '18

#### Oregon

\* Oregon forest facts; brief review of Oregon's timber resources. 8p n. d. Ore. State bd. of forestry, Salem

See also Oregon—Forester, State

#### Panama

Our present knowledge of the forest formations of the isthmus of Panama. H. Pittier. J For 16:76-84 Ja '18

#### Patagonia

Contribución a la exploración forestal en la Patagonia Austral. C. M. Hicken. (In Pan American scientific congress Pro., 1915, v. 3, p. 481-3) '17

#### Pennsylvania

Guide to the exhibit of the Pennsylvania Department of forestry and information about the work of the department. (B. 14) 21p il '16 Pa. Dept. of forestry, Harrisburg  
Operations and costs on Pennsylvania state forests. N. R. McNaughton. For Quar 14: 236-7 Je '16

Reforestation Pennsylvania's waste land; what and how to plant. W. G. Conklin. (B. 15) 34p il '16 Pa. dept. of forestry, Harrisburg  
Report of forestry. I. C. William. Pa Ag Dept B v 1:119-22 Ap '18

Report of the chief forest fire warden for the year 1916. (B. 16) 123p il map '17 Pa. Dept. of forestry, Harrisburg

Report on forests and forestry, 1915; with discussion. I. C. Williams. Pa Ag Dept B 278: 136-47 '16

Scotch pine in Pennsylvania. J For 16:605-7 My '18

See also Pennsylvania—Forest protection, Bureau of

#### Philippine Islands

Annual report of the Director of forestry of the Philippine Islands. J For 16:230-2 F '18  
Lesson of forestry in the Philippine Islands. G: P. Ahern. (In Pan American scientific congress Pro., 1915, v. 3, p. 492-502) '17

Philippine forests. G: D. Fuller. Bot Gaz 63: 418-19 My '17

Recent forestry propaganda in the Philippines. F. Sherfesse. J For 15:740-56 O '17

Utilization of a tropical forest. G: P. Ahern. Soc Am For Pro 11:17-26 Ja '16

See also Philippine Islands—Forestry, Bureau of

#### Porto Rico

Forests of Porto Rico, past, present, and future, and their physical and economic environment. L: S. Murphy. bibliog il map U S Ag B 354:1-99 '16

#### Rhode Island

See also Rhode Island—Forestry, Commissioner of

#### Russia

Importance of robinia pseudo-acacia L. in the afforestation of the steppes in the province of Iekaterinoslav (Russia). A. Kolesnikow. Int R Sci & Prac Ag 8,no 2:256-9 F '17

Russian forest statistics. For Quar 14:147-9 Mr '16

#### Servia

Question of forestry in the kingdom of Servia. Int R Ag Econ 73:114-22 Ja '17

#### South Africa

Passing views of forestry in British South Africa. H. R. MacMillan. For Quar 14:605-23 D '16

South African forestry report. (Commerce Reports no. 210) p 909-11 (S 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Timber resources of South Africa. (Commerce Reports no. 229) p 1215-16 (S 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

#### South America

Actitud del gobierno en materia de bosques nacionales—relación de la selvicultura con el desarrollo futuro de centro y Sud América, by E. L. Quirós; Raul Brin; H. Echegoyen; Forest problems and economic development in South America, by R. Zon; Scientific forestry for Latin America, by B. Moore. (In Pan American scientific congress Pro., 1915, v. 3, p. 796-800, 801-5, 805-12, 815-22, 822-34) '17

Forest conditions of Colombia and Venezuela. H. N. Whitford. il Pan Am Union B (17th and B sts, N. W., Washington, D.C. 25c) 46:468-83 Ap '18

South American forest resources. il Am For 23:295-8 My '17

South American forest resources and their relation to the world's timber supply. R. Zon. (In Pan American scientific congress Pro., 1915, v. 3, p. 483-92) '17

South American forests. H. M. Curran. Bul Pan Am Union (17th and B sts., N. W., Washington, D.C. 25c) 43:760-2 D '16

#### Southern states

Forestry; its place in the economic life of the South: two addresses. 24p '18 N. C. forestry assn., J. S. Holmes, sec., Chapel Hill, N.C.

Contents: Scientific land classification the basis of practical forestry and stock raising in the South, by C. S. Ucker; and Forest protection an economic necessity, by J. A. Mitchell

Practical reforestation, by H: S. Graves; Forestry and cattle raising on the cut-over pine lands of the southern states, by J. G. Lee. (In Cut-over land conf. of the South, 1917, p. 15-23, 217-25) \$2.50 '17 Southern pine assn., New Orleans, La.

#### Spain

Forest yield of public land in Spain. F. Bernard. Int R Sci & Prac Ag 9,no 5:576 My '18

Forests and forestry—*Continued*

## Sweden

- Conditions of life and work among the forests of Värmland, Dalecarlia and Norrland. *Int R Ag Econ* 77:82-95 My '17
- \* Few points from the development of modern Swedish forestry. H. Sylven. (*In* Forest club annual, p. 23-5) '18 College of forestry, Univ. of Wash., Seattle
- Forest industry in Sweden. E. Arosenius. *Int R Sci & Prac Ag* 9, no 1:18 Ja '18
- Forestry in Sweden. J. A. Amilon. *Int R Sci & Prac Ag* 8, no 11:1049-61 N '17

## Switzerland

- Législation forestière. *Int Yearbook Ag Leg* 1916:610-11 '17
- Swiss forestry. *For Quar* 14:104-9 Mr '16

## Texas

- Grass and woodland fires in Texas. J. H. Foster. *il Tex Ag Coll B v* 2:1-16 My '16
- Spread of timbered areas in central Texas. J. H. Foster. *J For* 15:442-5 Ap '17
- See also* Texas—Forestry, Department of

## Tropical zone

- Tropical forests and the war. H. N. Whitford. *bibliog J For* 16:507-22 My '18

## Tunis

- Notes on French forestry in Africa and Corsica. T. S. Woolsey, jr. *Soc Am For Pro* 11:338-40 Jl '16

## United States

- Aspen as a temporary forest type. F. S. Baker. *il J For* 16:294-303 Mr '18
- Australian study of American forestry. E. H. F. Swain. 138, xviii p 5s il '18 Queensland Dept. of public lands, Brisbane
- Axton plantations. B. E. Fernow. *J For* 15: 988-90 D '17
- Cost of growing timber. *For Quar* 14:759-64 D '16
- Eastern hemlock. E. H. Frothingham. *il map U S Ag B* 152:1-43 '15
- Ecology and silviculture in the southern Appalachians; old cuttings as a guide to future practice. E. H. Frothingham. *J For* 15:343-9 Mr '17
- Farms, forests, and erosion. S. T. Dana. *il U S Ag Yearbook* 1916:107-34; Same. Separate 688
- Forest legislation in America prior to March 4, 1789. J. P. Kinney. *bibliog Cornell Ag Exp B* 370:361-405 '16; Same. *Cornell Ag Exp Rep* 1916:361-405 '17
- Forest planting in the eastern United States. C. R. Tillotson. *il map U S Ag B* 153:1-38 '15
- Forest service reports on wood-using industries of the states. R. M. Harper. *Soc Am For Pro* 11:346-53 Jl '16
- Forestry and community development. S. T. Dana. *il U S Ag B* 138:1-33 '18
- Forestry and the paper industry. D. F. Houston. *il Am For* 23:205-12 Ap '17; Same. *Weekly N L* 4:1-3 Mr 28 '17; Excerpts. *Ag Digest* 1:445 My '17
- Forestry in the United States. *il map Stone & Webster J* (Boston \$1 per yr.) 20:440-9 Je '17
- From gray birches to barrel staves. W. A. Curtis. *il Country Gent* 81:12-13 Ja 1 '16
- How lumbermen in following their own interests have served the public. A. Cary. *J For* 15:271-89 Mr '17
- Laissez faire vs. foresight in forest management. B. P. Kirkland. *J For* 15:290-306 Mr '17
- Life history of lodgepole pine in the Rocky mountains. D. T. Mason. *il map U S Ag B* 154:1-35 '15
- New Englanders discuss forestry problems; conference held under auspices of New Hampshire state forestry commission, the department of forestry of the State college, and the Society for the protection of forests. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2261:51 S 14 '18

- Our forests in time of war. *Am For* 22:341-4 Je '16
- Photographing the forests. F. A. Waugh. *il Photo-Era* (367 Boylston st, Boston 20c) 40: 59-63 F '18
- Problems in Appalachian timber appraisal. W. W. Ashe. *J For* 15:322-34 Mr '17
- Reforestation on the national forests. C. R. Tillotson. *il U S Ag B* 475:1-63 '17
- State ownership of forest lands. P. T. Coolidge. *J For* 15:951-73 D '17
- Timber estimating in the southern Appalachians. R. C. Hall. *J For* 15:310-21 Mr '17
- War, forests and lumber. *Am For* 23:328-30 Je '17

- What of the future of the eastern forests of the United States? S. E. Elliott. *J For* 15: 65-7 Ja '17

- What thirty-nine states are doing in forestry. C. C. Andrews. 11p n.d. Minnesota Forestry bd., St Paul

*See also* Forest service (United States)

## Vermont

- Backward step in Vermont. *Am For* 23:369 Je '17
- Forestry in Vermont. R. M. Olzendam. *Am For* 23:49-50 Ja '17
- Private forestry undertaking. A. F. Hawes. *il Am For* 22:281-2 My '16

## Virginia

- \* Forestry situation in Virginia. R. C. Jones. (Forestry leaflet no. 9) 8p il '16 Virginia State forester, Univ. of Va., Charlottesville
- \* Forests of Alexandria county, Virginia. W. B. Dunwoody. (B. 13) 18p map '17 Virginia State forester, Univ. of Va., Charlottesville
- \* Forests of Chesterfield county, Virginia. G. D. Markworth. (B. 15) 8p '17 Virginia State forester, Univ. of Va., Charlottesville
- \* Forests of Nottoway county, Virginia. G. D. Markworth. (B. 14) 8p '17 Virginia State forester, Univ. of Va., Charlottesville
- \* How the forests and the lumber industry in Virginia can both be preserved. R. C. Jones. (Forestry leaflet no. 8) 24p il '16 Virginia State forester, Univ. of Va., Charlottesville

*See also* Virginia—Forester, State

## Washington

- Forest problems of Washington. H. Winkewerder. Seattle Municipal News (Municipal League of Seattle, 725 Central bldg., Seattle 10c) 6:7 Ja 20 '17
- See also* Washington—Forester, State; Washington forest fire association

## Wisconsin

- Forest planting in Wisconsin. W. D. Barnard. (B. 1) 34p il '16 Wisconsin conservation comm., Madison

## Forests and water supply

- Deserts due to deforestation. M. Wicks. *il Am For* 22:598-606 O '16
- Forest cover and snow retention on the east slope of the front range in Colorado. N. deW. Betts. *il Soc Am For Pro* 11:27-32 Ja '16

Formal gardening. *See* Landscape gardening

## Formaldehyde

- Formalin in the treatment of mastitis. J. N. Frost. *Am Vet M Assn J* 51:85-8 Ap '17
- Spray method of applying concentrated formaldehyde solution in the control of oat smut. R. J. Haskell. *Phyt* 7:381-3 O '17
- Treating seed with formalin. Wallaces' F 41: 319 F 25 '16

*See also* Disinfection and disinfectants

## Formosa

*See also* Botany—Formosa

## Forsythias

- Hybrid forsythias at Arnold arboretum. *Am Flor* 46:974 My 20 '16

## Fort Hays normal school

- Farming their way through college. P. C. Harvey. *il Country Gent* 82:2008-9 D 22 '17



- Fort Mardyck, France**  
Curious land tenure experiment. *Int R Ag Econ* 62:131-2 F '16
- Fossil fungi.** See Fungi, Fossil
- Fossorial wasps.** See Digger wasps
- Foul brood**  
American foulbrood. J. L. Byer. *Am Bee J* 56: 377-8 N '16  
American vs. European foul brood. *Gleanings* 44:226 Mr 15 '16  
Another onslaught on American foul brood. J. J. Anderson. *Gleanings* 44:492-3 Je 15 '16  
Better treatment for American foul brood. *Gleanings* 46:293 My '18  
Burning hives affected with foulbrood. F. D. Todd. *Am Bee J* 57:156 My '17  
Can European foul brood be stamped out? G. H. Rea. *Gleanings* 44:272-4 Ap 1 '16  
Control of bee diseases. W. Foster. *Gleanings* 44:431 Je 1 '16  
Control of European foulbrood. E. F. Phillips. *il Farmers' B* 975:1-16 '18  
Curing or eradicating, which? F. D. Todd. *Am Bee J* 58:161-3 My '18  
Difficulties in gross diagnosis of the infectious brood diseases of bees. A. H. McCray. *J Econ Entom* 9:192-6 F '16  
European and American foul brood. O. L. Hershiser. *Gleanings* 44:11-12, 57-8, 161-2, 241-2 Ja 1-15, F 15, Mr 15 '16  
European foulbrood. C. C. Miller. *Am Bee J* 57:272 Ag '17  
European foulbrood. W. S. Pangburn. *Am Bee J* 56:201 Je '16  
European foulbrood and its treatment. C. C. Miller. *Am Bee J* 58:232-3 Jl '18  
European foul brood and my kind friends. R. F. Holtermann. *Gleanings* 44:116-17 F 1 '16  
European foul brood chronic and acute. G. W. Joice. *Gleanings* 44:246 Mr 15 '16  
European foul brood; prevention and cure. A. Latham. *Gleanings* 44:479-80 Je 15 '16  
Fighting foulbrood. F. D. Todd. *Am Bee J* 57:228 Jl '17  
Foul brood of bees. R. G. Warry. *Ag Gaz of New South Wales* 27:651-5, 727-31 S-O '16  
Foul-brood of bees; its recognition and treatment. H. Garman. *il Ky Ag Exp C* 17:98-106 '17  
Foul brood regulations, effective March 1, 1916. F. B. Paddock. *Tex Ag Exp C* 11:1-10 '16  
How I permanently cured European foul brood. W. M. Harvey. *Gleanings* 45:525 Jl '17  
Important factors in the spread and control of American foulbrood. E. D. Ball. *J Econ Entom* 11:200-5 Ap '18  
Menace of European foul brood. L. A. P. Stone. *Gleanings* 44:274-5 Ap 1 '16  
My experience with European foulbrood. F. Kitinger. *Am Bee J* 58:165 My '18  
New cure for European foul brood. T. Riggs. *Gleanings* 44:102-4 F 1 '16  
Rendering foul-brood combs into wax. E. F. Townsend. *Gleanings* 44:439 Je 1 '16  
Report of the finding of American foulbrood and European foulbrood in the same bee comb. A. H. McCray. *J Econ Entom* 9:379 Je '16  
Some new and practical methods for the control of European foulbrood. E. G. Carr. *J Econ Entom* 10:197-200 F '17  
Spore-forming bacteria of the apiary. A. H. McCray. *bibliog il J Ag Research* 8:399-420 Mr 12 '17  
Texas foul brood law and foul brood regulations; superseding circulars no. 8, 11, 14. F. B. Paddock. *Tex Ag Exp C* 17:1-19 '16  
Treating American foulbrood. M. Wysong. *Am Bee J* 58:343 O '18  
Treatment of European foul-brood. W. S. Pangburn. *Am Bee J* 58:231-2 Jl '18  
Treatment of foulbrood. G. H. Patterson. *Am Bee J* 57:194 Je '17  
See also Bees—Diseases and pests
- Foundations**  
Farmer his own builder. H. A. Roberts. *Country Gent* 82:312 F '17 '17  
Replacing foundations. H. A. Roberts. *Country Gent* 81:1983 N 11 '16
- Foundations, Concrete**  
Concrete barn foundation. W. E. Frudden. *Hoards D* 50:871 Ja 21 '16  
Concrete basement for the dairy barn. H. C. Campbell. *il plans Hoards D* 53:424+ Mr 30 '17  
Concrete foundations. O Judd Farmer 64:8 F 23 '18  
Concrete foundations. Power F 27:48 F '18
- Four o'clock (plant).** See *Mirabilis*
- Fourth of July**  
How one town celebrated the Fourth. H. Crov. *il Country Life* 30:28-9 Jl '16  
How Rock Creek spends the 4th. R. E. Bone. *il O Judd Farmer* 61:3 Jl 1 '16  
We plan a community patriotic celebration for the Fourth of July. M. C. Hessler. *Country Gent* 82:1047 Je 16 '17
- Fowl.** See Poultry
- Fowl typhoid.** See Poultry—Diseases and pests
- Fowler, Joseph Gurney, 1855-1916**  
Life and work. *por Royal Hort Soc J* 42,pts 2-3:209-12 S '17
- Fox hunting**  
Essex foxhounds—a Maryland pack in the North. R. S. Pierrepont. *il Country Life* 31: 41-4 F '17  
Fox hunting in the snow. J. Weymouth. *il Country Life* 31:30-3 D '16  
Making a hunt country. J. B. Thomas. *il Country Life* 33:63-5 N '17  
Mr Smith's Irish hunt. H. W. Smith. *Country Life* 31:74 D '16
- Foxes**  
Black fox farming. O Judd Farmer 65:406 N 2 '18  
Care, sanitation and feeding of foxes in captivity. 20p '16 Canada Ag  
Fox and how to contend against him. W. H. Cuming. *J Dept Ag S Australia* 21:222-3 O '17  
How to destroy the fox. W. H. Cuming. *Ag Gaz of New South Wales* 29:58 Ja '18  
How to trap a fox. C. O. Ormsbee. *Rural N Y* 77:155 F 2 '18  
Trapping the fox and wolf. C. H. Chesley. *O Judd Farmer* 61:21 D 9 '16  
Trapping the red fox. A. R. Harding. *Nat Stock & F* 41:1028 Ja 19 '18  
See also Silver foxes
- Foxtail millet.** See Millet
- Fractures**  
Repair of bone in domestic fowl. B. F. Kaupp. *il N C Ag Exp Tech B* 14:1-17 '17
- Fragility of bones.** See Osteopsathyrosis
- France**  
Christmas in France. K. Wicker. *il Nat Stock & F* 41:924-5 D 22 '17  
France at war. F. M. Olzendam. *il Am For* 24:201-3 Ap '18  
See also subhead France under special subjects, e.g. Agriculture—France, Food supply—France
- Description and travel**  
Notes on the Vaucluse district. F. de Castella. *il J Dept Ag Victoria* 16:493-6 Ag '18
- Economic conditions**  
See also National agricultural labor office, France
- Industries and resources**  
Expansion of mechanical industry in the country and the townward migration. *Int R Ag Econ* 66:125-7 Je '16  
See also Forests and forestry—France
- Reconstruction**  
Agricultural reconstruction in France. M. Ryder. *il Breeder's Gaz* 73:545 Mr 14 '18; *Excerpts. Ag Digest* 2:980 My '18  
American tractors for France. *il Kimball's D F* 16:207 Mr 15 '18  
American tractors reclaim France. W. H. Dean. *il Country Gent* 83:3-4 F 23; 5+ Mr 9; 17+ Mr 16 '18

**France—Reconstruction—Continued**

- \* La terre pendant l'épreuve; la vocation paysanne. E. Labat. *Revue Deux Mondes* (15 rue de l'Université, Paris 3fr) 6 per 46:426-50 JI 15 '18
- Quaker reconstruction in France. J. T. Nichols. il *Wallaces'* F 42:1723 D 21 '17
- Rebuilding rural France. M. Ryder. il *Field* II 28:229-31 Ap '18
- Remaking the gardens of France. il *Gard M* 28:112-13 N '18
- Restoration of agriculture in the invaded departments. Int R Ag Econ 81:79-81 S '17
- Tractors and the food supply. il *Ag Digest* 2:890 Mr '18
- Will forests be planted on the old battle fields? il *Am For* 24:548-50 S '18

**Franklin stoves.** See Stoves, Franklin**Fraser Valley milk producers' association**

- Dairymen in Fraser valley. P. E. Triem. Kimball's D F 15:787 N 1 '17

**Fraternity of operative millers of America**

- 22d annual convention at Minneapolis, Je. 4-8. Coop Manager & F 6:49-52 JI '17

**Fraud.** See Misbranding**Free-martins.** See Twins

- Freeing of Goliath; story.** E. Copeland. *Ohio F* 141:470, 503 Mr 30-Ap 6 '18

**Freesias**

- Freesia culture. il *Am Flor* 50:1244 JI 13 '18
- Freesias. *Gard Chron* (Lond) 63:176 Ap 27 '18

**Freezing.** See Refrigeration and refrigerating machinery**Freezing points**

- Cryoscopic determination on tissue fluids of plants of Jamaican coastal deserts. J. A. Harris and J. V. Lawrence. *Bot Gaz* 64:285-305 O '17
- Extension to 5.99° of tables to determine the osmotic pressure of expressed vegetable saps from the depression of the freezing point. J. A. Harris. *Am J Bot* 2:418-19 O '15
- Freezing point lowering of the leaf sap of the horticultural types of persea americana. J. A. Harris and W. Popenoe. *J Ag Research* 7:261-8 N 6 '16; *Abstract. Int R Sci & Prac Ag* 8,no 4:566-7 Ap '17
- Freezing point method as a new means of determining the nature of acidity and lime requirements of soils. G. J. Bouyoucos. *Mich Ag Exp Tech B* 27:1-56 '16; Same. *Mich Ag Bd Rep* 1916:817-68
- Freezing point method as a new means of measuring the concentration of the soil solution directly in the soil (Tech. B. 24). G. J. Bouyoucos and M. M. McCool. il *Mich Ag Bd Rep* 1916:592-631
- Freezing point method as a new means of studying velocity of reaction between soils and chemical agents and behavior of equilibrium. G. J. Bouyoucos and W. A. Laude-man. *Mich Ag Exp Tech B* 37:1-32 '17
- Freezing-point method as an index of variations in the soil solution due to season and crop growth. D. R. Hoagland. *bibliog J Ag Research* 12:369-95 F 11 '18
- Further studies on the freezing point lowering of soils. G. J. Bouyoucos and M. M. McCool. *Mich Ag Exp Tech B* 31:1-51 '16; Same. *Mich Ag Bd Rep* 1917:558-605
- Hardening process in plants and developments from frost injury. R. B. Harvey. *bibliog il J Ag Research* 15:83-112 O 14 '18
- Notes on the calculation of the osmotic pressure of expressed vegetable saps from the depression of the freezing point, with a table for the values of P for  $\Delta-0.001^\circ$  to  $\Delta-2.999^\circ$ . J. A. Harris and R. A. Gortner. *Am J Bot* 1:75-8 F '14
- On the osmotic pressure of the tissue fluids of Jamaican loranthaceae parasitic on various hosts. J. A. Harris and J. V. Lawrence. *bibliog Am J Bot* 3:438-55 O '16
- Osmotic pressure as an index of habitat. B. Moore. *J For* 15:1010-13 D '17
- Relation of density of cell sap to winter hardness in small grains. S. C. Salmon and F. L. Fleming. il *J Ag Research* 13:497-506 Je 3 '18

**Freight and freightage**

- To move freight promptly; new proposal to clear incoming goods quickly from docks approved by McAdoo. *N Y Prod R* 46:395 JI 10 '18

**Freight car service**

- Agree on distribution of cars between stations in times of car shortage. *Am Coop J* 14:90 N '18
- Bringing in the crops. E: Hungerford. il *Country Gent* 82:1277-8+ Ag 18 '17
- Car distribution for grain. *Coop Manager & F* 7:30 Mr '18
- Car shortage. *Am Coop J* 12:162 O '16
- Car shortage a serious question in the spring fertilizer movement. *Am Fert* 45:40b D 9 '16
- Car shortage in sight. *Am Coop J* 12:296 D '16
- Coal shortage or car shortage; the cause and remedy. *Am Coop J* 12:338 D '16
- Distribution of cars. *Coop Manager & F* 8:32 N '18
- Economize cars. *N Y Prod R* 44:350 Je 27 '17
- Embargoes on freight. *Rural N Y* 75:593 Ap 8 '16
- Fertilizer for the 1919 wheat crop. *Am Fert* 48:66 Je 8 '18
- Getting there on a cattle train. K. D. Oliver. *Country Gent* 81:8 Ja 1 '16
- Interstate commerce commission calls conference on distribution of grain in cars. C. Thorne. *Am Coop J* 14:52 O '18
- Kansas farmers win car distribution war. T. L. Daniels. *Am Coop J* 12:572-3 Ap '17
- Make one car do the work of two. H. Bowker. *Am Fert* 46:49 Je 23 '17
- Movement of perishable traffic. G. D. Dixon. (*In Nat. league of commission merchants. 1917 convention, p. 82-90*) n.d. 90 W. Broadway, N.Y.
- Organizing for feed defense. S. Sosland. *Hoard's D* 56:7 JI 26 '18
- Plight of the apple man. il *Nonpartisan Leader* (Box 941, Fargo, N.D. \$2.50 per yr) 5:14 N 15 '17
- Possibilities of a market-train service. G. C. White and T. F. Powell. *U S Ag Yearbook* 1916:477-87; Same. *Separate* 701
- Railroad situation and the car shortage. E. O. McCormick. *Cal State Comm Hort B v* 7: 40-2 Ja '18
- Railroads urge farmers to order spring fertilizers now. *Am Fert* 47:48 D 22 '17
- Railway situation. G. E. McIntosh. (*In Report, Fruitgrowers' assn., 1916, p. 51-61*) '17
- Ontario ag. dept., Toronto
- Reduce car shortage. *Weekly N L* 5:5 O 17 '17
- Shippers' conference, Watertown, S.D., July 19-20. *Coop Manager & F* 6:64-5 Ag '17
- Transportation facilities for farm products. *Am Fert* 47:31 JI 7 '17
- Ways to reduce car shortage. *Power F* 26:15 N '17
- See also Bills of lading; Demurrage; Refrigerator cars

**Car load**

- Box car loaders. il *Am Fert* 49:80 N 9 '18
- Check the transportation waste. M. L. Williams. il *Rural N Y* 77:1037-8 S 7 '18
- Freight handling rules for shipments of dairy and poultry products. *N Y Prod R* 42:30 Ap 26 '16
- Heavy loading of freight cars in the transportation of northwestern apples. H. J. Ramsey. (*Markets Doc.* 13) 23p il '18 *U S Ag Loading American grapes.* H. S. Bird and A. M. Grimes. (*Markets Doc.* 14) 28p il '18 *U S Ag*
- Loading egg cars. *N Y Prod R* 46:898 O 9 '18
- Rules governing maximum loading of cars. W. C. Kendall. *Am Fert* 49:45 JI 6 '18
- Stowing a full carload. H. A. Roberts. il *Country Gent* 83:2+ S 7 '18
- Suggestions for the preparation of cars for grain loading. F. L. Carey. *Coop Manager & F* 8:45 D '18

**Freight cars**

- Car situation. G. E. McIntosh. (*In Report, Ontario fruit growers' assn., 1917, p. 14-20*) '18 Ontario ag. dept., Toronto



**Freight cars—Continued**

- Further demonstration; effectiveness of Cutter-Monesmith shock-absorbing device. N Y Prod R 46:1016 O 30 '18  
Government ownership of freight cars proposed. H. Smith. Am Coop J 12:665 Je '17  
Grain doors and cooerage—their relation to weight differences. Coop Manager & F 7:60 My '18  
Improved stock cars. A. H. Kolbe. il Hoard's D 52:204 S 8 '16  
Lining and loading cars of potatoes for protection from cold. H. S. Bird and A. M. Grimes. (Markets Doc.—17) 26p il '18 U S Ag  
Prevention of breakage of eggs in transit when shipped in carlots. M. E. Pennington and others. il U S Ag B 664:1-31 '18  
Warning; preparation of cars before loading. Coop Manager & F 8:34 O '18  
*See also* Refrigerator cars

**Disinfection**

- Car cleaning in Illinois. Wallaces' F 41:406 Mr 10 '16  
Car cleaning question. Wallaces' F 41:308 F 25 '16  
Cleaning and disinfection of live stock cars; with discussion. S. F. Musselman. Am Vet M Assn J 53:85-96 Ap '18  
Illinois breeders fight quarantine. O Judd Farmer 60:4 Mr 25 '16

**Freight inspection**

- Cargo inspection at British ports. Ag Gaz of Canada 5:666-7 Jl '18  
Witness for the shipper. H. A. Roberts. il Country Gent 83:5+ Je 22 '18

**Freight rates**

- Are ocean freight rates on cotton excessive? Prog F 33:479 Ap 13 '18  
Inland boat service; freight rates on farm products and time of transit on inland waterways in the United States. F. Andrews. U S Ag B 74:1-36 '14  
*See also* Railroads—Rates

**Freight ships**

- Re-inforced concrete ships. N Y Prod R 44: 734 S 5 '17

**French cherry.** *See* Surinam cherries

**Friendly phone;** story. B. J. Fowler. il Country Gent 83:16 Mr 30 '18

**Friendship**

- When a feller needs a friend. Banker-F 5:15 D '17

**Frijoles.** *See* Beans

**Fritillaria**

- Rusts occurring on the genus fritillaria. C. C. Rees. il Am J Bot 4:368-73 Je '17

**Froghoppers**

- Studies of life histories of froghoppers of Maine. H. Osborn. il Maine Ag Exp B 254: 265-88 '16

**Frogs**

- My friend hyla. H. Spencer. il Country Life 32:72 My '17  
Two frogs I have known. L. J. Doogue. il Country Life 30:66 Ag '16

**From gasoline to sail;** story. G. E. Walsh. Nat Stock & F 40:479+ Ag 5 '16

**From sunup to sundown;** story. C. Harris and F. H. Leech. il Country Gent 83:6-7 Mr 16; 18-19 Mr 23; 18-19 Mr 30; 18+ Ap 6; 18+ Ap 13; 17 Ap 20; 16 My 4; 19+ My 18; 20+ Je 29; 10-11 Ag 31; 10-11 S 21; 10-11 O 12; 46+ O 26; 20+ N 9; 22 N 30; 37+ D 14 '18

**Frontier and pioneer life**

- Are you a pioneer? E. J. Winfield. il Country Gent 82:1672-3 N 3 '17  
Illinois pioneers co-operated. O Judd Farmer 60:2 Je 17 '16  
Sisters of the sagebrush. W; H. Dean. il Country Gent 81:1001-2 My 6 '16  
Story of Martin. J. B. Weaver. il Wallaces' F 42:1718-19 D 21 '17

**Frost**

- Date of first frost. Weekly N L 5:9 S 19 '17  
Freezing injury of seed corn. T. A. Kiesselbach and J. A. Ratcliff. il Neb Ag Exp B 163:1-16 '18  
Frost and wheat; the damaged Canterbury crops. A. H. Cockayne. il J Ag New Zealand 12:1-10 Ja '16  
Frost charts and dates. charts Am Flor 51: 351 S 7 '18  
Frost damage to corn. maps Monthly Crop Rep 3:110 N '17  
Frost dates. Am Flor 49:438 S 15 '17  
Killing frost and length of the growing season in various sections of Kentucky. F. J. Walz. maps Ky Ag Exp C 19:120-32 '17  
Memorable Easter Sunday. 1905. W. C. Barnes. il Breeder's Gaz 69:866 Ap 20 '16  
What to do with frozen plants. Gard Chron Am 22:18 Ja '18

*See also* Frost protection; Plants, Effect of temperature on; Refrigeration and refrigerating machinery; Trees, Effect of frost on

**Frost protection**

- Electrical stimulation of crops. L. Birks and O'D. Davis. il J Ag New Zealand 15:185-90 O '17  
Freezing of fruit buds. F. L. West and N. E. Edlefsen. bibliog il Utah Ag Exp B 151:1-24 '17  
Frost protection. J. R. Cavanagh. Country Gent 82:564 Mr 17 '17  
Frost protection by irrigation. C. W. Skinner. Market Growers J 20:152 F 15 '17  
Frost protection for fruit and vegetables in the United States. Int R Sci & Prac Ag 7,no 1:36-42 Ja '16  
Frosts. H. J. Baldwin. il Minn Hort 46:299-303 Ag '18  
Hardening process in plants and developments from frost injury. R. B. Harvey. bibliog il J Ag Research 15:83-112 O 14 '18  
Home garden; frost protection for late crops. Country Gent 82:1528 O 6 '17  
Home garden; winter protection of plants. il Country Gent 83:33 N 9 '18  
Methods conducive to hardiness. M. Pfaender. Minn Hort 46:470-2 D '18  
Orchard heating. F. C. Brown. Country Gent 83:36 Mr 2 '18  
Orchard heating. D. F. Jones. Green's Fruit Grower 37:31 F '17  
Orchard heating. F. L. West and N. E. Edlefsen. bibliog Utah Ag Exp B 161:1-48 '17  
Orchard insurance against frost injury. E. W. Gage. Green's Fruit Grower 36:25 Mr '16  
Orchard protection from frost. W. Stone. Scientific Am (233 Broadway, N.Y. 10c) 118:147 F 16 '18  
Orchard winter injuries. J. E. Richardson. jr. il Country Gent 81:976 My 6 '16  
Orchard winter injuries. J. E. Richardson. jr. il Fruit-Grower 27:277 My 1 '16  
Preventing frost damage in orchards. C. O. Carpenter. Prog F 32:106 Ja 27 '17  
Protection of fruit against late spring frosts. Scientific Am (233 Broadway, N.Y. 10c) 117: 431 D 1 '17  
Smudge pots that made friends. C. Simpson. Country Gent 81:104 Ja 15 '16  
Some effects of shading lemon trees. A. D. Shamel and others. il Cal State Comm Hort B v 7:441-51 Jl '18  
Success and failure in orchard heating. H. R. Spencer. Fruit-Grower 27:528 D 15 '16  
Water content of the soil and the composition and concentration of the soil solution. M. M. McCool and C. E. Millar. bibliog Soil Sci 3:113-38 F '17  
Where orchard heating pays. C: Rapp. il Country Gent 82:731 Ap 14 '17  
Winter care of roses and other outdoor plants. Gard Chron Am 22:277 N '18  
Winter heating of peach orchards. W. J. Green. Ohio Ag Exp B v 1:374-6 D '16  
Winter kill in mild climates. C. I. Lewis. Better Fruit 11:12 Ap '17  
\* Winter protection. L. B. Wilder. Good House-keeping (119 W. 40th st, N.Y 20c) 67:76-80 N '18

**Frost protection—Continued**

Winter protection; cold less injurious than loss of moisture. C. L. Meller. *il Gard M* 26:135 N '17

Winter protection of small fruits. W. H. Jenkins. *Nat Stock & F* 42:828 D 14 '18

**Frozen money;** story. G. K. Turner. *il See* weekly numbers of the Country gentleman, beginning November 23, 1918

**Fruit**

Acid content of fruits. W. D. Bigelow and P. B. Dunbar. *J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:762-7 Ag '17

Are we growing fruit successfully? J. H. Wright. *Better Fruit* 11:6-7 N '16

Dietetic value of fruits. E. L. Burner. *Ill State Hort Soc Trans* 1916:179-89 '17

Easy meal. A. W. Herr. *Ohio F* 137:724 My 20 '16

Edible fruits of the forests. *Gard Chron Am* 21:434 D '17; Same. *Am For* 23:687 N '17; Same. *Weekly N L* 5:6 Mr 13 '18

Food plants of the ancient Hawaiians. V. MacCaughy. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 4:75-80 Ja '17

Food plants to attract birds and protect fruit. E. H. Forbush. *il Mass Ag Bd Yearbook* 1916, pt 2:191-209 '17

Food value of fruits. D. S. Gill. *Better Fruit* 12:5-6 Ja '18

Freezing of fruit buds. F. L. West and N. E. Edelesen. *bibliog il Utah Ag Exp B* 151:1-24 '17

Fresh fruits and vegetables as conservers of other staple foods. C. L. Hunt. *Farmers' B* 87:1-11 '17

Fruit. (*In* Geography of the world's agriculture, p. 77-92) maps '17 *U S Ag*

Fruit for home grounds. W. H. Chandler. *il Cornell Countryman* 14:377-80 F '17

Fruit notes from Missouri. L. R. Johnson. *Rural N Y* 76:419, 455 Mr 17-24 '17

Fruit register. *Gard Chron (Lond)* 62:107 S 15 '17

Fruits in a small garden. A. Van Gelder. *il Gard M* 24:222 Ja '17

Fruits under glass. J. Hudson. *Gard Chron (Lond)* 62:103 S 15 '17

Hardy fruit garden. W. A. Cook. *Gard Chron (Lond)* 62:109 S 15 '17

History and status of small fruits. S. J. Bole. *Am Fruit Grower* 38:8 N '18

Hybrid fruits that have made good. F. A. Waugh. *il Country Gent* 82:1746 N 10 '17

Making real use of the garden's crops. I. M. K. Allison. *Gard M* 26:132 N '17

Making the most out of tree fruits. *il O Judd Farmer* 62:9 Mr 3 '17

Marking fruits by electrical device. *Electrical Review* (515 Monadnock blk., Chicago 10c) 70:1096 Je 30 '17

Navel orange of Bahia with notes on some little-known Brazilian fruits. P. H. Dorsett and others. *il map U S Ag B* 445:1-35 '17

New fruits at Bedford. *il Gard Chron (Lond)* 60:168 O 7 '16

Old standard varieties of tree fruits vs. new varieties. O. M. McElvain. *Wis Hort Soc Rep* 48:127-31 '18

Palate of civilized man and its influence on agriculture. D. Fairchild. *il J Fr Inst (Franklin Inst., Philadelphia 50c)* 185:299-316 Mr '18

Part played by oxidases in the improvement of cultivated plants; biological experiments and considerations. M. Degli Atti. *Int R Sci & Prac Ag* 8,no 5:706-8 My '17

Small fruits a profitable side line. C. O. Warford. *il Prac F* 114:24 Ja 15 '18

Small fruits for the home and market. L. O. Williams. (*In* Nebraska Horticulture v. 6, no 12, p. 90-3) (F) '17 Neb. state hort. soc., Lincoln

Studies in fruit bud formation. J. R. Magness. (*In* 8th annual report, 1916, p. 98-105) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Same. *Better Fruit* 12:22 Ja; 25 F '18

Unhyphenated American fruits. F. A. Waugh. *il Country Gent* 82:3-4, 51 Ja 6-13 '17

Value of fruit in human nutrition. S. J. Crumbine. *Better Fruit* 13:7-8 D '18

Value of fruits and vegetables in the diet. E. Nickerson. *Minn Hort* 46:61-2 F '18

What fruit trees and small fruits to set out. *il Country Gent* 82:498 Mr 10 '17

When to pick fruit. E. I. Farrington. *Country Life* 32:80 O '17

Why plant fruit trees this fall? M. G. Kains. *Gard M* 28:81 O '18

*See also* Canning and preserving; Color of fruit; Cookery—Fruit; also names of fruits, e.g. Actinidia, Apples, Apricots, Avocados, Berries, Breadfruit, Cantaloupes, Cherries, Citrus fruits, Dates, Figs, Grapes, Guavas, Jujubes, Litchi, Mangoes, Nuts, Olives, Papaws, Papayas, Passion fruit, Peaches, Pears, Persimmons, Pineapples, Plantain, Plums, Pomegranates, Prunes, Pyronias, Quinces, Watermelons, also headings beginning Fruit

**Analysis**

Fruits and fruit products. *Assn Offic Ag Chem J* 2,no 2,pt 2:177-84 Ag '16

**By-products**

*See also* names of fruit, subhead By-products

**Composition**

Localisation of acids and sugars in fleshy fruits. *Int R Sci & Prac Ag* 7,no 1:53 Ja '16

**Costs**

Overhead expenses in fruit growing. *Nat Stock & F* 41:1248 Mr 2 '18

Some figures on the cost of bringing orchards into bearing. *Cal State Comm Hort B* v 5: 368-71 O '16

*See also* Orchard management; also names of fruits, subhead Costs

**Diseases and pests**

A B C of spraying. A. Fearing. *il Gard M* 24: 170-2 D '16

Abuse of water on fruit trees. D. F. Fisher. *Better Fruit* 12:5-4 Ap '18

Animal pests of fruit trees in New South Wales. W. W. Froggatt and W. B. Gurney. *Int R Sci & Prac Ag* 7,no 5:769-70 My '16

Anthraxose of raspberry and blackberry. H. S. Jackson. *Fruit-Grower* 27:411 S 1 '16

Aphids injurious to orchard fruits, currant, gooseberry and grape. A. L. Quaintance and A. C. Baker. *il Farmers' B* 804:1-42 '17

Argentine ant as an orchard pest. H. S. Smith. *il Cal State Comm Hort B* v 6:254-8 Je '17

Arsenical injury through the bark of fruit trees. D. B. Swingle and H. E. Morris. *bibliog il J Ag Research* 8:283-318 F 19 '17

Bacterial gummosis of stone fruits; with discussion. H. P. Barss. *il Cal State Comm Hort B* v 7:121-36 Mr '18

Black rot, leaf spot, and canker of pomaceous fruits. L. R. Hesler. *bibliog il Cornell Ag Exp B* 379:53-148 '16; Same. *Cornell Ag Exp Rep* 1917:53-148 '18

Bridge grafting for girdled trees. G. W. Wallace. *Rural N Y* 76:542 Ap 14 '17

Brief outline of the tree fruit insects. *Purdue Ag* 10:32 Ja '16

Bud weevils and other bud-eating insects of Washington. M. A. Yothers. *bibliog il Wash Ag Exp B* 124:1-43 '16

Cankers and other bark diseases of fruit trees. W. Lochhead. *J Ag (Quebec)* 21:51 O '17

Clean fruit; with discussion. R. F. Howard. *il (In* Nebraska Horticulture v. 6, no 12, p 80-90) (F) '17 Neb. state hort. soc., Lincoln

Coming fruit drive. M. G. Kains. *il Gard M* 27:189 My '18

Common insects and plant diseases of the farm, garden and orchard. W. E. Rumsey. *il W Va Ag Dept B* 17:1-37 '16

Common orchard pests and their control. G. C. Starcher and others. *Ala Ag Ext C* 7: 1-16 '17

Contribution to the life history and physiology of cylindrosporium on stone fruits. B. B. Higgins. *bibliog il Am J Bot* 1:145-73 Ap '14



**Fruit—Diseases and pests—Continued**

- Control of fruit pests. J. P. Stewart. *il Country Gent* 81:115 Ja 15 '16
- Control of fruit pests and diseases. A. L. Melander and F. D. Heald. *Wash Ag Exp Pop B* 100:1-61 '16
- Control of injurious insects and diseases of stone-fruits. H. T. Fernald and A. V. Osmun. *Mass Ag Ext C* 7:1-4 '16
- Control of more serious insects at Hood River. L. Childs. *Better Fruit* 11:14 Ap '17
- Control of pests of fruit trees in gardens and small orchards. *il J Bd Ag* 25:41-53 Ap '18
- Crown-rot of fruit trees: histological studies. J. G. Grossenbacher. *il Am J Bot* 4:477-512, pl 21-7 O '17
- Danger signals of nursery stock pests. W. C. O'Kane. *il Country Life* 32:76 Jl '17
- Delayed applications of lime-sulphur. P. Thayer. *il Ohio Ag Exp B v* 3:82-5 Mr '18
- Diseases of fruit trees and their treatment. H. W. Davey. *J Dept Ag Victoria* 16:101-7 F '18
- Dusting fruit trees and grapes for the control of diseases and biting insects. L. Caesar. (*In* Report. Entomological soc. of Ontario, 1916, p. 31-43) *il '17 Ontario ag. dept., Toronto*
- Dying of young fruit-trees. R. Waters. *il J Ag New Zealand* 12:112-21; 14:190-6 F '16, Mr '17
- Forced control of insect pests in Los Angeles county. W. Wood. *Cal State Comm Hort B v* 6:435-6 N '17
- Fruit and vegetable diseases and their control. E. C. Stakman and A. G. Tolaas. *il Minn Ag Exp B* 153:1-67 '16
- \* Fruit tree cankers and their control. E. C. Stakman and A. G. Newhall. (*C.* 51) 8p *il '18 Minn. State entomologist, St Paul*
- Fruit tree pests and diseases. *Gard Chron (Lond)* 64:76 Ag 24 '18
- How to control fruit and tree diseases. A. S. Colby. *Green's Am Fruit Grower* 38:19 Ja; 29 F '18
- How to know and control San Jose, oyster shell and scurfy scale. J. S. Houser. *il Green's Fruit Grower* 36:3 F '16
- How to tell the bugs. *Green's Fruit Grower* 37:27 F '17
- Importance and prevention of wood decay in fruit trees. W. T. Horne. *il Cal State Comm Hort B v* 5:278-82 Ag '16
- Injurious insects, old and new. P. J. Parrott. *il N Y State Fruit Growers' Assn Pro* 1916: 191-200
- Insect pests of the orchards and gardens of Idaho and their control. W. C. Edmundson. *il Idaho Ag Exp B* 87:1-30 '16
- Insects attacking fruit trees. L. Caesar. *il Ontario Ag Dept B* 250:1-55 Jl '17
- Lesser bud-moth. E. W. Scott and J. H. Paine. *bibliog il U S Ag B* 113:1-16 '14
- Life history of the melon fly. E. A. Back and C. E. Pemberton. *J Ag Research* 3:269-74 D '14
- Little leaf of deciduous fruit. R. W. Hodgson. *il Cal State Comm Hort B v* 7:529-32 S '18
- Market fruit garden; a brown rot season. *il Gard Chron (Lond)* 60:251 N 25 '16
- Massachusetts fruit trees and their insect foes. H. T. Fernald. *il Mass Ag Bd B* 2 (5th ed):102-28 '16
- Method for studying the humidity relations of fungi in culture. N. E. Stevens. *bibliog Phyt* 6:428-32 D '16
- Miscellaneous notes on injurious insects. P. J. Parrott and H. E. Hodgkiss. *il N Y State Ag Exp B* 423:359-87 '16; Summarized by F. H. Hall (Some new or rare fruit pests). B 423 Popular ed 8p
- More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. *il Ontario Ag Dept B* 257:1-43 '17
- Olethreutes variegana*, a microlepidopteron injurious to fruit trees, in Italy. A. Sarra. *Int R Sci & Prac Ag* 9,no 5:645-6 My '18
- Orchard pests and how to combat them. J Dept Ag S Australia 21:951-4 Jl '18
- Orchard-spraying experiments in the Stoke district. *J Ag New Zealand* 15:30-6 Jl '17
- Pest control for April. *il Cal State Comm Hort B v* 7:211-15 Ap '18
- Pest control for June. *il Cal State Comm Hort B v* 7:433-5 Je '18
- Pest control for July. *il Cal State Comm Hort B v* 7:473-6 Jl '18
- Pests that demand immediate control. L. Childs. *Better Fruit* 10:28 Ap '16
- Plant diseases. F. C. Stewart and M. F. Barus. *N Y Ag Dept B* 86:2426-31 Ag '16
- Prevalent and serious diseases that should be understood by the orchardist. *Va Ag Dept B* 109:30-4 '16
- Preventing winter injury to fruit trees. J. C. Whitten. *Minn Hort* 46:364-7 O '18
- Principal insect enemies of small fruits. *Purdue Ag* 10:37 F '16
- Protecting the orchard by dusting. D. Reddick. *il Green's Am Fruit Grower* 38:3-4 Ap '18
- Protection of apple and pear trees from blight, canker and other diseases. B. C. Moomaw, jr. *il Va Ag Dept B* 109:116-19 '16
- Report of committee on entomology. G. W. Herrick. *N Y State Fruit Growers' Assn Pro* 1916:22-9
- Report of committee on fungus diseases. T. F. Manns. (*In* Peninsula hort. soc. Trans., 1916, p. 58-64) '16 W. Webb, sec., Dover, Del.
- Rodents in the orchard. C. M. Salee. *Ohio F* 137:42 Ja 8 '16
- Root-knot of fruit-trees. J. A. Campbell. *il J Ag New Zealand* 15:63-8 Ag '17
- Rosy apple aphid, the plum curculio, the pear psylla, and the strawberry weevil. T. J. Headlee. (*In* Pro. N.J. state hort. soc., 1916, p. 125-6) '17 H. G. Taylor, sec., Riverton, N.J.
- Sinuate pear borer and leopard moth (C. 44). P. J. Parrott and H. Glasgow. *il N Y State Ag Exp Rep* 1915:484-6 '16
- Some horticultural diseases and their control. *Purdue Ag* 11:31-2 Ap '17
- Some horticultural insects and their control. *Purdue Ag* 11:30-1 Ap '17
- Some injurious insects. P. J. Parrott. *N Y Ag Dept B* 86:2421-4 Ag '16
- Some insect pests of the orchard. A. G. Ruggles. *il Minn Hort* 45:145-9 Ap '17
- Some orchard insects of economic importance in British Columbia. R. C. Treherne. (*In* Pro., Entom. Soc. of British Columbia, 1916, p. 66-83) *il '16*
- Sour-sap in fruit-trees. W. C. Hyde. *il J Ag New Zealand* 14:35-7 Ja '17
- Spray and practice outline for fruit growers. C. P. Halligan and R. H. Pettit. *il Mich Ag Exp Spec B* 86:1-24 '18
- Spray calendar for the truck patch. *Market Growers J* 18:395 Je 15 '16
- Spray schedule for fruits and vegetables. A. S. Colby. *Green's Am Fruit Grower* 38:9-10 F '18
- Spray to save the fruit crop from insects and diseases. A. L. Quaintance. *Weekly N L* 4: 4-5 My 2 '17; Same. *Better Fruit* 11:18+ Je '17
- Spraying formulas for orchard insects. A. L. Melander. *il Wash Ag Ext Ser* 1, no 39:1-16 '18
- Spraying of fruits; materials, schedules, etc. *il Pa Ag Ext C* 55:1-15 '17
- Spraying suggestions for 1918. M. A. Blake. *il Field* 11:28:161-2+ Mr '18
- Stone-fruit spray made from hydrated-lime and sulphur. G. C. Starcher. *Va Ag Exp B* 210:1-14 '16
- Suggestions for the control of the more serious plant diseases occurring at Hood River. L. Childs. *Ore Ag Exp B* 141:28-32 '17; Same. *Better Fruit* 11:10+ Mr '17
- Sun-scald of fruit trees a type of winter injury. A. J. Mix. *bibliog il Cornell Ag Exp B* 382: 237-84 '16; Same. *Cornell Ag Exp Rep* 1917: 237-84 '18
- Why of the June drop of fruit. A. J. Heinicke. *Cornell Countryman* 15:267-8+ F '18
- Widely-spread silver-leaf disease of plums, cherries and kindred fruits. P. S. Hayward. *Gard Chron (Lond)* 64:148 O 12 '18
- Winter control of orchard insects. W. H. Lloyd. *Purdue Ag* 11:39 Ja '17

**Fruit—Diseases and pests—Continued**

- Winter injury to fruit trees. J: E. Read. Ohio F 142:326 O 5 '18  
 Winter injury to fruit trees 1917-18. T. G. Bunting. J Ag (Quebec) 22:72 N '18  
 Winter kill needs attention. L. Childs. Better Fruit 12:14 J1 '17  
 Winter killing. W. J. Green. Ohio F 142:484 N 16 '18  
 Winter killing of fruit and nut trees. J. W. Firor. il Ga Ag Coll (Ext) C 60 4p '17  
 Winterkilling of fruit trees. F. C. Sears. il Country Gent 83:24 D 14 '18

*See also* Brown rot; Codling moths; Fire blight; Fruit flies; Fruit tree leaf syneta; Insects, Injurious and beneficial; Leaf rollers; Mediterranean fruit flies; Mexican orange maggots; Parandra borers; Scale insects; Spraying and dusting; also names of fruits, subhead Diseases and pests

**Laws**

- Loi n. 16 sur les maladies nuisibles aux arbres fruitiers en Egypte. Int Yearbook Ag Leg 1916:856-9 '17

**Exhibits**

- Boston fruit show. Am Flor 49:856 N 10 '17  
 History of fruit exhibits at New York state fair. H. B. Knapp. il N Y Ag Dept B 79:pt 1:694-705 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:694-705 '17  
 Horticultural exhibits and what they mean to the fruit interests of the state of New York. il N Y Ag Dept B 79:pt 1:706-16 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:706-9 '17  
 Minnesota state horticultural society; list of awards. 1915. Minn Hort 44:9-12 Ja '16  
 New York fruit at the land shows and at the San Francisco exposition. C. G. Porter. il N Y Ag Dept B 79:pt 1:710-16 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:710-16 '17  
 Preparing fruit for exhibition. W. N. Hutt. Prog F 33:585 My 11 '18  
 Report of the committee on fruits for the year 1916. E: B. Wilder. il Mass Hort Soc Trans 1916,pt 2:189-202 '17  
 Report on exhibits and record of awards. A. J. Farley. (In Pro. N.J. state hort. soc., 1916, p 136-47) '17 H. G. Taylor, sec., River- ton, N.J.  
 Why is a fruit show? S: Fraser. il Country Gent 82:313 F 17 '17

*See also* Agricultural exhibitions; Apples—Exhibits; Fruit—Judging

**Formulas for preservation**

- Formula for preserving fruits and vegetables for exhibition purposes, etc., etc. A. C. Lanoue. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 29-31) '16

**Grading**

- Do I need a fruit grader? Green's Fruit Grower 37:11 J1 '17  
 Grading fruit by machinery. il Nat Stock & F 40:632 S 16 '16  
 Inspection at point of shipment. K. B. Robinson. Ag Gaz of Canada 4:17-18 Ja '17  
 Machines for grading fruit. C. I. Lewis. il Country Gent 81:1686 S 16 '16  
 Physical handling of fruit—fruit grades. C. I. Lewis. il Better Fruit 11:5-6 N '16  
 Standard grades of fruit. Fruit-Grower 27: 260-1 Ap 15 '16  
 Standardized packing and grading of fruit. E. Meeking. il J Dept Ag Victoria 16:304-7 My '18  
 What about fruit below established standard? H. C. Rowley. Cal State Comm Hort B v 6: 193-8 My '17  
 Wormy pears are condemned in Sacramento county. F. C. Brosius. Cal State Comm Hort B v 6:408-10 O '17

*See also* Fruit industry—Laws and regulation; Fruit—Standards; also names of fruit, subhead Grading

**Judging**

- Exhibiting and judging fruit. Nat Stock & F 40:581 S 2 '16

- Fruit for exhibits. Prac F 112:343 S 15 '16  
 Standardization of rules for judging show fruit. J. A. Campbell. J Ag New Zealand 15:159-62 S '17

**Laws**

*See* Fruit industry—Laws and regulation

**Marketing**

- Act relating to the standardization of fruit packing; with text. G. P. Weldon. Cal State Comm Hort B v 5:125-8 Ap '16; Same: text (in French). Int Yearbook Ag Leg 1916:201-3 '17  
 Appeal for car retailing. C. N. Crottsenburg. il Fruit-Grower 27:505 D 1 '16  
 Canning a way to market. R. Howard. il Country Gent 83:12 Ja 5 '18  
 Co-operation in marketing fruit; the South Australian pool. J Dept Ag S Australia 21:644-5 Mr '18  
 Co-operative marketing of fruits. E. A. Leatherman. W Va Ag Dept B 13:25-30 '16  
 Developing the commercial market. V. Keyser. (In Nebraska Horticulture v. 6, no. 12, p. 95-7) (F) '17 Neb. state hort. soc., Lincoln  
 Eastern fruit men, prepare! E. W. Gage. Green's Fruit Grower 36:2 J1 '16  
 Economic trend in wholesale methods of fruit distribution. A. R. Rule. (In Pan American scientific congress Proc., 1915, v. 3, p. 729-35) '17  
 Fancy fruit—fancy prices. Fruit-Grower 27: 280 My 1 '16  
 From grower to grocer. J. H. Collins. Country Gent 81:1464 Ag 5 '16  
 Fruit-market agency will improve service. Better Fruit 11:20 Ag '16  
 Fruit marketing of the Pacific Northwest. H. F. Davidson. Better Fruit 10:28-9 F '16  
 Fruit marketing plan. Fruit-Grower 27:407 S 1 '16  
 Getting together in marketing, or reciprocal marketing. H. M. Gilbert. Better Fruit 10: 23-1, 44 Ja-F '16  
 Great gathering of fruit-growers. Fruit-Grower 27:90-1 F 1 '16  
 How Canadian growers advertised successfully. Market Growers J 19:5 J1 1 '16  
 How I save half my marketing cost. A. K. Bassett. il System on the Farm 3:182-3 N '18  
 How should I market my fruit? H. P. King. Cornell Countryman 15:265-1 F '18  
 Increasing the market by wider distribution. Better Fruit 11:19 Mr '17  
 Influence of supply on prices. A. U. Chaney. il Better Fruit 10:7-10 F '16  
 List of fruit buyers. W Va Ag Dept B 27: 1-22 '17  
 Marketing fruit at Mankato. P. L. Keene. il Minn Hort 44:343-8 S '16  
 Marketing fruit by association. A. N. Gray. il Minn Hort 44:27-8 Ja '16  
 Marketing fruit direct. H. G. Street. il Minn Hort 44:238-42 Je '16  
 Marketing fruits. P. W. Barnes. il Ohio F 142: 34 J1 13 '18  
 Marketing situation in the Niagara district. F. A. J. Sheppard. (In Report, Fruitgrowers' assn., 1916, p. 87-91) '17 Ontario ag. dept., Toronto  
 More information on fruit distribution. E. H. Shepard. Better Fruit 12:7 Ag '17  
 Needs of eastern fruit growers. S. J. T. Bush. Rural N Y 75:1065, 1095, 1129 Ag 12-26 '16  
 One season's selling campaign that built a permanent trade. H. P. Demarest. System on the Farm 3:50-1 Ag '18  
 One way of fighting excessive commissions. A. Maple. il Farm Eng 3:231 Ap '16  
 Profiting by his mistakes: farm of Willis Moore in Maryland. W: H. Dean. il Country Gent 81:1962-3 N 11 '16  
 Question of fruit marketing after the great war. G. C. Corbaley. Better Fruit 12:20-1 Ja '18  
 Regulation of the fruit trade. Int R Ag Econ 79:61-7 J1 '17  
 Regulations for the commerce of fruit in cases, in Queensland. Int R Sci & Prac Ag 7,no 3:436 Mr '16



**Fruit—Marketing—Continued**

Report of committee on packing and marketing. R. W. Rees. N Y Farms & Markets Dept Ag B 97:41-6 J1 '17

Report of peddling from cars committee. G. G. Grupe. Better Fruit 11:20 S '16

Scientific distribution of fruit: with discussion. H. Weinstock; J. L. Nagle; A. L. Wisner. Cal State Comm Hort B v 6:159-75 My '17

Small packages for fruits. Country Gent 81: 1089 My 20 '16

Some marketing problems confronting the California grower. F. M. Coleman. Cal State Comm Hort B v 7:52-4 Ja '18

Something new about selling fruit. Green's Fruit Grower 36:15 J1 '16

Standard basket and container law. Am Flor 47:424 S 9 '16

Standard grades of fruit. Fruit-Grower 27: 260-1 Ap 15 '16

Standardization of fruit products. C. A. Tonneson. Better Fruit 11:7 J1 '16

Statement of distribution N. W. box apples. C. J. Brand. Better Fruit 10:32 Ap '16

Successful method of organization for the distribution and sales of fruit. C. A. Green. Green's Fruit Grower 36:10 N '16

Uniform contract for the growers and selling agents of fruits and produce in the Pacific Northwest. Better Fruit 10:19 Ap '16

When fruit men get scared. J. H. Collins. Country Gent 81:9-10 Ja 1 '16; Same cond. Better Fruit 10:12 F '16

*See also* Fruit growers' associations; also names of fruit, subhead Marketing, e.g. Apples—Marketing. Cherries—Marketing. Prunes—Marketing

**Auction method**

Auction houses as distributors of fruits and vegetables. V. K. McElheny, jr. il N Y Ag Dept B 79:pt 1:915-26 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:915-26 '17

Auction method of selling fruit. J. P. Stewart. Penn State F 9:394 My '16

Auction method of selling fruits and vegetables. V. L. McElheny, jr. (In Nat. conf. on marketing and farm credits, 1916, p. 383-401) \$2 '17 C. W. Holman, sec., Madison, Wis.

Disposal of fruit by auction. A. M. Geary. il Better Fruit 10:8-9 Ap '16

Notes on the auctions. Rural N Y 75:87 Ja 15 '16

Sale of Canadian apples in Great Britain. F. H. Grindley. il Ag Gaz of Canada 3:1052-4 D '16

**Nomenclature**

Fruit nomenclature, the pomological committee of Australia. E. E. Pescott. il J Dept Ag Victoria 14:612-21 O '16; Same. Ag Gaz of New South Wales 27:868-76 D '16

Pomological committee of Australia—1917 meeting. E. E. Pescott. Ag Gaz of New South Wales 28:578-90 Ag '17; Same cond. J Dept Ag S Australia 21:53-5, 144-9 Ag-S '17

Pomology: philological notes. H. E. Durham. Gard Chron (Lond) 64:146 O 12 '18

Where the names come from. Better Fruit 10:25 Je '16

**Packing**

Act relating to the standardization of fruit packing: with text. G. P. Weldon. Cal State Comm Hort B v 5:125-8 Ap '16; Same: text (in French). Int Yearbook Ag Leg 1916:201-3 '17

Centralization of packing. S. V. Beckwith. Better Fruit 10:18+ My '16

Evolution of standardization in fruit packing. A. Anderson. Cal State Comm Hort B v 7: 42-4 Ja '18

How prices are increased by using the right fruit and vegetable packages. il System on the Farm 1:225-8 Ag '17

Net container act and the standardization law. C. G. Johnson. Cal State Comm Hort B v 6:98-9 Ap '17

New standard basket and container law. Green's Fruit Grower 37:12 S '17

Notes concerning certain California fruit packages. W. P. Tufts. Cal State Comm Hort B v 7:487-8 Ag '18

Packages, packing and—honesty. P. Earle. il Country Gent 81:1395 J1 22 '16

Packing fruit. Prac F 112:313 Ag 15 '16

Packing fruit and vegetables for market. C. C. Hulsart. il Prac F 113:282 Ag 15 '17

Packing mid-summer produce. M. R. Conover. il Ohio F 142:122 Ag 10 '18

Physical handling of fruit—packing houses. C. I. Lewis. Better Fruit 11:10+ D '16

Practical application of the California fresh fruit standardization law with deciduous fruits. H. E. Butler. Cal State Comm Hort B v 6:134-7 My '17

Report of committee on packing and marketing. R. W. Rees. N Y Farms & Markets Dept Ag B 97:41-6 J1 '17

Small fruit packages and packing. C. W. Baxter. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 17-22) '16; Same cond. J Ag (Quebec) 20:96 N '16

Standardization of fruit packing. Cal State Comm Hort B v 5:414-17 N '16

Standardization of the fruit pack and conservation. Cal State Comm Hort B v 6: 362-3 S '17

Standardized packing and grading of fruit. E. Meeking. il J Dept Ag Victoria 16:304-7 My '18

Weaknesses in our fresh fruit standardization law. F. B. McKevitt. Cal State Comm Hort B v 6:130-2 My '17

*See also* Fruit—Standards; Fruit crate presses; also names of fruit, subhead Packing

**Prices**

High living eighty years ago. F. C. Bradford. Better Fruit 12:16 O '17

Influence of supply on fruit. A. U. Chaney. (In Pan American scientific congress Pro., 1915, v. 3, p. 735-40) '17

Soft fruit (sales) order, 1918. J Bd Ag 25:495-7 J1 '18

**Standards**

Boosting the fruit game by law. R. E. Jones. il Green's Am Fruit Grower 38:1+ F '18

Development of the standardization idea in California. J. P. Irish. Cal State Comm Hort B v 7:47-8 Ja '18

Evolution of standardization in fruit packing. A. Anderson. Cal State Comm Hort B v 7: 42-4 Ja '18

Standardization as it is viewed by the railway companies. H. P. Anewalt. Cal State Comm Hort B v 7:45-6 Ja '18

Standardized packing and grading of fruit. E. Meeking. il J Dept Ag Victoria 16:304-7 My '18

*See also* Apple industry—Laws and regulation; Fruit industry—Laws and regulation

**Storage**

Control of dried-fruit insects in California. W: B. Parker. il U S Ag B 235:1-15 '15

Does home fruit storage pay? Ohio F 142:198 Ag 31 '18

Fruit and vegetable storage structures. il plan Concrete (Telegraph bldg., Detroit, Mich. 20c) 11:37-8 Ag '17

Fruit storage at home. Ohio F 138:328 O 7 '16

Fruit storage facilities. Better Fruit 12:23 Je '18

How the home gardener may lay by a fruit supply for the winter. il Country Gent 81: 1802 O 7 '16

Local cold storage problems for southern Illinois: with discussion. E. W. Bailey. Ill State Hort Soc Trans 1916:523-40 '17

Northwest fruit in Brazil. H. A. Cardinell. Better Fruit 12:23 D '17

Observations upon the relation of humidity to the ripening and storage of fruits. A. D. Shamel. Cal State Comm Hort B v 6:339-41 F '17

Out door storage cellars for home grown fruits. il Green's Fruit Grower 37:1 Ag '17

Simple methods of keeping fruits and vegetables in a fresh condition. Gard Chron (Lond) 64:61 Ag 10 '18

**Fruit—Storage—Continued**

- Storing late fruit. Gard Chron (Lond) 62:151 O 13 '17  
 Suggestions for storing fruit. Prac F 113: 364 N 1 '17  
 Winter storage of fruits. Country Gent 82: 1494 S 29 '17

See also Storage of farm produce; also names of fruit, subhead Storage

**Transportation**

- First refrigerator cars. P. Earle. il Country Gent 81:1501 Ag 12 '16  
 Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473-A) 59p il 50c '18  
 Am. ry. perishable freight assn., 135 E. 11th place, Chicago  
 Precooling, shipment and cold storage of tender fruit. E. Smith and J. M. Creelman. 35p il '16 Canada Ag  
 Profit insurance. M. L. Williams. il Country Gent 81:1614 S 2 '16  
 Transportation of fruit. G. E. McIntosh. Ag Gaz of Canada 5:138-40 F '18  
 Use of brine tank refrigerator cars for fruit shipments. E. Smith. 15p '17 Canada Ag; Same cond. Ag Gaz of Canada 4:110-14 F '17  
 See also names of fruit, subhead Transportation

**Varieties**

- Blooming season of hardy fruits (B. 407). U. P. Hedrick. N Y State Ag Exp Rep 1915: 546-70 '16  
 Co-operative fruit-testing. W. C. Hyde. il J Ag New Zealand 14:345-50 My '17  
 Co-operative fruit-variety testing. il W. C. Hyde. J Ag New Zealand 15:155-8 S '17  
 Dependable fruits. W. J. Green and others. il Ohio Ag Exp B 313:603-14 '17  
 Development of fruits for special conditions. W. T. Macoun. Mass Hort Soc Trans 1916, pt 1:39-57 '16  
 Fruit for the farm; with discussion. C. L. Richardson. Ill State Hort Soc Trans 1916: 310-28 '17  
 Fruit grower's attitude toward new varieties; with discussion. U. P. Hedrick. N Y State Fruit Growers' Assn Pro 1918:59-69  
 Fruit industry; varieties for export and local markets. J. A. Campbell. J Ag New Zealand 12:205-12 Mr '16  
 Fruit varieties for Maine. B. S. Brown. Maine Ag Ext B 111:1-19 '17  
 Fruits for a family orchard. M. A. Blake. Rural N Y 75:1440 N 18 '16  
 Fruits for Minnesota planting. Minn Hort 45: 44 Ja '17; Same. Minn Hort 45:332 Ag '17  
 Fruits, trees, and shrubs recommended for northern Minnesota. T. M. McCall. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 88-91) '17  
 Home fruit garden. J. L. Stahl. Western Wash Ag Exp B v 5:99-102 O '17  
 List of fruits recommended by the district horticultural societies for Illinois. Ill State Hort Soc Trans 1917:25-8 '18  
 List of fruits recommended for culture in Wisconsin. Wis Hort Soc Rep 48:7-9 '18  
 New and worthy fruits. O. M. Taylor. N Y State Fruit Growers' Assn Pro 1916:264-9  
 New fruits. U. P. Hedrick. il Rural N Y 77: 323, 371 Mr 2-9 '18  
 New fruits; studying varieties. Rural N Y 76: 318 Mr 3 '17  
 New or noteworthy fruits. U. P. Hedrick. il N Y State Ag Exp B 414:1-10 '16  
 New or noteworthy fruits. U. P. Hedrick. il N Y State Ag Exp B 427:523-9 '16  
 New or noteworthy fruits (B. 403). U. P. Hedrick. il N Y State Ag Exp Rep 1915:597-606 '16  
 Ordering plants and the selection of varieties. Am Fruit Grower 38:19 D '18  
 Planning to set out fruit trees. M. G. Kains. il Gard M 27:16-18 F '18  
 Plant fruit trees in the fall. Prog F 32: 1028 O 6 '17  
 Quality fruits for the home orchard. M. G. Kains. il map Country Life 31:35-48 Ap '17

- Report of committee on new plants and fruits. W. H. Chandler. N Y State Fruit Growers' Assn Pro 1918:19-21  
 Report of committee on new plants and fruits. G. H. Howe. N Y State Fruit Growers' Assn Pro 1916:17-22  
 Ripening dates and length of season for hardy fruits (B. 408). U. P. Hedrick. N Y State Ag Exp Rep 1915:571-96 '16  
 Some of our new fruits. A. Brackett. Minn Hort 46:463-4 D '18  
 Unprofitable varieties of fruit. Better Fruit 13:15 N '18  
 Varieties of fruit for Mississippi. E. F. White. Miss Ag Ext C 1 4p '16

**Weights and measures**

- How to mark contents of fruit and vegetable containers. Pa Ag Dept Dairy B v 15:7-8 Je '17

**Fruit, Blossoming of**

- Blooming season of hardy fruits (B. 407). U. P. Hedrick. N Y State Ag Exp Rep 1915: 546-70 '16

**Fruit, Color of. See Color of fruit****Fruit, Cooling of**

- Factors in transportation of strawberries from the Ozark region. V. W. Ridley. (Markets, Doc. 8) 10p '18 U S Ag  
 Grimsby precooling and experimental fruit storage warehouse. E. Smith. 16p il '16 Canada Ag  
 Handling and shipping fresh cherries and prunes from the Williamette valley. H. J. Ramsey. U S Ag B 331:1-28 '16  
 Heavy loading of freight cars in the transportation of northwestern apples. H. J. Ramsey. (Markets Doc. 13) 23p il '18 U S Ag  
 Maturity of fruits for precooled shipments. E. Smith. il Ag Gaz of Canada 3:18-20 Ja '16  
 Peach precooling. E. Smith. Ag Gaz of Canada 3:121-3 F '16  
 Precooling cherries. L. Greene. Fruit-Grower 27:232 Ap 1 '16  
 Precooling of California fruit. J. W. Lloyd. Ill State Hort Soc Trans 1916:140-7 '17  
 Precooling raspberries. E. Smith. Ag Gaz of Canada 3:865-6 O '16  
 Precooling, shipment and cold storage of tender fruit. E. Smith and J. M. Creelman. 35p il '16 Canada Ag  
 Rate of precooling fruit in different styles of packages and at different temperatures. E. Smith and J. M. Creelman. 16p '17 Canada Ag

**Fruit, Dried**

- Control of dried-fruit insects in California. W. B. Parker. il U S Ag B 235:1-15 '15  
 Cooking the dried fruits. O Judd Farmer 64: 29 Mr 9 '18  
 Cooking the dried fruits; apples and apricots. O Judd Farmer 64:26 Mr 16 '18  
 Dried pears and other things. F. T. Swett. Cal State Comm Hort B v 6:126-9 My '17  
 Reviving a lost art. il Nat Geographic Magazine (Hubbard Memorial Hall, Washington, D. C. 25c) 31:475-80 Je '17  
 South American markets for dried fruits. W. Fischer. (Special agents ser. 148) 35p '17 U. S. Bur. of for. and com. commerce, Washington, D.C.  
 Suggestive ways of using dried vegetables and fruits in the diet. W Va Ag Ext November Lesson 5p '17 (Mim.)  
 \* Time to use the dried things. C. B. King. il Good Housekeeping (119 W. 40th st, N.Y. 20c) 67:55 N '18  
 Use of dried fruits and vegetables. Mrs A. W. Parks. Neb Ag Ext Emergency B 33: 1-12 '18

See also Apples, Dried; Apricots, Dried; Dates; Figs; Pears, Dried; Prunes; Raisins

**Statistics**

- Commercial stocks of dried fruits, nuts, and peanuts on July 1. U S Food Surveys 2:1-16 O 5 '18



**Fruit, Dried—Statistics—Continued**

Commercial stocks of raisins, currants, figs, and dates; and miscellaneous fruits (apples, peaches, apricots, etc.), Jan. 1. U S Food Surveys 1:1-4, 7-8 J1 27 '18

**Fruit, Evaporation of.** See Drying (fruits and vegetables)

**Fruit, Respiration of**

Influence of temperature on respiration in fruit. Int R Sci & Prac Ag 7,no 2:211-12 F '16

**Fruit, Ripening of**

Changes in composition of peel and pulp of ripening bananas. H. C. Gore. bibliog J Ag Research 3:187-203 D '14

Changes in the chemical composition of grapes during ripening. F. T. Bioletti and others. Cal Univ Pub Ag Sci v 3, no 6 103-30p '18 (25c)

Color as an indication of the picking maturity of fruits and vegetables. L. C. Corbett. il U S Ag Yearbook 1916:99-106; Same. Separate 686

Development of sugar and acid in grapes during ripening. W. B. Alwood and others. U S Ag B 335:1-28 '16

Do you know when fruit is ripe? M. G. Kains. il Gard M 28:17-18 Ag '18

Enzymes of apples and their relation to the ripening process. R. W. Thatcher. bibliog J Ag Research 5:103-16 O 18 '15

Observations upon the relation of humidity to the ripening and storage of fruits. A. D. Shamel. Cal State Comm Hort B v 6:39-41 F '17

Physiology of ripening. J Ag (Quebec) 20:87 O '16

Preliminary observations on the ripening of Bartlett pears. W. V. Cruess and P. M. Stone. Cal State Comm Hort B v 5:425-9 D '16

Ripening dates and length of season for hardy fruits (B. 408). U. P. Hedrick. N Y State Ag Exp Rep 1915:571-96 '16

Season of ripening for peaches. Am Fruit Grower 38:24 D '18

Standards of maturity for the Washington navel orange. E. M. Chace. Cal State Comm Hort B v 6:325-30 Ag '17

**Fruit, Washing of**

Washing fruits and vegetables. A. W. Bitting. (B. 12) 28p il plans '17 Research laboratory, Nat. canners assn., Washington, D.C.

**Fruit boxes**

Pinus insignis for fruit-cases. il J Ag New Zealand 17:235-6 O '18

**Fruit breeding**

Budding of fruit-trees. W. H. Taylor. J Ag New Zealand 15:322-7 D '17

Citrus-fruit improvement: a study of bud variation in the Marsh grapefruit. A. D. Shamel and others. il U S Ag B 697:1-112 '18

Citrus-fruit improvement: a study of bud variation in the Washington navel orange. A. D. Shamel and others. il U S Ag B 623:1-146 '18

Collegeville trial station in 1917. J. B. Katzner. il Minn Hort 46:157-60 Ap '18

Developments in fruit breeding in 1917. C. G. Patten. Minn Hort 46:274-8 J1 '18

Disease-resistant fruits. Nat Stock & F 40: 972 D 23 '16

Growing melons on trees. J. E. Higgins. il J Heredity 7:208-20 My '16

Hybrid fruits that have made good. F. A. Waugh. il Country Gent 82:1669 N 3 '17

Improvement of nursery stock. A. L. Wisker. Cal State Comm Hort B v 6:199-202; Discussion. L. Coates. 202-7 My '17

Minnesota as the originator of new fruits. R. D. Underwood. Minn Hort 46:403-10 N '18

Need of fruit-breeding. S. A. Beach. il Minn Hort 45:167-74 Ap '17

New creations in fruits. N. E. Hansen. il Minn Hort 45:464-9 D '17

Notes on the breeding of raspberries. R. D. Anthony. il N Y State Ag Exp B 417:75-88 '16

Originating new varieties. Fruit-Grower 27: 509 D 1 '16

Pedigree tree and scion-selection. J. A. Campbell. J Ag New Zealand 15:314-16 D '17

Persian walnut; a typical problem in tree breeding. J. R. Smith. il J Heredity 7:55-60 F '16

Problems in walnut breeding. L. B. Batchelor. il J Heredity 7:61-5 F '16

Results in raising new raspberries. C. P. Newman. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 114-20) '16

Variations in Washington navel orange. il Rural N Y 77:1374 D 14 '18

Why navel oranges are seedless. A. D. Shamel. il J Heredity 9:246-9 O '18

See also Apple breeding; Grapes—Breeding; Pears—Breeding; Strawberries—Breeding; also Minnesota state fruit breeding farm

**Fruit buds.** See Buds**Fruit butter**

Homemade fruit butters. C. P. Close. Farmers' B 900:1-7 '17; Excerpts. J Ag (Quebec) 21:sup7 N '17; Excerpts. Better Fruit 12: 24 D '17

See also Apple butter

**Fruit crate presses**

Press for the Georgia carrier. M. A. Blake and H. C. Haines. il N J Ag Exp C 64:1-8 '17

**Fruit crops**

Failure of the fruit crops. Gard Chron (Lond) 64:48 Ag 3 '18

Fruit crop conditions. Fruit-Grower 27:284, 300, 316, 396, 412, 428, 440; 28:255, 270, 282, 297, 310, 320 My 1-Je 1, Ag 15-O 1 '16, My 1-J1 15 '17

Fruit crop estimate August 1, 1916. Better Fruit 11:19 S '16

Fruit crop report no. 1. 8p (Je) '18 Canada Ag

Fruit crop report no. 3. 7p (Ag) '18 Canada Ag

Fruit crop report no. 4. 8p (S) '18 Canada Ag

Fruit crop report, no. 5. 8p (O) '18 Canada Ag

Fruit outlook for 1916. Green's Fruit Grower 36:8 J1 '16

Fruit prospects, 1916-17. P. J. Carmody. J Dept Ag Victoria 14:705-10 D '16

Fruit prospects, 1917-18. P. J. Carmody. J Dept Ag Victoria 15:724-8 D '17

Fruit situation. Ohio F 142:98 Ag 3 '18

Initial promise in apples. O Judd Farmer 64: 549 My 25 '18

1916 fruit crop estimate for Washington. Better Fruit 11:11 O '16

Remarks on the condition of the fruit crops. Gard Chron (Lond) 64:91, 117-18, 127, 137-8, 161 Ag 31, S 21-O 5, 19, '18

Report on the condition of the out-door fruit crops. Gard Chron (Lond) 64:42-7, 62, 72, 82, 101 Ag 3-24, S 7 '18

Washington fruit crop report, July, 1917. Better Fruit 12:6 Ag '17

**Fruit culture**

Baby tractor of great power. il Scientific Am (233 Broadway, N. Y. 10c) 116:323 Mr 31 '17

Bees and fruit together. E. R. Root. il Gleanings 45:332-4 My '17

Beginning a home orchard. F. A. Waugh. il Country Gent 82:1913-14 D 8 '17

Care and management of the home orchard. R. S. Herrick. Minn Hort 46:236-9 Je '18

Care of a young orchard. F. T. Haynes. Prac F 113:23 Ja 15 '17

Care of the bearing orchard. F. H. Johnson. il J Ag (Quebec) 20:235 Je '17

Care of the home orchard. S. W. Hamm. il Prac F 114:22 Ja 15 '18

Care of the old orchard. R. P. McPherson. il N Y Ag Dept B 79,pt 1:824-9 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:824-9 '17

Care of the young orchard. E. L. Kirkpatrick. Ohio F 137:386 Mr 11 '16

China a fruitful field for plant exploration. F. N. Meyer. il map U S Ag Yearbook 1915: 205-24

Cleanliness a factor in controlling insects and fungus diseases in the orchard. C. J. Tyson. Penn State F 10:69-70 Ap '17

**Fruit culture—Continued**

- Climate in relation to fruit growing. J. W. Crow. N Y State Fruit Growers' Assn Pro 1916:80-9
- Concentrated home orchard. M. G. Kains. il Country Life 34:58-9 O '18
- Cost of orchard planting. F. I. Odell. Country Gent 81:1199 Je 10 '16
- Crops and stock on the home farm; farm orchards. E. Molyneux. Gard Chron (Lond) 64:154 O 12 '18
- Culture and chick feed together. Rural N Y 76:576 Ap 21 '17
- Dairy farm orchard. G. W. Rogers. Rural N Y 77:350 Mr 2 '18
- Desirable home fruit garden. Green's Fruit Grower 37:3 Mr '17
- Diversity of fruit growing. C. I. Lewis. Better Fruit 10:19-21 F '16
- Drafting the slacker orchard. M. G. Kains. il Country Life 33:68-9 Mr '18
- Earning power of fruit trees. Green's Fruit Grower 36:30 Mr '16
- Effect of the war on the farm apple orchard. A. J. Grant. (In Report, Ontario fruit growers' assn., 1917, p. 52-8) '18 Ontario ag. dept., Toronto
- Effect of too much cultivation. E. S. Black. Rural N Y 77:368 Mr 9 '18
- Essentials of successful fruit growing. U. P. Hedrick. il Green's Fruit Grower 36:1 N '16
- Estimating a fruit crop. A. W. Speyers. Country Gent 81:638 Mr 18 '16
- Every farmer should grow some fruit—intercropping. D. A. Walker. Fruit-Grower 27:14 Ja 1 '16
- Fall work in the orchard. Prac F 112:379 O 15 '16
- Fall work in the orchard. J. H. Gourley. il Green's Am Fruit Grower 37:5 O '17
- Farm fruit garden. Green's Am Fruit Grower 38:8 Mr '18
- Farm fruit garden. H. O. Werner. il N D Ag Ext B 9:1-37 '17
- Farm orchard. F. J. Heacock. il Purdue Ag 11:14-18 Mr '17
- Feed the trees. Fruit-Grower 27:472 N 1 '16; Same cond. Gard Chron Am 20:463 N '16
- First-year figures for a thousand-acre orchard. W. B. Lanham. il Country Life 31:48 N '16
- Fruit as food to win the war. E. S. Smith. Am For 24:102 F '18
- Fruit from worn-out land. J. H. Mattern. il Country Gent 81:315 F 12 '16
- Fruit gardens for small areas. Country Life 30:82 Ag '16
- Fruit grower in a crisis. Purdue Ag 11:40-1 Je '17
- Fruit growing by motion pictures. E. A. Dench. Green's Am Fruit Grower 38:4 Ja '18
- Fruit in mixed farming. L. M. Johnson. il Fruit-Grower 27:47 Ja 15 '16
- Fruit lands and the land banks. H. S. Stabler. Country Gent 83:13+ My 11 '18
- Fruit spur and this year's crop. F. W. Allen. Fruit-Grower 27:128 F 15 '16
- Fruit trees in the small home garden. N. H. Ellsworth. il House Beautiful (3 Park st. Boston 25c) 43:294-5 Ap '18
- Fruit trees on the farm. J Dept Ag S Australia 21:803-6 My '18
- Fruit will help to win the war. E. S. Smith. Green's Am Fruit Grower 38:3 Ja '18
- Getting ready for spring tree planting. C. A. Green. il Green's Fruit Grower 36:1 Ja '16
- Growing an orchard under adverse conditions. J. E. Fischler. Prac F 113:26 Ja 15 '17
- Growing hardy fruits. F. W. Bateman. Gard Chron Am 21:207-8 My '17
- Growing orchard crops. C. I. Lewis. Better Fruit 12:12 Mr '18
- Hardy fruit culture. See weekly numbers of Gardener's chronicle (London)
- Heading apple trees low. W. I. Chamberlain. Nat Stock & F 41:1036 Ja 19 '18
- Home fruit supply. E. Anderson. il Green's Fruit Grower 37:4 Ag '17
- Home orchard. Prac F 112:459 D 15 '16
- Home orchard. W. N. Hutt. N C Ag Dept B v 39:1-16 F '18
- Home orchard. T. F. Jager. il Prac F 112:23 Ja 15 '16
- Home orchard movement. Green's Fruit Grower 36:3 Ap '16
- Home orchard: setting and care. Prog F 32: 108 Ja 27 '17
- Horticulture as a side line. E. P. Snyder. Ohio F 137:794 Je 10 '16
- How I reformed a disreputable orchard. G. B. Keezell. il Prac F 113:25 Ja 15 '17
- How the apple seed grew and what it led to. A. W. Motes. Green's Fruit Grower 36:14 My '16
- How to have a good home orchard. C. J. Hayden. Prog F 31:1194 O 14 '16
- How to make small orchard profitable. P. C. Stark. Green's Am Fruit Grower 38:7 F '18
- How to mark varieties. S. C. Dunkelberger. il Green's Am Fruit Grower 38:24 Ja '18
- If you feed your trees properly they'll feed you. C. I. Lewis. il Country Gent 83:8 Je 1 '18
- Improving the orchard. F. A. Kuhn. Fruit-Grower 27:201 Mr 15 '16
- Items for orchardists. Prac F 113:285 Ag 15 '17
- January work in the orchard. J. P. Stewart. il Country Gent 81:61 Ja 8 '16
- Labor problem among fruit growers. H. Suzzallo. Better Fruit 12:7 F '18; Same cond. Ag Digest 2:937 Ap '18
- Laying out, planting and caring for the home orchard. F. J. Crider. Prog F 31:1193 O 14 '16
- Leased-orchard business. T. W. Harvey. il Country Gent 81:329 F 12 '16
- Leasing an orchard. V. H. Davis. Ohio F 141: 312 Mr 2 '18
- Lessons from a prosperous orchard. il Wall-laces' F 41:479 Mr 24 '16
- Lessons taught by the fruit buds. il Va Ag Dept E 109:84-6 '16
- Light crops and their causes. W. T. Macoun. (In Report, Fruitgrowers' assn., 1916, p. 65-74) '17 Ontario ag. dept., Toronto
- Making young trees hardy. E. W. Gage. Green's Fruit Grower 36:3 Ag '16
- Manuring experiments on fruit. Gard Chron (Lond) 63:135 Mr 30 '18
- Market fruit garden. Gard Chron (Lond) 59: 15, 85, 255; 60:179; 61:22, 40, 57, 106, 133, 149, 159, 189, 229-30; 62:1, 67, 76, 225; 63: 11-12, 53, 103-4, 145-6, 193, 243; 64:12, 156, 195 Ja 8, F 12, My 13, O 14 '16, Ja 20-27, F 10, Mr 10, 31, Ap 14-21, My 12, Je 9, J1 7, Ag 18-25, D 8 '17, Ja 12, F 9, Mr 9, Ap 6, My 11, Je 15, J1 13, O 19, N 16 '18
- Mulching the fruit plantations, by A. W. Brayton; Fertilizing the orchard, by H. M. Dunlap. Ill State Hort Soc Trans 1917:377-81, 401-6 '18
- No space for fruits?—nonsense! M. G. Kains. il Gard M 27:132-4 Ap '18
- Observations in an orchard. W: H. Mosier. il Green's Fruit Grower 37:1+ S '17
- Old orchards worth while. F. W. Allen. Country Gent 82:343 F 17 '17
- Opening up the fruit farm. R. E. Bingham. il Minn Hort 45:121-5 Mr '17
- Operating costs and methods. C. G. Woodbury and others. il Ind Ag Exp B 194:1-78 '16
- Orchard and garden efficiency. O. Davis. il Field II 27:545 J1 '17
- Orchard and garden information. W. N. Hutt. Prog F 32:206 F 17 '17
- Orchard business. D. G. Miller. (In Pro. N.J. state hort. soc., 1916, p. 127-36) '17 H. G. Taylor, sec., Riverton, N.J.
- Orchard conditions in the Ozarks. L: Erb. Rural N Y 77:321 Mr 2 '18
- Orchard cultivation. Prac F 113:163 Ap 15 '17
- Orchard demonstration work. R. H. Bell. Penn State F 9:294-5 Ja '18
- Orchard heating. F. C. Brown. Country Gent 83:36 Mr 2 '18
- Orchard heating. F. L. West and N. E. Edlefsen. bibliog Utah Ag Exp B 161:1-48 '17
- Orchard on the hillside. O. H. Barnhill. Country Gent 81:945 Ap 29 '16
- Orchard planting principles. J. C. Whitten. Green's Fruit Grower 37:9 Ap '17



**Fruit culture—Continued**

Orchard problems and their solutions. See monthly numbers of Green's American fruit grower

Orchard-raised livestock. R. E. Jones. *il Country Gent* 83:15 Mr 16 '18

Orchard reclamation by modern methods. J. M. Field. *Fruit-Grower* 28:98 F 1 '17

Orchard winter injuries. J. E. Richardson, jr. *il Fruit-Grower* 27:277 My 1 '16

Orchardless farms. M. Brown. *Am Fruit Grower* 38:2 O '18

Orchards and orchard work. C. H. Beaumont. *J Dept Ag S Australia* 20:585-7 F '17

Outgo and income of a ten-acre apple orchard; with discussion. U. P. Hedrick. *Ill State Hort Soc Trans* 1917:70-89 '18

Personal experience in fruit growing. *il Green's Fruit Grower* 37:1 J1 '17

Planning a fruit farm. *Green's Fruit Grower* 36:2 F '16

Planning for fruit this year and after. M. G. Kains. *il Gard M* 26:194-6 Ja '18

Planning small orchard. W. E. Wiecking. *O Judd Farmer* 64:12 Ja 12 '18

Planting the orchard. H. J. Bovill. *J Dept Ag Victoria* 15:663-5 N '17

Poultry and fruit growing. E. M. Long. *il Reliable* P J 23:1073, 1195; 24:55, 142 Ja-Apr '17

Present day orchard essentials. S. Van Aken. *Ohio F* 138:83 J1 29 '16

Profitable thirteen-acre orchard. *il O Judd Farmer* 60:3 My 13 '16

Profits from fruit farming. *Gard Chron (Lond)* 60:157 S 30 '16

Program for the small fruit grower. A. S. Colby. *Green's Am Fruit Grower* 38:7 My '18

Quick money for tiding over. A. W. Brayton. *Fruit-Grower* 27:102 F 1 '16

Redeeming the old orchard. J. A. Hart. *Prac F* 112:206 My 15 '16

Repairing damages in the orchard. W. S. Teator. *il Rural N Y* 77:318, 371 Mr 2-9 '18

Result of neglect. *Fruit-Grower* 27:349 J1 1 '16

Roadway orchards. H. L. Spooner. *Green's Fruit Grower* 36:3 Ap '16

Safety first applied to fruit growing. *Rural N Y* 77:186 F 9 '18

Setting of fruit at blossom time. C. L. Burkholder. *il Green's Fruit Grower* 37:2 Ag '17

Small fruit plot. M. R. Conover. *Green's Fruit Grower* 36:38 Mr '16

Some phases of alfalfa as a crop in the orchard. P. S. Darlington. *Better Fruit* 12:10-11+ My '18

Spring work in the orchard. W. J. Green. *il Ohio F* 137:249+ F 19 '16

Starting a new orchard. E. T. Owen. *Ohio F* 141:674 My 18 '18

Starting a young orchard. W. J. Green. *il Ohio F* 137:138 Ja 29 '16

Student farmer's retrospect. H. R. E. Collins. *il Canadian Magazine* (200 Adelaide st. West, Toronto, Canada 25c) 50:29-34 N '17

Taking stock. *Prac F* 112:343 S 15 '16

Talk with a fruit grower. *il Green's Fruit Grower* 36:3 O '16

Tenderfoot farming. J. A. Dimock. *il Country Gent* 81:435-6 F 26 '16

To make an orchard pay. L. Shippey. *Country Gent* 83:26 F 9 '18

Trees for the home fruit garden. *il Country Gent* 82:1349 S 1 '17

Unfruitful tree and how to correct it; with discussion. S. A. Beach. *il Minn Hort* 45:369-79 O '17

Wall fruit trees; design, planting, training. *Gard Chron (Lond)* 63:43 F 2 '18

War and the fruit grower. B. W. Douglass. *il Country Gent* 83:7+ S 14 '18

What fruit-growing did. C. N. Crottsenburg. *Fruit-Grower* 27:490 N 15 '16

What shall the fruit grower do? *Country Gent* 82:1027 Je 16 '17

What to plant for profit. *il Green's Fruit Grower* 37:1 Ap '17

Who got fooled? C. N. Crottsenburg. *Fruit-Grower* 27:359 J1 15 '16

Why farmers' orchards fail. W. R. Butler. *Country Gent* 81:1754 S 30 '16

Winter work in the orchard. A. Frank. *Western Wash Ag Exp B v* 5:155-6 Ja '18

Work for July with orchard and truck crops. L. A. Niven. *Prog F* 33:792 J1 13 '18

Working combination. *il Am Bee J* 56:151-2 My '16

Young man and fruit growing. M. King, jr. *Prac F* 112:107 Mr 1 '16

See also Apple culture; Frost protection; Fruit breeding; Fruit farms; Grafting; Orchard management; Pruning; San Jose scale; Spraying and dusting; also names of fruit

**Apparatus and equipment**

Equipping the orchard. A. J. Farley. *il Field* 11 27:188-90 Mr '17

See also Pruning tools; Spraying and dusting—Apparatus and equipment

**Bibliography**

Cotton's Planter's manual. E. A. Bunyard. *Gard Chron (Lond)* 63:174 Ap 27 '18

Small fruits; list of references prepared by John Crerar library and Library, College of agriculture, University of Illinois in co-operation with S. J. Bole. 4p mime n.d. Univ. of Ill, College of ag., Urbana

**History**

History of cultivated fruits, as told in the lives of great pomologists. B. Wynne. *Gard Chron (Lond)* 63:121-2 Mr 23 '18

**Alabama**

Home orchard. G. C. Starcher and J. C. C. Price. *Ala Ag Ext C* 13:1-18+ '18

**Argentina**

Apple and other fruits in the Argentine republic. R. N. Justo. *Better Fruit* 11:16-17+ My '17

**Australia**

Australian pomology; report of the Pomological committee of Australia for 1918. E. E. Pescott. *J Dept Ag Victoria* 16:434-44 J1 '18

First report of the state experiment orchard, Berri, River Murray. G. Quinn and C. G. Savage. *J Dept Ag S Australia* 22:215-23 O '18 (to be cont)

Orchard notes. W. J. Allen. See monthly numbers of *Agricultural gazette of New South Wales*

Orcharding in the Cherry Tree Hill district. J. G. R. Bryant. *il Ag Gaz of New South Wales* 27:107-11 F '16

Practical irrigation-farming in Australia; with special reference to fruit and fodder crops. A. M. Makinson. *Ag Gaz of New South Wales* 27:43-54 Ja '16

**California**

Acreage of the principal fruits and certain farm crops grown in forty-eight of the fruit counties of California; tabulation. *Cal State Comm Hort B v* 7:216a Ap '18

Benefits of cover crops in the orchards of California; with discussion. W. M. Mertz. *Cal State Comm Hort B v* 7:26-37 Ja '18

Experimental projects of the division of pomology, University of California. W. L. Howard. *Cal State Comm Hort B v* 7:62-4 Ja '18

Fruit orchards and vineyards, including olives and nuts. *Cal Ag Bd Rep* 1917:130-200 '18

Have we reached the limit of profitable orchard and vineyard planting; with discussion. H. C. Dunlap. *Cal State Comm Hort B v* 7:43-52 Ja '18

Saving California's fruit. H. G. Tinsley. *il Country Gent* 83:22 N 2 '18

Small fruit culture in California. A. H. Hendrickson. *il Cal Ag Exp C* 164:1-24 '17

Work of the Yuma experiment farm in 1916; orchard fruits. R. E. Blair. (W. I. A. C. 20) p 32-7 il '18 U S Ag

**Canada**

Control of insect pests in the orchards on the Indian reserves in British Columbia. T. Wilson. *il Ag Gaz of Canada* 3:856-9 O '16

Cultivation of fruit in the prairie provinces. *Ag Gaz of Canada* 5:693-4 J1 '18

**Fruit culture—Canada—Continued**

- Fruit growing in Canada. il Nat Stock & F 40:554 Ag 26 '16  
 Fruit growing in Quebec. W. Lochhead. J Ag (Quebec) 21:100 Ja '18  
 Horticulture at the Dominion experimental station, Morden, Manitoba. W. T. Macoun. il Ag Gaz of Canada 3:502-4 Je '16  
 Progress of fruit growing in Quebec. J Ag (Quebec) 19:145 Ja '16

**China**

- Mysterious ancient fruit groves of China. E. W. Gage. il Green's Am Fruit Grower 38:7 Mr '18

**Colorado**

- Fruit growing in Colorado. E. P. Sandsten. 19p map n.d. Colorado state board of immigration, Capitol bldg., Denver

**Connecticut**

- Report of orchard work on Mount Carmel experiment farm for years 1911 to 1916 inclusive. E. M. Stoddard. Conn State Ag Exp Rep 1916, pt 5:365-77 '17

**Corn belt**

- Commercial orchard in corn belt. il O Judd Farmer 62:3 Je 23 '17  
 Fruit growing in the corn belt. Wallaces' F 41:209 F 11 '16  
 Hood river of the corn belt. il Wallaces' F 41:1087 Ag 18 '16

**Eastern states**

- Practical orcharding—tree fruits in the East. C. S. Wilson. il N Y Ag Dept B 97:222-31 Jl '17

**Illinois**

- Illinois apple growers at Flora. il O Judd Farmer 63:3 Ag 25 '17

**Kansas**

- Fruit growing in Kansas. G. O. Greene. il Kan Ag Ext B 16:1-71 '17

**Maryland**

- Fruit growing in Maryland. J. B. Seth. il Green's Am Fruit Grower 38:10 Ag '18

**Minnesota**

- Fruit growing a successful industry in Minnesota. A. W. Richardson. il Minn Hort 44:103-9 Mr '16  
 Minnesota as the originator of new fruits. R. D. Underwood. Minn Hort 46:403-10 N '18  
 Minnesota orchard. Minn Hort 44:367-71 O '16  
 Minnesota orchard; with discussion. J. F. Bartlett. Minn Hort 46:101-8 Mr '18  
 My experience with a young orchard. R. Viall. Minn Hort 44:42-5 Ja '16  
 My orchard crop of 1915. H. Simmons. il Minn Hort 44:89-94 Mr '16  
 Orchard in Minnesota. R. Wellington. il Minn Hort 44:36-41; 45:337-44 Ja '16, S '17

See also Minnesota state fruit breeding farm

**Missouri**

- Bringing back a big orchard. E. H. Favor. il Fruit-Grower 27:5-6 Ja 1 '16  
 Fruit notes from Missouri. L. R. Johnson. il Rural N Y 75:380 Mr 4 '16  
 Good place to live; Marionville, Missouri. C. N. Crottsenburg. Fruit-Grower 27:368 Jl 15 '16

**New Jersey**

- Varieties of tree fruits popular in New Jersey. M. A. Blake. Rural N Y 76:454 Mr 24 '17

**New York**

- Central New York fruit and alfalfa farm. il Rural N Y 75:71-2 Ja 15 '16  
 Fruit growers at N. Y. experiment station. Rural N Y 77:1091, 1113 S 21-28 '18  
 Fruit industry in New York state. il maps plans N Y Ag Dept B 79:pts 1 & 2:638-981, 991-1432 Ja '16; Same. N Y Ag Dept Rep 1916,pts 2 & 3:638-981, 991-1432 '17

- Fruitman-shepherd; combination succeeds on New York farm. S. Fraser. il Country Gent 81:619-20 Mr 18 '16  
 Growing prize-winning fruit. G. E. Snyder. Rural N Y 75:423 Mr 11 '16  
 Importance and outlook of apple and other orcharding in New York and the East. E. Van Alstyne. il map N Y Ag Dept B 86:2607-19 Ag '16  
 Operating costs of a well-established New York apple orchard. G. H. Miller. il U S Ag B 130:1-16 '14  
 Orchard in connection with mixed farming. E. van Alstyne. il N Y Farms & Markets Dept Ag B 97:232-42 Jl '17  
 Orchard on Long Island. Rural N Y 77:343 Mr 2 '18  
 Situation in New York's fruit belt. Nat Stock & F 42:78 Ap 13 '18

**New Zealand**

- Work for the coming month; the orchard. J. A. Campbell. See monthly numbers of Journal of agriculture of New Zealand

**Northwestern states**

- Future of the fruit industry of the Northwest. W. S. Thornber. Better Fruit 10:38-9 Ja '16

**Ohio**

- Fruit notes from southern Ohio. U. T. Cox. Rural N Y 75:112 Ja 22 '16  
 Orchard rejuvenation in southeastern Ohio. F. H. Ballou. il Ohio Ag Exp B 301:1-40 '16; Excerpts. Ohio Ag Exp B v 1:313-18 O '16  
 Ottawa county fruit situation. L. S. Warner. Ohio F 44:774 Je 15 '18  
 Southern Ohio orchards in 1915. U. T. Cox. Ohio F 137:74 Ja 15 '16

**Rhode Island**

- Mid-western grown trees in New England soil. R. W. Peckham. Fruit-Grower 27:12 Ja 1 '16

**South America**

- South American markets for fresh fruits. W. Fischer. (Special agents ser. no. 131) 163p il '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.

**Southern states**

- Home orchards in the South. W. N. Hutt. il Country Gent 82:1596 O 20 '17  
 Orchard and truck farm work for September. L. A. Niven. Prog F 33:1026 S 21 '18  
 Orchard and truck farm work for November. L. A. Niven. Prog F 33:1188 N 2 '18

**Texas**

- Home orchards in Texas. W. B. Lanham. il map Tex Ag Ext B B-30:1-13 '16  
 Horticultural experiments at the San Antonio field station, southern Texas. S. H. Hastings and R. E. Blair. il U S Ag B 162:1-26 '15

**United States**

- Fruit notes from the Hudson valley. E. W. Mitchell. Rural N Y 75:183 F 5 '16  
 Future fruit growing. U. P. Hedrick. N Y State Fruit Growers' Assn Pro 1916:254-62  
 Growing fruit for home use in the great plains area. H. P. Gould and O. J. Grace. bibliog il Farmers' B 727:1-40 '16  
 Orchard and garden notes for the Gulf Coast country. L. T. Rhodes. Prog F 31:469 Ap 1 '16

**Washington**

- Washington state department of horticulture. M. L. Dean. Better Fruit 12:10 Ja '18

**West Virginia**

- Crew work, costs, and returns in commercial orcharding in West Virginia. J. H. Arnold. il U S Ag B 29:1-24 '13  
 Reducing lost motion in fruit growing. H. P. Gould. W Va Ag Dept B 13:3-15 Ja '16

**Wisconsin**

- Wisconsin meeting. W. B. Bullock. Fruit-Grower 27:58 Ja 15 '16



**Fruit exhibits.** See Fruit—Exhibits

**Fruit farm management.** See Fruit farms; Orchard management

**Fruit farms**

Apples in the land of Evangeline; W. W. Pineo's methods. A. J. Campbell. *il Fruit-Grower* 27:374 Ag 1 '16  
 Barred plymouth rocks saved this poultry and fruit farm. G. W. Watson. *Reliable P* J 23:214-15+ Ag '16  
 Big meeting in big orchard; Illinois fruit men visit A. L. McClay. O Judd Farmer 61:14 Ag 12 '16  
 Building a fruit business; Frank Pyle's Orchard home farm. E. H. Favor. *il Fruit-Grower* 27:293+ My 15 '16  
 Choice fruit for high-class markets. C. S. Phelps. *Rural N Y* 77:1181, 1210, 1230 O 19-N 2 '18  
 Clear grit and gumption; legless man succeeds as a fruit-grower. C. N. Crotsenburg. *il Fruit-Grower* 27:438 O 1 '16  
 Eastern fruit section. W. L. Hubbs. *Wallaces' F* 42:764 My 4 '17  
 Eight apple crops in eight years. C. N. Crotsenburg. *Fruit-Grower* 27:469 N 1 '16  
 Essentials of small fruit growing. F. E. Beatty. *il Green's Fruit Grower* 36:2 Je '16  
 Feeding hay to apples. H. W. Collingwood. *il Country Life* 29:40-1 Ap '16  
 Fruit + stick-to-it-iveness=success. Mrs. C. Hoffman. *il Prac F* 112:25 Ja 15 '16  
 Good business methods pay in Nebraska. F. E. Parsons. *il Fruit-Grower* 28:213 Ap 1 '17  
 Grand old man of Onondaga; Judson N. Knapp. H. Findlay. *Rural N Y* 75:1587 D 30 '16  
 He is an apple farmer now. C. N. Crotsenburg. *il Fruit-Grower* 27:470 N 1 '16  
 Heacock fruit company's farm of 110 acres. S. J. Knight. *il Green's Fruit Grower* 36:5 O '16  
 Here's real conservation; Wm. E. Schilling's reclaimed orchard in Missouri. C. N. Crotsenburg. *il Fruit-Grower* 27:373+ Ag 1 '16  
 In orchard and garden. J. Crowley. *Green's Am Fruit Grower* 38:9 Ap '18  
 Keeping the home fires burning. J. F. Cunningham. *il Ohio F* 142:473 N 16 '18  
 Made good with cherries. E. L. Ragsdale. *il Fruit-Grower* 27:454 O 15 '16  
 Made \$155 an acre. *Fruit-Grower* 28:8 Ja 1 '17  
 Money-making orchard. E. H. Favor. *il Fruit-Grower* 27:470 N 1 '16  
 Niagara fruit man. H. R. Cox. *il Country Gent* 82:363-4 F 24 '17  
 On the road to success. C. W. Dodson. *Fruit-Grower* 28:240 Ap 15 '17  
 \$1,500 a year profit from 10 acres of hill-top. *Green's Fruit Grower* 36:7 S '16  
 Optimistic about Illinois fruit; Perrine brothers' farm. O Judd Farmer 63:3 Jl 14 '17  
 Orchard with a future; Ridgewood farm. *il Country Gent* 81:1268 Je 24 '16  
 Personal experience in fruit growing. *il Green's Fruit Grower* 37:1 Jl '17  
 Profitable nine-year-olds. F. L. Ballard. *Fruit-Grower* 28:264 My 15 '17  
 Profiting by his mistakes; farm of Willis Moore in Maryland. W. H. Dean. *il Country Gent* 81:1962-3 N 11 '16  
 Profits from hillside acres; growing fruit, ducks and chickens at Tuckerton. Pa. L. Johnson. *il Country Gent* 81:1186 Je 10 '16  
 Prosperous Illinois berry farm. *il O Judd Farmer* 62:1 Je 2 '17  
 Rejuvenating an old orchard. E. L. Ragsdale. *il Fruit-Grower* 27:489 N 15 '16  
 Run by an all-star cast; Potomac valley farm. W. H. Dean. *il Country Gent* 81:1547-8 Ag 19 '16  
 Some reflections of a back-to-the-lander. J. Anthony. *il Country Life* 30:36-7 Je '16  
 Speaking of fruit growers; Frank C. Bancroft of Delaware. H. R. Cox. *il Country Gent* 81:1391-2 Jl 22 '16  
 Spencer succeeds with apples. H. R. O'Brien. *il Country Gent* 83:5 N 16 '18  
 Story of a day on a Dutchess county, N.Y., fruit farm. W. S. Teator. *Rural N Y* 76:1171 O 13 '17

Story of Curdmore, Saverton, Mo. P. C. Stark. *il Am Fruit Grower* 38:3 S '18  
 Success after failure. E. R. Root. *il Gleanings* 45:433-6 Je '17  
 Thirty years on two and a half acres. A. A. Eastman. *il Green's Fruit Grower* 37:1 My '17  
 Trunkmaker is orchardist. C. N. Crotsenburg. *il Fruit-Grower* 27:453 O 15 '16  
 Two men and an apple farm. H. R. Cox. *il Country Gent* 82:1794 N 17 '17  
 Well made orchard in central Ohio; Ohio orchard company. Union county. J. F. Cunningham. *Ohio F* 140:281 O 6 '17  
 Well-managed Ohio apple orchard; farm of Thomas Thornburg. J. F. Cunningham. *il Ohio F* 137:677 My 13 '16  
 Why he succeeded. *Fruit-Grower* 28:7 Ja 1 '17  
 Wman without capital, and an orchard. H. W. Collingwood. *il Country Life* 29:40-1 F '16

**Fruit flies**

Breeding fruit-fly parasites in the Hawaiian islands. J. G. Bridwell. *J Econ Entom* 9:472-6 O '16  
 Currant fruit fly; life history, habits, natural enemies and methods of control. H. H. P. Severin. *bibliog il Maine Ag Exp B* 264:177-247 '17; Same. *Maine Ag Exp Rep* 1917:177-247  
 Danger of introducing fruit flies into the United States. E. A. Back. *il U S Ag Year-book* 1917:185-96; Same. *Separate* 731  
 Experimental work with fruit-flies. W. W. Froggatt. *Ag Gaz of New South Wales* 29:579-80 Ag '18  
 Fruit flies occurring in India, Burma, and Ceylon. M. Bezzi. *Int R Sci & Prac Ag* 8,no 1:169-70 Ja '17  
 Fruit flies of economic importance in California. H. H. P. Severin. *il Cal State Comm Hort B* v 7:201-6, 430-2 Ap, Je '18  
 Fruit-fly parasitism in Hawaii during 1916. C. E. Pemberton and H. F. Willard. *J Ag Research* 12:103-8 Ja 14 '18  
 Interrelations of fruit-fly parasites in Hawaii. C. E. Pemberton and H. F. Willard. *il J Ag Research* 12:285-95 F 4 '18  
 Oils tested to trap trypetidae and ortoridae. H. H. P. Severin. *bibliog il Cal State Comm Hort B* v 7:419-23 Je '18  
 Yellow currant and gooseberry fruit-fly. L. A. Whitney. *il Cal State Comm Hort B* v 5:152-7 Ap '16

See also Cherry fruit flies; Dark currant fruit flies; Mediterranean fruit flies; Melon flies; Mexican orange maggots

**Fruit flies, Mediterranean.** See Mediterranean fruit flies

**Fruit growers' agency**

Articles of incorporation, officers, and committees of the Fruit growers' agency, inc. *Better Fruit* 10:10 Je '16  
 By-laws of the Fruit growers' agency, incorporated. *Better Fruit* 11:5-6 Jl; 22+ Ag '16  
 Fruit growers' agency. *Better Fruit* 11:14 My '17  
 Fruit growers' agency, inc. P. H. Weyrauch. *Better Fruit* 11:23 Ja '17  
 Fruit growers' agency incorporated. *Better Fruit* 10:17 Mr '16; Same cond. *Country Gent* 81:1375 Jl 15 '16  
 Fruit-market agency will improve service. *Better Fruit* 11:20 Ag '16  
 Members. *Better Fruit* 12:24 Ag '17  
 Opportunity of the fruit grower. P. H. Weyrauch. *Better Fruit* 11:17 S '16  
 Playing the red apple game. R. Howard. *il Country Gent* 83:10-11+ Ja 12 '18

**Fruit growers' association of Ontario**

48th annual report, 1916. 91p '17 Ontario ag. dept., Toronto

**Fruit growers' associations**

Association of plum and apricot growers in California. *Int R Ag Econ* 67:41-2 Jl '16  
 Associational selling of apples. H. L. Alexander. *W Va Ag Dept B* 13:41-3 Ja '16  
 Co-operation and its benefits to the fruit-grower; with discussion. C. G. Marshall. *il (In Nebraska Horticulture v* 6, no. 12, p 41-53) (F) '17 Neb. state hort. soc., Lincoln

**Fruit growers' associations—Continued**

Co-operation in selling. Green's Fruit Grower 36:11 J1 '16

Co-operation spells success; starting growers' marketing associations. R. C. Gano. *il* Fruit-Grower 27:357 J1 15 '16

Eastern fruit-growers meet. Fruit-Grower 27:200 Mr 15 '16

Formation of two growers' associations in Chile. *Int R Ag Econ* 68:39-41 Ag '16

Getting together in marketing, or reciprocal marketing. H. M. Gilbert. *Better Fruit* 10: 23+, 44 Ja-F '16

Land of strawberries; cooperative organizations. E. W. Gage. *il* Green's Fruit Grower 36:1 Je '16

Marketing our fruit. W. H. Conant. *Maine Ag Dept B v* 18:13-16 Je '18

Need of a state-wide dried apricot growers' association. R. E. Harrington. *Cal State Comm Hort B v* 5:15-19 Ja '16

New marketing association. H. R. Cox. *il* Country Gent 81:1973 N 11 '16

Orchardists' future; the marketing problem. S. A. Beach. *Fruit-Grower* 27:278-9 My 1 '16

Organization of the Oregon fruit industry. H. Macpherson. *Ore Ag Ext B ser* 2, no 49:28-40 '16

Outline of the proposed scheme for an Australian citrus growers' association. F. R. Arndt. *J Dept Ag S Australia* 21:890-3 Je '18

Principles and practices of cooperation applied to citrus production and distribution. G. H. Powell. (*In* *Pan American scientific congress* Pro., 1915, v. 3, p. 665-71) '17

When fruit men get scared. J. H. Collins. *Country Gent* 81:9-10 Ja 1 '16; Same cond. *Better Fruit* 10:12 F '16

*See also* Fruit—Marketing; Horticultural associations; also American cranberry exchange, California almond growers' exchange, California associated olive growers, California associated raisin company, California fruit growers' exchange, California peach growers, California pear growers' association, California state fruit growers' association, California walnut growers' association, Central California berry growers, Colrain fruit growers' cooperative association, Florida citrus exchange, Fruit growers' agency, Georgia fruit exchange, Hudson River fruit exchange, Martinsburg (West Virginia) fruit exchange, National apple growers, New York state fruit growers' association, Northwestern fruit exchange, Oxford Bears fruit growers' association, Ozark fruit growers' association, Prune and apricot growers' information bureau, South Haven fruit exchange, United fruit companies of Nova Scotia

**Accounting**

System of accounting for cooperative fruit associations. G. A. Nahstoll and W. H. Kerr. *U S Ag B* 225:1-25 '15

System of accounting for fruit shipping organizations. G. A. Nahstoll and J. R. Humphrey. *U S Ag B* 590:1-60 '18

**Fruit growers' conference**

Fruit growers' conference, Spokane, 1916. *Better Fruit* 11:31+ F '17

**Fruit growers' convention**

Proceedings of the 50th Fruit growers' convention, Sacramento, California, Nov. 21-23, '17; with papers and resolutions. *Cal State Comm Hort B v* 7:2-109 Ja '18

**Fruit handling**

Handling fruits for distant markets. *Better Fruit* 11:10 Ag '16

Helping fruit growers and shippers; results of investigations by the United States Department of agriculture. *Better Fruit* 12:19 J1 '17

Marketing perishable crops profitably. E. W. Gage. *il* Rural N Y 77:741 Je 1 '18

Methods of handling basket fruits. E. Smith and J. M. Creelman. 13p *il* '17 Canada Ag

Packing house equipment. J. M. Tanner. *Ill State Hort Soc Trans* 1916:189-97 '17

Pathological aspects of the federal fruit and vegetable inspection service. C. L. Shear. *Phyt* 8:155-60 Ap '18

Physical handling of fruit. C. I. Lewis. *il* Ore Ag Ext B ser 2, no 49:1-27 '16; Same abr. *Better Fruit* 11:5-8 O; 5-6 N; 10+ D '16

Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473-A) 59p *il* 50c '18 Am. ry. perishable freight assn., 135 E. 11th Place, Chicago

Sorting, sizing, packing and storing of fruit. E. L. Markell. (*In* *Peninsula hort. soc. Trans.*, 1916, p. 41-7) '16 W. Webb, sec., Dover, Del.

*See also* Apples—Handling; Oranges—Handling; Peaches—Handling

**Fruit industry**

Banking the fruit crop. J. J. Rouse. *Better Fruit* 12:5-7 F '18

California deciduous fruit shipments. *Better Fruit* 12:6 Ja '18

Canned fruits industry in California. *Int R Sci & Prac Ag* 7, no 2:289-91 F '16

Commercial fruit-growing. *Gard Chron* (Lond) 63:90 Mr 2 '18

Co-operative fruit-testing in New Zealand. W. C. Hyde. *il* J Ag New Zealand 14:345-50 My '17

\* Fruit growing in Brazil. *il* Americas (55 Wall st, N.Y.) 5:31-4 O '18

Fruit industry in Ecuador. C. D. Andrade. *il* Pan-Am Magazine (70 5th av, N.Y. 25c) 27: 15-18 My '18

Fruit industry; varieties for export and local markets. J. A. Campbell. *J Ag New Zealand* 12:205-12 Mr '16

Fruit notes from California. J. C. Johnson. *Am Fruit Grower* 38:16 O '18

Future of the fruit business. *Rural N Y* 76: 406 Mr 17 '17

History and status of the small fruit industry. F. J. Bole. *Ill State Hort Soc Trans* 1916: 102-10 '17

Labor problem among fruit growers. H. Suzzallo. *Better Fruit* 12:7 F '18; Same cond. *Ag Digest* 2:937 Ap '18

Publicity—good and bad. A. H. Harris. (*In* 8th annual report, 1916, p. 105-14) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.

Question of fruit marketing after the great war. G. C. Corbaley. *Better Fruit* 12:20-1 Ja '18

Red apples for the allies. W. H. Dean. *il* Country Gent 83:3-4+ Ag 24 '18

South American markets for fresh fruits. W. Fischer. (Special agents ser. no. 131) 163p *il* '17 U. S. Bur. foreign and domestic commerce, Washington, D.C.

War and the fruit grower. B. W. Douglass. *il* Country Gent 83:7+ S 14 '18

*See also* Apple industry

**Laws and regulation**

Act relating to the standardization of fruit packing; with text. G. P. Weldon. *Cal State Comm Hort B v* 5:125-8 Ap '16; Same: text (*in* French). *Int Yearbook Ag Leg* 1916:201-3 '17

Arrêté n. 5201 concernant l'établissement d'un office impérial pour l'approvisionnement en légumes et en fruits en Allemagne. *Int Yearbook Ag Leg* 1916:184-5 '17

Boosting the fruit game by law. R. E. Jones. *il* Green's Am Fruit Grower 38:1+ F '18

Enforcement of the fresh fruit standardization law as it applies to grapes. F. P. Roulard. *Cal State Comm Hort B v* 6:132-3 My '17

Legislation affecting the interests of fruit growers. *N Y State Fruit Growers' Assn Pro* 1916:317-22

Manual of laws pertaining to the Department of farms and markets; apples; fruit-bearing trees. *N Y Farms & Markets Dept Ag B* 108:156-64 Je '18

Net container and the standardization law. C. J. Johnson. *Cal State Comm Hort B v* 6: 98-9 Ap '17

New standard basket and container law. *Green's Fruit Grower* 37:12 S '17



**Fruit industry—Laws and regulation—Cont.**

Practical application of the California fresh fruit standardization law with deciduous fruits. H. E. Butler. Cal State Comm Hort B v 6:134-7 My '17

Regulation of the fruit trade. Int R Ag Econ 79:61-7 JI '17

Regulation of the fruit trade in the United States. Ag Gaz of Canada 4:1125-8 D '17

Regulations for the commerce of fruit in cases in Queensland. Int R Sci & Prac Ag 7,no 3:436 Mr '16

Standard basket and container law. Am Flor 47:424 S 9 '18

Standardization of fruit packing. Cal State Comm Hort B v 5:414-17 N '16

Victoria—Act providing that majority of orchardists within given area can petition for creation of fruit trust, and trust has power to levy compulsory rate and then obtain government advance for building cool stores. Measure is designed to enable fruit-growers collectively to build cool stores and establish canning, drying and packing and preserving establishments. (Passed Assembly '17)

Weaknesses in our fresh fruit standardization law. F. B. McKevitt. Cal State Comm Hort B v 6:130-2 My '17

See also Fruit—Diseases and pests—Laws

**Statistics**

Acreage of fruits, bearing and nonbearing, by counties, in 1915. G. P. Weldon. Cal State Comm Hort B v 5:103-5 Mr '16

Acreage of fruits, bearing and nonbearing, by counties, in 1916. G. P. Weldon. Cal State Comm Hort B v 6:115-17 Ap '17

Acreage of the principal fruits and certain farm crops grown in forty-eight of the fruit counties of California; tabulation. Cal State Comm Hort B v 7:216a Ap '18

Are the United States government's estimates of the apple crop reliable and helpful to the grower? Va Ag Dept B 109:107-8 '16

California—yields and prices of citrus and other fruits, olives, olive oil. Doc Leaflets 1 no 4:52-6 O '17

Car-lot shipments of fruits and vegetables in the United States in 1916. P. Froehlich. U S Ag B 667:1-196 '18

Fruit orchards and vineyards, including olives and nuts. Cal Ag Bd Rep 1917:130-200 '18

Monthly crop report, Dept. of agriculture. Better Fruit 12:7-8 S '17

Official apple crop report for August, 1918. L. M. Estabrook. Am Fruit Grower 38:4 S '18

Statistics of fruit. U S Ag Yearbook 1917:681-4

Statistics of fruits in principal countries. H. D. Ruddiman. U S Ag B 483:1-40 '17

Washington state department of horticulture. M. L. Dean. Better Fruit 12:10 Ja '18

**Fruit inspection**

Benefits of the inspection of our fruit-growers; with discussion. C. W. Baxter. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 76-82) '16

Enforcement of the fresh fruit standardization law as it applies to grapes. F. P. Roulard. Cal State Comm Hort B v 6:132-3 My '17

League-state inspection system. O. T. Clawson. Better Fruit 10:5 Ap '16

Practical application of the California fresh fruit standardization law with deciduous fruits. H. E. Butler. Cal State Comm Hort B v 6:134-7 My '17

Weaknesses in our fresh fruit standardization law. F. B. McKevitt. Cal State Comm Hort B v 6:130-2 My '17

See also Apple industry—Laws and regulation; Fruit industry—Laws and regulation

**Fruit juices**

Balling degree of fruit juices. W. V. Cruess. Cal State Comm Hort B v 5:286-9 Ag '16

Cold storage for fruit juices. Green's Fruit Grower 36:16 Ja '16

Concentrated fruit juices. M. L. Williams. Country Gent 81:1577 Ag 26 '16

Juices and sirups. Weekly N L 5:6 Ag 15 '17

Quenching a nation's thirst. J. R. McMahon. il Country Gent 82:1625-6 O 27 '17

Studies on fruit juices. H. C. Gore. U S Ag B 241:1-19 '15

See also Cider; Grape juice; Perry

**Fruit ladders.** See Ladders

**Fruit paste**

Fruit pastes. Weekly N L 5:8 Ag 8 '17

**Fruit peeling**

Chemical process of peeling peaches. C. C. Newman and B. Freeman. il plans S C Ag Exp B 196 6p '18

**Fruit peeling machines**

Detailed description of a new machine for peeling citrus fruits. S. C. Hood. il U S Ag B 399:13-19 '16

**Fruit products**

By-products and principal products of fruit business. L. D. Batchelor. Better Fruit 11:18+ JI '16

Developing the by-products industry. P. H. Weyrauch. Better Fruit 10:9 My '16

Manufacture of fruit products in Oregon. R. Paulus. (In 8th annual report, 1916, p. 114-18) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Same. Better Fruit 11:6-7 Je '17

See also Apple flakes; Cider; Fruit butter; Fruit juices; Fruit paste; Fruit sirups; Jam; Jelly; Marmalade; Vinegar; Wines and wine making

**Analysis**

Report on fruit products. P. B. Dunbar and H. A. Lepper. Assn Offic Ag Chem J 2:175-82 F '17

**Fruit sirups**

Sweets from fruit sirups. Nat Stock & F 42:583 S 21 '18

**Fruit spurs**

Making annual bearers of biennials. R. H. Roberts. Green's Am Fruit Grower 38:7 Ap '18

See also Apple fruit spurs

**Fruit surveys**

Fruit survey of Mesa county. E. P. Sandsten and others. il map Colo Ag Exp B 223:1-52 '17

**Fruit tree leaf syneta**

Fruit-tree leaf syneta, spraying data and biological notes. G. F. Mozzette. il J Econ Entom 9:458-61 O '16

**Fruit trees**

Barren trees made to produce by girdling. T. J. Talbert. Better Fruit 11:16 D '16

Bracing fruit trees. E. H. Favor. Green's Am Fruit Grower 38:9 My '18

Buying fruit trees. E. Rogers. Ohio F 141:266 F 23 '18

Cheap orchard. B. W. Douglass. il Country Gent 81:1437 JI 29 '16

Exclusion legislation and fruit tree production. V. B. Stewart. Phyt 8:360-4 JI '18

Experience with misfit trees. A. H. de Graff. Rural N Y 76:1414 D 15 '17

Fruit tree inoculation. W. F. Van Buskirk. Rural N Y 77:322 Mr 2 '18

Fruit tree root systems; spread and depth. A. B. Ballantyne. il Utah Ag Exp B 143:1-15 '16

Fruit trees by the roadside. E. White. il Green's Am Fruit Grower 37:5 D '17

Fruiting of trees in consecutive seasons. S. Pickering. J Ag Sci 8:131-5 S '16; Excerpt. Int R Sci & Prac Ag 7,no 12:1790-2 D '16

Growing pedigreed trees; records will show those worthy of propagation. A. D. Shamel. il Country Gent 83:24 F 23 '18

Influence of low temperature on fruit growing in New York state; with discussion. W. H. Chandler. N Y State Fruit Growers' Assn Pro 1918:186-94

Maintaining proper vigor in fruit trees. C. I. Lewis. Green's Am Fruit Grower 38:5-6 Mr '18

Making a natural brace. F. P. Wicher. il Green's Am Fruit Grower 38:14 My '18

**Fruit trees—Continued**

- Making over old or poor trees. *il Gard M* 23: 83-5 Mr '16
- Most useful fruit trees. A. Tegnier. *Green's Fruit Grower* 37:19 Ja '17
- Planting fruit trees for home use. S. Fraser. *il Gard M* 25:177-8 Ap '17
- Propping fruit trees. O. H. Barnhill. *Country Gent* 81:1542 Ag 19 '16
- Relation of the variability of yields of fruit trees to the accuracy of field trials. L. D. Batchelor and H. S. Reed. *bibliog J Ag Research* 12:245-83 F 4 '18
- Resurrection of devastated France; fruit tree saved by surgery. *Current History Magazine*. N Y Times (Times Square, N.Y. 25c) 6,pt2:347-50 Ag '17
- Support for an overloaded fruit tree. N. B. Pendergast. *il Minn Hort* 44:349 S '16
- Thinning an orchard. *Nat Stock & F* 41:1037 Ja 19 '18
- Training the young trees. A. C. Weed. *il Rural N Y* 77:326, 373 Mr 2-9 '18
- Tree growth in blasted ground. J. R. Mattern. *Better Fruit* 10:17 Je '16
- Trees growing in exposed places. *Green's Fruit Grower* 36:5 Ja '16
- Wall fruit trees; design, planting, training. *Gard Chron (Lond)* 63:43 F 2 '18
- Winter protection for your fruit trees. M. D. Underwood. *Am Fruit Grower* 38:21 D '18
- See also* Apple trees; Trees, Care of

**Diseases and pests**

*See* Fruit—Diseases and pests

**Grading**

- Grading of fruit-trees. T. W. Kirk. *il J Ag New Zealand* 16:267-70 My '18

**Grafting**

*See* Grafting

**Pollination**

- Bees and fruit production. *Gard Chron (Lond)* 63:168 Ap 20 '18
- Bees as pollinators in the orchard. E. A. Earp. *J Ag New Zealand* 14:395-6 My '17
- Bees help fruitgrowers. *Better Fruit* 11:22 My '17
- Bees in the orchard—more fruit. *il Green's Fruit Grower* 37:5 Ja '17
- Bees that help make fruit. F. C. Pellett. *il Country Gent* 83:52 Mr 9 '18
- Common honey bee as an agent in prune pollination. A. H. Hendrickson. *il Cal Ag Exp B* 274:127-32 '16
- Common honey bee as an agent in prune pollination. A. H. Hendrickson. *il Cal Ag Exp B* 291:215-36 '18
- Effect of cross-pollination on size, color, shape, and quality of the apple. W. H. Wicks. *bibliog il Ark Ag Exp Tech B* 143 n.p. '18; Same cond. *Better Fruit* 13:9-11 N '18
- Factors influencing the abscission of flowers and partially developed fruits of the apple (*pyrus malus* L.). A. J. Heinicke. *bibliog il Cornell Ag Exp B* 393:45-114 '17
- From the California standpoint. M. C. Richter. *Gleanings* 44:271 Ap 1 '16
- Germination of the pollen grains of apple and other fruit trees. J. Adams. *bibliog Bot Gaz* 61:131-47 F '16
- How the bees helped to produce a record crop of apples. G. H. West. *Gleanings* 44:317 Ap 15 '16
- Influence of bees on fruit crops. F. A. Jacobsen. *J Ag New Zealand* 16:205-9 Ap '18
- Just how important is the work of the bee? J. E. Crane. *Gleanings* 44:272 Ap 1 '16
- Number of colonies needed to pollinate properly a citrus orchard. *Gleanings* 44:92 F 1 '16
- Perfect pollination of citrus groves. E. G. Baldwin. *Gleanings* 44:269-71 Ap 1 '16
- Pollenizing fruit blossoms. H. H. Root. *il Gleanings* 44:157-8 F 15 '16
- Pollinating fruit trees. L. G. Corrie. *il J Heredity* 7:365-9 Ag '16; Excerpts. *Int R Sci & Prac Ag* 8,no 6:879-81 Je '17
- Pollinating the pecan. E. E. Risien. *il J Heredity* 8:384 Ag '17

- Pollination by bees. A. Bowman. *Better Fruit* 12:19 S '17
- Pollination of cherries. E. A. Bunyard. *Gard Chron (Lond)* 62:23 Jl 21 '17
- Pollination of fruit trees: observations and experiments from 1904 to 1912. *Int R Sci & Prac Ag* 7,no 1:83-6 Ja '16
- Pollination of the mango. W. Popenoe. *il U S Ag B* 54:21-20 '17
- Pollination of the pomaceous fruits; gross vascular anatomy of the apple. E. J. Kraus and G. S. Raiston. *bibliog il Ore Ag Exp B* 138:1-12 '16
- Scientifically pruning and pollenizing the Bing cherry. E. Bowles. *Better Fruit* 13:7 Jl '18
- Self-sterility of sweet cherries; the value of bees as pollinators. *Fruit-Grower* 27:233 Ap 1 '16; Same. *Gleanings* 44:384 My 15 '16
- Value of bees in the orchard. *Rural N Y* 77: 831 Je 29 '18
- Value of honey bees in the orchard. J. W. Love. *il Prac F* 112:457 D 15 '16

**Pruning**

*See* Pruning

**Roots**

- How to root-prune fruit trees. *Gard Chron* Am 21:403 N '17

**Fruit trees, Care of.** *See* Trees, Care of

**Fruit trees, Dwarf**

- Does the dwarf apple pay? G. T. Powell. *il Country Gent* 83:10 F 16 '18
- Dwarf apple trees. O. M. Huestis. *il Minn Hort* 44:137-41 Ap '16
- Dwarf apples. U. P. Hedrick. *il N Y Ag Dept B* 79,pt 1:871-88 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:871-88 '17
- Dwarf apples (B. 406). U. P. Hedrick. *il N Y State Ag Exp Rep* 1915:518-45 '16
- Dwarf pears. F. T. Swett. *Cal State Comm Hort B v* 6:421-2 N '17
- Further observations on the effects of pruning, root pruning, ringing and stripping on the formation of fruit buds on dwarf apple trees. A. W. Drinkard, jr. *il Va Ag Exp Tech B* 17:137-46 '17; Same. *Va Ag Exp Rep* 1915-1916:137-46 '17
- Garden of dwarfs. G. E. Walsh. *House Beautiful* (3 Park st, Boston 25c) 42:397 N '17
- Out-of-the-way orchards. F. C. Sears. *il Country Gent* 83:2+ O 26 '18
- Summer-pruning dwarf-trained apple trees. *il Gard Chron (Lond)* 59:332 Je 24 '16
- Where the dwarf fruit tree really fits. S. Fraser. *il Gard M* 25:99-101 Mr '17

**Fuchsias**

- Fuchsia splendens*. *Gard Chron (Lond)* 61:245 Je 16 '17
- Fuchsias for the outdoor garden. *Gard Chron* Am 22:178 Je '18

**Fucus**

- Contribution to our knowledge of *splachnidium*. M. L. Roe. *bibliog il Bot Gaz* 62:400-8 N '16
- Development of the conceptacle in *fucus*. M. L. Roe. *bibliog il Bot Gaz* 61:231-46 Mr '16

**Fuel**

- Coal conference at Washington. *Am Flor* 50: 969 Je 1 '18
- Controlling foods and fuels. O Judd Farmer. *il N Y Ag* 11 '17
- Use of fuel; suggestions for greater economy in the creamery boiler room. *N Y Prod R* 45:266-7 D 26 '17
- Use of rice hulls as a fuel in Italy. *Scientific Am* (233 Broadway, N.Y. 10c) 117:497 D 29 '17
- Use wood instead of coal. Kimball's D F 16:16 Ja 1 '18
- See also* Automobile engines—Fuel; Bagasse as fuel; Coal; Heating; Kerosene; Peat; Wood as fuel

**Fuel control**

- Coal conference at Washington. *Am Flor* 49: 1209-10 D 22 '17
- Coal for greenhouse use cut one-half. *Market Growers J* 22:360 My 15 '18



**Fuel control—Continued**

- Coal libel nailed again. W. R. Pierson. Am Flor 49:1257 D 29 '17  
 Conservation and regulation in the United States during the world war; an outline for a course of lectures to be given in higher educational institutions. pt 2 C: R. Van Hise. 65-233p '17 U.S. Food administration, Washington, D. C.  
 Fifty per cent fuel order. Am Flor 50:813-14 My 11 '18  
 Food and fuel control. C. F. Stoddard. Monthly Review (U.S. Bureau of labor statistics, Washington, D.C.) 5:914-25 N '17  
 Fuel consumption restricted one-half. Am Flor 50:765 My 4 '18  
 Fuel regulation and commercial grower. A. Rasmussen. Am Flor 50:814 My 11 '18  
 Wood to the front as wartime fuel. Am For 23:741-2 D '17

**Fuel economy**

- Are you a patriot in conserving fuel? V. H. Manning. Country Life 33:48 F '18  
 Economical firing of power plants burning soft coal. N Y Prod R 46:548+ Ag 7 '18  
 Fuel conservation. R. E. Moore. Am Flor 51:48 Jl 27 '18  
 Fuel economy. Am Flor 50:104 F 2 '18  
 Fuel economy in domestic heating and cooking. B. L. Steele. Wash Ag Ext Ser 1,no 32:1-14 '17  
 Fuel economy in the creamery—suggestions from club members. N Y Prod R 47:106+ N 27 '18  
 Greenhouse management. L. C. Corbett. Market Growers J 23:71+, 93 Ag 15-S 1 '18; Same. Am Flor 51:130, 254, 352 Ag 10, 24, S 7 '18  
 Home heating; how to get the most out of a ton of coal. 4p '18 U.S. Fuel administration, Washington, D.C.  
 Household physics and practice cottage work. B. L. Steele. J Home Econ 10:162-7 Ap '18  
 Producing food from wood and oil. W. C. McCollom. il Gard M 28:47-8 S '18  
 Relative cost of natural gas, soft coal, coal oil, gasoline and electricity for cooking, based on tests made in the laboratory of the Department of home economics. 6p '17 Ohio State Univ., Columbus  
     Limited edition  
 Save fuel in dairy plants. N Y Prod R 47:18 N 6 '18; Same. Creamery 7:36 D '18  
 Save fuel when you cook. Power F 27:44 D '18  
 Solving the fuel problem. Gard M 26:196 Ja '18  
 What coal sacrifice can we make? Country Life 35:66 N '18  
 Your greenhouse with the 50% coal allowance. Gard M 28:111 N '18

**Fuel oil.** See Petroleum as fuel

**Full steam ahead;** story. E. Baird. il Country Gent 83:16-17 F 9 '18

**Fumigating machines.** See Fumigators

**Fumigation**

- Carbon bisulphid and its use for grain fumigation. W. H. Goodwin. il Ohio Ag Exp B v 1:86-90 Mr '16  
 Control of insects in ships by steam. R. C. Treherne. Ag Gaz of Canada 5:668-9 Jl '18  
 Cotton fumigation. il Travelers Standard (Hartford, Conn.) 5:193-202 O '17  
 Fighting insect pests in August; preventing corn weevil damage. A. F. Conradi. Prog F 32:861 Ag 11 '17  
 Fumigating with tobacco stems. V. S. Griffen. Market Growers J 18:131 F 15 '16  
 Fumigation of greenhouses. G. E. Stone. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:235 O 13 '17  
 Fumigation treatment to save corn and peas. Ala Ag Exp Press B 94 2p n.d.  
 Heating seed rooms to destroy insects. E. G. Montgomery. Am Soc Agron J 9:105-8 Mr '17  
 Kill corn weevils. A. P. Spencer. Fla Ag Ext B 10 41p '17  
 New method of subterranean fumigation: control of fungous-growing ant in Cuba. J. S. Houser. J Econ Entom 9:285-7 Ap '16

Toxicity of various benzene derivatives to insects. W: Moore. bibliog J Ag Research 9: 371-81 Je 11 '17

See also Disinfection and disinfectants; Hydrocyanic acid gas; Nitrobenzene

**Fumigators**

- Home-made potted plant fumigator. il Gard M 26:184 Ja '18  
 Note on a machine to kill gelechia larvæ by hot air, and the effects of heat on gelechia larvæ and cotton seed. L. Gough. Egypt Ag Tech & Sci B 6:1-15 '16 (10c)  
 Simon's hot-air machine for the treatment of cotton seed against pink boll worm. G. Storey. Egypt Ag Tech & Sci B 11:1-7 '16 (5c)

**Fungi**

- Absorption of gold from colloidal solutions by fungi. M. Williams. Ann Bot 32:531-4 O '18  
 Bibliography and new species of Philippine fungi. P. W. Graff. Mycol 8:253-88 S '16  
 Birds as carriers of the chestnut-blight fungus. F. D. Heald and R. A. Studhalter. bibliog il J Ag Research 2:405-22 S '14  
 Black zones formed by wood-destroying fungi. A. S. Rhoads (Syracuse Univ. Pubs. 17,no.28: 61 '17). Exp Sta Record 38,no 6:555 '18  
 Canvas-attacking fungus. J. Ramsbottom. Ag J of India 12:671-2 O '17  
 Citrus diseases of Porto Rico; citrus fungi. J: A. Stevenson. J Dept Ag Porto Rico 2: 116-18 Ap '18  
 Control of plant diseases due to fungi in Great Britain. A. S. Horne. bibliog il Royal Hort Soc J 42,pt 1:13-26 O '16  
 Convenient, little-known method of making micro-mounts of fungi. F. L. Stevens. Phyt 6:367-8 Ag '16  
 Development of the ascocarp of rhizina undulata fr. H. M. Fitzpatrick. bibliog il Bot Gaz 63:282-96 Ap '17  
 Diseases of pecans. F: V. Rand. il J Ag Research 1:303-38 Ja '14  
 Distribution of fungi in Porto Rico. B. Fink. Mycol 10:58-61 Mr '18  
 Dying of young fruit-trees. R. Waters. J Ag New Zealand 14:190-6 Mr '17  
 Economic mycology. M. C. Potter. bibliog Royal Hort Soc J 42,pts 2-3:317-23 S '17  
 Fungi and disease in plants, by E. J. Butler. Review by G. A. Gammie. Ag J of India 13: 666-70 O '18  
 Fungi and lichens from the island of Guam. P. W. Graff. bibliog Mycol 9:4-22 Ja '17  
 Fungi collected at Arkville, New York. W: A. Murrill. Mycol 8:293-9 N '16  
 Fungi of New Mexico. P. C. Standley. Mycol 8:142-77 My '16  
 Fungous disease of hemp. V. K. Charles and A. E. Jenkins. il J Ag Research 3:81-4 O '14  
 Fungus diseases of trees. R. B. Maxwell. il Am For 22:161-3 Mr '16  
 Fungus fairy rings in eastern Colorado and their effect on vegetation. H. L. Shantz and R. L. Piemeisel. bibliog il J Ag Research 11:191-246 O 29 '17  
 Growth of parasitic fungi in concentrated solutions. L. A. Hawkins. bibliog J Ag Research 7:255-60 O 30 '16  
 Illustrations of fungi. W: A. Murrill. il Mycol 8:12-14, 191-4, 231-4; 9:185-90, 257-60; 10: 107-10, 177-81 My-S '16, Jl-S '17, My-Jl '18  
 Index to illustrations of fungi articles I-XXII of Mycologia; list. W: A. Murrill. Mycol 8: 47-51 Ja '16  
 Influence of parasitic fungi on the clover crop. A. I. Lobik. Int R Sci & Prac Ag 8,no 2:307-8 F '17  
 Investigations of the rotting of slash in Arkansas. W. H. Long. U S Ag B 496:1-14 '17  
 Method for studying the humidity relations of fungi in culture. N. E. Stevens. bibliog Phyt 6:428-32 D '16  
 Montana forest tree fungi—polyporaceae. J. R. Weir. il Mycol 9:129-37 My '17  
 New Japanese fungi. T. Tanaka. Mycol 9: 167-72, 249-53, 365-8; 10:86-92, 285-8 My-Jl, N '17, Mr '18  
 New leaf and twig disease of picea engelmanni. J. R. Weir. il J Ag Research 4:251-4 Je '15

**Fungi—Continued**

- New or little known hosts for wood-destroying fungi. A. S. Rhoads. *Phyt* 7:46-8 F '17
- New or noteworthy North American fungi. J. Dearness. *Mycol* 9:345-64 N '17
- New or noteworthy species of fungi; descriptive list. J. Dearness. *Mycol* 8:98-107 Mr '16
- North Dakota fungi. J. F. Brenckle. *Mycol* 10:199-221 J1 '18
- North Dakota fungi; list. J. F. Brenckle. *Mycol* 9:275-93 S '17
- Notes on a few species of Asheville fungi. H. C. Beardslee. *il Mycol* 9:30-3 Ja '17
- Notes on bulbiferous fungi with a key to described species. J. W. Hotson. *il Bot Gaz* 64:265-84 O '17
- Notes on new species of fungi from various localities. C. E. Fairman. *Mycol* 10:164-7 My '18
- Notes on the altitudinal range of forest fungi. J. R. Weir. *Mycol* 10:4-14 Ja '18
- Notes on wood-destroying fungi which grow on both coniferous and deciduous trees. J. R. Weir. *Phyt* 7:379-80 O '17
- Parasitic fungi of New Jersey. C. A. Schwarze. *il N J Ag Exp B* 313:1-226 '17
- Pathological histology of strawberries affected by species of botrytis and rhizopus. N. E. Stevens. *il J Ag Research* 6:361-6 Je 5 '16
- Perennial mycelium in species of peronosporaceae related to phytophthora infestans. I. E. Melhus. *bibliog il J Ag Research* 5:59-70 O 11 '15
- Photographs and descriptions of cup-fungi. F. J. Seaver. *il Mycol* 8:195-8, 235-8; 9:1-3, 53-4; 10:1-3 J1-S '16, Ja-Mr '17, Ja '18
- Pleurotus, omphalia, mycena, and collybia published in North American flora; names proposed. W. A. Murrill. *Mycol* 8:218-21 J1 '16
- Probable non-validity of the genera botryodiplodia, diplodiella, chaetodiplodia, and lasiodiplodia as cause of Java black rot. J. J. Taubenhaus. *bibliog il Am J Bot* 2:324-31 J1 '15
- Pure cultures of wood-rotting fungi on artificial media. W. H. Long and R. M. Harsch. *bibliog J Ag Research* 12:33-82 Ja 14 '15
- Review of mycology. P. Vuillemin. *Sci Am Sup* (233 Broadway, N. Y. 10c) 86:206-8, 222-4 S 28-O 5 '18
- Some fungi collected in Virginia. W. A. Murrill. *Mycol* 9:34-6 Ja '17
- Some Kentucky fungi. L. O. Overholts and M. F. Overholts. *Mycol* 8:249-52 S '16
- Some new or little known hosts for wood-destroying fungi. A. S. Rhoads. *Phyt* 7:46-8; 8:164-7 F '17, Ap '18
- Strange botanical garden; where the molds that grow in old books are studied. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:379 Ap 27 '18
- Studies in Porto Rican parasitic fungi. E. Young. *Mycol* 8:42-6 Ja '16
- Studies in the physiology of parasitism. W. Brown. *J Bd Ag* 23:474-8 Ag '16
- Studies in the physiology of parasitism; on the relation between the infection drop and the underlying host tissue. W. Brown. *Ann Bot* 30:399-406 J1 '16
- Studies of the Schweinitz collections of fungi; sketch of his mycological work. C. L. Shear and N. E. Stevens. *bibliog il Mycol* 9:191-204, 333-44 J1, N '17
- Study of some imperfect fungi isolated from wheat, oat, and barley plants. E. C. Johnson. *bibliog il J Ag Research* 1:475-90 Mr '14
- Studying fungi as a pastime; with discussion. W. A. Murrill. (*In Pro.*, Nat. educ. assn., 1916, p. 726-9) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Sugar-cane fungi and diseases of Porto Rico. J. R. Johnston and J. A. Stevenson. *bibliog il J Dept Ag Porto Rico* 1:177-251, 19-31pl O '17
- Synthetic culture media for wood-destroying fungi. E. J. Pieper and others. *Phyt* 7:214-20 Je '17
- Systematic relationship of clithris. L. R. Teahon. *il Bot Gaz* 65:552-5 Je '18
- Taxonomy of the agaricaceae. W. A. Murrill. *Am J Bot* 4:315-26 Je '17
- Tennessee and Kentucky fungi. C. H. Kauffman. *Mycol* 9:159-66 My '17
- Texas parasitic fungi. B. C. Tharp. *Mycol* 9:105-24 Mr '17
- Toxicity to fungi of various oils and salts, particularly those used in wood preservation. C. J. Humphrey and R. M. Fleming. *bibliog il U S Ag B* 227:1-38 '15
- Treatment of fungoid diseases on estates. R. D. Anstead. *Ag J of India* 13:95-104 Ja '18
- Two-banded fungus beetle. F. H. Chittenden. *bibliog il J Econ Entom* 10:282-7 Ap '17
- Two new wood-destroying fungi. J. R. Weir. *il J Ag Research* 2:163-6 My '14
- Two timber-destroying fungi. J. B. Cleland and E. Cheel. *il Ag Gaz of New South Wales* 27:201-2 Mr '16
- Undescribed timber decay of pitch pine. L. O. Overholts. *il Mycol* 9:261-70 S '17
- Unidentified fungus injurious to the conifer cedrus deodara in India. H. M. Glover. *Int R Sci & Prac Ag* 9,no 4:519 Ap '18
- Witch's broom on Japanese cherries. C. W. H. Douglass. *il Am For* 23:346-8 Je '17
- See also Achlya; Alfalfa crown wart; Alternaria; Apple canker; Apple black rootrot; Apple rot; Apple rust; Apple scab; Armillaria; Ascobolus; Ascochyta; Ascodesmis; Ascomycetes; Aspergillus; Bacteriology; Basidiomycetes; Boletaceae; Botany; Botrytis; Brown rot; Catharinaea; Cercospora; Chestnut blight; Choanephora; Citrus melanose; Citrus scab; Clavaria; Coccinomyces; Coffee leaf-blight; Coleosporium; Coniophora; Coprinus; Cortinari; Cotton anthracnose; Cronartium; Crown gall; Cylindrosporium; Cystospora; Daldinia; Diaporthe; Discina; Dry rot; Endothia; Entomophthora; Eoconartium; Equisetum; Fritillaria; Fruit—Diseases and pests; Fungi, Fossil; Fungicides; Fusarium; Gasteromycetes; Gloeosporium; Glomerella; Grape anthracnose; Grape mildew; Heart rot; Inocybes; Keithia thujina; Lactaria; Leaf blotch; Leaf spot; Lemon cottony rot; Lemon sour rot; Macrophoma; Macrosporium; Meliola; Microstroma; Mildew; Molds (botany); Mushrooms; Mycogone; Mycorrhizae; Myxomycetes; Neopeckia; Onygena; Peanut leafspot; Peridermium; Peronospora; Peziza; Philocopa; Pholiota; Phoma; Phomopsis; Phyllachora; Phytophthora; Pilacre; Pilobolus; Plants—Diseases and pests; Plenodomus; Polytrichum; Poplar-canker, European; Potato rot; Potato silver-scurf; Puff balls; Pyrenopeziza; Pyrenoma; Ramularia; Raspberry anthracnose; Ravenelia; Red aschersonia; Rheosporangium; Rhizina; Rhizoctonia; Rhizopus; Roesleria; Root rot; Rose canker; Russula; Rusts; Saccharomycetes; Saprolegniaceae; Sclerotinia; Sclerotium; Septoria; Soil fungi; Sorosporella; Sparassia; Sphaeronema; Sporotrichum; Stemphylium; Sterigmatocystis; Strawberry rot; Sweet potato foot rot; Sweet potato scurf; Thielavia; Tomato buckeye rot; Truffles; Twig blight; Vegetables—Diseases and pests; Verticillium; Wallrothiella; Watermelon stem-end rot; Wheat scab

**Anatomy**

- Comparative histology of certain Californian boletaceae. H. S. Yates. *bibliog Cal Univ Pub Botany* v 6, no 10 221-74p, 21-25pl '16 (50c)

**Bibliography**

- Index to American mycological literature. See bimonthly numbers of *Mycologia*

- Physiology of fungi. D. H. Rose. *Bot Gaz* 65: 112-15 Ja '18

**Dissemination of spores**

- Automatic spore trap. F. D. Fromme. *il Phyt* 8:542-4 O '18

- Dissemination of septoria lycopersici Speg. by insects and pickers. W. H. Martin. *bibliog Phyt* 8:365-72 J1 '18



**Fungi, Effect of gases on**

Influence of illuminating gas and its constituents on certain bacteria and fungi. C. A. Ludwig. bibliog *Am J Bot* 5:1-31 Ja '18

**Fungi, Effect of light on**

Effect of Roentgen and ultraviolet rays upon fungi. H. L. Trumbull and J. W. Hotson. *il Phyt* 7:426-31 D '17

**Fungi, Effect of temperature on**

Effect of natural low temperature on certain fungi and bacteria. H. E. Bartram. *J Ag Research* 5:651-5 Ja 3 '16

Temperature relations of apple-rot fungi. C. Brooks and J. S. Cooley. *il J Ag Research* 8:139-64 Ja 22 '17

Temperatures of the cranberry regions of the United States in relation to the growth of certain fungi. N. E. Stevens. bibliog *J Ag Research* 11:521-9 D 3 '17

**Fungi, Effect of tobacco smoke on**

Effect of tobacco smoke and of methyl iodide vapor on the growth of certain microorganisms. C. A. Ludwig. bibliog *Am J Bot* 5:171-7 Ap '18

**Fungi, Entomogenous. See Entomophthora**

**Fungi, Fossil**

Remarkable fossil fungi. E. W. Berry. *il Mycol* 8:73-9 Mr '16

**Fungicides**

Apple-scab control in Oregon. H. P. Barss. *Better Fruit* 10:34+ F '16

Combination spraying for insect pests and fungus. P. R. Jones. *Better Fruit* 10:7-9 Mr '16

Compatibility table—insecticides, fungicides. G. P. Gray. *Better Fruit* 12:10 Ja '18

Copper fungicides for vine diseases. F. de Castella. *J Dept Ag Victoria* 16:592-9 O '18

Cuprammonium washes; their preparation, biological properties, and application. O. Butler. bibliog *il Phyt* 7:235-68, pl 3-10 Ag '17

Fruit and vegetable diseases and their control. E. C. Stakman and A. G. Tolaas. *il Minn Ag Exp B* 153:1-67 '16

Fungicidal properties of certain spray-fluids. J. V. Eyre and E. S. Salmon. *J Ag Sci* 7: 473-507 Ap '16

Fungicides. *Prac F* 112:148 Ap 1 '16

Fungicides and insecticides. H. M. Nicholls. (B. 59) 19p '16 Tasmania ag. and stock dept., Tasmania, Australia

Fungicides; how to make and use them. *Prog F* 31:215 F 12 '16

Fungous diseases and insects in the garden. W. F. Massey. *Prog F* 31:755 Je 10 '16

Fungus sprays—based on 50 different observations. S. G. Campbell. *il Better Fruit* 11:5-6 Ja '17

How to fight plant diseases. H. R. Fulton. *Prog F* 32:224 F 17 '17

Insecticides and fungicides. L. Caesar. *il (In Report, Ontario vegetable growers' assn., 1917, p. 29-32) '18 Ontario ag. dept., Toronto*

Insecticides, fungicides and directions for their use. H. T. Fernald. *Mass Ag Bd B* 2 (5th ed):155-65 '16

More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. *Ontario Ag Dept B* 257:42-3 '17

New fungicide for use against American gooseberry-mildew. J. V. Eyre and E. S. Salmon. *J Bd Ag* 22:1118-25 F '16

Paris green substitutes. G. W. Herrick. *O Judd Farmer* 60:11 My 20 '16

Phenolic insecticides and fungicides; with report of examination and analyses of proprietary preparations. G. P. Gray. *il Cal Ag Exp B* 269:329-81 '16

\* Possible new fungicide for wheat and barley smut. W. W. Mackie. *Science (Science Press, Garrison, N.Y. 15c) n s* 48:515-16 N 22 '18

Problems connected with the treatment of fungous diseases by spraying. E. S. Salmon and J. V. Eyre. *Gard Chron (Lond)* 60:229 N 11 '16

Some spraying experiments. *Fruit-Grower* 27: 204 Mr 15 '16

Stone-fruit spray made from hydrated-lime and sulphur. G. C. Starcher. *Va Ag Exp B* 210:1-14 '16

*See also* Bordeaux mixture; Hydrated-lime sulfur; Lime-sulfur; Spraying materials; Sulfur as fungicide; also United States—Insecticide and fungicide board

**Analysis**

Analyses of materials sold as insecticides and fungicides for 1916. C. S. Cathcart and R. L. Willis. *N J Ag Exp B* 301:1-16 '16

Analyses of materials sold as insecticides and fungicides for 1917. C. S. Cathcart and R. L. Willis. *N J Ag Exp B* 315:1-16 '17

Fungicide and insecticide inspection. *Maine Ag Exp Office Inspec* 75:1-8 '16

Insecticides and fungicides. (*In Experimental farms, 1916, v. 1, p. 169-74*) 45c '17 Canada Ag

Insecticides and fungicides; methods of analysis. bibliog *Assn Office Ag Chem J* 2,no 2,pt 1:63-77 Ag '16

**Laws**

Insecticide and fungicide law, effective July 4, 1917. 8p '17 Iowa dairy and food comm., Des Moines

**Fungous-growing ants. See Ants**

**Fungus beetles**

Two-banded fungus beetle. F. H. Chittenden. bibliog *il J Econ Entom* 10:282-7 Ap '17

**Fur**

Furs for the youngsters. R. S. Wheeler. *il Country Gent* 83:50 Ja 5 '18

Preparing furs for market. *Prac F* 112:414 N 15 '16

Preparing furs for market. G. J. Thiessen. *Ohio F* 138:550 D 2 '16

Talks to young trappers. G. J. Thiessen. *il Country Gent* 83:32 Ja 26 '18

**Prices**

Small furs are in demand. J. D. Judd. *O Judd Farmer* 65:319 O 12 '18

**Fur-bearing animals**

Conservation of the fur resources of northern Canada, by C. G. Hewitt; Report of committee on fisheries, game and fur bearing animals, by O. Master. (*In Report, 1917, p. 119-22, 249-56*) '17 Canada Comm. of conservation, Ottawa

Don't destroy animal dens. A. R. Harding. *il Nat Stock & F* 41:814 N 24 '17

Laws relating to fur-bearing animals, 1915. D. E. Lantz. *Farmers' B* 706:1-24 '16

Laws relating to fur-bearing animals, 1916. D. E. Lantz. *Farmers' B* 783:1-28 '16

Laws relating to fur-bearing animals, 1917. D. E. Lantz. *Farmers' B* 911:1-31 '17

Trapping farm furs. A. R. Harding. *il Kimball's D F* 15:19 Ja 15 '17

Trapping for fur bearers. C. H. Chesley. *Country Gent* 82:377 F 24 '17

Trapping for profit. Wallaces' *F* 42:1526 N 9 '17

Trapping fur bearers. *il Breeder's Gaz* 72:1265 D 27 '17

*See also* Civet cats; Minks; Muskrats; Raccoons; Silver foxes; Skunks

**Fur farming**

Breeding of mink in captivity. E. L. MacDonald. (*In Report, 1917, p. 300*) '17 Canada Comm. of conservation, Ottawa

Care, sanitation and feeding of foxes in captivity. 20p '16 Canada Ag

Domesticated silver fox. N. Dearborn. *il map Farmers' B* 795:1-32 '17

Fur farming as a side line. N. Dearborn. *il U S Ag Yearbook* 1916:489-506; Same. Separate 693

Fur farming in Minnesota. L. R. Jones. *Breeder's Gaz* 69:334 F 10 '16

Illinois skunk farm. O. Crooker. *O Judd Farmer* 61:2 N 11 '16

Silver fox farming. *Ohio F* 141:137 Mr 2 '18

Silver fox farming in eastern North America. N. Dearborn. *il plan map U S Ag B* 301:1-35 '15

Skunk breeding. *il J Heredity* 8:452-4 O '17

**Fur farming—Continued**

- Skunk farmer. W: P. Doyle. Ohio F 140:227 S 15 '17  
 Skunk farming on the side. F. E. Brimmer. Rural N Y 77:1401 D 21 '18  
 Taming a wild trade. A. J. Burr. Bellman (118 S. 6th st, Minneapolis, Minn. 10c) 23: 572-3 N 24 '17

**Fur trade**

- Conservation of the fur resources of northern Canada, by C. G. Hewitt; Report of committee on fisheries, game and fur bearing animals, by O. Master. (In Report, 1917, p. 119-22, 249-56) '17 Canada Comm. of conservation, Ottawa  
 Fur trade of the United States. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:24-5 Ja 12 '18  
 Pennsylvania and Ohio furs. A. R. Harding. Nat Stock & F 40:991 D 30 '16

See also Fur farming; Trapping

**Furfural**

- Suggestion in regard to the preparation and use of caramel. G. P. Plaisance and H. Monsch. J Home Econ 9:167-71 Ap '17

**Furnaces**

- How the furnace helped. A. M. Kimball. Country Gent 83:45 F 23 '18

**Furniture**

- Buying new and utilizing old furniture. Prac F 114:128 Mr 15 '18  
 Combining furniture types. il Country Life 31: 138 Mr '17  
 Conserving household furniture. M. Corbett. Rural N Y 76:1427; 77:16 D 15 '17, Ja 5 '18  
 Distinction in house furnishing. il Country Life 33:96 Ja '18  
 Excellence of modern craftsmanship. il Country Life 29:76+ Ja '16  
 Furnishing and decorating the summer home. A. R. Fairman. il Country Life 32:35-46 My '17  
 Furnishing on a budget. L. D. P. Lee. il Country Life 31:48-51, 80 Mr '17  
 Furnishings that bespeak the glory of a by-gone age. J. M. Breese. il Country Life 34:88 S '18  
 Furniture designed for summer use. il Country Life 34:114 My '18  
 Furniture to individualize the bedroom. il Country Life 34:90 O '18  
 Historic types and modern furniture. C. M. Price. il Country Life 33:27-40 F '18  
 Importance of furniture in the Yuletide setting. J. M. Breese. il Country Life 35:82+ D '18  
 Incidental furniture, by C. M. Price; photographs. Country Life 33:69 D '17  
 Neighborliness of furnishings. R. R. Goodnow. il Country Life 32:33-6 Ag '17  
 Old French chairs. W. A. Dyer. il Country Life 33:74+ F '18  
 Old furniture in the new world. il Country Life 33:108 N '17  
 Old lacquered furniture. W. A. Dyer. il Country Life 29:27-30 Ap '16  
 Romance of living with our forefathers' furniture. J. M. Breese. il Country Life 33:104+ Ap '18  
 Simply painted furniture. J. C. Marshall. il Gard M 24:30 Ag '16  
 To-day's reproductions of yesterday's furniture. il Country Life 35:88 N '18  
 Treating old furniture. R. S. Wheeler. Country Gent 81:239 Ja 29 '16  
 What is your furniture? G. R. Wilmot. il Country Gent 81:868 Ap 15 '16  
 Your shabby furniture; how to get the best results when you do it up at home. H. D. Eberlein. Country Gent 81:1709 S 16 '16

See also Chairs; Desks; Dressing glasses; Garden ornaments and furniture; House decoration; Porch furniture; Stools; Tables; Wardrobes; Wash-stands

**Fusarium**

- Breeding tomatoes resistant to fusarium. J. B. S. Norton. Market Growers J 21:272 D 15 '17

Changes in the chemical composition of rye seed through the action of some forms of fusarium. A. Pomaskij. Int R Sci & Prac Ag 7,no 7:960-2 JI '16

Effect of certain species of fusarium on the composition of the potato tuber. L. A. Hawkins. bibliog J Ag Research 6:183-96 My 1 '16

Generation of aldehydes by fusarium cubense. E. C. Lathrop. Phyt 7:14-16 F '17

Identification of species of fusarium occurring on the sweet potato, ipomoea batatas. H. W. Wollenweber. bibliog il J Ag Research 2:251-86 JI '14

Physiological study of two strains of fusarium in their causal relation to tuber rot and wilt of potato. G. K. K. Link. bibliog il Bot Gaz 62:169-209 S '16; Same. Neb Ag Exp Research B 9:1-45 '16

Potato-stem lesions. H. A. Edson and M. Shapovalov. il J Ag Research 14:213-20 JI 29 '18

Preliminary report on the vertical distribution of fusarium in soil. M. W. Taylor. Phyt 7:374-8 O '17

Some potato tuber-rots caused by species of fusarium. C. W. Carpenter. bibliog il J Ag Research 5:183-210 N 1 '15

Studies on a fusarium disease of corn and sorghum. L. H. Pammel and others. il Ia Ag Exp Research B 33:115-36 '16

Trailing fusarium in McLean county, Ill. O Judd Farmer 63:4 N 10 '17

See also Cabbage yellows; Potato rot; Potato wilt; Powdery dry-rot; Tomato blight; Tomato wilt; Wilt disease

**Fusel oil**

- Study of the fusel oil and esters in distilled liquors. L. Katz. Assn Offic Ag Chem J 2: 188-96 F '17

## G

**Gaillardias**

- Gaillardias for market. J. H. Sperry. il Country Gent 82:658 Mr 31 '17

**Galactose**

- Toxicity of galactose and mannose for green plants and the antagonistic action of other sugars toward these. L. Knudson. il Am J Bot 4:430-7 JI '17

Galapagos islands. See Plants—Galapagos islands

**Galbraith, Alexander**

- Portrait. Breeder's Gaz 69:909 Ap 27 '16

Galega officinalis. See Goat's-rue

Galerucella. See Cherry leaf beetles; Elm leaf beetles

**Galium**

- Some points in the morphology of the stipules in the stellatae, with special reference to galium. H. Takeda. il Ann Bot 30:197-214, 601-3 Ap, O '16

**Galloway cattle**

- Galloways in America. O. H. Swigart. Breeder's Gaz 69:554 Mr 9 '16  
 Shaggycoats and food production. il Breeder's Gaz 72:1149-50 D 20 '17

**Galls (botany)**

- Aeriferous tissue in willow galls. A. Cosens and T. A. Sinclair. il Bot Gaz 62:210-25 S '16

Anatomical study of gymnosporangium galls. A. Stewart. bibliog il Am J Bot 2:402-17 O '15

Development of the phylloxera vastatrix leaf gall. H. R. Rosen. bibliog il Am J Bot 3: 337-60 JI '16

Gall insects and their relations to plants. E. P. Felt. il Sci Monthly (Science Press, Garrison, N. Y. 30c) 6:509-25 Je '18

Galls and the insects which produce them. R. S. Walker. il Country Life 30:78 S '16

Galls of tamarix articulata Vahl. L. Trabut. Int R Sci & Prac Ag 9,no 5:576-7 My '18



**Galls (botany)—Continued**

- \* Key to American insect galls. E. P. Felt. il N Y State Museum (Albany) B 200:1-310 Ag '18
- Notes on the anatomy of peridermium galls. A. Stewart. bibliog il Am J Bot 3:12-23 Ja '16
- Notes on the anatomy of the punctatus gall. A. Stewart. bibliog il Am J Bot 1:531-46 D '14
- Origin and development of the galls produced by two cedar rust fungi. J. L. Weimer. bibliog il Am J Bot 4:241-51 Ap '17
- \* Uses of insect galls. M. M. Fagan. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:155-76 F '18
- Zoocecidia of northeastern United States and eastern Canada. B. W. Wells. bibliog Bot Gaz 65:535-42 Je '18

See also Crown gall

**Galvanometers**

- Use of the vibration galvanometer with a 60-cycle alternating current in the measurement of the conductivity of electrolytes. N. B. Green. bibliog Am J Bot 4:411-16 Jl '17

**Gambrel roofs**

- On the two horns of the gambrel. A. Embury. il Country Life 32:49-52 My '17

**Game**

- Report of committee on fisheries, game and fur bearing animals. O. Master. (In Report, 1917, p. 249-56) '17 Canada Comm. of conservation, Ottawa

**Protection  
Directories**

- Directory of officials and organizations concerned with the protection of birds and game, 1918. (B. S. Doc. 109) 17p '18 U S Ag

**Game birds**

- Game fowl at the experimental farm. F. C. Elford. il Ag Gaz of Canada 4:853-4 O '17
- Objections to game preserves. J. R. Mattern. Power F 25:41 Je '16
- Scarcity of game birds. J. R. Mattern. Power F 25:39 S '16
- Table shows open seasons for migratory game birds throughout the United States. Weekly N L 6:8 O 30 '18
- Upland game birds: the grouse. A. A. Allen. il Am For 24:497-500 Ag '18
- Upland game birds: turkeys, quails and pheasants. A. A. Allen. il Am For 24:543-7 S '18
- What is a game bird? A. A. Allen. il Am For 22:669-73 N '16

See also Birds—Protection; Game protection; also names of birds, e.g. Ducks, Wild, Pheasants, Quails

**Game farming**

- Black fox farming. O Judd Farmer 65:406 N 2 '18
- Breeding of ringneck pheasants. E. A. Quarles. il Field II 26:22-3, 126-7, 412 Ja-F, My '16
- Cornell game farm. Cornell Countryman 15: 38+ O '17
- Game farming for pleasure or profit. H. K. Job. Sci Am Sup (233 Broadway, N. Y. 10c) 86:90 Ag 10 '18
- Raising wild mallards on the farm. C. A. LeClair. il Country Life 29:50-1 Ja '16
- Wild mallard ducks for the farm. F. H. Valentine. Country Gent 81:802 Ap 8 '16

**Game laws**

- Arizona fish and game law; 1918 revised edition. 24p n. d. Ariz. State game warden, Phoenix
- Bird and game laws of Rhode Island, revised to June 1, 1917. 29p n. d. R. I. Comrs. of birds, Providence
- California laws relating to fish and game and federal regulations, 1917-1919. 180p '17 Cal. Bd. of fish and game comrs., San Francisco
- Chasse et pêche et commerce des produits y relatifs. Int Yearbook Ag Leg 1916:692-720 '17
- Digest of the game, fish and forestry laws. J. Kalbfus, ed. 338p '17 Pa. game comm., Harrisburg

- Farmer and the city hunter. E. L. Cronk. Rural N Y 76:289 F 24 '17
- Fish and game laws of Idaho, 1917-1918. 76p n.d. Idaho State fish and game warden, Boise
- Fish and game laws of the state of New Hampshire, 1917-1918. 72p '17 N. H. fish and game comr., Milford
- Game and fish laws and laws relative to destruction of noxious animals. 295p '17 Sec. of state, Lansing, Mich.
- Game and fish laws of the state of Delaware, 1917. 69p '17 Del. Bd. of fish and game comrs., Dover
- Game and fish laws of the state of Nebraska in force April 24, 1917. 55p '17 Neb. Game and fish comm., Lincoln
- Game, bird and fish laws of Wyoming, 1917-1918. 93p n.d. State game warden, Lander, Wyoming
- Game law of Missouri. 36p n. d. Mo. State game and fish comm., Jefferson City
- Game laws and the farmer. A. C. Weed. Rural N Y 76:107 Ja 27 '17
- Game laws for 1913; a summary of the provisions relating to seasons, export, sale, limits, and licenses. U S Ag B 22:1-59 '15
- Game laws for 1916. T. S. Palmer and others. maps Farmers' B 774:1-64 '16
- Game laws for 1917; a summary of the provisions of federal, state, and provincial statutes. G: A. Lawyer and others. Farmers' B 910:1-70 '17
- Game laws for 1918; a summary of the provisions of federal, state, and provincial statutes. G: A. Lawyer and F. L. Earnshaw. Farmers' B 1010:1-69 '18
- Game season in New York. G: D. Pratt. Rural N Y 75:1589 D 30 '16
- Hunters must observe both U.S. and state game laws. Weekly N L 6:3 O 2 '18
- \* Information for the public in regard to the Alaska game law and regulations of the Department of agriculture. (Game C. 5) 16p '18 Alaska. Governor, Sitka
- Lacey act and federal migratory-bird law being generally observed by hunters. Weekly N L 5:8 D 12 '17
- Laws of the state of Indiana for the protection of fish, game, birds and furbearing animals, 1917-1918. 52p '17 Ind. Comr. of fisheries and game, Indianapolis
- Laws relating to fur-bearing animals, 1915. D. E. Lantz. Farmers' B 706:1-24 '16
- Laws relating to fur-bearing animals, 1916. D. E. Lantz. Farmers' B 783:1-38 '16
- Laws relating to fur-bearing animals, 1917. D: E. Lantz. Farmers' B 911:1-31 '17
- Legislation proposed providing amendments to the conservation laws. Md Conservation Comm (Baltimore) Offic B 4:1-26 Ja '18
- Maine inland fish and game laws; 1917-18 revision. 109p '17 Maine Comr. of inland fisheries, Augusta
- New acts and amendments to Massachusetts fish and game laws, 1916-1917; supplement to 1915 ed. 30p '17 Mass. Comrs. on fisheries and game, State House, Boston
- New game laws based on U. S.-Canadian treaty. Weekly N L 6:1+ Ag 28 '18
- New Jersey fish and game laws, 1917. 249p '17 N.J. Bd. of fish and game comrs., Trenton
- Oregon fish and game laws, 1917-1918. 204p '17 State bd. of fish and game commissioners, Oregon bldg., Portland
- Protection and development of great natural water-food resources. Md Conservation Comm (Baltimore) Offic B 1:1-15 Jl '17
- Summary of game laws. T. Blackburn. O Judd Farmer 65:555 D 14 '18
- Who is game to fight the game laws? M. D. Williams. Rural N Y 75:1537 D 16 '16

See also Birds—Protection

**Game propagation**

- Game farming for pleasure or profit. H. K. Job. Sci Am Sup (233 Broadway, N. Y. 10c) 86:90 Ag 10 '18
- Wild game as a war weapon; neglected means of increasing and conserving our meat supplies. E. C. MacMechen. il Scientific Am (233 Broadway, N.Y. 10c) 118:88-9 Ja 26 '18

**Game protection**

- Bringing back the game. A. A. Allen. *il Am For* 23:15-18 Ja '17
- Bringing back the game. E. A. Quarles. *il Cornell Countryman* 14:387-8+, 471-3 F-Mr '17
- Conservation of game in the national forests and national parks. E. W. Nelson. *il Am For* 23:139-45 Mr '17
- Forestry and game conservation. A. Leopold. *J For* 16:404-11 Ap '18
- Game and fish conditions in Maryland. E. L. Le Compte. *Md Conservation Comm (Baltimore) Office B* 3:9-17 N '17
- Propagation of wild-duck foods. W. L. McAtee. *il maps U S Ag B* 465:1-40 '17
- Regulations for the protection of game in certain localities in Alaska. (Service and Regulatory Announcements—B. S. 22) 3p '18 U S Ag
- To conserve food in America, we must preserve the wild life. T. G. Pearson. *Touchstone* (118 E. 30th st, N. Y. 35c) 3:257-60 Je '18

**Games**

- Country playground. C. Comstock. *Rural Manhood* 8:98-101 Mr '17
- Few games with which to pass the evening. *Prog F* 31:479 Ap 1 '16
- Games as educators. F. Allen. *Nat Stock & F* 40:944 D 16 '16
- Games for boys and girls in rural schools. N. M. Locke. *Rural Manhood* 8:171-4 Ap '17
- Games which are great fun. A. E. Lowell. *O Judd Farmer* 61:20 Jl 15 '16
- Hours happily spent. *Ohio F* 138:369 O 14 '16
- Old games are best. *Country Gent* 81:2209 D 23 '16
- Relay games. *Rural Manhood* 9:113-16 Mr '18
- See also Amusements; Children's amusements; Sports; Toys; also names of games, e.g. Golf, Polo, Tennis

**Gametophytes**

- Gametophytes of *taxus canadensis* Marsh. A. W. Dupler. *bibliog il Bot Gaz* 64:115-36 Ag '17
- Note on the sporeling of *phylloglossum* attached to a prothallus. K. Sampson. *il Ann Bot* 30:605-7 O '16
- Prothallia and sporelings of three New Zealand species of *lycopodium*. C. J. Chamberlain. *bibliog il Bot Gaz* 63:51-65 Ja '17
- Prothallia of *lycopodium* in America. E. A. Spessard. *il Bot Gaz* 63:66-76; 65:362 Ja '17, Ap '18
- Prothallia of *ophioglossum vulgatum*. N. E. Pfeiffer. *il Bot Gaz* 61:518-22 Je '16
- Some ecological adaptations of certain fern prothallia—*camptosorus rhizophyllus* Link., *asplenium platyneuron* Oakes. F. L. Pickett. *il Am J Bot* 1:477-98 N '14

**Garages**

- Cheap garage. *Prog F* 32:318 Mr 10 '17
- Combination garage and hen house. P. B. Ruggles. *il Country Life* 30:70 O '16
- Commercial garage. E. V. Laughlin. *plan Farm Eng* 5:6 N '17
- Concrete garages. H. C. Campbell. *il plan Farm Eng* 3:161 F '16
- Farm shop and garage. W. E. Frudden. *il Hoard's D* 51:455 Ap 7 '16
- Garage for the farm. D. R. Van Horn. *plans Farm Eng* 5:7 O '17
- Garage in the house. J. T. Boyd, jr. *il plans Country Life* 32:56-9 My '17
- Serviceable one-car garage. *plan Am Coop J* 12:466 F '17

**Garawi. See Sudan grass****Garbage**

- Analyze garbage. *Weekly N L* 4:8 Je 13 '17

**Statistics**

- \* Monthly report on garbage collections and garbage grease—April, 1918. (*In Official statement no. 2, p. 8*) '18 U. S. Food administration, Washington, D.C.

**Garbage, Utilization of**

- Saving fats from garbage; American chemical society offers to aid Food administration. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:320 Ap '18

**Garbage as feed. See Feeding and feeding stuffs —Garbage****Garbage as fertilizer**

- Availability of nitrogen in garbage tankage. J. P. Schroeder. *Am Fert* 45:21-2 O 14 '16
- Fertilizer value of city waste; the composition of garbage. W. J. O'Brien and J. R. Lindemuth. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:49-54 Ja '17
- Fertilizer value of city wastes; garbage tankage. P. J. Schroeder. *J Industrial & Eng Chemistry (Easton, Pa. 60c)* 9:513-18 My '17
- Fertilizers from municipal waste. *Market Growers J* 18:267 Ap 1 '16
- Fertilizing value of some household wastes. P. E. Browning. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 9:1043 N '17
- Garbage tankage, its composition; the availability of its nitrogen and its use as a fertilizer. P. J. Schroeder. *Int R Sci & Prac Ag* 9,no 3:295-6 Mr '18
- Millions from city garbage. J. P. Schroeder. *il Am City—City ed (Tribune bldg., N.Y. 35c)* 17:499-503 D '17

**Garbanzo. See Chick peas****Garden cities**

- French garden-hamlet. G. Benoit Levy. *il Survey* (112 E. 19th st, N.Y. 25c) 39:488-9 F 2 '18
- Garden city movement; hearing before the U.S. Senate subcommittee of the committee on agriculture and forestry pursuant to S. Res. 305; a resolution authorizing and requesting the Senate committee on agriculture and forestry to hear and consider testimony relative to the garden city and garden suburb movement. 53p '17 Apply to congressmen

- \* Garden suburb for shipyard workers. *il plan Survey* (112 E. 19th st, N. Y. 10c) 40:595 Ag '24 '18

**Garden clubs**

- City full of gardens. A. Fearing. *il Country Life* 30:90 My '16
- Garden clubs. L. C. Williams. *il Kan Ag Ext C* 9:1-24 '18
- Garden clubs and gardeners' societies. W. Gray. *Gard Chron Am* 20:13 Ja '16
- Garden clubs in the schools of Englewood, N.J. C. O. Smith. (*B. 1917, no. 26*) 44p '17 U.S. Bur. of educ. Washington, D.C.
- Minnesota boys' and girls' garden and canning club work. *il Minn Hort* 46:321-9 S '18
- Organization and publicity. *Gard M* 28:103 N '18
- Reports and plans of town and city garden clubs. W. E. Vaplon. *il Colo Ag Ext B* 133:1-14 '18
- Southern little gardens in December. Mrs. L. Patterson. *Prog F* 31:1388 D 2 '16
- What a city garden club may do. A. H. Helder. *Am City (Tribune bldg., N.Y. 35c)* 16:264-5 Mr '17
- What a garden club has done for its community. O. H. Foster. *Touchstone* (118 E. 30th st, N.Y. 35c) 2:600-4 Mr '18

**Garden contests**

- Home, yard and garden contests. R. J. Pearse. *il Ia Ag Ext B* 38:1-15 '16
- How one city improved its gardens. R. B. Woodward. *il Gard M* 23:333-5 Jl '16
- Value of garden competitions. W. T. Macoun. *Ag Gaz of Canada* 5:446-8 My '18

**Garden cress. See Peppergrass****Garden furniture. See Garden ornaments and furniture****Garden gates. See Gates****Garden houses. See Summer-houses****Garden illumination. See Gardens—Lighting****Garden ornaments and furniture**

- Equipping an orchard as a living room. C. M. Frederick. *il Country Life* 31:108 Mr '17
- Furnishing the terrace. A. R. Fairman. *il Country Life* 34:40-3 My '18
- Garden furniture that fits. R. Dean. *il Gard M* 25:320-2 Jl '17



**Garden ornaments and furniture—Continued**

- Garden sculptures. R. I. Aitken. *Country Life* 34:57-9 My '18  
Lawn and garden vases. *il Am Flor* 46:985 My 27 '16  
Marble work in the garden. D. C. Gale. *il Gard Chron Am* 20:468-70 N '16  
Pottery, statuary and garden ornaments. C. C. Savage. *il Gard M* 22:201-2 Ja '16  
Some garden sculpture of Paul Manship. *il Country Life* 33:53-5 N '17  
Stump seats. C. L. Meller. *il Country Life* 31:103 Ap '17

**Garden pools**

- Appropriate planting for formal pools. R. Dean. *il Gard M* 23:331-2 Jl '16  
Back-yard lily pond. E. S. Brinton. *il Country Gent* 81:1271 Je 24 '16  
Bit of heaven in my garden. K. J. Bull. *il Country Life* 30:37 O '16  
Homemade pool and fountain for sixty dollars. F. Spring. *il House Beautiful* (3 Park st., Boston 25c) 41:214 Mr '17  
Informal or naturalistic pools. R. Dean. *il Gard M* 23:286 Je '16

**Garden state dairies**

- Built for efficiency—the modern idea in milk plant structures at Camden, N.J. *il Creamery* 4:23-5 Mr '16

**Garden steps**

- Garden steps. R. Dean. *il Country Life* 33:45-7 F '18

**Garden tools**

- Five acres kept with man-power cultivator. V. W. Killick. *il Illustrated World* (Drexel av. and 58th st., Chicago 15c) 26:252 O '16  
Garden implements; their use and care. C. J. Hayden. *il Prog F* 31:186 F 5 '16  
Garden movies no. 2; photographs. W. C. McCollom and A. Kruhm. *Gard M* 27:13 F '18  
Gardening on a machine-to-win-the-war basis. A. Kruhm. *il Gard M* 27:20 F '18  
Implements for the garden. G. H. Alford. *Prog F* 33:96 Ja 26 '18  
Practical garden talks. E. E. Norris. *il House Beautiful* (3 Park st., Boston 25c) 43:195-8, 270-1 Mr-Apr '18  
Simple talk for the beginner. *Gard M* 27:14 F '18  
Tools as a secret of success. *il Country Gent* 82:58 Ja 13 '17

*See also* Fruit culture—Apparatus and equipment; Hoes; Pruning tools

**Garden walls**

- Looking over the garden wall in a very practical frame of mind; photographs. *Country Life* 31:68-9 Mr '17

**Garden webworms**

- Alfalfa web worm. C. E. Sanborn. *bibliog il Okla Ag Exp B* 109:1-7 '16  
Controlling the garden webworm in alfalfa fields. E. O. G. Kelly and T. S. Wilson. *il Farmers' B* 944:1-7 '18

**Gardeners**

- Early masters of the garden art. L. P. Jensen. *Gard Chron Am* 20:111-13 Mr '16  
Eccentricities of a gardener. E. C. White. *Country Life* 29:53 Mr '16  
Gardener and his profession. W. N. Craig. *Gard Chron Am* 20:465-6 N '16  
Gardener's interest, duty and value in public park service. T. Wirth. *Gard Chron Am* 22:91-2 Mr '18  
History of cultivated fruits, as told in the lives of great pomologists; R. Thompson. B. Wynne. *Gard Chron (Lond)* 63:121-2 Mr 23 '18  
Horticulture as a profession from the standpoint of a gardener. J. Johnson. *Gard Chron Am* 20:192 Ap '16  
Relation of the gardener to civic work. L. P. Jensen. *Gard Chron Am* 22:126-7 Ap '18  
Some 17th and 18th century gardeners. W. Roberts. *Gard Chron (Lond)* 62:235-6 D 15 '17  
Treatise on the behavior to gardeners. *Gard Chron Am* 20:147-8 Mr '16  
Young gardener. J. Johnson. *Gard Chron Am* 21:212 My '17

Young gardeners' opportunity in America. H. Gibson. *Gard Chron Am* 20:15-16 Ja '16

*See also* National association of gardeners

**Gardeners' chronicle (London)**

- Twenty-five years with the Gardeners' chronicle. *Gard Chron (Lond)* 61:214 My 26 '17

**Gardeners' societies. See Garden clubs**

**Gardenias**

- Gladioli and gardenias. *Am Flor* 48:510 Mr 24 '17

**Gardening**

- Amateur gardening in America. J. Livingstone. *Wis Hort Soc Rep* 48:34-43 '18  
Amateur gardening seventy years ago. *Gard Chron (Lond)* 60:233 N 11 '16  
April reminders for the gardener. *Country Gent* 83:44 Ap 6 '18  
Art of sowing seed. *Gard M* 27:54 F '18  
Autumn in the flower garden. D. Lumsden. *bibliog il Cornell Reading Course* 128:75-108 '17  
Blue-flower garden. G. W. Kerr. *il Country Gent* 83:56 Mr 16 '18  
Combining beauty and comfort with stern utility. S. F. Hamblin. *plans Gard M* 27:23-5 F '18  
Confessions of a novice. *Gard Chron (Lond)* 59:31, 148, 169; 60:39, 144, 198; 61:52, 124, 251; 62:77; 63:111, 195 Ja 15, Mr 11, 25, Jl 22, S 23, O 21 '16, F 3, Mr 24, Je 23, Ag 25 '17, Mr 16, My 11 '18  
Cultivation of plants in tubs. *Gard Chron Am* 20:152 Mr '16  
December in the South. J. M. Patterson. *Gard M* 26:168 D '17  
December planting in the South. J. M. Patterson. *Gard M* 28:149 D '18  
\* Duty to dig. D. L. Sharp. *Atlantic* (41 Mt Vernon st., Boston 35c) 122:598-606 N '18  
Early gardener. L. Clement. *il Fruit-Grower* 27:121 F 15 '16  
Early plants for the paying garden. F. F. Rockwell. *il Gard M* 27:15 F '18  
Everyman's garden. See weekly numbers of *Country gentleman*  
Fall planting of shrubs and other ornaments. *il Country Gent* 81:1588 Ag 26 '16  
Family garden. H. P. Knapp. *Ohio F* 137:630 Ap 29 '16  
February garden. *Prac F* 113:74 F 15 '17  
First steps in gardening. F. F. Rockwell. *Gard M* 24:209-10 Ja '17  
Flowers for the war time garden. E. Strang. *Gard M* 27:137-9 Ap '18  
From a mountain garden. E. S. Rutherford. *Country Gent* 82:791 Ap 21 '17  
Future of flower gardening in America. D. Burpee. *Am Flor* 49:1148 D 15 '17; Same *abr. Gard Chron Am* 21:443 D '17  
Garden and orchard—what to do this week and next. L. A. Niven. *Prog F* 33:1089, 1257, 1306, 1350, 1382 O 5, N 16, 30-D 14 '18  
Garden days and bright ideas. M. C. Hessler. *Country Gent* 82:753 Ap 14 '17  
Garden in December. W. F. Massey. *Prac F* 113:404 D 1 '17  
Garden in fall and winter. W. F. Massey. *Ohio F* 138:470 N 11 '16  
Garden in September. W. F. Massey. *Prac F* 114:289 S 1 '18  
Garden in October. *Prac F* 112:358 O 1 '16  
Garden in the South. J. M. Patterson. *Gard M* 28:110 N '18  
Garden irrigation. *Weekly N L* 5:4 Ap 10 '18  
Garden irrigation; with discussion. L. Herziger. *Wis Hort Soc Rep* 48:172-9 '18  
Garden movies. W. C. McCollom. *il Gard M* 28:143 D '18  
Garden notes for the Gulf Coast country. L. T. Rhodes. *Prog F* 31:199 F 5 '16  
Garden profits nearly \$200 an acre. H. E. Thorp. *Prog F* 31:110 Ja 22 '16  
Garden questions. *Rural N Y* 77:1328 N 30 '18  
Garden that we are building. D. E. W. Spratt. *Country Life* 31:102 Ap '17  
Garden work in mid winter. W. F. Massey. *Prac F* 114:4 Ja 1 '18  
Gardening as a woman's job. Mrs H. M. Dunlap. *il Ill Farmers Inst Household Sci* 1917:167-71 '18; Same. *Am Coop J* 12:501+ Mr '17

**Gardening—Continued**

- Gardening for re-educating disabled soldiers. G. Harris. *il Gard M* 28:45-6 S '18
- Gardening in Florida. W. A. McRae. *Fla Ag Dept Quar B v* 26:23-31 O '16
- Gardening in January. M. Flindt. *Wallaces' F* 43:190 F '18
- Getting a running start. J. M. Patterson. *Gard M* 26:204 Ja '18
- \* Getting ready for next year. W: C. McCollom. *il Independent* (119 W. 40th st, N. Y. 10c) 96:23 O 5 '18
- Getting ready for the planting time. D. F. Jones. *il Gard M* 24:220 Ja '17
- Groundwork of gardening. F. F. Rockwell. *il Independent* (119 W. 40th st., N.Y. 10c) 89:404-5 Mr 5 '17
- Grow a garden. 8p *il '16 Int. harvester co., Chicago*
- Growing flowers. A. C. Hottes. *il Cornell Ag Exp Rep* 1916, v 2:925-9 '17
- Home garden. *il Country Gent* 83:34 O 5 '18
- Home garden: forcing rhubarb and asparagus. *il Country Gent* 83:32 N 16 '18
- Home garden: late vegetables and early roses. *il Country Gent* 83:32 Ag 10 '18
- Home garden; make a planting of Chinese cabbage for fall use. *il Country Gent* 83:30 Ag 17 '18
- Home garden; mustard, broccoli, Brussels sprouts—and iris. *il Country Gent* 83:26 Ag 24 '18
- Home garden: plant your peonies now. *il Country Gent* 83:26 S 28 '18
- Home garden; prepare now for next year. *il Country Gent* 83:33 S 14 '18
- Home garden: the value of dead leaves. *il Country Gent* 83:42 O 26 '18
- Home garden; winter vegetables for the South. *Country Gent* 83:26 S 21 '18
- Home gardens. E. K. Thomas. *R I Ag Bd B* 8p Ap '17
- Hot-weather gardening—irrigation, cultivation, mulching. *il Country Gent* 81:1304 Jl 1 '16
- Housewife's garden-making. K. V. Saint Maur. *il Good Housekeeping* (119 W. 40th st., N.Y. 15c) 64:104 F '17
- In praise of gardening. F. Duncan. *Scribner's* (597 5th av., N.Y. 25c) 61:368-70 Mr '17
- Inexpensive foliage plants. O Judd *Farmer* 60:26 Ap 8 '16
- Intensive garden notes. W. F. Massey. *Rural N Y* 76:381 Mr 10 '17
- July in the flower garden—shrub pruning—bulbs and perennials. *il Country Gent* 81:1412 Jl 22 '16
- Just a border of annuals. L. Melish. *il Gard M* 23:74 Mr '16
- Keep the garden at work in the South. *Prog F* 31:633 My 6 '16
- Keeping up appearances in the flower border. L. B. Wilder. *Gard M* 27:195 My '18
- Late fall work for the gardener. *il Country Gent* 81:2012 N 18 '16
- Little gardens. Mrs L. Patterson. *Prog F* 31:1125 S 23 '16
- Living from one acre. W. F. Massey. *Ohio F* 139:718 My 26 '17
- Making the best of it. S. F. Hamblin. *il Gard M* 23:81-3, 164-5, 242, 295-6; 24:8-9 Mr-Je, Ag '16
- Making the garden safe for the summer; what modern irrigation means. F. F. Rockwell. *il Gard M* 25:280-1 Je '17
- Making the home beautiful. W. F. Massey. *Prog F* 32:331 Mr 10 '17
- Making use of the fence corners. G. Shull. *Fruit-Grower* 27:109 F 1 '16
- Maryland garden notes. W. F. Massey. *Ohio F* 142:530 N 30 '18
- Month's reminder. *Gard M* 25:163-4 Ap '17
- Month's reminder, January, 1918. *Gard M* 26:187-8 Ja '18
- Month's reminder, December, 1918. *Gard M* 25:148 D '18
- Much ado about planting. K. B. Burton and J. McMurray. *il Gard M* 25:165 Ap '17
- Much from little land. J. S. Underwood. *Green's Fruit Grower* 36:5 Je '16
- My backyard garden. H. T. Howland. *Country Gent* 81:1163 Je 3 '16
- My neglected garden. A. Rose. *Rural N Y* 75:595, 693, 1056 Ap 8, 29, Ag 5 '16
- 1916's garden. *il Country Gent* 81:26 Ja 1 '16
- Notes from a Maryland garden. W. F. Massey. See weekly numbers of *Rural New-Yorker*
- October glories in hardy flowers. W: Saville. *Gard Chron Am* 20:426 O '16
- Old fashioned flowers from frost to frost. G. H. Sinclair. *il Gard M* 22:204-6 Ja '16
- Old glory gardens. F. S. Fox. *il Country Gent* 82:1928 D 8 '17
- Orchard and truck farm work for December. L. A. Niven. *Prog F* 33:1367 D 14 '18
- Pin money crops for the home gardener. F. F. Rockwell. *il Gard M* 23:210; 23:34-6, 90, 171-2, 244, 340 Ja-My, Jl '16
- Pits for winter gardening. *Int R Sci & Prac Ag* 7, no 1:120-1 Ja '16
- Plan now for summer garden. Mrs C. Ryder. *Ohio F* 139:234 F 17 '17
- Plan that flower garden. I. Somers. *Green's Am Fruit Grower* 38:12 Mr '18
- Planning for fruit this year and after. M. G. Kains. *il Gard M* 26:194-6 Ja '18
- Planning next year's garden. J. M. Patterson. *Gard M* 22:228 Ja '16
- Planning the garden. W. N. Hutt. *Prog F* 33:94 Ja 26 '18
- Planning the home garden. W: N. Craig. *Gard Chron Am* 20:57-8+ F '16
- Planting a flower garden. R. Lampman. *il Rural N Y* 75:562 Ap 1 '16
- Planting a garden for autumn; descriptive list of flowers. N. Taylor. *Gard M* 23:165-6 Ap '16
- Planting out commences. J. M. Patterson. *Gard M* 23:178 Ap '16
- Poultryman's garden. T. F. McGrew. *Am P Advocate* 26:327 Ap '18
- \* Practical garden talks. E. E. Norris. *il House Beautiful* (41 Mt Vernon st, Boston 25c) 43:195-8, 270-1, 362-4; 44:13-15, 76-8, 144-6, 204-6 Mr-S '18
- Preparation of ground for and general treatment of hardy herbaceous perennials. H. E. Downer. *Gard Chron Am* 20:231-3 My '16
- Preparing for next year. J. M. Patterson. *Gard M* 24:22 Ag '16
- Problem of the bare places. L. B. Wilder. *il Country Life* 31:57-60 Mr '17
- Profitable acre. W. J. Muilenburg. *Wallaces' F* 41:543 Mr 31 '16
- Progress of vegetable culture. E. Beckett. *Gard Chron (Lond)* 64:85 Ag 31 '18
- Purest of human pleasures. J. Burnham. *Unpopular R* (18 W. 45th st, N. Y. 75c) 10:140-5 Jl '18
- Raising hardy plants from seed. E. L. Strang. *il House Beautiful* (3 Park st., Boston 25c) 41:212-13 Mr '17
- Rhubarb, asparagus, horse-radish, greens. *il Country Gent* 81:892 Ap 22 '16
- Rosarian's war shifts. *Gard Chron (Lond)* 62:85 S 1 '17
- Saving labor in land cultivation; tractors for garden use. F. E. Goodwin. *il Gard M* 26:21-2 Ag '17
- School and home gardening. J. L. Randall. (*In Report, U. S. Comr. of educ.*, 1916, v. 1 p. 259-70) '16 U.S. Bur. of educ., Washington, D.C.
- Seed sowing, cultivation and watering of gardens. J. W. Roe. *Wis Hort Soc Rep* 48:108-11 '18
- Shading vegetables and flowers. G. H. Garekol. *Gard M* 23:42 F '16
- Some things to do in the fall. *il Country Gent* 81:1942 N 4 '16
- Southern little gardens. Mrs L. Patterson. See weekly numbers of *Progressive farmer*
- Sowing seed and planting. E. Beckett. *Gard Chron Am* 22:125 Ap '18
- Spring in the flower garden. D: Lumsden. *il Cornell Reading Courses* 5, no 106:99-120 '16; Same. *Cornell Ag Exp Rep* 1916, v 2:1185-1204 '17
- Start some strawberries now. *il Country Gent* 81:1692 S 16 '16
- Suburban garden. J: R. McMahon. *il Country Gent* 81:1225-6 Je 17 '16
- Succession problem in California. S. B. Mitchell. *il Gard M* 27:82-4 Mr '18
- Summer flower garden. *il Country Gent* 82:1261 Ag 11 '17



**Gardening—Continued**

Thrift gardens. 19p il 10c '17 National clean up and paint up campaign bureau, Security bldg., St Louis, Mo.

Unskilled gardenings. Rural N Y 76:339 Mr 3 '17

Use of native plants for ornamental planting. L. P. Jensen. Gard Chron Am 20:17-18+ Ja '16

Vegetables, flowers, fruits to be started in August. il Country Gent 81:1516 Ag 12 '16

War time flower garden. J: Johnson. Gard Chron Am 22:107 Ap '18

Water to increase garden efficiency. G. W. Hood. il Gard M 26:13-14 Ag '17

What can be done in October. Prac F 112: 378 O 15 '16

What can be done in November. Prac F 112: 398 N 1 '16

What planting does to make a house a home. C. L. Meller. il Gard M 22:193-4 Ja '16

What should the city do for training in home gardening and elementary agriculture? (*In* Vocational education survey of Minneapolis, p 469-88) (B 199, Vocational educ. ser. 1) '17 U.S. Bureau of labor statistics, Washington, D.C.

What we can learn from France. W: F. Rowles. Gard Chron (Lond) 62:177 N 3 '17

What we learned in 1915. W. F. Massey. il Rural N Y 75:370 Mr 4 '16

Why make a garden—what is gardening. M. G. Feint. il Ohio F 139:221 F '17 '17

Wild-flower gardening. C. D. Ross. Country Gent 82:605 Mr 4 '17

Will you have a fall garden? Prog F 31:1051 S 2 '16

Winter gardening for the coming year's results. Gard M 23:52 F '16

Work for the coming month; the garden. W. H. Taylor. See monthly numbers of Journal of agriculture of New Zealand

Work for the month in the garden. J: Johnson. See monthly numbers of Gardeners' chronicle of America

See also Aquatic plants; Back yards; Climbing plants; Cold frames; Electrohorticulture; Flats (horticulture); Floriculture; Forcing (plants); Frost protection; Gardens; Grafting; Greenhouses; Hedges; Hotbeds; Insects, Injurious and beneficial; Landscape gardening; Market gardening; Perennials; Plant breeding; Plant propagation; Plants, Protection of; Pruning; School gardens; Shrubs; Spraying and dusting; Truck farming; Vegetable gardening; Window gardening

**Bibliography**

Bibliographical curiosity. C. H. Payne. Gard Chron (Lond) 64:7 Jl 6 '18

Bibliography of gardening. M. F. Warner. Gard Chron (Lond) 64:194 N 6 '18

Early masters of the garden art. L. P. Jensen. Gard Chron Am 20:111-13 Mr '16

Garden writings in America. L. Barron. Mass Hort Soc Trans 1916, pt 1:71-88 '16

Gardening books. A. O. Jeffery. Ontario Library Review (Toronto) 1:65-7 F '17

Glance at the garden books of the year. Gard M 26:156 D '17

Guide to garden books. Gard M 27:196 My '18

Home garden; thrift gardens and flower gardens. K. T. Moody, comp. St Louis Pub Lib B p 67-70 F '18

Old French gardening books. C. H. Payne. Gard Chron (Lond) 63:215 My 25 '18

Shade trees and gardening. 10p '17 Detroit public library, Detroit, Mich.

**Examinations**

Gardeners' examinations. Am Flor 46:1120 Je 16 '16

**History**

Interesting story of gardening. Gard Chron Am 21:427-8; 22:7-8+, 37-8, 69-70 D '17-Mr '18

**Planting plans and tables**

Calendar of farm work. map Prog F 33:187 F 16 '18

Everybody's planting and planning problems. E. L. Strang. il Gard M 22:185-8 Ja '16

Expansible garden plan with rose arbor.

E. L. Strang. Gard M 25:22-4 F '17

Laying out small grounds; plan for a home garden. Rural N Y 77:234 F 16 '18

Paper planting. F. F. Rockwell. Independent (119 W. 40th st., N.Y. 10c) 89:156 Ja 22 '17

Planting with a real purpose. S. F. Hamblin. il Gard M 23:169-71 Ap '16

Practical planting guide. A. T. Thomson. Woman's Home Companion (381 4th av., N.Y. 15c) 44:88 Mr '17

**Study and teaching**

Teaching gardening in elementary schools. il Pan Am Union B (17th and B sts., N.W., Washington, D.C. 25c) 45:215-23 Ag '17

**Gardening, Medieval**

Henry VIII as a landscape gardener. H. Littlehales. Gard Chron (Lond) 59:280 My 27 '16

**Gardens**

Always a flower in the garden. S. H. Evans. Gard Chron Am 21:15 Ja '17

Back yard gardens. Gard Chron Am 21:103-5 Mr '17

Barbara develops the land. F. L. Warner. il Country Life 32:37-8 Ag '17

Chaplet of herbs; its fragrance and flavor. M. M. Higgins. il Touchstone (118 E. 30th st. N. Y. 35c) 2:574-81+ Mr '18

Chronicle of a 1917 war garden. R. S. Payne. il Gard M 27:18-19 F '18

Color combinations in the garden. E. Starr. il Minn Hort 44:449-54 D 16

Color in the flower garden. R. R. Root. Gard Chron Am 20:316-17 Jl '16

Color in the garden. L. B. Wilder. il Country Life 33:27-40 Mr '18

Color schemes for formal flower beds. R: Marshall. (*In* Ontario horticultural societies, 11th annual report, 1916, p. 61-5) '17 Ontario ag. dept., Toronto, Canada

Colorful garden of an artist. G. Tabor. il Country Life 29:19-21 F '16

Cut your garden to fit your space. M. E. Nichols. il Country Life 30:134 My '16

Evolution of my garden. Mrs G. Clarke. il Gard M 25:235-7 My '17

Farm flower garden. F. Allen. Nat Stock & F 40:142 Ap 29 '16

Few unusual garden effects; photographs. Country Life 29:44-5 Mr '16

Flower gardens as usual in 1918. Gard Chron Am 22:56 F '18

Flowers for everybody's garden. A. S. Swanson. Minn Hort 45:86-92 F '17

Flowers from frost to frost from fall planting. C. H. Irvine. il Gard M 24:94-5 O '16

From a mountain garden. E. S. Rutherford. Country Gent 82:355, 521, 791, 916, 1101, 1188 F 17, Mr 10, Ap 21, My 19, Je 30, Jl 21 '17

Fruits in a small garden. A. Van Gelder. il Gard M 24:222 Ja '17

Garden I dream of. W. P. Eaton. il Country Life 29:33-5 Mr '16

Garden photography as a fine art; illustrated by rare photographs of beautiful gardens. Touchstone (118 E. 30th st, N.Y. 35c) 2:278-87 D '17

Getting the soil ready for this year's crops. Country Gent 81:748 Ap 1 '16

Glimpse into frostless gardens. F. A. Waugh. il Country Life 13:37-40 F '17

Grandmother's garden. G: W. Kerr. il Country Gent 83:60 F 16 '18

Hospitable gardens. E. White. il Gard M 25: 32-3 F '17

How I made my flower garden pay. Mrs S. New. Fruit-Grower 27:212 Mr 15 '16

How we made our garden. F. C. Nieder. Fruit-Grower 27:137 F 15 '16

In praise of gardens. R. B. Kimball. House Beautiful (3 Park st., Boston 25c) 41:222 Mr '17

Keeping the garden busy. F. J. Crider. Prog F 32:155 F 3 '17

\* Late flower plot that cares for itself. A. T. Thomson. il Touchstone (118 E. 30th st, N. Y. 35c) 3:362-4 Jl '18

Making of my garden. L. B. Wilder. il Gard M 24:203-5 Ja '17

Most prized corner of the farm. O Judd Farmer 62:5 Mr 3 '17

**Gardens—Continued**

- My neighbor's garden. C. D. Stuart. *il Am Bee J* 58:160, 201 My-Je '18
- Myron Hunt's back yard. F. B. Johnston. *il Country Life* 33:50-1 Mr '18
- Name formal garden. G. Dillistone. *Gard Chron Am* 21:309 Ag '17
- Old-fashioned garden. S. A. Hamilton. *Country Gent* 81:574-5 Mr 11 '16
- \* One woman's garden. *il Touchstone* (118 E. 30th st, N. Y. 35c) 3:249-55 Je '18
- Palette for garden making. G. Tabor; H. J. Koehler. *il Country Life* 31:27-40 Mr '17
- Planning a wild garden. *Gard Chron Am* 20: 290 S '16
- Planning the garden. M. G. Kains. *il Fruit-Grower* 28:123 F 15 '17
- Small garden plot and the high cost of living. G. W. Hood. *Gard M* 25:162 Ap '17
- Society of little gardens. B. A. Clark. *il House Beautiful* (3 Park st., Boston 25c) 41:72-5 Ja '17
- Suggestions on care and irrigation of gardens and lawns. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:464 My 8 '18
- Summer in our garden. Mrs G. E. Skinner. *Minn Hort* 44:317-20 Ag '16
- Vines and other things. G. E. Gifford. *Fruit-Grower* 27:246 Ap 1 '16
- Walls in and about the garden. W. H. Butterfield. *il Gard M* 24:6-8 Ag '16
- What I did with a city lot and a 2-family house. H. S. Sammond. *Gard M* 25:62 F '17
- Winter's ramble in the garden. H. O. English. *Gard Chron Am* 21:399 N '17
- See also Agricultural college farm gardens; Bog gardens; Botanical gardens; Garden ornaments and furniture; Garden pools; Gardening; Gardens, Japanese; Landscape gardening; Perennials; Rock gardens; Roof gardens; School gardens; Shakespeare gardens; Water gardens; Workingmen's gardens

**Lighting**

- Garden at night. G. Marston. *il Country Life* 31:26-7 Ja '17

**Burma**

- Gardens in Burma. F. K. Ward. *Gard Chron (Lond)* 60:167 O 7 '16

**Egypt**

- Letters from soldier-gardeners; in Egypt. F. Gooch. *Gard Chron (Lond)* 62:207 N 24 '17

**England**

- Aldenharn in late summer. *il Gard Chron (Lond)* 60:155-6 S 30 '16
- Aldenharn in summer. *Gard Chron (Lond)* 60:25, 37-8 JI 15-22 '16
- Aldenharn in winter. *Gard Chron (Lond)* 61: 93-4 Mr 3 '17
- English gardening in war time. Survey (112 E. 19th st., N.Y. 10c) 37:432-3 Ja 13 '17
- Ibroxhill rock garden, Bellahouston Park, Glasgow. J. Whitton. *il Gard Chron (Lond)* 63:241 Je 15 '18
- Keele Hall, Staffordshire. *il Gard Chron (Lond)* 59:330-1 Je 24 '16
- Notes from a Galloway garden. H. Maxwell. *Gard Chron (Lond)* 61:105, 149, 169, 219, 259; 62:21, 65, 95, 125, 155, 185, 255 Mr 10, Ap 14, 28, Je 2, 30, JI 21, Ag 18, S 8, 29, O 20, N 10, D 29 '17
- Notes from a garden in east Hampshire. A. Trevor-Battye. *Gard Chron (Lond)* 61:121 Mr 24 '17
- Some old English gardens. J. Dickson. *Gard Chron Am* 21:243-4 Je '17
- Sussex rock-garden. F. J. Hanbury. *il Royal Hort Soc J* 42,pts 2-3:271-81 S '17

**France**

- Gardens in the war area. A. B. Meggles. *Gard Chron (Lond)* 64:184 N 9 '18
- Remaking the gardens of France. *il Gard M* 28:112-13 N '18

**India**

- Gardens of north India: from the original lithographs by B. Chesney. Asia (627 Lexington av, N. Y. 25c) 18:385-92 My '18

- Ornamental gardening in India. W. Burns. and E. Little. *il Ag J of India* 12:253-61 JI '17

**Japan**

- Flowers and gardens of Japan. E. H. Wilson. *Mass Hort Soc Trans* 1916,pt 1:17-24 '16; Same cond. *Gard Chron Am* 20:21 Ja '16; Same cond. *Am Flor* 46:594-5 Ap 8 '16; Abstract. *Gard Chron (Lond)* 59:279 My 27 '18

**Persia**

- Of Persian gardens. H. G. Dwight. *il Asia* (627 Lexington av, N. Y. 25c) 18:400-5 My '18

**Switzerland**

- Floraire, Geneva. A. Martineau. *Gard Chron (Lond)* 63:76-7 F 23 '18

**United States**

- Alleged garden of Gerald Stanley Lee. W. Haynes. *il Country Life* 31:41-2 N '16
- From ashes to roses: an enclosed, terraced garden in the township of Milton, Mass. *il House Beautiful* (3 Park st., Boston 25c) 41:216-17 Mr '17
- Garden facing the sea; Mrs E. H. Clapp's garden at Swampscott, Mass. *il House Beautiful* (3 Park st., Boston 25c) 41:228-9 Mr '17
- Garden of Mrs Charles P. Fox at Springhouse near Philadelphia; photographs. *Country Life* 32:40-1 JI '17
- Imhagh, Tuxedo Park, N.Y. *il Gard Chron Am* 22:53-4 F '18
- Island garden from 1652; Sylvester Manor at Shelter Island, New York. T. Tryon. *il Country Life* 30:19-21 JI '16
- Terrace garden for Mr H. H. Rogers at Tuxedo Park, New York; photographs. J. W. Gillies. *Country Life* 29:36-7 Ap '16

**Gardens, Bog.** See Bog gardens

**Gardens, Japanese**

- Japanese garden. J. Johnson. *il Gard Chron Am* 20:505-6 D '16
- \* Japanese garden in America, is it a possibility? H. D. Bogan. *il House Beautiful* (41 Mt Vernon st, Boston 25c) 44:125-7 Ag '18
- Japanese garden in California on the estate of Mr G. W. Wattle, Hollywood; photographs. *Country Life* 32:60-1 My '17
- Japanese gardens in America. C. A. Byers. *il Art World* (2 W. 45th st., N.Y. 35c) 2: 571-4 S '17
- Popular Japanese gardens. M. Wells. *il Delin-eator* (Spring and MacDougal sts., N.Y. 15c) 90:23 F '17
- Spirit of the Japanese garden. B. Y. Morrison. *il Scribner's* (597 5th av, N.Y. 35c) 62: 703-11 D '17

**Gardens, Rock.** See Rock gardens

**Gardens, Water.** See Water gardens

**Garget.** See Udder—Diseases

**Garlic**

- Commercial acreage of garlic. *Monthly Crop Rep* 3:40 My '17
- Garlic. R. L. Watts. *Country Gent* 81:1078 My 20 '16
- Increased interest in garlic culture. *Market Growers J* 18:119-20 F 15 '16

**Garlic, Wild.** See Wild garlic

**Garment making.** See Dressmaking

**Gas**

- Making nitric acid from gas. *Am Fert* 47:22-3 Ag 4 '17
- Use of gas for laboratories, isolated factories, homes and stores. *il Am Fert* 44:42c-42d Ja 22 '16

See also Plants, Effect of gases on

**Gas and oil engines**

- About laying up your engine. L. J. Watson. *Power F* 25:37 S '16
- About magnetos for farm engines. C. V. Hull. *il Power F* 26:25+ JI '17
- Advancing the spark. A. P. Pearce. *Country Gent* 83:34 Mr 9 '18
- Are you and your engine pals. H. A. Von Nieda. *il Power F* 26:44 O '17
- Auto motors for stationary purposes. I. W. Dickerson. *Wallaces' F* 43:296 F 15 '18



**Gas and oil engines—Continued**

Before you buy that engine. P. T. Hines. Country Gent 82:1406 S 15 '17  
 Buying a gasoline engine. P. T. Hines. Prog F 32:130 F 3 '17  
 Carbon troubles. F. L. Peterson. Country Gent 81:2039 N 25 '16  
 Cold-weather trouble. G. P. Pearce. Country Gent 83:44 Ja 12 '18  
 Concrete engine base. R. H. Smith. il Country Gent 83:34 Mr 9 '18  
 Consideration of gas engine details. Farm Eng 3:164+ F '16  
 Course of study in farm tractors; further gas engine details. Farm Eng 3:195-6 Mr '16  
 Determining engine's horse power. Rural N Y 77:1309 N 23 '18  
 Engine fuel troubles. J. B. Kelley. Kimball's D F 14:162 Mr 1 '16  
 Engine gang troubles remedied. C. O. Reed. O Judd Farmer 60:23 F 5 '16  
 Engine on a one-man farm. Country Gent 81:1193 Je 10 '16  
 Engine on the binder. Wallaces' F 41:945 Jl 7 '16  
 Engine talks. P. T. Hines. Country Gent 82:481 Mr 10 '17  
 Every man an engine expert. P. T. Hines. Country Gent 82:1257 Ag 11 '17  
 Gas engine and the milking machine. W. Jack. Hoard's D 53:927 Je 29 '17  
 Gas engine governors and governing. A. Phillips. il Farm Eng 3:230 Ap '16  
 Gas engine lubrication. Farm Eng 3:226+ Ap '16  
 Gas engine troubles and remedies. Farm Eng 3:253-4, 273 My-Je '16  
 Gasoline engine—a tireless hired man. A. M. Salley. il Prog F 31:173 F 5 '16  
 Gasoline engine for the farm. C. K. Shedd. il Hoard's D 53:914 Je 29 '17  
 Gasoline engines. Wallaces' F 43:54 Ja 11 '18  
 General notes on power farming. E. R. Wiggins. Power F 25:22 F '16  
 Grease on the armature. G. P. Pearce. Country Gent 81:2171 D 16 '16  
 Greatest labor saver. Farm Eng 5:11 S '17  
 Grinding and timing valves. Country Gent 82:942 My 26 '17  
 How and why of the gas engine. A. E. Waller. il Prac F 112:275 Jl 15 '16  
 How to get rid of carbon deposits. Power F 25:40 D '16  
 It pays to know gas engine principles. D. M. Finley. Farm Eng 5:8 Ag '17  
 Keeping the engine healthy. L. W. Dickerson. O Judd Farmer 60:8 Ja 22 '16  
 Kerosene engine. L. Dickey. N Y Prod R 44:274 Je 13 '17  
 Kerosene engine. W. F. Gibbons. Ohio F 138:83 Jl 29 '16  
 Knowledge in tractor operation. E. R. Wiggins. Country Gent 81:1373 Jl 15 '16  
 Lauson kerosene engine. il Irr Age 31:138 Jl '16  
 Locating engine troubles. I. W. Dickerson. O Judd Farmer 60:12 Ja 29 '16  
 Make and break ignition. J. B. Kelley. il Kimball's D F 14:247 Ap 1 '16  
 My method of stopping leaks. D. R. A. Drummond. Power F 27:24 O '18  
 Oil engine and its application to Indian agriculture. W. M. Schutte. Ag J of India 13:608-15 O '18  
 Oil the clutch. R. Olney. Country Gent 82:206 F 3 '17  
 Power farming. S. W. Charles. Farm Eng 6:6 Ja '18  
 Power of engines and tractors. I. W. Dickerson. Country Gent 81:1266 Je 24 '16  
 Putting up a line shaft. R. H. Smith. Rural N Y 77:1310 N 23 '18  
 Rust has its good points too. W. B. Jones. il Power F 27:16 O '18  
 Scale trouble in the gas engine. H. A. Von Nieda. Power F 27:33 N '18  
 Selling gas engines on trial. J. Francis. Power F 27:24 F '18  
 Something wrong. E. R. Wiggins. Country Gent 82:960 Je 2 '17  
 Starting in cold weather. Country Gent 81:1972 N 11 '16  
 Starting the farm gas engine in winter. R. Olney. Power F 26:20 N '17

Summer uses for a gasoline engine; our experience pool. Prac F 114:161 Ap 15 '18  
 Teaching women to run the engine. W. H. Underwood. il Power F 25:29 O '16  
 There is carbon in your engine. R. Olney. Power F 25:19 N '16  
 Tractor engine troubles. D. McDonald. Country Gent 81:2113 D 9 '16  
 Try these kinks on your engine. Power F 25:47 Mr '16  
 Weaning the gasoline engine. R. H. Smith. Rural N Y 76:568 Ap 14 '17  
 When an engine overheats. P. T. Hines. Country Gent 82:1070 Je 23 '17  
 When Don got her small engine. plan Power F 26:28 Ag; 24 S; 30 O; 26 N '17; 27:28 F; 22 My; 34 Je '18  
 When the engine power is weak. P. T. Hines. Country Gent 82:613 Mr 24 '17  
*See also* Automobile engines; Farm engines

**Cooling**

Cooling water troubles. R. Olney. Country Gent 82:960 Je 2 '17  
 Gasoline engine cooling systems. P. T. Hines. il Prog F 32:246 F 24 '17  
 One way to keep an engine cool. R. Olney. Power F 26:36 Ja '17

**Fuel**

Alcohol a substitute for gasoline. Power F 26:56 Mr '17  
 Fuels for internal combustion engines. O. E. Bransky. Am Soc Ag Eng Trans 10,no 2:108-15 '17  
 Kerosene for fuel. B. J. Ruetenik. Country Gent 81:1469 Ag 5 '16  
 Utilizing kerosene as engine fuel. G. W. Iverson. O Judd Farmer 62:2 Ja 13 '17

**Valves**

Gas engine valves. A. Phillips. Farm Eng 3:191 Mr '16  
 Some helpful hints on gas engine valves. D. R. A. Drummond. il Power F 25:12 N '16

**Gases.** *See* Fungi, Effect of gases on; Plants, Effect of gases on

**Gases in soils.** *See* Soil gases

**Gaskets**

Proper use of gaskets. W. A. Tarantous. O Judd Farmer 60:7 My 27 '16

**Gasoline**

American motorists and the gasoline situation. A. Johnston. Country Life 34:96 My '18  
 Gasoline and the government. B. W. Currie. il Country Gent 81:957-8+, 1014-15 My 6-13 '16  
 Gasoline hazards. Ohio F 138:110 Ag 5 '16  
 Gasoline—past, present and future. Wallaces' F 41:524 Mr 31 '16  
 Gasoline seven times more powerful than dynamite. Green's Fruit Grower 36:17 Ag '16  
 Handling gasoline. C. V. Hull. Power F 26:16 Ja '17  
 Ignition of gasoline by electricity. Power F 25:22-3 S '16  
 Low grade gasoline and old cars. W. B. Jones. Power F 27:20 O '18  
 Protecting the farmstead from fire. A. Scott. Breeder's Gaz 69:918 Ap 27 '16  
 Save gasoline to meet war needs. Power F 27:14 Ja '18  
 Saving gasoline. E. Rogers. Power F 27:33 D '18  
 That gasoline problem. E. A. Stephens. Country Life 30:86 My '16  
 Why of gasoline prices. Better Fruit 10:14 Ap '16

**Storage**

Place where gasoline stays put. il Power F 26:12 My '17

**Gasoline, Substitutes for**

Power-alcohol; a substitute for petrol. J Dept Ag Victoria 16:115-17 F '18

**Gasoline engines.** *See* Gas and oil engines

**Gasteromycetes**

Notes on new or rare species of gasteromycetes. W. H. Long. Mycol 9:271-4 S '17

**Gastrophilus haemorrhoidalis.** *See* Botflies

- Gates, Burton Noble, 1881-**  
Ontario provincial apiarist. M. Pettit. Am Bee J 58:373 N '18
- Gates**  
Barn gate easily opened. il System on the Farm 3:142 O '18  
Combination farm-gate. J. D. Ritchie. il J Ag New Zealand 14:51-2 Ja '17  
Doorways to the garden. A. Embury. il Gard M 23:175-6 Ap '16  
Gates and gateposts for farmhouses. W. B. Brinckloe. O Judd Farmer 61:24 O 28 '16  
New farm gate. W. C. Wilson. Prog F 31:40 Ja 8 '16  
Practical hog farm gate. Mrs D: E. Harris. Swine World 5:9 Mr '18  
Swinging farm gate. L. M. Roehl. Hoard's D 53:250 Mr 2 '17
- Gearing**  
Use and abuse of gear wheels. X. W. Putnam. Farm Eng 5:4 Mr '17
- Geese**  
Ancestry of the goose. il J Heredity 7:39-45 Ja '16  
Breeding Toulouse geese. W. H. Martin, jr. Prog F 33:6 Ja 5 '18  
Care and feeding of goslings. M. A. Herold. Prac F 112:154 Ap 1 '16  
Care of baby geese. Am P Advocate 24:472 Ap '16  
Care of geese. Am P Advocate 26:130 Ja '18  
Care of young geese. S. A. Little. Am P Advocate 26:426 My '18  
Chances with geese. Country Gent 81:168 Ja 22 '16  
Chapter for beginners; geese. Am P Advocate 25:324+ Mr '17  
Domestic geese. F. W. Kazmeier. Tex Ag Ext B 10:81-4 '16  
Eggs in several baskets insure poultry success. M. A. Herold. il Prac F 112:71+ F 15 '16  
Experience with geese. M. A. Herold. Nat Stock & F 41:290 Je 9 '17  
Farm goose raising. il Country Gent 81:459 F 26 '16  
Feeding and housing geese in winter. E. M. Betts. Prac F 113:428 D 15 '17  
Feeding goslings. Wallaces' F 41:880 Je 16 '16  
Geese. J. Hadlington. Ag Gaz of New South Wales 27:891-3 D '16  
Geese a war asset. Ohio F 142:100 Ag 3 '18  
Geese as flesh-producers. Sci Am Sup (233 Broadway, N. Y. 10c) 86:123 Ag 24 '18  
Geese as food conservators. F. H. Valentine. Country Life 33:118 Ap '18  
Geese by trainloads. T. J. Delohery. Country Gent 83:35 S 14 '18  
Geese for meat; they produce big gains on very cheap feeds. M. H. Decker. il Country Gent 83:31 Ag 3 '18  
Geese, grass and greenbacks. T. F. Jager. il Prac F 113:159+ Ap 15 '17  
Geese in large numbers. F. H. Valentine. Country Gent 81:1450 Jl 29 '16  
Getting a start with geese. E. M. Betts. Prac F 113:388 N 15 '17  
Goose eggs in incubators. Nat Stock & F 41:92 Ap 14 '17  
Goose eggs in incubators. F. H. Valentine. Country Life 33:86 F '18  
Goose raising. Prog F 31:547 Ap 15 '16; Same. N Y Prod R 42:118 My 10 '16  
Goose raising. M. A. Jull. il J Ag (Quebec) 20:63 S '16  
Goose raising. H. M. Lamon and A. R. Lee. il Farmers' B 767:1-16 '17; Same cond. Am P Advocate 25:322 Mr '17; Same cond. Am P J 48:455 Mr '17  
Goose raising. A. G. Taylor. J Ag (Quebec) 22:97 D '18  
Goose raising artificially. Country Gent 81:1124 My 27 '16  
Grainless farm geese. F. H. Valentine. il Country Gent 83:32 My 11 '18  
Handling geese. Ohio F 142:559 D 7 '18  
Hints on goose culture. Reliable P J 23:1202 F '17  
Kent island goose industry. il O Judd Farmer 60:15 F 5 '16  
More geese should be raised on farms. C. M. Brumfield. Am P J 49:663+ Jl '18
- Patriotic goose growing. E. I. Farrington. Country Life 25:77 D '18  
Pointers on geese. Ohio F 138:583 D 9 '16  
Profits from geese. M. Betts. il Fruit-Grower 28:91 F 1 '17  
Raising ducks, geese, and turkeys; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 57) 10p '17 U. S. States relations service, Washington, D.C.  
Raising geese on the farm. A. Bayes and F. S. Jacoby. Ohio F 137:358 Mr 4 '16  
Small flocks on good pasture are profitable. M. A. Herold. il Country Gent 81:1521 Ag 12 '16  
Use of charcoal in fattening ducks and geese. J Ag (Quebec) 22:12 Jl '18  
Venture in goose farming. M. A. Jull. il Rural N Y 76:511 Ap 7 '17
- Geese, Wild**  
Wild geese of Wyndygoul. E. T. Seton. il Country Life 29:19-21 Ap '16
- Gelatin**  
Gelatin; grades on the market and use in ice cream. O. E. Williams. N Y Prod R 41:550-1, 586 Ja 26-F 2 '16  
Making gelatine. N Y Prod R 44:200 My 30 '17  
Preparing gelatine. A. H. Start. N Y Prod R 44:200 My 30 '17  
Why gelatin is required and its effect on ice cream quality. O. E. Williams. Creamery 4:36+ Mr; 43 Ap '16
- Statistics**  
Commercial stocks of gelatin. U S Food Surveys 1:29-31 Je 29 '18
- Gelechia gossypiella.** See Bollworms, Pink
- Genealogy**  
Office-holding family. M. T. Goodrich. J Heredity 8:277-83 Je '17  
Tracing your ancestors. E. Putnam. J Heredity 9:8-14 Ja '18
- General Austrian society for the sale of cattle**  
Object and the task of the Allgemeine oesterreichische viehverwertungsgesellschaft. Int R Ag Econ 76:28-30 Ap '17
- General breeders' association of the province of Quebec**  
22d annual meeting. Montreal. Feb. 8, 1916. J Ag (Quebec) 19:219 Ap '16  
23d annual meeting. Montreal. Feb. 12-13, 1917. J Ag (Quebec) 20:209 Ap '17
- General federation of women's clubs**  
Biennial; the time has come for rural clubs to help. M. Sellers. Country Gent 81:1312 Jl 1 '16  
Echoes from the federation. Wallaces' F 41:850 Je 9 '16  
New York biennial. G. V. Gray. il Country Gent 81:867 Ap 15 '16
- General Grant national park**  
\* General information regarding Sequoia and General Grant national parks. 45p bibliog maps '18 U. S. Nat. park service, Washington, D. C.
- General union of cooperative consumers' associations**  
Denmark: the General union of co-operative consumers' associations in 1915. Int R Ag Econ 73:17-19 Ja '17
- Geneticist (word)**  
Report of committee on nomenclature. J Heredity 7:8 Ja '16
- Genetics**  
\* Application of genetics to breeding problems. L. J. Cole. il School Sci and Math (2059 E. 72d place, Chicago 30c) 18:447-54 My '18  
\* Case of the blue Andalusian. W. A. Lippincott. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:95-115 F '18  
\* Disproof of a certain type of theories of crossing over between chromosomes. H. S. Jennings. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:247-61 Ap '18  
Meaning of genetic terms. J Heredity 9:91-4 F '18
- Study and teaching**  
Present status of instruction in genetics. E. E. Barker. J Heredity 8:69-71 F '17



**Geneva, Illinois**

Children's Isle; how Geneva, Illinois, solved the playground problem. W. F. French. *il Country Life* 31:44-5 N '16

**Gentry, N. H.**

Portrait. *Breeder's Gaz* 69:1321 Je 29 '16

**Geographical distribution of animals and plants**

\* **Africa and South America; relationships between the African and South American fauna and flora.** H. H. Johnston. 19th Century (249 W. 13th st, N.Y. 50c) 84:180-7 JI '18

Age and area hypothesis and the problem of endemism. E. W. Sinnott. *Ann Bot* 31:209-16 Ap '17

Age and area hypothesis of Willis. E. W. Sinnott. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:457-9 N 9 '17

Cryoscopic constants of expressed vegetable saps as related to the local environmental conditions in the Arizona deserts. J. A. Harris and J. V. Lawrence. *Int R Sci & Prac Ag* 8,no 5:708-11 My '17

Distribution of endemic species in New Zealand. H. de Vries. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:641-2 Je 22 '17

Distribution of species. M. C. Coulter. *Bot Gaz* 63:419-20 My '17

Distribution of species in New Zealand. J. C. Willis. *Ann Bot* 30:437-57 JI '16

Distribution of the plants of the outlying islands of New Zealand. J. C. Willis. map *Ann Bot* 31:327-33 JI '17

Evolution of species in Ceylon, with reference to the dying out of species. J. C. Willis. *Ann Bot* 30:1-23 Ja '16

Floral relations among the Galapagos islands. A. L. Kroeber. *Cal Univ Pub Botany* v 6, no 9 199-220p '16 (20c)

Further evidence for age and area; its applicability to the ferns, etc. J. C. Willis. *bibliog Ann Bot* 31:335-49 JI '17

Geographic affinities of the vascular floras of New England, the maritime provinces and Newfoundland. M. L. Fernald. maps *Am J Bot* 5:219-36 My '18

Geographical distribution of the marine algæ. W. A. Setchell. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:197-204 Mr 2 '17

Life zone investigations in Wyoming. M. Cary. *il map U S Ag No Am Fauna* 42:1-95 '17

Note on the age and area hypothesis. E. W. Berry. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:539-40 N 30 '17

On endemism and the mutation theory. H. N. Ridley. *Ann Bot* 30:551-74 O '16

On the osmotic concentration of the tissue fluids of phanerogamic epiphytes. J. A. Harris. *bibliog Am J Bot* 5:490-506 N '18

Physical chemistry in the service of phyto-geography. J. A. Harris. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:25-30 JI '17

Phytogeography of Manoa valley, Hawaiian islands. V. MacCaughy. *il maps Am J Bot* 4:561-603 D '17

Plant communities of farm land. R. G. Stapledon. *bibliog Ann Bot* 30:161-80 Ja '16

Plants as travellers. *J Ag* (Quebec) 20:88 O '16

Pollen sterility in relation to the geographical distribution of some onagraceae. C. C. Forsaith. *bibliog il Bot Gaz* 62:466-87 D '16

Present day problems of plant geography. J. Dufrenoy. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:242-3, 266-7 Ap 20-27 '18

Relation between age and area in the distribution of plants. E. F. Andrews. *Science* (Science Press, Garrison, N.Y. 15c) n s 47:142-3 F 8 '18

\* **Relative age of endemic species.** H. de Vries. *Science* (Science Press, Garrison, N.Y. 15c) n s 47:629-30 Je 28 '18

Relative age of endemic species and other controversial points. J. C. Willis. *bibliog Ann Bot* 31:189-208 Ap '17

Role of winter temperatures in determining the distribution of plants. F. Shreve. *Am J Bot* 1:194-202 Ap '14

Sources and distribution of the New Zealand flora, with a reply to criticism. J. C. Willis. *bibliog Ann Bot* 32:339-67 JI '18

Trans-Pacific agriculture. O. F. Cook. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:436-7 N 2 '17

*See also* Botany—Ecology; Forest ecology; Plant introduction

**Geography, Commercial**

Geography of the world's agriculture. V. C. Finch and O. E. Baker. 149p *bibliog maps U S Ag*

Geography of wheat prices; summary of conditions affecting farm prices of wheat in different parts of the United States. L. B. Zapoleon. maps *U S Ag B* 594:1-46 '18

**Geology**

*See also* Paleobotany; Soils

**Minnesota**

Surface formations and agricultural conditions of northeastern Minnesota. F. Leverett and F. W. Sardeson. (B. 13) 69p *il maps '17 Univ. of Minnesota, Minneapolis*

**Georgia**

*See also* subhead Georgia under special subjects, e.g. Agriculture—Georgia, Crops—Georgia

**Education**

Seventh annual report of the eleven district agricultural schools of Georgia. J. S. Stewart. *Ga Ag Coll B* 109:1-36 Je '16

Where country children get as good schools as city children. C. Poe. *il Prog F* 31:811 Je 24 '16

**Industries and resources**

Empire state of the South: what she is and will be. 95p *il map '16 Ga. state dept. of ag., Atlanta*

**Georgia agricultural experiment station**

Twenty-ninth annual report, 1916. 31p *il n.d. Georgia experiment station, Experiment, Ga.*

**Georgia dairy and live stock association**

23d meeting. M. P. Jarnagin. *Jersey B* 37:191 F 6 '18

**Georgia fruit exchange**

Co-operation saved the peaches. W. B. Hunter. *il Fruit-Grower* 27:526+ D 15 '16

**Georgia state college of agriculture**

Announcement 1917-1918. *Ga Ag Coll B* 119:1-110 '17

Annual report 1916-17. *Ga Ag Coll B* 128:1-76 '17

Annual report, 1917-1918. A. M. Soule. *Ga Ag Coll B* 153:1-83 '18

Short courses for farmers and farm women January 2-12, 1918. *il Ga Ag Coll B* 143:1-20 '17

**Extension service**

Annual report of extension service 1915-1916. maps *Ga Ag Coll (Ext) B* 110:1-56 Ag '16

Annual report of extension service 1916-1917. *Ga Ag Coll (Ext) B* 133:1-69 '17

Extension service report for Georgia, 1917-1918. J. P. Campbell. maps *Ga Ag Coll (Ext) B* 157:1-63 '18

**Georgia state forest school**

Opportunities in the profession of forestry and the business of lumbering. *il Ga Ag Coll (Ext) C* 55:1-8 '17

**Geotropism**

Geotropism and the Weber-Fechner law. J. Small. *Ann Bot* 31:313-14 Ap '17

Influence of the leaf upon root formation and geotropic curvature in the stem of bryophyllum calycinum and the possibility of a hormone theory of these processes. J. Loeb. *il Bot Gaz* 63:25-50 Ja '17

Influence of the medium upon the orientation of secondary terrestrial roots. R. M. Holman. *il Am J Bot* 3:407-14 O '16

Orientation of primary terrestrial roots with particular reference to the medium in which they are grown. R. M. Holman. *bibliog il Am J Bot* 3:274-318 Je '16

**Geraniums**

- Genial geranium. *il Gard Chron Am* 22:143 My '18  
 Growing the finest geraniums. M. G. Kains. *O Judd Farmer* 60:31 Ap 1 '16  
 Pelargoniums or geraniums. E. H. Jones. *il J Ag (Quebec)* 19:255 Je '16  
 Zonal pelargoniums. R. P. Brotherston. *il Gard Chron (Lond)* 59:175 Mr 25 '16  
*See also* Cranesbill

**Diseases and pests**

- Tarsonemus pallidus Banks, a pest of geraniums. P. Garman. *il Md Ag Exp B* 208:327-42 '17; Same. *Md Ag Exp Rep* 1916-1917 '17

**German East Africa**

- Land question and the land policy in German East Africa. *Int R Ag Econ* 71:89-93 N '16

**Germany**

- Farm boy and the war. *O Judd Farmer* 64:4 Ja 5 '18  
 Prussian military autocracy. D. F. Houston. *Weekly N L* 5:1-2+ O 31 '17; Same. *Power F* 26:44-5+ D '17  
 What Germany stands for. C. Poe. *Prog F* 33:485 Ap 13 '18  
*See also* subhead Germany under special subjects, e.g. Agriculture—Germany, Food supply—Germany

**History**

- Luther in the day of rural rebellion. G. H. Gerberding. *Rural Manhood* 8:337-9 O '17  
 Some worthwhile history. Wallaces' *F* 43:1146 Ag 9 '18

**Royal colonisation commission**

- Work of the Royal colonisation commission for the provinces of West Prussia and Posen. *Int R Ag Econ* 64:118-23 Ap '16

**Germicides. See Disinfection and disinfectants****Germination**

- Agricultural value of impermeable seeds. G. T. Harrington. *bibliog il J Ag Research* 6:761-96 Ag 14 '16; Abstract. *Int R Sci & Prac Ag* 7,no 11:1605-8 N '16  
 Biology of lodgepole pine as revealed by the behavior of its seed. C. G. Bates. *J For* 15:410-16 Ap '17  
 Catalase and oxidase content of seeds in relation to their dormancy, age, vitality, and respiration. W. Crocker and G. T. Harrington. *bibliog J Ag Research* 15:137-74 O 21 '18  
 Controlling influence of carbon dioxide on the production of secondary dormancy in seeds of brassica alba. F. Kidd and C. West. *bibliog il Ann Bot* 31:457-87 Jl '17  
 Drought-resisting adaptation in seedlings of Hopi maize. G. N. Collins. *bibliog il J Ag Research* 1:293-302 Ja '14  
 Ecological investigations upon the germination and early growth of forest trees. R. H. Boerker. 89p *bibliog il '16 Univ. of Nebraska, Lincoln*; Same. *University Studies (Nebraska Univ., Lincoln)* v 16 nos 1, 2:1-89 Ja-Apr '16  
 Effect of depth of covering seed upon the germination and quality of stock. S. B. Show. *J For* 15:619-23 My '17  
 Effect of germination of cotton seed of passing the kapas through the opener. Bhai Kharak Singh. *Ag J of India* 13:719-21 O '18  
 Effect of meteorological factors on the germination capacity of seeds. J. N. Waliden. *Int R Sci & Prac Ag* 8,no 3:340-2 Mr '17  
 Electrification of agricultural seed. *Gard Chron (Lond)* 62:223 D 1 '17  
 Experiments on the germination of seeds of gramineae. F. Kling. *Int R Sci & Prac Ag* 7,no 4:535-6 Ap '16  
 Factors affecting the depth of sowing various crops. F. S. Harris and H. J. Maughan. *bibliog Utah Ag Exp B* 164:1-18 '18  
 Frost and the plants' awakening. *Gard Chron (Lond)* 59:104 F 19 '16  
 Further studies of the germination of Johnson grass seeds. G. T. Harrington. *Assn Off Seed Analysts Pro* 1916-1917:71-6 '17  
 Germinating coconuts. O. F. Cook and C. B. Doyle. *il J Heredity* 7:148-57 Ap '16  
 \* Germination and juvenile forms of some oaks. L. H. Pammel and C. M. King. (*Contribution no. 63*) 367-91p *il '17 Iowa state college, Dept. of botany, Des Moines*  
 Reprinted from the *Proceedings of the Iowa academy of science*, v. 24, 1917.  
 Germination and viability tests of Johnson grass seed. G. T. Harrington. *Assn Off Seed Analysts Pro* 1916-1917:24-8 '17  
 Germination of hard seeds. *Am Flor* 49:1294 D 29 '17  
 Germination of hard seeds. H. H. Love and C. E. Leighty. *Am Flor* 46:644 Ap 8 '16  
 Germination of iris pseudacorus, Linn., in normal and abnormal conditions. J. H. T. Walsh. *Gard Chron (Lond)* 62:201 N 17 '17  
 Germination of seeds. *Gard Chron (Lond)* 59:246 My 6 '16  
 Germination of seeds of agropyron repens. R. C. Dahlberg. *Assn Off Seed Analysts Pro* 1916-1917:21-4 '17  
 Germination tests of the seeds of garden cress (*lepidium sativum*) under very varied conditions. P. Lesage. *Int R Sci & Prac Ag* 8,no 1:51-2 Ja '17  
 Hard seed. *Gard Chron (Lond)* 60:244 N 18 '16  
 Hastening the germination of Bermuda grass seed by the sulfuric acid treatment. W. E. Bryan. *il Am Soc Agron J* 10:279-81 O '18  
 How a plant is born. E. E. Shaw. *il Gard M* 22:226 Ja '16  
 Influence of hydrogen peroxide on germination. E. Demoussy. *Int R Sci & Prac Ag* 7, no 6:811-12 Je '16  
 Influence of water and mineral matter on the germination of peas. L. Maquenne and E. Demoussy. *Int R Sci & Prac Ag* 8,no 8:1110-12; no 9:1229-30 Ag-S '17  
 Influence on germination of the hot water treatment of cereal seeds for smut. G. Lakon. *Int R Sci & Prac Ag* 8,no 6:852-3 Je '17  
 Latent life. *Gard Chron (Lond)* 59:48 Ja 22 '16  
 Mechanical device for placing samples of seed into germination tests. H. D. Hughes. *Assn Off Seed Analysts Pro* 1916-1917:42-9 '17  
 Mechanics of dormancy in seeds. W. Crocker. *Am J Bot* 3:99-120 Mr '16  
 Murder will out. E. E. Shaw. *il Gard M* 23:38 F '16  
 Natural reproduction from seed stored in the forest floor. J. V. Hofmann. *bibliog il J Ag Research* 11:1-26 O 1 '17; Abstract. *J For* 15:1046-9 D '17  
 New maize secret. *J Dept Ag Victoria* 16:123-4 F '18  
 New method of germinating acorns for forest planting. J. W. Harshberger. *il Am For* 22:687-8 N '16  
 Not spiders, but seeds. *il Country Gent* 81:827 Ap 15 '16  
 Observations on the development and germination of the seed in certain polygonaceae. E. F. Woodcock. *bibliog il Am J Bot* 1:454-76 N '14  
 Relation of germination in the greenhouse and nursery. S. B. Show. *J For* 16:319-28 Mr '18  
 Relation of green manures to the failure of certain seedlings. E. B. Fred. *bibliog il J Ag Research* 5:1161-76 Mr 20 '16; Abstract. *Int R Sci & Prac Ag* 7,no 3:348 Mr '16  
 Report of lespedeza germination tests. M. Dworak. *Assn Off Seed Analysts Pro* 1916-1917:35-7 '17  
 Scalding or boiling burs of bur clover to hasten germination. J. F. Duggar. *Prog F* 31:11 Ja 1 '16  
 Seed germination. *Am Flor* 47:322 Ag 26 '16  
 Some availability studies with ammonium phosphate and its chemical and biological effects upon the soil. F. E. Allison. *bibliog Soil Sci* 5:1-80 Ja '18  
 Some effects of salt-treated soils on absorption by seeds. W. F. Gericke. *bibliog Soil Sci* 3:271-8 Mr '17  
 Studies in seed germination; the genus marah (*megarrhiza*), cucurbitaceae. A. W. Hill. *il Ann Bot* 30:215-22 Ap '16



**Germination—Continued**

- Viability of radish seeds (*raphanus sativus* L.) as affected by high temperatures and water content. H. D. Waggoner. *bibliog Am J Bot* 4:299-313 My '17; *Abstract. Int R Sci & Prac Ag* 9,no 1:47-9 Ja '18  
 Vitality of buried seeds. S. B. Haskell. *Country Gent* 82:562 Mr 17 '17  
 Way with badly germinating seeds. *Gard Chron (Lond)* 63:124 Mr 23 '18  
*See also* Seed testing; Seeds

**Gestation.** *See* Pregnancy

**Ghirka wheat.** *See* Wheat—Varieties

**Ghost flower.** *See* Indian pipe

**Gillyflowers.** *See* Stocks (flowers)

**Ginger**

- Common medicinal plants. A. Retlas. *Ohio F* 137:228 F 12 '16

**Gingerbread**

- Delicious gingerbread. V. C. Lee. *O Judd Farmer* 65:293 O 5 '18

**Gingham**

- Study of gingham. R. McTavish. *J Home Econ* 10:321-2 Jl '18

**Ginkgo**

- Ginkgo and the microsporangial mechanisms of the seed plants. E. C. Jeffrey and R. E. Torrey. *il Bot Gaz* 62:281-92 O '16  
 Maidenhair tree. *il Gard Chron Am* 20:279 Je '16

**Ginseng**

- American ginseng. *Ag Gaz of New South Wales* 27:740 O '16  
 Ginseng. F. C. Erkel. *Minn Hort* 46:427 N '18  
 Ginseng raising, by T. H. Sutton; American ginseng culture, by J. W. Sears. *Ky Ag Dept Rep* 1916-1917:338-41, 341-2 '18  
 Ginseng troubles. A. O. Gilbertson. *il Minn Hort* 45:210-11 My '17  
 Profits from freak farming. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:249 Mr 23 '18

**Diseases and pests**

- Alternaria panax*, the cause of a root-rot of ginseng. J. Rosenbaum and C. L. Zinsmeister. *il J Ag Research* 5:181-2 O 25 '15  
 Ginseng diseases and their control. H. H. Whetzel and others. *il Farmers' B* 736:1-22 '16  
 Pathogenicity and identity of sclerotinia libertiana and sclerotinia smilacina on ginseng. J. Rosenbaum. *bibliog il J Ag Research* 5:291-8 N 15 '15  
 Phytophthora disease of ginseng (B. 363). J. Rosenbaum. *bibliog il Cornell Ag Exp Rep* 1916:65-106 '17  
 Ramularia root-rot of ginseng. C. L. Zinsmeister. *il Phyt* 8:537-71 N '18

**Gipsy moths**

- Control of the gipsy moth by forest management. G. E. Clement; W. Munro. *map U S Ag B* 484:1-51 '17  
 Dispersion of gipsy-moth larvæ by the wind. C. W. Collins. *U S Ag B* 273:1-23 '15; *Abstract. Int R Sci & Prac Ag* 7,no 1:167-9 Ja '16  
 Food plants of the gipsy moth in America. F. H. Mosher. *U S Ag B* 250:1-39 '15  
 Gipsy moth. *Purdue Ag* 11:35 N '16  
 Gipsy moth and the browntail moth. H. S. Smith. *il Cal State Comm Hort B v* 6:311-15 Jl '17  
 Gipsy moth and the brown-tail moth and their control. A. F. Burgess. *il map Farmers' B* 845:1-28 '17  
 Gipsy moth control work. *Ag Digest* 2:533 Jl '17  
 Gipsy-moth larvæ as agents in the dissemination of the white-pine blister-rust. G. F. Gravatt and G. B. Posey. *J Ag Research* 12:459-62 F 18 '18  
 Gipsy moth work. *map Conn State Ag Exp Rep* 1916, pt 2:83-96 '17  
 Introduction and establishment in Canada of the natural enemies of the brown-tail and gipsy moths. *map Ag Gaz of Canada* 3:20-1, 111-16 Ja-F '16  
 Methods used in determining wind dispersion of the gipsy moth and some other insects. C. W. Collins. *il J Econ Entom* 10:170-7 F '17

- New tree banding material for the control of the gipsy moth. A. F. Burgess and E. L. Griffin. *il J Econ Entom* 10:131-5 F '17  
 Present status of the gipsy and brown-tail moths in Connecticut. I. W. Davis. *J Econ Entom* 10:193-5 F '17  
 Relation of insects to the spread of the wilt disease. H. W. Allen. *J Econ Entom* 9:233-5 F '16  
 Report on the gipsy moth work in New England. A. F. Burgess. *il maps U S Ag B* 204:1-32 '15  
 Solid-stream spraying against the gipsy moth and the brown-tail moth in New England. L. H. Worthley. *il U S Ag B* 480:1-15 '17  
 Some timely suggestions for the owners of woodlots in New England. F. H. Mosher and G. E. Clement. *Sp '17 U.S. Bur. of entomology, Washington, D.C.*  
 Suppression of the gipsy and brown-tail moths and its value to states not infested. A. F. Burgess. *il U S Ag Yearbook* 1916:217-206; *Same. Separate* 706  
 Suppression work against the gipsy and brown-tail moths. W. E. Britton and I. W. Davis. *map Conn State Ag Exp B* 203:246-58 '18

**Diseases**

- New bacterial disease of gipsy-moth caterpillars. R. W. Glaser. *il J Ag Research* 13:515-22 Je 3 '18  
 Studies on wilt of gipsy moth caterpillars; with discussion. J. W. Chapman and R. W. Glaser. *J Econ Entom* 9:149-69 F '16  
 Wilt of gipsy-moth caterpillars. R. W. Glaser. *bibliog il J Ag Research* 4:101-28 My '15

**Laws**

- Law of Massachusetts relating to destruction of gipsy and brown tail moth. W. E. Hanman, comp. 18p '18 N. Y. (state) Lib. legislative reference section  
 Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew 90c)

**Girard, Henry**

- Best farmer in France. W. H. Dean. *il por Country Gent* 83:11-12+ N 23 '18

**Girls**

- Rural and community sociologist. E. R. Groves. *Rural Manhood* 8:405-7 N '17  
 When your girls leave home. *Prog F* 33:516 Ap 20 '18  
*See also* College girls; Education of women; Farm girls

**Girls' clubs**

- Accomplishments of boys' and girls' clubs in food production and conservation. O. H. Benson. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:147-57 N '17  
 Back to the home girls. S. R. Guseman. *Ohio F* 138:158 Ag 19 '16  
 Commonweal club. E. L. Ullmann. *Rural Manhood* 8:395-6 N '17  
 Developing farm girls' clubs. H. Mason. *il Ohio F* 139:54 Ja 13 '17  
 Eight week clubs. A. M. Clark. *il Country Gent* 81:1056 My 13 '16  
 Girls' club and home demonstration work in Alabama. M. J. Reese. *Prog F* 31:361 Mr 11 '16  
 Girls' club guide. L. P. Dowdle. *il Ga Ag Coll (Ext)* B 153:1-15 '18  
 Girls' club work in Georgia, 1916. *il Ga Ag Coll (Ext)* B 105:1-16 '16  
 Girls' club work in Georgia, 1917. L. P. Dowdle. *il Ga Ag Coll (Ext)* B 122:1-16 '17  
 Girls' club work in Ohio. *Ohio F* 139:54 Ja 13 '17  
 Girls' clubs organization circular, 1917. S. R. Guseman. *il W Va Ag Ext C* 113:1-14 '17  
 Girls' clubs; organization circular, 1918. S. R. Guseman. *il W Va Ag Ext C* 175:1-15 '18  
 Home-demonstration work and girls' clubs in the South. (*In* Cooperative extension work, 1916, pt. 2, p. 28-30) *il '17 U S Ag*  
 How the Mississippi club girls are doing things. S. V. Powell. *Prog F* 31:360 Mr 11 '16  
 Ohio girls' club work. *il Ohio F* 139:88 Ja 20 '17

**Girls' clubs—Continued**

Sewing for girls' club work. (Doc. 83) 16p il '18 U.S. States relations service, Washington, D.C.

Sociable county whose young girls think that town must be a lonesome place. G. P. Snyder. il Country Gent 81:1816 O 7 '16  
Songs for girls' clubs. L. P. Dowdle. Ga Ag Coll (Ext) B 131 14p '17

Suggestions on girls' club work. L. R. Gaddis. Purdue Ag Ext Leaflet 70:1-4 '16

Tennessee Liberty girls' club learning house-keeping and homemaking. Prog F 31:358 Mr 11 '16

See also Agricultural clubs; Canning clubs; Cooking clubs

**Glacier national park**

\* General information regarding Glacier national park. 76p bibliog maps '18 U.S. Nat. park service, Washington, D.C.

Glacier national park. M. Daniels. il Am For 22:397-404 Jl '16

\* Unknown wonders of Glacier national park. G. E. Mitchell. il Travel (31 Union sq. N., N.Y. 35c) 31:4-9 My '18

Wild flowers of Glacier park. W. P. Eaton. il Country Life 32:36-9 Jl '17

**Gladden, Washington**

Passing of a great man. C. G. Williams. Ohio F 142:46 Jl 20 '18

**Gladioli**

Culture of the gladiolus and the canna. W. Hughes. J Ag (Quebec) 20:204 Ap '17  
Do you like flowers? Wallaces' F 41:499 Mr 24 '16

Florist's gladiolus. A. J. Bliss. Gard Chron (Lond) 59:25, 31, 53 Ja 8-22 '16

Gladioli and gardenias. Am Flor 48:510 Mr 24 '17

Gladioli for market. J. H. Sperry. il Country Gent 82:777 Ap 21 '17

Gladiolus hybrids. Gard Chron (Lond) 59:34 Ja 15 '16

Gladiolus hybrids. A. J. Bliss. Gard Chron (Lond) 59:66 Ja 29 '16

Gladiolus studies; botany, history, and evolution of the gladiolus. A. C. Beal. bibliog il Cornell Ag Ext B 9:93-188 '16

Gladiolus studies; culture and hybridization of the gladiolus. A. C. Hottes. bibliog il Cornell Ag Ext B 10:195-271 '16

Gladiolus, the flower for everyone. il O Judd Farmer 62:34 Mr 3 '17

Gladiolus's place in the war garden. B. H. Tracy. il Gard Chron Am 22:75-6 Mr '18

Glorious gladioluses. O Judd Farmer 60:44 Mr 4 '16

Growing gladioli for market. P. M. Riley. il Country Life 30:98 My '16

Growing the gladiolus. E. J. Weaver. Rural N Y 77:721 My 25 '18

Handling and storing gladiolus bulbs. G. D. Black. il Minn Hort 45:83-5 F '17

How I grow my gladioli. W. Hartry. (In Report, Horticultural societies of Ontario, 1917, p. 10-16) il '18 Ontario ag. dept., Toronto

How to grow the gladiolus. A. Cowee. Gard Chron Am 21:10 Ja '17

Hybrids of gladiolus primulinus. S. Mottet. Gard Chron (Lond) 59:219 Ap 22 '16

Modern gladiolus. Gard Chron Am 21:242 Je '17

Rare beauties of the gladiolus. M. Chamberlain. il Gard M 24:17 Ag '16

Seeding gladioli at Fordhook. il Am Flor 47:389 S 9 '16

Story of the modern gladiolus. M. Chamberlain. il Gard M 23:229-31 My '16

Summer with some of the new gladioli. E. E. Trumbull. Gard M 23:232 My '16

Truth about gladiolus growing for farmers. E. J. Weaver. Rural N Y 75:652 Ap 22 '16

Uses of the gladiolus and its culture. B. H. Tracy. il Gard Chron Am 20:143-4 Mr '16

Varieties of gladiolus for the novice. M. Chamberlain. il Gard M 27:194 My '18

See also American gladiolus society

**Diseases and pests**

Hard rot disease of gladiolus. L. M. Massey. bibliog il Cornell Ag Exp B 380:153-81 '16; Same. Cornell Ag Exp Rep 1917:153-81 '18

**Glanders**

Active immunization to glanders. A. Marxer. Am Vet M Assn J 48:754-6 Mr '16

Comparative values of the intra-dermal-palpebral mallein test and the examination of the blood for the diagnosis of glanders. Int R Sci & Prac Ag 8,no 1:95-6 Ja '17

Conglutination test for the diagnosis of glanders. H. W. Schoening. bibliog J Ag Research 11:65-75 O 15 '17

Conglutination test with special reference to the diagnosis of glanders. C. P. Fitch. bibliog Am Vet M Assn J 48:566-74 F '16

Diagnosis of glanders by means of coagulation tests. Int R Sci & Prac Ag 7,no 2:239-41 F '16

Glanders. (In Report, 1916, p. 75-8) il '17 Oregon state live stock sanitary board, Salem

Glanders. (In 6th annual report, 1917, p. 20-8) (Pub. Doc. no. 98) '18 Mass. Dept. of animal industry, Boston

Glanders in man. Am Vet M Assn J 49:783-4 S '16

Glanders in wild animals kept in zoological gardens. G. H. Hart. Am Vet M Assn J 49:659-63 Ag '16

Glanders or farcy. C. Lynch. il N Y Ag Dept Rep 1916,pt 2:225-33 '17  
From N Y Ag Dept B 76

Intra-palpebral mallein test. A. Liautard. Am Vet M Assn J 49:9-11 Ap '16

Note on the diagnosis of glanders. A. H. Shilston. il Ag J of India 11:65-70 Ja '16

Ophthalmic mallein for the diagnosis of glanders. J. R. Mohler and A. Eichhorn. il U S Ag B 166:1-11 '15

Ophthalmic test for glanders; with a simplified method of procedure. N. S. Ferry. Am Vet M Assn J 50:41-6 O '16

Palpebral malleinization. Am Vet M Assn J 53:587-96 Ag '18

Pfeiler proposal for the combating of glanders in the field by immunization. Am Vet M Assn J 49:536-8 Jl '16

Remarks on glanders. Am Vet M Assn J 49:785-7 S '16

Second report of the special committee for the detection of glanders. Am Vet M Assn J 50:747-57 F '17

Sources of error in the mallein ophthalmic reaction. J. Schnürer. Am Vet M Assn J 50:738-9 F '17

Stamping out glanders. E. L. Vincent. Nat Stock & F 41:282 Je 9 '17

Suppression of glanders. C. D. McGilvray. map Ag Gaz of Canada 4:19-22 Ja '17

See also Anti-glanders serum

**Preventive inoculation**

Immunization tests with glanders vaccine. J. R. Mohler and A. Eichhorn. U S Ag B 70:1-13 '14

Properties of the serum of animals hyperimmunised against glanders, and the choice of animals for the preparation of such serum rich in suitable antibodies. E. Bertetti and G. Finzi. Int R Sci & Prac Ag 9,no 1:69-71 Ja '18

**Glands (botany)**

Chemistry and histology of the glands of the cotton plant, with notes on the occurrence of similar glands in related plants. E. R. Stanford and A. Viehoever. bibliog il J Ag Research 13:419-36 My 20 '18

Glandular pubescence in various medicago species. R. McKee. Am Soc Agron J 10:159-62 Ap '18

Leaf glands of peaches. Gard Chron (Lond) 61:6 Ja 6 '17

Leaf nectaries of gossypium. E. L. Reed. il Bot Gaz 63:229-31 Mr '17

Taxonomic value and structure of the peach leaf glands (B. 365). C. T. Gregory. bibliog il Cornell Ag Exp Rep 1916:183-222 '17

See also Nectar secretion

**Glands, Odoriferous.** See Scent-producing organs



- Glass**  
Glass in the making. *il Country Gent* 82: 523 Mr 10 '17
- Glass cooking utensils**  
Cooking in glass. I. C. B. Allen. *il Country Gent* 81:1601 Ag 26 '16
- Glassware**  
Art of new cut glass. *il Country Life* 31: 140 Ap '17  
Glassware dishes. Ohio F 139:833 Je 30 '17  
Pictorial flasks and cup-plates. W. A. Dyer. *il Country Life* 34:74+ Je '18  
Silver and glass for the tables. *il Country Life* 34:94 O '18
- Globe-flower**. See *Kerria japonica*
- Globe mallow**  
Sphaeralcea. *il Gard Chron (Lond)* 64:75 Ag 24 '18
- Gloeosporium**  
Gloeosporium disease of the spice bush. J. J. Taubenhaus. *Am J Bot* 1:340-2 Jl '14
- Glomerella**  
Plus and minus strains in the genus glomerella. C. W. Edgerton. *il Am J Bot* 1:244-54 My '14  
Utilization of certain pentoses and compounds of pentoses by glomerella cingulata. L. A. Hawkins. *Am J Bot* 2:375-88 O '15
- Gloxinias**  
Cultivation of gloxinias. *Gard Chron Am* 20: 34 Ja '16  
Gloxinia. *Gard Chron Am* 22:51 F '18
- Glucose**  
Glucose and its household uses. J Ag (Quebec) 22:64 O '18  
\* Preparation of several useful substances from corn cobs. F. B. LaForge and C. S. Hudson. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 69c)* 10:925-7 N '18
- Gluten**  
Colloidal swelling of wheat gluten in relation to milling and baking. F. W. Upson and J. W. Calvin. *il Neb Ag Exp Research B* 8:1-26 '16  
Gluten formation in the wheat kernel. G. A. Olson. *Wash Ag Exp B* 142:1-19 '17  
Gluten of bread. *il J Heredity* 8:350-4 Ag '17
- Glycocoll**  
Physiological water requirement and the growth of plants in glycocoll solutions. A. Dachnowski and R. Gormley. *bibliog Am J Bot* 1:174-85 Ap '14
- Gnats**  
See also Buffalo gnats
- Gnetales**  
Independent evolution of vessels in gnetales and angiosperms. W. P. Thompson. *bibliog il Bot Gaz* 65:83-90 Ja '18
- Gnetum**  
Morphology and affinities of gnetum. W. P. Thompson. *bibliog il Am J Bot* 3:135-84 Ap '16  
Preliminary note on the morphology of gnetum. W. P. Thompson. *Am J Bot* 2:161 Ap '15
- Goat breeders' associations**  
See also British Columbia goat breeders' association
- Goats**  
Ancestry of the goat. *Int R Sci & Prac Ag* 7:no 2:255-6 F '16  
Angora goat. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 36:115 F '16  
Angora goat. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 38:217-18, 231-3 Mr-Apr '18  
Angora goats and sheep in Florida—why not both? Fla Ag Dept Quar B v 28:15-35 O '18  
Angora mutton and mohair. D. H. Williams. *il Country Gent* 83:1 O 26 '18  
Back-yard family cow. R. E. Jones. *il Country Gent* 83:8 Je 22 '18  
Boy's goat farm. *Country Gent* 82:350 F 17 '17  
Breeding goats to meet demand. *Am Sheep B & W* 37:250 Ag '17  
Buying brush killers. J. C. Knollin. *il Country Gent* 81:930 Ap 29 '16  
Care of milch goats. *Rural N Y* 75:165 Ja 29 '16  
Climbing with the goats. *Country Gent* 83:30 Ap 20 '18  
Experiments in Germany on the causes of sterility in male goats. J. Wester. *Int R Sci & Prac Ag* 7:no 4:554 Ap '16  
Fences that turn goats. *Country Gent* 81:1228 Je 17 '16  
For the good of the industry in general. F. C. Lounsbury. *Am Sheep B & W* 37:314 My '17  
From brush to blue grass. C. A. Le Clair. *il Country Gent* 81:377 F 19 '16  
Goat grazing on national forests. *Breeder's Gaz* 70:111 Jl 20 '16  
Goat—his suitability to the Americas. *il Pan Am Union B* (17th and E sts, N. W., Washington, D.C. 25c) 44:568-92 My '17  
\* Goat-ranching is made an important industry by the war. *Current Opinion* (63 W. 36th st, N.Y. 25c) 65:271-2 O '18  
Goat registration in Canada. *Am Sheep B & W* 37:569 S '17  
Goats as brush destroyers. H. Hackedorn. *il Breeder's Gaz* 69:916 Ap 27 '16  
Goats for clearing pastures. *Country Gent* 82:1871 D 1 '17  
Goats versus cows. W. H. Miller. *il Prac F* 114:242 Jl 15 '18  
Good words for the goat. *Rural N Y* 77:206 F 9 '18  
Importance of the milch goat. L. S. Gillette. *il Hoard's D* 55:179 F 22 '18  
Interest in goat husbandry. F. C. Jacobs. *Nat Wool Grower* 7:30 Ag '17  
International Nubian breeders' association. *Am Sheep B & W* 36:371 Je '16  
Making money with goats. G. H. Dacy. *il Farm Eng* 5:6 O '17  
Management of the doe flock at kidding time. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 36:178-9 Mr '16  
Milch goat. A. C. McCandlish and L. S. Gillette. *la Ag Exp C* 42:1-4 '18  
Milch goat in California. E. C. Voorhies. *bibliog il Cal Ag Exp B* 285:87-114 '17: Same. *Am Sheep B & W* 37:634-5, 698-9, 762-3 O-D '17  
Milch goat in southern California. L. B. Matthews. *Am Sheep B & W* 36:112 F '16  
Milch goat registration. *Am Sheep B & W* 36: 177 Mr '16  
Milch goats. Mrs W. B. Doak. *il Nat Stock & F* 40:378 Jl 8 '16  
Milch goats. H. S. Elliott. *Fla Ag Dept Quar B v* 28:5-13 Jl '18  
Milk goat—present status and future development. L. S. Gillette. *Am Sheep B & W* 38:470 Jl '18  
Milk goats. E. L. Shaw. *il Farmers' B* 920:1-36 '18  
Prospects for the development of the milch goat industry. T. R. Arkell. *Am Sheep B & W* 37:441 Jl '17  
Proved milch goat milk superior to cow product. J. H. Breneman. *Am Sheep B & W* 37: 504 Ag '17  
Selection and breeding of milch goats. L. S. Gillette and A. C. McCandlish. *Am Sheep B & W* 38:530 Ag '18  
Shall I keep a goat? *Rural N Y* 77:55 Ja 12 '18  
Shall we admit goats to registry by inspection? *Am Sheep B & W* 36:495 Ag '16  
Shearing mohair and preparation of the fleece. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 36:242-3 Ap '16  
Sheep and goat industry in California. T. H. Ramsay. *Cal Ag Bd Rep* 1917:xxiv-xxvii '18  
Sheep and goats. (*In* Geography of the world's agriculture, p. 136, 142-6) maps '17 U S Ag  
Western goats in New England. W. G. Todd. *Am Sheep B & W* 36:113-14 F '16
- Diseases and pests**  
Ailments of the goat. A. T. Kinsley. *Am Sheep B & W* 38:56 Ja '18  
Diagnosis and treatment of principal goat diseases. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 36:306-7 My '16  
Diseases of goats. T. R. Arkell and H. V. Bent. *Am Sheep B & W* 38:417 Je '18

**Goats—Diseases and pests—Continued**

Notes on a fatal parasitic infestation in a herd of cattle and goats in the province of Ambos Camarines. W: H. Boynton and L. D. Wharton. *il Philippine Ag R* 9,no 4: 348-53 '16

Prevention of Malta fever by active immunisation of animal carriers. H. Vincent. *Int R Sci & Prac Ag* 9,no 4:411-12 Ap '18

Studies on contagious agalaxy of goats in Algeria. E. Sergeant and G. Roig. *Int R Sci & Prac Ag* 8,no 8:1135-6 Ag '17

**Feeding**

Economical feeding of milch goats. L. S. Gillette and A. C. McCandlish. *Am Sheep B & W* 38:746-7 N '18

**Study and teaching**

Instruction in sheep and goat husbandry; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 76) 12p '18 U.S. States relations service, Washington, D.C.

**Goats' milk.** See Milk, Goats'

**Goat's-rue**

Ensilage from goat's rue. W. Dibble. *il J Ag New Zealand* 13:230-1 S '16

Goat's-rue (galega officinalis); a recently gazetted noxious weed. A. H. Cockayne. *il J Ag New Zealand* 12:125-30 F '16

**Go-Getter;** story. C. Richter. *il Country Gent* 83:16-17+ Ap 6 '18

**Going away to town;** story. H. C. Bennett. *il Country Gent* 83:20-1 Mr 2 '18

**Gold hat;** story. A. P. Terhune. *il Country Gent* 83:20-1+ F 16 '18

**Goldenrod**

Anatomy of certain goldenrods. E. S. Whitaker. *il Bot Gaz* 65:250-60 Mr '18

Goldenrods as honey plants. F. C. Pellett. *il Am Bee J* 57:300-1 S '17

Sheep poisoned by western goldenrod. S. Lockett. *Am Vet M Assn J* 51:214-21 My '17

**Golden-winged woodpecker.** See Flickers

**Goldfish**

Care of gold fish. E. H. Jones. *J Ag (Quebec)* 19:179 F '16

Goldfish aristocracy. L. S. Crandall. *il Country Life* 29:30-1 F '16

**Golf**

Afield with a home-bred pro; Walter Hagen's game of golf. H. Reed. *il Country Life* 30: 44-5 O '16

Golf scoring. S. Metzger. *Country Life* 32:90 O '17

New golf champion? H. Reed. *il Country Life* 30:36-7 Ag '16

On the green in one. H. Reed. *il Country Life* 31:48-9 Ja '17

**Gonadectomy**

Goodale's experiments on gonadectomy of fowls. T. H. Morgan. *Science (Science Press, Garrison, N.Y. 15c)* n s 45:483-4 My 18 '17

See also Capons and caponizing; Castration

**Gonorrhea**

Testicular infusion agar—a sterilizable culture medium for the gonococcus. I. C. Hall. *bibliog J Bact* 1:343-52 My '16

**Goose.** See Geese

**Goose flowers.** See Pelican flowers

**Gooseberries**

Gooseberries. *il Nat Stock & F* 40:1278 F 24 '17

Gooseberries. S: Fraser. *il Country Gent* 81: 2230 D 30 '16

Gooseberries. E. P. Powell. *il Country Gent* 81:453 F 26 '16

Gooseberries (C. 46). O. M. Taylor. *N Y State Ag Exp Rep* 1915:647-51 '16

Gooseberries and currants. J. Oskamp. *il Ind Ag Exp B* 207:1-11 '17

Gooseberries in New York state. O. M. Taylor. *il N Y Ag Dept B* 79,pt 2:1391-6 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1391-6 '17

Gooseberry culture. *il Prac F* 112:249 Je 15 '16

Gooseberry recipes. H. A. Lyman. *O Judd Farmer* 61:19 Ag 5 '16

Strawberries, currants and gooseberries; with discussion. A. W. Brayton. *Ill State Hort Soc Trans* 1917:257-64 '18

**Diseases and pests**

Important currant and gooseberry diseases. A. S. Colby. *Am Fruit Grower* 38:14 S '18

Studies in the life histories of some species of septoria occurring on ribes. R. E. Stone. *il Phyt* 6:419-27 D '16

Yellow currant and gooseberry fruit-fly. L. A. Whitney. *il Cal State Comm Hort B* 5:152-7 Ap '16

See also Gooseberry mildew; Pine blister rust

**Gooseberry fruit flies.** See Fruit flies

**Gooseberry mildew**

American gooseberry mildew. *Gard Chron (Lond)* 63:218 My 25 '18

Ammonium sulphide wash for American gooseberry-mildew. *J Bd Ag* 23:1098-1100 F '17

Control of American gooseberry mildew by spraying. F. R. Petherbridge and A. C. Cole. *J Bd Ag* 23:750-5 N '16

Controlling gooseberry mildew. G: D. Aiken. *Country Gent* 81:2006 N 18 '16

New fungicide for use against American gooseberry-mildew. J. V. Eyre and E. S. Salmon. *J Bd Ag* 22:1118-25 F '16

Summer sprays against American gooseberry-mildew. B. T. P. Barker and A. H. Lees. *J Bd Ag* 22:1244-9 Mr '16

**Gophers**

Concerning the pocket gopher and destructive habits. T. H. Scheffer. *Better Fruit* 10:7-8 Ap '16

Control of gophers. *Ag Gaz of Canada* 4:35-42 Ja '17

Control of the pocket gopher. G: F. Sykes. *Ore Ag Ext B* 200:1-4 '17

Control of the pocket gopher in California. J. Dixon; E. R. De Ong. *il Cal Ag Exp B* 281: 1-15 '17

Go for gophers. *Country Gent* 82:1311 Ag 25 '17

Gopher destruction. *Sp il* '16 *Canada Ag*

Life-history and control of the pocket gopher in the Willamette valley. H. M. Wight. *il Ore Ag Exp B* 153:1-55 '18

Pocket gophers. F. Hood. *il Wallaces' F* 42: 628 Ap 6 '17

Pocket gophers with suggestions for control. W. L. Burnett. (C. 23) *8p il* '17 *Colo. State entomologist, Fort Collins*

To control gopher. *Weekly N L* 5:7 Ja 30 '18

**Gorteria**

Protection of gorteria and neurada seedlings. J. Hutchinson. *il Gard Chron (Lond)* 63: 133-4 Mr 30 '18

**Gortyna micacea.** See Potato stem borers

**Goss, Arthur**

Sketch. M. L. Fisher. *por Purdue Ag* 10:14 Ap '16

**Gossypium.** See Cotton

**Gossypol**

Contribution to the chemistry of gossypol, the toxic principal of cottonseed. F. E. Carruth. *Am Chemical Soc J* (Charles L. Parsons, sec., Box 505, Washington, D. C. \$6 per yr.) 40:647-62 Ap '18

Gossypol, the toxic substance in cottonseed. W. A. Withers and F. E. Carruth. *bibliog il J Ag Research* 12:83-102 Ja 14 '18

Gossypol, the toxic substance in cottonseed meal. W. A. Withers and F. E. Carruth. *bibliog il J Ag Research* 5:261-88 N 15 '15

Methods of approximating the relative toxicity of cottonseed products. F. E. Carruth. (*J. Biol. Chem.*, 32, no. 1 87-90p. '17). *Exp Sta Record* 38:113-14 F '18

**Gourds**

Using the gourd. H. L. Gaut. *il Country Gent* 82:1469 S 22 '17

**Government control of railroads.** See Railroads —Government control



**Government grain corporation.** See United States food administration grain corporation

**Government ownership**

Government ownership of freight cars proposed. H. Smith. *Am Coop J* 12:665 Je '17  
Ownership of stock yards. M. L. McClure. *Wallaces' F* 43:1815 D 13 '18  
State ownership of forest lands. P. T. Coolidge. *J For* 15:951-73 D '17

**Government publications**

Checking the bulletin monopoly. *Country Gent* 81:1024 My 13 '16  
Department bulletins, with contents and indexes, prepared by the Division of publications. nos. 1-25, 26-50, 51-75, 76-100, 101-125, 126-50, 151-75, 176-200, 201-25, 226-50, 251-75, 276-300, 301-25. 13pts 16-'17 U S Ag  
See also Bibliography; Printing, Public; also Farmers' bulletins, Journal of agricultural research, Weekly news letter

**Bibliography**

\* Farmers' bulletins, department bulletins, year-books, Journal of agricultural research; list of publications for sale by the Superintendent of documents. Washington, D. C. (Price list 16—11th ed) 46p '17 Supt. of doc., Washington, D. C.

**Government regulation of industry**

Does regulation regulate? C. Thorne. *Wallaces' F* 41:704 My 5 '16  
Federal versus state regulation. *Wallaces' F* 41:1438 N 3 '16  
Government to control necessities. *Hoard's D* 54:414 O 19 '17  
Governmental regulation during the world war. C. R. Van Hise. *Assn Am Ag Coll & Exp Pro* 1917:134-46 '18  
Organized business. C. Thorne. *Wallaces' F* 41:820+ Je 2 '16  
Regulation of the middleman. A. Hobson. *il Hoard's D* 54:57 Ag 10 '17  
See also Food control; Prices—Government regulation

**Governors (machinery)**

Clean your governor. *Power F* 25:53 My '16  
Gas engine governors and governing. A. Phillips. *il Farm Eng* 3:230 Ap '16  
Keep governor clean. L. J. Watson. *Power F* 27:28 Jl '18  
Why steam engine governors dance. L. J. Watson. *Power F* 25:37 N '16

**Governors' tri-state milk commission**

Milk commission's report. *Nat Stock & F* 41:768 N 10 '17  
Report of the governors' tri-state milk commission. maps Pa Ag Dept B 287:1-70 '17

**Gow, R. M.**

Portrait. *Breeder's Gaz* 69:231 F 3 '16

**Grackles**

Grackle family. *Ohio F* 137:310 F 26 '16

**Grading**

Home made engine land plane. plan *Farm Eng* 4:44 S '16  
Some tractor grader hitches. C. V. Hull. *il Power F* 26:39 Ja '17

**Graduate school of agriculture**

Graduate school at Amherst, Mass. *Breeder's Gaz* 70:96 Jl 20 '16

**Grafting**

All kinds of grafts. F. A. Waugh. *il Country Gent* 83:10-11 F 2 '18  
Apple-bud selection; apple seedlings from selected trees. C. S. Crandall. *il Ill Ag Exp B* 211:181-264 '18  
Apple culture in Victoria. J. Farrell. *il J Dept Ag Victoria* 14:577-89 O '16  
Bridge grafting fir girdled trees. G. W. Wallace. *Rural N Y* 76:542 Ap 14 '17  
Bridge grafting girdled trees. *Purdue Ag* 10:40 Mr '16  
Bridge grafting of fruit trees. W. F. Fletcher. *il Farmers' B* 710:1-8 '17; Same cond. *Better Fruit* 10:6 Ap '16; Same cond. *Minn Hort* 45:126-7 Mr '17; Same cond. *Green's Am Fruit Grower* 38:22 Ap '18  
Bridge grafting wounded trees. H. Findlay. *il Country Gent* 82:1842 N 24 '17

Bud curl of the lemon tree. C. C. Miller. *il Cal State Comm Hort B v* 7:515-19 S '18  
Changing the variety of an apple tree. *il Wallaces' F* 41:571 Ap 7 '16  
Cross-pollination by budding. J. R. Mattern. *Country Gent* 81:211 Ja 29 '16  
Crown grafting; an easy way to make over old trees. *Gard M* 25:244 My '17  
Curing goat-girdled trees. *Fruit-Grower* 27:97 F 1 '16  
Experience in bridge-grafting. J. P. Poland. *il Rural N Y* 77:486 Mr 30 '18  
Grafting. L. Cady. *il Minn Hort* 46:109-13 Mr '18  
Grafting. W. H. Taylor. *il J Ag New Zealand* 13:193-8 S '16  
Grafting and budding. G. G. Atwood. *il N Y Ag Dept B* 79:pt 1:957-66 Ja '16; Same. N.Y. Ag Dept Rep 1916:pt 2:957-66 '17  
Grafting and budding. V. H. Davis. *Ohio F* 139:484 Mr 31 '17  
Grafting, budding and inarching as practiced today. W: Morrow. *Gard Chron Am* 21:199 My '17  
Grafting large grapevines. G. R. Wood. *Rural N Y* 75:245 F 12 '16  
Grafting roses. *Am Flor* 46:6-7 Ja 22 '16  
Grafting tardy walnut trees. C: L. McNary. *Better Fruit* 12:8-9 Je '18  
Grafting walnuts and hickories. J. R. Smith. *il Country Gent* 81:195-6 Ja 29 '16  
Grow your own trees. C. C. Wiggins. *il Country Gent* 83:46 Ja 19 '18  
Growing and grafting olive seedlings. F. T. Bioletti and others. *il Cal Ag Exp B* 268:322-6 '16  
How budding and grafting are done. W: H. Wolff. *il Gard M* 26:48 S '17  
How to bridge graft. *il Wallaces' F* 41:529 Mr 31 '16  
How to successfully graft the crab cactus. M. Nelms. *il Gard M* 22:238 Ja '16  
Is bridge-grafting profitable. E. W: Gage. *Green's Fruit Grower* 37:10 Mr '17  
Long experience at top-working apples. T. H. King. *il Rural N Y* 75:741 My 13 '16  
Methods of budding. C. N. Crotzburg. *il Fruit-Grower* 27:309 Je 1 '16  
Methods of grafting. *Rural N Y* 76:319 Mr 3 '17  
Native wild fruit trees. J. M. Smith. *Fruit-Grower* 28:71 Ja 15 '17  
Operation of budding. *il J Heredity* 8:184-90 Ap '17  
Paradise apple stocks; being the first report of the work in progress at the Wye college fruit experiment station, East Malling. R. G. Hatton. *il Royal Hort Soc J* 42:pts 2-3:361-99 S '17  
Penetration of scion by stock. G. B. Patvardhan. *il J Heredity* 9:187-8 Ap '18  
Perpetuating choice fruit. *il Field* 11 27:380 My '17  
Relative merits of different rootstocks; with discussion. W. L. Howard. *Cal State Comm Hort B v* 7:20-6 Ja '18  
Root and cleft grafting. H. D. Hemenway. *il Mass Ag Bd B* 2 (5th ed):95-101 '16  
Root grafting—how to do it. S. Van Aken. *Ohio F* 137:170 F 5 '16  
Saving girdled fruit trees. G. W. Peck. *il O Judd Farmer* 64:6 Ap 13 '18  
Saving the girdled fruit trees. W. C. Gillespie. *il Pa Ag Ext C* 54:1-8 '17  
Speaking of apples. H. B. Bagg. *Green's Fruit Grower* 36:1 Jl '16  
Spring grafting of the vine. F. de Castella. *il J Dept Ag Victoria* 15:554-65. 608-16 S-O '17  
Stir the grafting wax. J. P. Stewart. *Country Gent* 81:747 Ap 1 '16  
Summer bud, or yema graft of the vine. F. de Castella. *il J Dept Ag Victoria* 15:41-52. 92-101 Ja-F '17  
Table d'hôte tree created by science. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:236 Ap 13 '18  
Top-grafting; discussion. *il Minn Hort* 44:207-12 My '16  
Top grafting. A. C. Gorham. *il J Ag (Quebec)* 19:212 Ap '16  
Top grafting. H. E. Van Deman. *Green's Fruit Grower* 36:10 Mr '16

**Grafting—Continued**

- Top-grafting results. Gard Chron (Lond) 64: 32 JI 27 '18
- Top-worked fruit tree. H: Dunsmore. il Minn Hort 46:193-8 My '18
- Top-working. O. W. Moore. Minn Hort 44: 352-3 S '16
- Top-working and bridge-grafting fruit trees. G. W. Peck. il Cornell Reading Course 123: 243-68 '17
- Top-working not desirable. S: Fraser. O Judd Farmer 62:8 F 17 '17
- Top-working of bearing peach trees. M. A. Blake. il Rural N Y 75:360, 429 Mr 4-11 '16
- Top-working old trees. C. N. Crotsenburg. il Fruit-Grower 28:6 Ja 1 '17
- Top-working pecan trees. E. J. Kyle. Tex Ag Ext B B-21:1-7 '16
- Top-working poor fruit trees. J. R. Mattern. il Gard M 23:84-5 Mr '16
- Top-working with tender varieties. F. L. Washburn. il Minn Hort 45:288-9 JI '17
- Top-working young apple trees. F. H. Ballou. il Rural N Y 75:579 Ap 8 '16
- Variations of a sexual hybrid of the vine obtained by grafting it on one of its parents. F. Baco. Int R Sci & Prac Ag 8,no 4:582-3 Ap '17
- Viticulture in South Africa. A. I. Perold. Int R Sci & Prac Ag 7,no 1:9-14 Ja '16
- Walnut—cultural methods—top grafting. J. B. Neff. Better Fruit 12:7 N '17
- What varieties shall we top-graft? F. W. Kimball. il Minn Hort 46:129-30 Ap '18
- Where bridge grafting is needed. il Rural N Y 75:513 Mr 25 '16
- Whip-grafting apple trees. C. J. Hayden. Prog F 32:93 Ja 27 '17
- Young top-worked orchard; with discussion. E. G. Lee. il Minn Hort 45:14-22 Ja '17
- Grafting wax**  
Making grafting wax. I. J. Mathews. Ohio F 139:407 Mr 17 '17
- Graham flour**  
Using graham and cornmeal. M. Corbett. Rural N Y 76:625 Ap 28 '17
- Grain**  
About the cracking of grain. L. K. Brown. Power F 26:25 My '17
- Brewing industry and grain. Rural N Y 76: 789 Je 16 '17
- Brown's crop talks: growth and lodging of grain. L. C. Brown. il O Judd Farmer 65:90 Ag 3 '18
- Cereals surprise us by being so interesting. Country Gent 82:574 Mr 17 '17
- Directions for growing small grains. W. Wheeler. Mass Ag Bd C 83:1-4 '18
- Effect of greenhouse temperatures on the growth of small grains. T. B. Hutcheson and K. E. Quantz. il Am Soc Agron J 9: 17-21 Ja '17
- Experiments with small grains under irrigation. J. S. Welch. il Idaho Ag Exp B 93:1-24 '17
- Grain-dust explosions. B. W. Dedrick and others. bibliog il U S Ag B 68:1-54 '18
- Grain for distilleries and denatured alcohol. G. D. Crain, jr. Power F 25:33 S '16
- Grain scales and grain weighing. H. H. Alfrety. Railway Age Gazette (Woolworth bldg., N.Y. 15c) 62:1155-6 Je 1 '17
- Harvesting the grain crop. J. A. Raiser. Ohio F 140:38 JI 21 '17
- Harvesting the small grain. C. O. Carpenter. Prog F 32:620 My 19 '17
- Increased production of cereals. J. T. Pridham. Ag Gaz of New South Wales 29:728-30 O '18
- Irrigation of grain. W. W. McLaughlin. il Farmers' B 863:1-22 '17
- Large crops being secured. B. W. Snow. O Judd Farmer 65:109 Ag 10 '18
- Making food from fodder. O. R. Geyer. il Scientific Am (233 Broadway, N.Y. 10c) 117: 177+ S 8 '17
- Mode of pollination in some farm crops. M. N. Pope. bibliog Am Soc Agron J 8:209-27 JI '16
- More winter grain. Weekly N L 5:1-2 S 12 '17
- New method for harvesting small grain and grass plots. A. G. McCall. Am Soc Agron J 9:138-40 Mr '17

- Palate of civilized man and its influence on agriculture. D: Fairchild. il J Fr Inst (Franklin Inst., Philadelphia 50c) 185:299-316 Mr '18
- Preliminary note on soil moisture and temperature factors in the winter-killing of grain crops. S. C. Salmon. Science (Science Press, Garrison, N.Y. 15c) n s 47:173-4 F 15 '18
- Prepare to store grain crop. il O Judd Farmer 63:3 JI 28 '17
- Principles and practice with cereals. il O Judd Farmer 62:3 Je 30 '17
- Relation to the density of cell sap to winter hardiness in small grains. S. C. Salmon and F. L. Fleming. il J Ag Research 13:497-506 Je 3 '18
- Requirements for cereal consumption in Netherlands and United States. Doc Leaflets 1,no 1:3-5 JI '17
- Saving the grain crop. W. C. Smith. Country Gent 81:1227 Je 17 '16
- Saving the grain crops. C. W. Warburton. il Country Gent 83:9 Je 8 '18
- \* Scientific plant breeding. Nature (St Martin's st. London, W. C. 6d) 101:405-7 JI 25 '18
- Seeding small grains. C. G. Williams. Ohio Ag Exp B v 2:76-7 Mr '17
- Seeding winter grains in furrows to prevent winterkilling. S. C. Salmon. il Am Soc Agron J 8:176-88 My '16
- Small grain investigations. H. H. Love and W. T. Craig. il J Heredity 9:67-76 F '18
- Small grains, by M. A. Carleton. Review. Am Soc Agron J 9:196-8 Ap '17
- Sow grains early. Weekly N L 4:4 Ap 18 '17
- Spring small grain. Wallaces' F 41:501 Mr 24 '16
- Stack first—then thresh. R. A. Moore. Wis Ag Ext C 85 4p '17; Same abridged. Hoard's D 54:12 JI 27 '17
- Weed seed tax; screenings area a loss to the growers but a valuable by-product to the trade. P. S. Rose. il Country Gent 83:5+ Ag 24 '18
- Why cereals winterkill. S. C. Salmon. bibliog Am Soc Agron J 9:353-80 N '17; Abstract. Int R Sci & Prac Ag 9,no 3:288-9 Mr '18
- Wide vs. narrow drill. R. H. Burlingmair. Farm Eng 4:64 O '16
- World shortage of grain. Prog F 32:649 Je 2 '17
- World's cereal crops. Ag J of India 12:329-31 Ap '17
- World's crop 25 percent short. Am Coop J 12:216+ N '16
- World's grain situation. See monthly numbers of American cooperative journal
- See also Binder twine; Cereal foods; Feeding and feeding stuffs—Grain; Shocking of grain; Stacks (hay, grain, etc.); Threshing; also headings beginning Grain; also names of various cereal plants, e.g. Barley, Buckwheat, Chick peas, Corn, Millet, Oats, Proso, Rice, Rye, Sorghum, Wheat

**Analysis**

- Laboratory research in connection with the grain elevators of the Russian state bank. Int R Sci & Prac Ag 7,no 1:148-9 Ja '16

**Costs**

- Cost of an acre of corn, wheat and oats. Wallaces' F 42:1129 Ag 17 '17
- Cost of producing a bushel of grain. Wallaces' F 42:1105 Ag 10 '17
- Cost of production of the principal cereals in European Russia. V. Kotelnikov. Int R Sci & Prac Ag 7,no 8:1171-5 Ag '16
- See also Grain—Prices

**Diseases and pests**

- Barberry bush and black stem rust of small grains. I. E. Melhus and L. W. Durrell. il Ia Ag Exp C 35 4p '17
- Carbon bisulphid and its use for grain fumigation. W. H. Goodwin. il Ohio Ag Exp B v 1:86-90 Mr '16



**Grain—Diseases and pests—Continued**

Cereal diseases and the national food supply. H. B. Humphrey. *il U S Ag Yearbook* 1917: 481-95; Same. Separate 755

Cereal diseases and their control. J. B. Berry. *Ga Ag Coll (Ext)* C 72:1-4 '18

Corn and cotton wireworm in its relation to cereal and forage crops, with control measures. E. H. Gibson. *il Farmers' B* 733:1-7 '16

Diseases of grains and forage crops. M. T. Cook and J. P. Helyar. *N J Ag Exp C* 51: 1-8 n.d.

Fight grain smuts and blights. R. E. Vaughan and A. G. Johnson. *il Wis Ag Ext C* 57:1-4 '16

First progress report of the special committee on the damage by insects to grain in store. *J Dept Ag Victoria* 15:494-8 Ag '17

Hessian fly, chinch bug, and army worm entrenched. R. H. Moulton. *il Hoard's D* 55: 513 Ap 12 '18

Household and camp insects; cereal and seed pests. E. P. Felt. *il N Y State Museum (Albany)* B 194:64-70 F '17

How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:1-24 '17

Infection experiments with timothy rust. E. C. Stakman and L. Jensen. *bibliog J Ag Research* 5:211-16 N 1 '15

Physiological races of *erysiphe graminis* on wheat and oats. M. G. Reed. *Int R Sci & Prac Ag* 7, no 10:1541-3 O '16

Relating to insects injurious to stored grain, and suggestions for their control. H. S. Elliot. *Fla Ag Dept Quar B v* 26:1-19 Jl '16

Report on insects injurious to flour and grain in the province of Ekaterinivslav (South Russia) in 1915. N. Witkowskij. *Int R Sci & Prac Ag* 7, no 5:774-5 My '16

Sharp-headed grain leafhopper. E. H. Gibson. *U S Ag B* 254:1-16 '15

Stem maggots attacking growing grain. N. Criddle. *il Ag Gaz of Canada* 3:504-7 Je '16

Stored grain insects. *il Purdue Ag* 11:36-7 Ja '17

Study of some imperfect fungi isolated from wheat, oat, and barley plants. E. C. Johnson. *bibliog il J Ag Research* 1:475-90 Mr '14

Vital factor in the conservation of our grain crops. J. Troop. *Purdue Ag* 12:471-2 My '18

Wireworms attacking cereal and forage crops. J. A. Hyslop. *il U S Ag B* 156:1-34 '15

*See also* Angoumois grain moth; English grain aphid; Grain weevils; Rusts; Smuts; Spike-horned leaf-miners; Spring grain aphid; also names of grain, subhead Diseases and pests

**Exhibits**

Preparing grain exhibits for the show. A. I. Foard. *Wallaces' F* 41:1502 N 17 '16

*See also* Wheat—Exhibits

**Grading**

Clean and grade your grain. F. N. G. Kranich. *il Power F* 27:54-5 Mr '18

Conversion of the weights of mechanical separations of corn, wheat, and other grains into percentages. E. G. Boerner. *U S Ag B* 574:1-21 '17

Farmers propose new grades. R. Harmon. *Nonpartisan Leader (Box 575, St Paul, Minn.)* \$2.50 per yr.) 5:6 D 24 '17

Final conferences on grain grades act. F. S. Betz. *Am Coop J* 12:207 N '16

Grading farm grains. R. C. Miller. *Coop Manager & F* 7:35-7 Mr '18

New grain robbery in North Dakota. *Nonpartisan Leader (Box 575, St Paul, Minn.)* \$2.50 per yr.) 5:8 N 22 '17

*See also* Grain—Standards

**Marketing**

Marketing Canada's grain crop under government control. W. R. Bawlf. *Economic World (128 Water st, N.Y. 25c) n s* 16:510-12 O 12 '18

Marketing grain at country points. G. Livingston and K. B. Seeds. *il U S Ag B* 558:1-45 '17

Marketing of grain and cheese. (*In Nat. conf. on marketing and farm credits, 1916, p. 307-53*) \$2 '17 C. W. Holman, sec., Madison, Wis.

Includes: Marketing problems of the northwestern grain growers, by L. J. Frazier; Necessary cost of handling grain at country station, by F. W. Stout; Boards of trade and the national welfare, by J. R. Mauff; Costs in exporting grain, by J. H. Barnes; Cooperation in cheese sales, by H. Krumrey

Marketing of grain at country points. *Coop Manager & F* 7:42 O '17

Marketing of mixed grains. H. C. Filley and P. L. Gaddis. *il Neb Ag Ext B* 38:1-3 '16

Minnesota farmer grain dealers opposed to anti-hedging legislation. *Coop Manager & F* 6:22-5 Mr '17

St Paul peeved. *Coop Manager & F* 7:33-4 S '17

*See also* Farmers' grain dealers' associations

**Milling and baking tests**

Other grains than wheat in bread making and Milling value of barley. W. L. Stockham; T: Sanderson. *il N D Ag Exp B* 123: 100-7 '17

**Moisture content**

Intrinsic values of grain, cottonseed, flour, and similar products, based on the dry-matter content. E. G. Boerner. *U S Ag B* 374:1-32 '16

Shrinkage in grain; prices of stored cereals must vary monthly because of moisture. F. A. Welton. *Ohio Ag Exp B v* 3:39-43 F '18

Special flask for the rapid determination of water in flour and meal. J: H. Cox. *il U S Ag B* 56:1-7 '14

Taking the moisture out of the grain. F. S. Betz. *Am Coop J* 12:732-3 Jl '17

*See also* Wheat—Moisture content

**Prices**

Cheaper grain?—we hope so. *Am P J* 49:30 Ja '18

Erratic range in wheat. *Am Coop J* 12:454 F '17

General grain situation; how farmers are affected. O Judd *Farmer* 65:39 Jl 13 '18

Grain (prices) order, 1917. *J Bd Ag* 24:673-5 S '17

Grain (prices) order, 1918. *J Bd Ag* 25:742-4 S '18

Loi relative à la taxation et à la réquisition des céréales en France. *Int Yearbook Ag Leg* 1916:381-3 '17

Minimum and maximum prices for grain. J Dept Ag Ireland 18, no 1:83-7 '18

Price guarantees needed. R. Allen. O Judd *Farmer* 62:9 My 12 '17

Record prices established for wheat. *Am Coop J* 12:626 My '17

United Kingdom fixes grain prices. R. P. Skinner. (*Commerce Reports* no. 237) p 127 (O 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

When shall the farmer sell his grain and hogs? what the past shows. *Banker-F* 3:10 S '16

When shall the farmer sell his grain? bankers, read this carefully. *Banker-F* 3:15 Je '16

**Roots**

On the study of the root system of cereals. S. I. Vorobiev. *Int R Sci & Prac Ag* 8, no 2:198-201 F '17

Variations in the development of secondary rootlets in cereals. E. H. Walworth and L. H. Smith. *Am Soc Agron J* 10:32-5 Ja '18

**Seed**

Breeding, standardization and dissemination of pure bred seed grains. R. A. Moore. *Tex Ag Dept B* 52:26-30 '16

Canadian government elevators used for seed purposes. G: H. Clark. *Ag Gaz of Canada* 5:863 S '18

Cleaning and grading grain. *Power F* 26:40 Ja '17

Economy in the use of seed grain. *J Bd Ag* 24:994-6 D '17

**Grain—Seed—Continued**

Experiments on the treatment of cereal seeds for the control of bunt and smut and also for keeping off birds. O. Malpeaux. *Int R Sci & Prac Ag* 7, no 5:752-3 My '16

Grading of seed grain. *Ag Gaz of Canada* 3: 957 N '16

Growing and dissémination of pure-bred seed. R. A. Moore. *Mo Ag Bd Yearbook* 1916:574-7

Methods of producing pure seed. W. C. Barrie. (*In Report, Live stock branch, 1916, p. 20-2*) '17 Ontario ag. dept., Toronto, Canada

Notes on the absorption of water by seeds of the cereals. O. A. Stevens. *Assn Offic Seed Analysts Pro* 1916-1917:69-71 '17

Pure-bred grains for seed. J. F. Cox. *il Coun-try Gent* 82:137 Ja 27 '17

Relation of size of seed and sprout value to the yield of small grain crops. T. A. Kiesselbach and C. A. Helm. *bibliog il Neb Ag Exp Research B* 11:1-73 '17

Sale of seed grain to farmers. *Congressional Rec* 56:4554-88, 5493-601, 4611-12 Mr 28 '18

Seed grain loans planned in drought regions to help next spring planting. *Weekly N L* 6:3 O 23 '18

Some studies on the germination of the seed of oryza sativa and zea mays. I. Nagai. *Int R Sci & Prac Ag* 8, no 8:1109-10 Ag '17

Standards of seed wheat, oats, barley and rye. *Ag Gaz of Canada* 5:1141-2 D '18

Third annual report of the State grain laboratory of Montana. *il Mont Ag Exp B* 113: 79-100 '16

Wolfryn electro-chemical process for the treatment of seed grain. F. T. Shutt. *Ag Gaz of Canada* 5:762-4 Ag '18

**Standards**

Amendments to grain standards act. *Coop Manager & F* 7:45-6 D '17

Farmer and the federal grain standards. M. W. Pickell. *il Am Coop J* 14:110 D '18

Federal grades and federal grain supervision. G. Livingston. *Coop Manager & F* 7:55-6 JI '18

Federal grading of grain. *Coop Manager & F* 8:30 O '18

Grading of seed grain. *Ag Gaz of Canada* 3: 957 N '16

Grain standards act. *Weekly N L* 5:3 O 24 '17

Grain standards act analyzed. *Coop Manager & F* 7:42 Ja '18

Minneapolis grade hearing. *Coop Manager & F* 7:30 Ap '18

Minnesota grain grades. *Coop Manager & F* 8:31-2+ S '18

New Minnesota grades for grain. *Coop Manager & F* 6:29-34+ Ag '17

New official grain grades. O Judd Farmer 64:471 Ap 27 '18

Official grain standards of the United States for wheat and corn; tabulated and abridged. 24p '17 Simonds-Shields-Lonsdale grain co., Exchange bldg., Kansas City, Mo.

Official grain standards of the United States for wheat and shelled corn. *Coop Manager & F* 7:38-44 My '18

Opinions of general interest regarding questions arising under the United States grain standards act. (Service and regulatory announcements—Markets 18) 18p '17 U S Ag

Probable effect of the federal grain standards act on Washington grades. R. D. Jarboe. *Coop Manager & F* 6:42 F '17

Public hearing on official grain standards conducted by Chief Brand at Minneapolis, Dec. 6-7. *Coop Manager & F* 7:23-94 Ja '18

Publication of amendments to United States grain standards act. (Service and regulatory announcements—Markets 26) 36p '17 U S Ag

Rules and regulations of the secretary of agriculture under the United States grain standards act of August 11, 1916. *U S Ag C* 70:1-54 '16

Standard grades for wheat and oats. J. W. T. Duvcl. *Coop Manager & F* 6:27 F '17

Standardizing grain grades. O Judd Farmer 69:2 Je 10 '16

Standards of seed wheat, oats, barley and rye. *Ag Gaz of Canada* 5:1141-2 D '18

State vs federal inspection. O Judd Farmer 61:16 JI 22 '16

United States grain standards act. (Service and regulatory announcements—Markets 24) 40p map '17 U S Ag

U.S. wheat standards; secretary of agriculture establishes and promulgates standards under grain standards act. *Weekly N L* 4:1 Ap 11 '17; Same. *Ag Digest* 1:449 My '17

See also Corn—Standards; Wheat—Standards

**Statistics**

See Grain trade—Statistics

**Storage**

First progress report of the special committee on the damage by insects to grain in store. J Dept Ag Victoria 15:494-8 Ag '17

Grain-bin sanitation. W. H. Goodwin. *il Ohio Ag Exp B* v 2:223-4 JI '17

Household and camp insects; cereal and seed pests. E. P. Felt. *il N Y State Museum (Albany)* B 194:64-70 F '17

Menace to the wheat stacks. J Dept Ag S Australia 20:977-9 JI '17

Minnesota grain and storage laws. *Coop Manager & F* 6:28 Ag '17

Notes on the biology of the angoumois grain moth, sitotroga cerealella Oliv; with discussion. J. L. King. map J Econ Entom 11:87-93 F '18

Relating to insects injurious to stored grain, and suggestions for their control. H. S. Elliot. *Fla Ag Dept Quar B* v 26:1-19 JI '16

Report on insects injurious to flour and grain in the province of Ekaterininsk C South Russia) in 1915. N. Witkovsky. *Int R Sci & Prac Ag* 7, no 5:774-5 My '16

Stored grain insects. *il Purdue Ag* 11:36-7 Ja '17

Storing grain. E. F. Cauthen. *Prog F* 31:855 JI 8 '16

When shall the farmer sell his grain and hogs? what the past shows. *Banker-F* 3:10 S '16

See also Corn houses; Grain elevators; Granaries

**Testing**

Improved apparatus for determining the test weight of grain, with a standard method of making the test. E. G. Boerner. *il U S Ag B* 472:1-15 '16; Same abr. *Int R Sci & Prac Ag* 8, no 3:425-30 Mr '17

Special flask for the rapid determination of water in flour and meal. J: H. Cox. *il U S Ag B* 56:1-7 '14

Testing grains at shows. C. O. Ormsbee. *Country Gent* 82:1648 O 27 '17

**Transportation**

Adjustment of grain rate made. W. P. Trickett. *Coop Manager & F* 8:35 O '18

Advantages of the new bill of lading; the Pomerene act. *Coop Manager & F* 6:28 F '17

Car distribution for grain. *Coop Manager & F* 7:30 Mr '18

Car leakage costs carrier time and money. *Am Coop J* 11:614 F '16

Demurrage case. *Coop Manager & F* 6:24 My '17

Effect of decreased lake tonnage on grain carrying. A. A. Poland. (Commerce Reports no. 266) p 595-7 (N 13) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

\* Embargoes and permits. (*In Official statement no. 5, p. 7*) '18 U. S. Food administration, Washington, D. C.

Freight rates on food products excessive. C. Thorne. *Am Coop J* 12:660-2 Je '17

Grain doors and cooorage—their relation to weight differences. *Coop Manager & F* 7: 60 My '18

Grain embargo. *Coop Manager & F* 8:32 O '18

Increase in grain rates. C. Thorne. *Wallaces' F* 43:1164 Ag 16 '18

Interstate commerce commission calls conference on distribution of grain in cars. C. Thorne. *Am Coop J* 14:52 O '18

Loss of grain on its way to market. *il Am Coop J* 13:195 Ja '18

Meeting in Chicago to consider best plan of handling claims for loss and damage to grain in transit. *Coop Manager & F* 7:65 Ap '18



**Grain—Transportation—Continued**

- Minneapolis grain freight rate case. J. G. McHugh. *Coop Manager* & F 8:42-9 S '18  
National council and the railroads. *Am Coop J* 14:20+ S '18  
Natural shrinkage rule. J. W. Shorthill. *Am Coop J* 11:123 JI '16  
New grain route opens; Vancouver-Panama-Great Britain route. F. J. Dickie. *Country Gent* 83:7 Ja 19 '18  
Report of transportation committee; with discussion. H. L. Goemann. (*In Pro.*, Grain dealers nat. assn., 1917, p. 20-1) '17 Charles Quinn, sec.-treas., Toledo, O  
Shipping grain in bulk. J. L. Ashlock. *Country Gent* 81:1372 JI 15 '16  
Sweeping investigation of loss and damage claims on grain shipments. *Am Coop J* 12:762 Ag '17  
Warning; preparation of cars before loading. *Coop Manager* & F 8:34 O '18

**Varieties**

- Red rock wheat and rosen rye. F. A. Spragg. *Am Soc Agron J* 10:167-71 Ap '18  
Relation of kinds and varieties of grain to Hessian-fly injury. J. W. McColloch and S. C. Salmon. *J Ag Research* 12:519-27 F 25 '18  
Selection of cereals in Sweden and the increased production thus caused. N. H. Nils-son. *Int R Sci & Prac Ag* 9,no 2:160-6 F '18  
Varieties of oats, barley, and rye recommended by the Department of agriculture. *Ag Gaz of New South Wales* 28:89-90 F '17

**Weights and measures**

- Adequate facilities for weighing. C. A. Briggs. *Coop Manager* & F 8:64 O '18  
Terminal grain weighmasters and committee on grain weighing of the National scalemen's association hold joint conference. *Coop Manager* & F 8:38-40 N '18  
Weighing of grain from viewpoint of terminal weighmaster. *Coop Manager* & F 7:34 My '18

**Alaska**

- Selection and hybridisation of cereals in Alaska. C. C. Georgeson. *Int R Sci & Prac Ag* 9,no 4:431-6 Ap '18

**Argentina**

- Grain convention of Argentina. *Pan Am M* (70 5th av, N. Y. 25c) 27:80 Je '18  
Production and handling of grain in Argentina. L. Duval. *il maps U S Ag Yearbook* 1915:281-98

**Arizona**

- How to improve standard farm crops in Cochise county. A. L. Paschall. *il Ariz Ag Ext C* 15 10p '17

**Australia**

- Superior quality of Victorian grain. *il J Dept Ag Victoria* 15:176-7 Mr '17

**California**

- 1918 grain crop. T: F. Hunt. *Cal Ag Exp C* 169:1-8 '17

**Canada**

- \* Canada's grain crops and farm live stock 1917-1918. *Econ World* (128 Water st, N. Y. 25c) n s 16:700 N 16 '18  
\* Grain crops. (*In Report*, Bur. of industries, 1917, p. 8-11) '18 Ontario ag. dept., Toronto  
Report from the cereal division for the fiscal year ending March 31, 1916. (*In Experimental farms*, 1916, v. 2, p. 1001-93) *il 35c* '17 Canada Ag

**Colorado**

- Cereal experiments at the Akron field station, Akron, Colo. G: A. McMurdo. *il U S Ag B* 402:1-34 '16  
Marketing grain in Colorado. *Am Coop J* 13:459+ Ag '18

**Corn belt**

- Grain farming in the corn belt; with live stock as a side line. C. Vrooman. *Farmers' B* 704:1-47 '16

**Europe**

- Europe builds up grain reserves. *Am Coop J* 11:605-6 F '16

**Germany**

- German grain supply. I. Caoul. *Scientific Am* (233 Broadway, N.Y. 10c) 116:373 Ap 14 '17

**Great Britain**

- Average prices in England of wheat, barley and oats in each week in 1913, 1914, and 1915; table. *J Bd Ag* 22:1033 Ja '16  
Damaged grain, seeds and pulse (prices) order, 1917. *J Bd Ag* 24:1026-8 D '17  
Need for an increase of cereals. E. Molyneux. *Gard Chron* (Lond) 63:10 Ja 5 '18  
United Kingdom fixes grain prices. R. P. Skinner. (*Commerce Reports* no. 237) p 127 (O 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Idaho**

- Growing grain on southern Idaho dry farms. L. C. Aicher. *il map Farmers' B* 769:1-23 '16

**Illinois**

- Yields of spring grains in Illinois. W. L. Burlison and O. M. Allyn. *il Ag Exp B* 195:499-508 '17

**Italy**

- Selection of cereals in Italy. G. Patanè. *Int R Sci & Prac Ag* 7,no 6:777-87 Je '16

**Maryland**

- Cereal experiments in Maryland and Virginia. T. R. Stanton. *il map U S Ag B* 336:1-51 '16  
Fall-sown grains in Maryland and Virginia. T. R. Stanton. *il Farmers' B* 786:1-23 '17

**Massachusetts**

- Small grains for Massachusetts. E. Jones. *Mass Ag Ext C* 60 3p '18

**Montana**

- Cereal experiments at the Judith basin substation, Moccasin, Mont. N. C. Donaldson. *il map U S Ag B* 398:1-41 '16  
Date and rate-of-seeding tests with spring grains under irrigation. A. Atkinson. *Mont Ag Exp B* 120:107-17 '17  
Dry farm grain tests in Montana. A. Atkinson and N. C. Donaldson. *il map Mont Ag Exp B* 110:167-218 '16  
Grains for the Montana dry lands. N. C. Donaldson. *il map Farmers' B* 749:1-22 '16

**Nevada**

- Grain production in Nevada. C. S. Knight. *il Nev Ag Exp B* 89:1-34 '17

**New England**

- Grain growing in New England. *Rural N Y* 76:612 Ap 28 '17  
More grain production in New England? F. S. Prince. *Hoard's D* 55:424 Mr 29 '18

**North Dakota**

- Cereal experiments at Dickinson, N. Dak. J. A. Clark. *il U S Ag B* 33:1-44 '14  
Cereal experiments at the Williston station. F. R. Babcock. *il U S Ag B* 270:1-36 '15  
Grains for western North and South Dakota. F. R. Babcock and others. *il Farmers' B* 878:1-21 '17

**Oregon**

- Experiments with spring cereals at the eastern Oregon dry-farming substation, Moro, Oreg. D: E. Stephens. *il maps U S Ag B* 498:1-37 '17; Abstract. *Int R Sci & Prac Ag* 8,no 6:860-3 Je '17  
Grain for the dry lands of central Oregon. L. R. Breithaupt. *il map Farmers' B* 800:1-22 '17

**South Dakota**

- Cereal investigations on the Belle Fourche experiment farm. C. Salmon. *il U S Ag B* 297:1:41 '15  
Grains for western North and South Dakota. F. R. Babcock and others. *il Farmers' B* 878:1-21 '17

**Grain —Continued****Southern states**

More small grain for the South. Am Fert 48: 60 Je 22 '18  
 South and the winter grain crop. Am Fert 45:32-6 S 30 '16

**Sweden**

Government has, by royal decree, requisitioned the supplies of wheat, rye, barley, oats, mixed grain, vetches, peas, beans, and sugar beets within the kingdom. The order applies to all stocks from a previous harvest on hand September 1 and to the harvest of 1917 as soon as it is cut. The decree remains in force until April 30, 1918

**Texas**

Cereal crops in the panhandle of Texas. J. F. Ross, bibliog il map Farmers' B 738:1-16 '16

**United States**

Big grain crops in the making. B. W. Snow. O Judd Farmer 65:23 Jl 13 '18  
 Cereal experiments in Montana and in Wyoming, United States. N. C. Donaldson; J. W. Jones. Int R Sci & Prac Ag 8,no 4:586-93 Ap '17  
 Summary of U.S.D.A. bulletins 398 and 430  
 Conflicting grain stories. Am P J 49:430 Ap '18  
 Corn crop dependent on weather. B. W. Snow. O Judd Farmer 63:8 S 15 '17  
 Crop promise generally maintained. O Judd Farmer 63:4 Ag 11 '17  
 Grain and live stock; national policy touching vital food elements indicated by factors of war period. H. Hoover. (B. 10) 16p '17  
 U. S. Food administration, Washington, D.C.  
 Grain and national efficiency. Country Gent 81:1624 S 2 '16  
 Grain for distilling purposes; hearing before the Senate committee on agriculture and forestry on prohibiting the use of grain for distilling purposes. 19p '17 Apply to congressmen  
 Liberal farm stocks of grain, notably in corn. B. W. Snow. O Judd Farmer 64:4 Mr 16 '18  
 Plenty of corn but quality bad. B. W. Snow. O Judd Farmer 63:3 N 17 '17  
 Recommendations of the third interstate cereal conference. Science (Science Press, Garrison, N.Y. 15c) n s 46:11-12 Jl 6 '17  
 Relation of winter temperature to the distribution of winter and spring grains in the United States. S. C. Salmon. maps Am Soc Agron J 9:21-4 Ja '17  
 Shall the brewing of grain be prohibited? E. Davenport. Atlantic (3 Park st, Boston 35c) 120:79-83 Jl '17  
 Western corn situation; why grain does not come. I. L. Sears. Rural N Y 77:223 F 16 '18  
 World food supply in sight. B. W. Snow. O Judd Farmer 64:617+ Je 15 '18

**Utah**

Cereal investigations at the Nephi substation. P. V. Cardon. il U S Ag B 30:1-50 '13  
 Grains for the Utah dry lands. J. W. Jones and A. F. Bracken. il Farmers' B 883:1-21 '17

**Virginia**

Cereal experiments in Maryland and Virginia. T. R. Stanton. il map U S Ag B 336:1-51 '16  
 Fall-sown grains in Maryland and Virginia. T. R. Stanton. il Farmers' B 786:1-23 '17

**Washington**

Cereals in western Washington. E. B. Stookey. Western Wash Ag Exp B v 5:10-14 Ap '17  
 Spring-sown grain crops from western Washington. E. B. Stookey. Western Wash Ag Exp B v 5:164-8 F '18

**Wyoming**

Cereal experiments on the Cheyenne experimental farm, Archer, Wyo. J. W. Jones. il U S Ag B 430:1-39 '16  
 Winter grains. T. S. Parsons. il Wyo Ag Exp B 116:39-52 '17

Grain aphids. See English grain aphids; Spring grain aphids

**Grain binders**

Better service from the grain binder. P. T. Hines. Prog F 33:685 Je 8 '18  
 Binder operator his own expert. C. O. Reed. il Country Gent 82:1080-1 Je 30 '17  
 Binder troubles. I. W. Dickerson. Wallaces' F 43:1039 Jl 12 '18  
 Care and repair of binders. D. E. Womer. Penn State F 10:10-11 Ja '17  
 Engine on the binder. Wallaces' F 41:945 Jl 7 '16  
 Engine on the binder. R. Olney. il Country Gent 81:1480 Ag 5 '16  
 Get the binder under shelter. D. N. Barrow. Prog F 31:859 Jl 8 '16  
 Get your binder in shape. P. T. Hines. Prog F 32:561 My 5 '17  
 Grain binder and mowing machine. A. L. French. Prog F 31:182 F 5 '16  
 Motor driven binder. J. R. Chamberlin. Power F 27:35 Je '18  
 Requisites in small grain harvest. C. O. Reed. il O Judd Farmer 62:1 Je 9 '17  
 Starting season with binder. C. O. Reed. O Judd Farmer 60:7 Je 10 '16  
 Use of gas engines on self-binders. C. Miller. Purdue Ag 11:36-7 My '17; Same. Hoard's D 53:910 Je 29 '17

**Grain bins, Concrete**

\* Construction of concrete grain bins with steel forms supported on central mast. il Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:507 N 27 '18

**Grain bleaching**

Preliminary study of the bleaching of oats with sulphur dioxide. G. H. Baston. il U S Ag B 725:1-11 '18

**Grain borers, Lesser**

Serious pest to stored wheat. W. W. Froggatt. il Ag Gaz of New South Wales 29:726-8 O '18

**Grain cars**

\* Joint conference on grain handling and weighing. Railway Age (Woolworth Bldg., N. Y. 15c) 65:747-8 O 25 '18

**Grain cleaning machines**

Need of efficient grain cleaning machinery as part of equipment of every country elevator. Coop Manager & F 7:66 Ja '18  
 New dressing machine for spherical grain. il Int R Sci & Prac Ag 7,no 12:1809-12 D '16  
 Wonderful grain cleaning machine. il Coop Manager & F 7:70-1 Ja '18

See also Rice cleaning machines

**Grain clubs**

Boys' and girls' pure-bred seed grain growing. R. A. Moore. il Mo Ag Bd Yearbook 1916:123-31

Grain corporation, United States. See United States food administration grain corporation

Grain dealers' associations. See Farmers' grain dealers' associations; also names of associations, e.g. Grain dealers' fire insurance company of Indianapolis, Grain dealers' national association, Indiana grain dealers' association, Missouri grain dealers' association, Northwestern grain dealers' association

Grain dealers' fire insurance company of Indianapolis

Business conditions in the country grain trade. Coop Manager & F 7:50-4 My '18

**Grain dealers' national association**

Annual convention to be held September 23-25. Coop Manager & F 8:50-4+ S '18

Meeting in Chicago to consider best plan of handling claims for loss and damage to grain in transit. Coop Manager & F 7:65 Ap '18

Proceedings of the 21st annual meeting, Buffalo, N.Y., Sept. 24-26. 40p '17 Charles Quinn, sec.-treas., Toledo, O.

21st annual meeting, Buffalo, N. Y. Coop Manager & F 7:50-62, 78-85 O-N '17

21st annual meeting to be held at Buffalo, N.Y., Sept. 24-6, 1917. Coop Manager & F 7:38-9 S '17

22d annual convention, Milwaukee, Wis., Sept. 23-25. Coop Manager & F 8:52-67 O '18



**Grain drills**

What you should know about grain drills. il Prog F 32:921 S 1 '17

**Grain drying machines**

Drying of cereal grains in Germany. R: Stetefeld. Int R Sci & Prac Ag 8,no 4:651-3 Ap '17

Electricity applied to the threshing and drying of cereals, in Italy. A. Tarchetti. Int R Sci & Prac Ag 8,no 12:1269-70 D '17

Grain driers in the United States. (Markets—Doc. 12) 6p '18 U S Ag

Is a grain drier in the elevator a good thing for the farmer? Am Coop J 13:379 My '18

Portable Vasing cereal drier. A. Tarchetti. Int R Sci & Prac Ag 7,no 8:1158-60 Ag '16

**Grain elevator managers**

Do you treat your manager right? Am Coop J 13:175 D '17 (to be cont)

Essentials of good elevator management. Coop Manager & F 7:32 N '17

Letters from a manager to his dad. O Jacobs. Am Coop J 13:235, 339; 14:8 F, Ap, S '18

See also Farmers' managers association of South Dakota; National association of managers

**Grain elevators**

Calumet terminal elevator, C. & N. W. Ry. il Railway Review (537 S. Dearborn st, Chicago 15c) 61:600-1 N 17 '17

Co-operative elevator success. J. J. Kunkel. Coop Manager & F 8:46 D '18

Country elevator in the Canadian West. W. C. Clark. 23p '16 Queen's university, Kingston, Ontario, Can.

Elevator construction as it affects insurance rates. G: E. Traut. Am Coop J 11:969 My '16

Elevator fire escapes. Am Coop J 11:1066 Je '16

Farm elevator. il Wallaces' F 41:1237 S 22 '16

Farmers' annual loss—thirty-six million dollars. Am Coop J 12:437-8 F '17

Farmers' co-operative elevators. I. W. Dickerson. il Wallaces' F 43:1407 O 4 '18

Farmers' co-operative elevators in Minnesota. Int R Ag Econ 80:1-11 Ag '17

Farmers' co-operative grain elevators. E. Budd. Ohio F 142:47 Jl 20 '18

Farmers' elevator at Baltic. S. D. E. J. Oyan. il Am Coop J 11:627 F '16

Farmers' elevator at Elliott, N. Dak. il Coop Manager & F 7:76 F '18

Farmers' elevators. Int R Ag Econ 62:19-27 F '16

Farmers' elevators in Minnesota 1914-1915. E. D. Durand and J. P. Jensen. maps Minn Ag Exp B 164:1-43 '16

Farmers' elevators in Minnesota. United States of America. L. D. H. Weld. Int R Sci & Prac Ag 7,no 9:1363-9 S '16

Fire hazard f Canadian grain elevators. Int R Ag Econ 70:51-2 O '16

Government regulations to determine dockage. V. E. Butler. Coop Manager & F 7:33-4 N '17

Grain dust explosion prevention campaign. D. J. Price. Coop Manager & F 7:39-40 Je '18; Same. Power F 27:49 Jl '18

\* Grain handling plant. plan Engineer (33 Norfolk st, Strand, London, W. C. 2) 126:240-1 S 20 '18

Great necessity of additional grain elevators on the Atlantic seaboard. O. P. B. Jacobson. Coop Manager & F 8:42 N '18

Gush, the square deal and the pro-rata plan. Am Coop J 13:91 N '17

How to make a live elevator. C. D. Haywood. Am Coop J 11:602+ F '16

Impressions of a manager. I. S. Henjum. Coop Manager & F 7:49 Mr '18

Injecting business policies into the farming industry. Am Coop J 13:301 Mr '18

Letters from a manager to his dad. O Jacobs. Am Coop J 13:10, 57, 194, 235, 289-90 S-O '17, Ja-Mr '18

Manager as a solicitor sees him. F. O'Hearn. Am Coop J 11:828 Ap '16

Necessary cost of handling grain at country station. F. W. Stout. (In Nat. conf. on marketing and farm credits, 1916, p. 322-5) \$2 '17 C. W. Holman, sec., Madison, Wis.

New municipal grain elevator. G. B. Hegardt. il Am City (Tribune bldg., N.Y. 35c) 17:341-3 O '17

Patronage dividend. W. F. Ramsey. Am Coop J 13:236 F '18

Position and the activity of the grain elevators of the government and the railway companies in Russia. Int R Ag Econ 75:124-7 Mr '17

Progress in building and equipment. il plans Am Coop J 11:918-21 My '16

Promiscuous building of elevators. T. E. Hamman. Am Coop J 11:1015 Je '16

Put in an elevator. I. W. Dickerson. il Wallaces' F 43:720 Ap 26 '18

Putting the kick in the elevator leg. il Am Coop J 14:128 D '18

Recent successes of agricultural co-operation in Canada. Int R Ag Econ 75:17-24 Mr '17

Saving the thirty-six million dollars. Am Coop J 12:499 Mr '17

Side lines for co-operative elevators. Coop Manager & F 7:32 N '17

Some debatable questions in farmers elevators. J. E. Boyle. Coop Manager & F 6:23 Ja; 21 Mr; 23 Ap '17

South Dakota managers of farmer elevator companies organize state association. Co-op Manager & F 8:58 S '18

Successful co-operative elevator. il Wallaces' F 41:1295 O 6 '16

Terminal elevator for Sioux City. Coop Manager & F 7:24 Ja '18

**Accounting**

Complete loose leaf system for elevator accounting. Coop Manager & F 7:83 Jl '18

Elevator accounting and auditing; with discussion. J: R. Humphrey. Am Coop J 11:475-9 Ja '16

Government system of accounting. Coop Manager & F 6:26-8 My '17

Grain elevator men study the government system of bookkeeping. Coop Manager & F 7:36-7 Ag '18

Patronage dividends in cooperative grain companies. J: R. Humphrey and W. H. Kerr. U S Ag B 371:1-10 '16

Short course in grain elevator accounting and management. Coop Manager & F 6:52-3 Ag '17

Some debatable questions in farmers' elevators. J. E. Boyle. Coop Manager & F 6:26 F '17

System of accounts for farmers' cooperative elevators. J: R. Humphrey and W. H. Kerr. U S Ag B 236:1-30 '15

System of accounts for primary grain elevators. J: R. Humphrey and W. H. Kerr. U S Ag B 362:1-30 '16

See also Equitable cooperative auditing association; North Dakota cooperative auditing circle

**Equipment**

Grain scales—grain weighing. H. H. Alfrey. Coop Manager & F 6:50-2 My '17

Grain weights verified by new semi-automatic scales. plan Coop Manager & F 7:48-9 D '17

Importance of the automatic weighing scale for country elevators. Coop Manager & F 7:30-2 My '18

Modern wagon dump. il Coop Manager & F 6:55 Ja '17

Richardson automatic scale school. Coop Manager & F 7:47 D '17

Successful wild pea separator. il Coop Manager & F 6:82 Mr '17

**Laws**

Loi sanctionnant la construction de certains éleveurs de céréales, modifiant la loi de 1912 sur les travaux publics et visant d'autres fins en dérivant ou s'y référant en Australie. Int Yearbook Ag Leg 1916:113-14 '17

**Grain elevators, Concrete**

Concrete grain bins and elevators. 15p il '17 Portland cement assn., Chicago

Concrete grain tanks. 15p il '18 Portland cement assn., 111 W. Washington st, Chicago

**Grain elevators, Concrete—Continued**

- Cooperative elevator of concrete at low cost, il plan Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:195 Je '18  
 Re-inforced concrete elevator, il Coop Manager & F 8:66 D '18  
 20,000 bu. concrete elevator for \$7,500, il plans Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:194 Je '18

**Grain exchanges**

- Functions of a grain exchange, J: G. McHugh, Coop Manager & F 6:36-7 F '17  
 Future trading in wheat; how the speculative system operated before the grain exchange was closed, L. D. H. Weld, il Country Gent 82:1701 N 3 '17

**Grain exchanges, Council of.** See Council of grain exchanges**Grain growers' grain company**

- Annual report for the twelve months ending the 31st of Aug., 1917, 40p '17 United grain growers limited, Winnipeg, Manitoba  
 On August 31st, 1917, the Grain growers' grain co., and the Alberta farmers' co-operative elevator co., amalgamated their interests to form United grain growers limited  
 History of organization, finances, etc. Am Coop J 12:11-15 S '16

**Grain handling**

- Handling grain by bags in the Pacific Northwest, Coop Manager & F 6:30 Je '17  
 How to handle headed grain, il Power F 27:39 Je '18  
 Improved method of loading grain, J. A. Worsham, Coop Manager & F 7:64 JI '18  
 Observations on the bulk handling of grain for California, B. H. Crocheron and C. J. Williams, Cal Ag Exp C 152:1-24 '16  
 Pneumatic grain handling appliances, C. Bentham, Engineer (33 Norfolk st., Strand, London, W. C. 2) 122:494 D 1 '16  
 Portable pneumatic grain unloading plant, il Engineer (33 Norfolk st, Strand, London, W.C. 2.) 126:94-5 Ag 2 '18  
 Scoop shovels eliminated by a turntable dump for grain, A. J. Holt, il System on the Farm 1:230 Ag '17

**Grain harvesting machinery.** See Harvesting machinery**Grain head threshers**

- Effective head thrasher, W. E. Hanger, il Am Soc Agron J 8:267-8 JI '16

**Grain improvement associations**

- Real grain improvement association, il Wal-laces' F 41:559 Ap 7 '16

**Grain inspection**

- Defeat of the federal inspection of grain, J. E. Kelley, Forum (286 5th av., N.Y. 25c) 58:355-62 S '17  
 Federal grades and inspection of grain, R. C. Miller, Coop Manager & F 7:39-41 Mr '18  
 Grain shippers must secure inspection of grain sold by federal grades for each interstate shipment from or to an inspection point, Coop Manager & F 8:34 D '18  
 Grain standards act provides for establishment of official standards and licensing of grain inspectors, Am Coop J 12:17 S '16  
 Minnesota's straw man, Country Gent 81:688 Mr 25 '16  
 Montana grain inspection and the federal grain standards for wheat, A. Atkinson, Mont Ag Exp C 68:1-14 '17  
 Probable effect of the federal grain standards act on Washington grades, R. D. Jarboe, Coop Manager & F 6:42 F '17  
 Revised rules for inspections of overloaded cars, Coop Manager & F 6:22-3 Ag '17  
 Rules and regulations of the secretary of agriculture under the United States grain standards act of August 11, 1916, U S Ag C 70:1-54 '16  
 Standard grades for wheat and oats, J. W. T. Duvel, Coop Manager & F 6:27 F '17  
 Summary of facts ascertained from reports by inspectors licensed to inspect and grade shelled corn and wheat under the United States grain standards act and from voluntary reports of elevators or warehouses in

grain markets of the United States during the period May 1, 1917, to October 31, 1917. (Service and Regulatory Announcements—Markets 37) 82p U S Ag

See also Missouri—Grain inspection and weighing department

**Grain inspectors**

List of all persons licensed under the provisions of the United States grain standards act, to inspect and grade shelled corn and wheat, together with a list of all places designated as inspection points. (Service and Regulatory Announcements—Markets 38) 24p '18 U S Ag

Supersedes Service and regulatory announcements no. 31

**Grain laboratories**

See also Montana state grain laboratory

**Grain milling**

- Every woman her own miller, A. G. Vestal, il Power F 27:42 Mr '18  
 Government to assist in grinding coarse grain, Coop Manager & F 7:56 F '18  
 Home milled grain, Am P J 48:855 Ag '17  
 Rules and regulations of the government for the milling industry, Coop Manager & F 7:27-9 N '17  
 Small grist mill for grinding flour at home, J. Atkinson, il Rural N Y 77:908 JI 20 '18  
 Wheat and corn grinder for home use, F. Telford, il Scientific Am (233 Broadway, N.Y. 10c) 118:136 F 9 '18

**Grain rusts.** See Rusts**Grain sampling**

Table for converting weights of mechanical separations into percentages of the sample analyzed, E. G. Boerner, U S Ag B 516:1-21 '16

See also Seed sampling

**Grain sawflies.** See Western wheat-stem sawflies**Grain separators.** See Threshing machines**Grain smuts.** See Smuts**Grain sorghum.** See Sorghum**Grain testers**

Cowan grain dockage tester, il Coop Manager & F 8:47 D '18

**Grain trade**

- Address delivered at conference of grain dealers and representatives of the Food administration, H. Hoover, Coop Manager & F 7:60-3 JI '18  
 Attitude of the Bureau of markets toward the grain trade, F. A. Derby, Coop Manager & F 7:40 JI '18  
 Big shrinkage in grain prices, Am Coop J 11:719-20 Mr '16  
 Business conditions in the country grain trade as shown by the Grain dealers fire insurance company of Indianapolis, Coop Manager & F 7:50-4 My '18  
 Business problems of the month, Coop Manager & F 7:46 S '17  
 By a twist of the fist grain is bought and sold on the Chicago board of trade, T. J. Delohery, il Country Gent 81:2111 D 9 '16

\* Canada's national grain route, E: Porritt, Political Sci Quarterly (Academy of political sci., Columbia Univ., N.Y. \$1) 33:344-77 S '18

Cass county, North Dakota grain dealers, hold meeting, Coop Manager & F 8:62-3 S '18

\* Cereal balance, Nature (St Martin's st, London, W. C. 6d) 101:370 JI 11 '18

Changes confronting the grain trade, E. C. Eikenberry, Coop Manager & F 6:61-3 F '17

Charles J. Brand, chief of bureau, desires co-operation of grain trade, Coop Manager & F 7:34 JI '18

Chicago the nerve center of the world's grain trade, R. H. Moulton, Ag Digest 2:503 Je '17

Conference of representatives of the grain trade of the United States, New York, April 30-May 1, 1918, 252p '18 U.S. Food administration grain corporation, 42 Broadway, N.Y.



**Grain trade—Continued**

- Crop estimates are lowered. *Am Coop J* 11: 1024+ *Je* '16
- Farmer, the board of trade, and the producer. *J. R. Mauff. Coop Manager & F* 6:29-31 *Ap* '17
- Foreign grain marts lower. *Am Coop J* 11: 830-1 *Ap* '16
- Grain trade awaits developments. *Am Coop J* 12:680 *Je* '17
- Grain trade representatives meet with Food administration. *Coop Manager & F* 7:30-2+ *Je* '18
- Great upheaval. *B. W. Currie. Country Gent* 82:675-6, 716-17, 760-1, 798-9, 830-1, 867 *Ap* 7-My 12 '17
- Greatest farmers' business union. *J. R. McMahon. il Country Gent* 83:1-2 *D* 21 '18
- How I study the news while holding wheat. *F. H. Higgins. il map System on the Farm* 1:30-2 *Mr* '17
- Illinois grain dealers' association tests the shippers weight law of Illinois and finds it constitutional. *Coop Manager & F* 6:24-5 *Ja* '17
- Kansas City board of trade amends its rules, future trading re-established. *Coop Manager & F* 7:37 *My* '18
- Letters from a manager to his dad. *O. Jacobs. Am Coop J* 13:10, 57, 194 *S-O* '17, *Ja* '18
- Missouri supreme court renders decision to the effect that Merchants' exchange of St Louis is forbidden to issue certificates for weights they supervise. *Coop Manager & F* 6:27 *F* '17
- New grain route opens; Vancouver-Panama-Great Britain route. *F. J. Dickie. Country Gent* 83:7 *Ja* 19 '18
- New regulations in future trading by Chicago board of trade. *Coop Manager & F* 7:36 *My* '18
- Organization of the sample trade in grain in Minnesota. *Int R Ag Econ* 83:57-63 *N* '17
- Output of mill feeds. *Jersey B* 37:1843 *O* 30 '18
- Problems of the grain trade. *Coop Manager & F* 6:25-6 *Ag* '17
- Protecting grain hedge; speculation insures against price flurries. *J. H. Collins. Country Gent* 81:1835 *O* 14 '16
- Shall we carry the fight to the mills? *T. L. Daniel. Am Coop J* 13:144-5 *D* '17
- Terminal and primary market conditions. *C. H. Canby. Am Coop J* 11:700 *Mr* '16
- Trading in grain futures. *L. D. H. Weld. (In Pan American scientific congress Pro., 1915, v. 3, p. 430-9)* '17
- Uniform trade rules needed for the cash trade. *V. E. Butler. Coop Manager & F* 6: 53-4 *Ja* '17
- Value of the trade press. *E. G. Osman. Coop Manager & F* 6:44-6 *Ag* '17
- Wheat dockage on a percentage basis. *Coop Manager & F* 7:81 *S* '17
- Wheat supplies abundant. *Am Coop J* 11:1132 *JI* '16
- World's grain situation. See monthly numbers of the American cooperative journal
- See also* Farmers' grain dealers' associations; Grain—Standards; Grain dealers' associations; Grain inspection; Wheat trade; also Grain dealers' national association, Missouri—Grain inspection and weighing department

**Laws and regulation**

- Commerce des produits agricoles des machines, des engrais et du bétail; approvisionnement en général et commerce des céréales. *Int Yearbook Ag Leg* 1916:33-169 '17
- Décret de la lieutenantance n. 4 fixant les règles à suivre pour la déclaration du blé et du maïs conformément au décret royal du 31 janvier 1915 en Italie. *Int Yearbook Ag Leg* 1916:19-20 '17
- Décret de la lieutenantance n. 654 relatif au recensement du blé en Italie. *Int Yearbook Ag Leg* 1916:20-2 '17
- Farmers propose new grades. *R. Harmon. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.)* 5:6 *D* 24 '17

- Invoicing grades contrary to required inspection certificate in violation of grain standards act. *C. J. Brand. Coop Manager & F* 8:36+ *D* '18
- \* Warehouse, grain, and weights and measures laws of Minnesota up to and including laws passed at the legislative session of 1917. i-xiv,1-69p n.d. Review pub. co., St Paul, Minn.

*See also* Grain—Standards

**Statistics**

- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, Jan. 1. *U S Food Surveys* 1:1-22 *Je* 8 '18
- Commercial stocks of corn, oats, barley, rye, and the food products made from these cereals, July 1. *U S Food Surveys* 2:1-28 *S* 9 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on May 1, 1918. *U S Food Surveys* 1:1-8 *My* 21 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on June 1, 1918. *U S Food Surveys* 1:1-8 *Je* 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on July 1, 1918. *U S Food Surveys* 2:1-8 *JI* 29 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on August 1, 1918. *U S Food Surveys* 2:1-8 *Ag* 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States, Sept. 1. *U S Food Surveys* 2:1-8 *S* 25 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on Oct. 1, 1918. *U S Food Surveys* 2:1-11 *O* 26 '18
- Commercial stocks of grain, flour, and miscellaneous food products in the United States on November 1, 1918. *U S Food Surveys* 2:1-7 *N* 25 '18
- Commercial stocks of important grains and grain food-products in the United States on April 1, 1918. *U S Food Surveys* 1:2-7 *Ap* '18
- Consumption of specified cereals per capita in selected countries; yearly average of 1902-1911. *Monthly Crop Rep* 4:124 *O* '18
- Corn crops better than expected. *B. W. Snow. O Judd Farmer* 65:428 *N* 9 '18
- Farm stocks of grain moderate. *B. W. Snow. O Judd Farmer* 60:16 *Ja* 22 '16
- Final report showing acreage, yield and value of Saskatchewan's 1917 grain crop; heavy fall plowing indicates big increase. *Credit Men's J (Winnipeg, Manitoba 10c)* 4:276-7 *Mr* '18
- \* Grain situation in Aug. 1918. (*In* Official statement no. 5, p. 26-7) '18 U.S. Food administration, Washington, D.C.
- Grain situation; July 1917-May 1918. (*In* Official statement no. 2, p. 13-14) '18 U.S. Food administration, Washington, D.C.
- \* Grain situation; July 1917-June 1918. (*In* Official statement no. 3, p. 13-14) '18 U.S. Food administration, Washington, D.C.
- \* Grain situation; movement for September and for crop year, 1918-19, by bushels. (*In* Official statement, no. 7, p. 29) '18 U.S. Food administration, Washington, D.C.
- \* Grain situation; 1917-1918. (*In* Official statement no. 4, p. 17) '18 U.S. Food administration, Washington, D.C.
- \* Grain storage capacity of the United States and Canada. (*In* Official statement no. 2, p. 6) '18 U.S. Food administration, Washington, D.C.
- Liberal farm stocks of grain, notably in corn. *B. W. Snow. O Judd Farmer* 64:4 *Mr* 16 '18

**Grain trade—Statistics—Continued**

- Light farm stocks of grains; wheat surplus nearing exhaustion. B. W. Snow. O Judd Farmer 62:14 Ja 20 '17
- Method of gathering grain crops. Monthly Crop Rep 3:14 F '17
- Production, trade and consumption of oats, barley and rye, 1916-17 compared with the five year period before the war. Ag Gaz of Canada 4:742-5 Ag '17
- Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no. 4) 82p (O) '16 Bur. of statistics, Int. inst. of ag., Rome
- Statistics of grain crops, 1916. U S Ag Year-book 1916:561-610; Same. Separate 719
- Statistics of grain crops, 1917. U S Ag Year-book 1917:605-54
- Summary of facts ascertained from reports by inspectors licensed to inspect and grade shelled corn and wheat under the United States grain standards act and from voluntary reports of elevators or warehouses in grain markets of the United States during the period May 1, 1917, to October 31, 1917. (Service and Regulatory Announcements—Markets 37) 82p U S Ag
- Yields of grain during the last 20 years. S. D. Conner. Purdue Ag 10:20 My '16

**Grain weevils**

- How to kill the weevil in stored grain. G. M. Bentley. Prog F 33:619 My '18
- Menace to the wheat stacks. J Dept Ag S Australia 20:977-9 Jl '17
- Weevil problem. D. C. Winterbottom. J Dept Ag S Australia 21:864-6 Je '18
- Wheat storage problems; protection from weevils. J Dept Ag S Australia 21:588-90 F '18; Same. J Dept Ag Victoria 16:117-19 F '18; Same. Ag J of India 13:527-8 Jl '18; Excerpt. Ag Gaz of New South Wales 29:100 F '18

See also Corn weevils

**Grain weighmasters, Terminal. See Terminal grain weighmasters****Grainmen's union**

- Articles of the Grainmen's union. Coop Manager & F 8:44 N '18

**Gram. See Chick peas****Granaries**

- Borrow to build grain bins. F. Kerr. O Judd Farmer 63:4 Ag 4 '17
- Farm granary on skids. D. H. Williams. Country Gent 83:20 S 7 '18
- Filling grain tanks. K. J. T. Ekblaw. Country Gent 81:1698 S 16 '16
- Grain bin sanitation. J. Marsh. Ohio F 142:27 Jl 13 '18
- Grain storage buildings. K. J. T. Ekblaw. 16p plan '16 Nat. lumber mfrs. assn., Chicago
- Here's a portable granary that a farmer can build for himself; the plans are free. Weekly N L 6:3 O 2 '18
- Permanent grain storage buildings. D. G. Carter. il Hoard's D 56:37 Ag 2 '18
- Portable farm granary. L. M. Jeffers and others. plans (Doc.—Markets 11) 8p '18 U S Ag
- Provide storage for farm grain—Department gives plans for granary. il plan Weekly N L 6:3 N 20 '18
- 1300-bushel granary; construction and cost. W. E. Frudden. Country Gent 81:706 Mr 25 '16
- Two-story cornerrib and granary. W. A. Radford. Power F 27:24+ My '18
- Grandmother Lee's second childhood; story. B. B. Stuart. Nat Stock & F 41:922 D 22 '17
- Grandmother's bread; story. E. Singmaster. il Country Gent 83:18-19 Ap 20 '18
- Grandmother's bugs—and mine. P. S. Lovejoy. il Country Gent 83:5+ Ja 12 '18

**Grange**

- Address at 52nd meeting of the National grange. O. Wilson. Nat Stock & F 42:771 N 23 '18
- Children in the grange. J. Buell. Ohio F 139: 423 Mr 17 '17

- County boards of agriculture and list of granges. N J Ag Dept C 8:45-62 '17
- Early history of the grange. R. Hall. Ohio F 138:461 N 11 '16
- Grange and patriotism. O. Wilson. Hoard's D 51:681 D 7 '17
- Grange doings in Pennsylvania, Delaware, New Jersey and New York. Prac F 113:5 Ja 1 '17
- Grange feasts in war time. J. Buell. Ohio F 141:733 Je 1 '18
- Grange movement in northern Illinois. Mrs M. C. Smith. Ohio F 137:361 Mr 4 '16
- Message to the state agricultural convention. G. W. F. Gaunt. N J Ag Dept B 11:443-7 '18
- Ohio's pioneer granges. Ohio F 139:830 Je 30 '17
- Stockman and the grange. H. A. Caton. Nat Stock & F 41:35 Mr 31 '17
- Value of the grange. Mrs H. M. Woodward. Prac F 112:397 N 1 '16
- What good is it? Nat Stock & F 41:99 Ap 14 '17
- What the grange has meant to me. Country Gent 82:1897 D 1 '17
- Where does the grange stand? F. A. Waugh. Country Gent 83:13 Ag 31 '18
- See also Iowa state grange; National grange; New York state grange; North Dakota grange

**Granite state dairymen's association**

- New Hampshire dairymen meet. J. M. Fuller. Hoard's D 55:8 Ja 25 '18

**Grape anthracnose**

- Anthracnose or black spot of the vine. F. de Castella and C. C. Brittlebank. il J Dept Ag Victoria 15:404-21 Jl '17
- Diseases of the vine. H. E. Laffer. il J Dept Ag S Australia 21:462-71 Ja '18
- Notes on vine black spot or anthracnose. F. de Castella and C. C. Brittlebank. J Dept Ag Victoria 16:420-5 Jl '18

**Grape berry worms**

- Control of the grape-berry moth in the Erie-Chautauqua grape belt. D. Isely. bibliog il U S Ag B 550:1-42 '17
- Control of the grape berry worm. W. H. Goodwin. J Econ Entom 9:91-106 F '16
- Grape-berry worm. W. H. Goodwin. il Ohio Ag Exp B 293:259-307 '16; Abstract. Ohio Ag Exp B v 1:145-8 My '16
- Life history and control of the vine-moths; observations made in 1914, by the plant diseases observatory of Turin, Italy. P. Voglino. Int R Sci & Prac Ag 7,no 6:906-7 Je '16
- Tobacco juice for the treatment of the vine-moths in Piedmont. Int R Sci & Prac Ag 7, no 6:908-9 Je '16

**Grape curly-leaf. See Grape little-leaf****Grape juice**

- Concord grape juice: manufacture and chemical composition. B. G. Hartmann and L. M. Tolman. U S Ag B 656:1-26 '18
- Grape juice industry. G. Frey. N Y Ag Dept B 79,pt 2:1268-71 Ja '16; Same. N Y Dept Rep 1916,pt 3:1268-71 '17
- How to make grape juice. A. M. Latham. Prog F 31:1042 Ag 26 '16
- Preservation of unfermented grape-juice. S. F. Anderson. il J Ag New Zealand 16:32-6 Ja '18

**Grape leaf folders**

- Grape leaf-folder [desmia funeralis Hubn]. J. F. Strauss. il map U S Ag B 419:1-16 '16

**Grape little-leaf**

- Little-leaf of the vine. F. T. Bioletti and L. Bonnet. il J Ag Research 8:381-98 Mr 6 '17

**Grape mildew**

- Action of copper sulphate on vine mildew. Int R Sci & Prac Ag 7,no 6:894-5 Je '16
- Comparative tests of remedies against vine mildew (plasmopara viticola), in Austria in 1916. K. Kornauth and R. Wöber. Int R Sci & Prac Ag 8,no 2:303-5 F '17
- Diseases of the vine; downy mildew (plasmopara viticola). H. E. Laffer. Ag Gaz of New South Wales 29:581-4 Ag '18
- Downy mildew in vines. H. E. Laffer. J Dept Ag S Australia 20:970-7 Jl '17



**Grape mildew—Continued**

- Downy mildew of the vine. S. F. Anderson. J Ag New Zealand 16:367-8 Je '18  
Downy mildew, plasmopara viticola. F. de Castella. il J Dept Ag Victoria 16:568-74 S '18  
Notes on downy mildew. F. de Castella and C. C. Brittlebank. il J Dept Ag Victoria 15: 685-700 N '17  
Researches on vine mildew, favourable time for treatment. Int R Sci & Prac Ag 7,no 2: 309 F '16  
Vines offering a relative resistance to mildew. R. Salomon. Int R Sci & Prac Ag 9,no 1:117-18 Ja '18

**Grape root-worms**

- Grape root-worm (C. 41). F. Z. Hartzell. il N Y State Ag Exp Rep 1915:478-83 '16

**Grape sirup**

- \* Grape sirup; the possibilities of production in California. (B. 12) 10p '18 Cal. State bd. of viticultural comrs., Sacramento  
Muscadine grape sirup. C: Dearing. il Farmers' B 758:1-11 '16  
Sirup of grapes as a substitute for sugar. Scientific Am (233 Broadway, N.Y. 10c) 117: 185 S '15 '17

**Grape weevils**

- On the parthenogenetic reproduction of otioryrhncus sulcatus, a coleopteron injurious to the vine, in France. J. Feytaud. Int R Sci & Prac Ag 9,no 1:124 Ja '18

**Grape yellow-leaf. See Grape little-leaf**

**Grapefruit**

- California grapefruit. A. D. Shamel. il Cal State Comm Hort B v 5:239-49 Jl '16  
Citrus-fruit improvement: a study of bud variation in the Marsh grapefruit. A. D. Shamel and others. il U S Ag B 697:1-112 '18  
Cooperation in production of California grapefruit. il J Heredity 7:524-6 N '16  
Influence of fertilizer treatment on the coloration of grapefruit. B. F. Floyd. Fla Ag Exp Rep 1917:46R-51R '18  
Present outlook for the pomelo in California. R. S. Vaile. Cal State Comm Hort B v 6:21-2 Ja '17  
Some constituents of the American grapefruit (citrus decumana). H. F. Zoller. bibliog J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:364-74 My '18

**Grapes**

- Amateur grape-growing in America. S. J. Bole. il Am Fruit Grower 38:3-4 D '18  
Bob makes good with queen. M. Nichols. Ohio F 140:121 Ag 18 '17  
Crystallization of cream of tartar in the fruit of grapes. W: B. Alwood. J Ag Research 1:513-14 Mr '14  
Cultivation of the vine by the Desbois method. Int R Sci & Prac Ag 8,no 7:1007-8 Jl '17  
Development of a successful vineyard. F. H. Ellis. il Ohio F 139:269+ F 24 '17  
Diagnostic value of grape pips. Int R Sci & Prac Ag 7,no 2:233-6 F '16  
Dipping and drying the sultana. H. Showell. J Dept Ag S Australia 20:667-71 Mr '17  
Enforcement of the fresh fruit standardization law as it applies to grapes. F. P. Rouillard. Cal State Comm Hort B v 6:132-3 My '17  
Experiments in manuring vines with chemical fertilisers, carried out in 1915 by the National society of agriculturists of Hungary. B. Kovácsy. Int R Sci & Prac Ag 7,no 5: 696-7 My '16  
Farm woman's vineyard. Mrs R. K. Temple. Country Gent 81:806 Ap 8 '16  
Figs and muscadines for home use. W. N. Hutt. Prog F 31:1193 O 14 '16  
Future of the wine grape industry. E. M. Sheehan. Cal State Comm Hort B v 6:138-40 My '17  
Grape culture. W. Obermeyer. Better Fruit 12:18 Ag '17  
Grape growing. F. Sanders. Ill State Hort Soc Trans 1917:296-300 '18  
Grape growing for pleasure and profit. C: A. Green. il Green's Fruit Grower 36:1 S '16

- Grape growing for the home supply. C: A. Green. il Green's Am Fruit Grower 37:3 D '17  
Grape pruning. F. H. Beach. il Purdue Ag Ext Leaflet 68:1-6 '16  
Grape recipes. C. Marshall. O Judd Farmer 61:21 S 30 '16  
Grapes for the home garden. il Green's Fruit Grower 36:4 F '16  
Grapes—home grown and home consumed. F. A. Waugh. il Country Gent 83:12-13 Mr 30 '18  
Grapes in a small way. il Purdue Ag 10:35-6 Ja '16  
Grow grapes for home use. S: Underwood. Fruit-Grower 27:170 Mr 1 '16  
Growing and marketing of grapes. R. T. Reid. Western Wash Ag Exp B v 5:174-7 Mr '18  
Growing grapes. Prog F 31:432 Mr 25 '16  
Growing grapes. Prog F 32:648 Je 2 '17  
Home canning; grapes. A. M. Johnson. Country Gent 82:1507 S 29 '17  
Home grape growing. F. A. Waugh. il Country Gent 81:1577 Ag 26 '16  
Home uses for muscadine grapes. C: Dearing. il Farmers' B 859:1-22 '17  
How to propagate muscadine grapes. L. A. Niven. Prog F 33:1236 N 9 '18  
Hybrid fruits that have made good. F. A. Waugh. il Country Gent 82:1669 N 3 '17  
Look backward on the grape. L. H. Bailey. il N Y Ag Dept B 79,pt 2:1219-27 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1219-27 '17  
Manures in relation to vines. H. E. Laffer. Ag Gaz of New South Wales 29:491-6 Jl '18  
Manuring of vineyards. H. E. Laffer. J Dept Ag S Australia 20:558-63 F '17  
Muscadine grapes. Prog F 31:831 Jl 1 '16  
Notes on grape culture. H. Manning. Fruit-Grower 27:168 Mr 1 '16  
Notes on grapes. L. R. Johnson. il Rural N Y 75:779 My 20 '16  
Outside the grape belt. W. H. Jenkins. Nat Stock & F 40:1196 F 10 '17  
Plums and grapes for the home garden. R. D. Anthony. il Field il 27:192-3 Mr '17  
Propagating grapes. W. E. Wiecking. Ohio F 138:282 S 23 '16  
Pruning and training grape varieties. F. E. Gladwin. Rural N Y 77:1188 O 19 '18  
Pruning grapes in a commercial vineyard. il Rural N Y 75:363 Mr 4 '16  
Pruning the grape. C. C. Wiggans. il Country Gent 82:1896 D 1 '17  
Pruning the seedless grapes. F: T. Bioletti. il Cal Ag Exp C 191:1-12 '18  
Pruning vines. T. Fromm. J Dept Ag S Australia 20:666 Mr '17  
Raspberries, blackberries, currants, grapes and gooseberries. il Country Gent 81:454-5 F 26 '16  
Renewing the old vineyard. A. P. Marshall. il Green's Am Fruit Grower 38:7 Ap '18  
Rupestris metallica (Cape). F. de Castella. J Dept Ag Victoria 15:181-2 Mr '17  
Seedless raisin grapes. F: T. Bioletti. Cal Ag Exp B 298:75-86 '18  
Setting home vineyard. E. J. Baxter. O Judd Farmer 61:3 S 23 '16  
Shallow cultivation in vineyards. P. Buchard. Int R Sci & Prac Ag 8,no 7:1005-6 Jl '17  
Spring grafting of the vine. F. de Castella. il J Dept Ag Victoria 15:554-65, 608-16 S-O '17  
Stocks tested at the National school of agriculture, Montpellier, France. L. Ravaz. Int R Sci & Prac Ag 8,no 5:750-2 My '17  
Studies of muscadine grapes. Country Gent 81:1192 Je 10 '16  
Summer bud, or yema graft of the vine. F. de Castella. il J Dept Ag Victoria 15:41-52, 92-101 Ja-F '17  
Table grape hybrid bearers. E. Pée-Laby. Int R Sci & Prac Ag 8,no 12:1235 D '17  
Table grapes. J Dept Ag S Australia 21:697-701 Ap '18  
Training grapevines. F. E. Gladwin. Rural N Y 75:282 F 19 '16  
Transpiration, condensation and chilling. W: Taylor. Gard Chron (Lond) 59:294 Je 3 '16

**Grapes —Continued**

- Victorian fresh grapes at the Panama-Pacific exposition. F. de Castella. J Dept Ag Victoria 14:31-3 Ja '16
- Visit to a vine. E. Wakeman. Rural N Y 75:117 Ja 22 '16
- Viticulture. P. H. Knappstein. J Dept Ag S Australia 22:69-70 Ag '18
- When are grapes ripe? F. T. Bioletti. Cal State Comm Hort B v 6:106-7 Ap '17
- Winter care of the grape. P. E. Horton. il Purdue Ag 11:37-8 N '16
- Winter injury of grapes. Rural N Y 75:183 F 5 '16
- Winter injury of grapes. F. E. Gladwin. il N Y State Ag Exp B 433:107-39 '17; Summarized by F. H. Hall. (Why and when winter kills grapes). B 433 Popular ed 8p
- Winter protection of the vinifera grape. F. Garcia and J. W. Rigney. il N M Ag Exp B 100: 1-32 '16

**Breeding**

- Breeding southern grapes. L. R. Detjen. il J Heredity 8:252-8 Je '17
- Growing vinifera grapes and their use in breeding. R. D. Anthony. N Y State Fruit Growers' Assn Pro 1916:152-6
- Inheritance of certain characters of grapes (Tech B. 45). U. P. Hedrick and R. D. Anthony. bibliog N Y State Ag Exp Rep 1915:489-505 '16; Same. J Ag Research 4:315-30 Jl '15
- Inheritance of sex in vitis rotundifolia. L. R. Detjen. bibliog il N C Ag Exp Tech B 12:1-42 '17; Same. N C Ag Exp Rep 1917:1-42
- Muscadine grape breeding. C. Dearing. il J Heredity 8:409-24 S '17
- Selection and hybridisation of American vines in Italy. G. Patané. Int R Sci & Prac Ag 7,no 10:1393-1404 O '16
- Variations of a sexual hybrid of the vine obtained by grafting it on one of its parents. F. Baco. Int R Sci & Prac Ag 8,no 4:582-3 Ap '17

**Composition**

- Autolysis of grapes. Int R Sci & Prac Ag 7,no 1:136-9 Ja '16
- Changes in the chemical composition of grapes during ripening. F. T. Bioletti and others. Cal Univ Pub Ag Sci v 3, no 6 103-30p '18 (25c)
- Chemical composition of American grapes grown in the central and eastern states. W. B. Alwood and others. U S Ag B 452:1-20 '16; Same cond. Int R Sci & Prac Ag 8,no 3:390-3 Mr '17
- Development of sugar and acid in grapes during ripening. W. B. Alwood and others. U S Ag B 335:1-28 '16
- Variations in mineral composition of sap, leaves, and stems of the wild-grape vine and sugar-maple tree. O. M. Shedd. bibliog J Ag Research 5:529-42 D 20 '15

**Diseases and pests**

- Common diseases of the grape. M. T. Cook. il N J Ag Exp C 55:1-8 n.d.
- Control of insects injurious to the grape, by F. Z. Hartzell; Diseases of grapes, by D. Reddick. il N Y Ag Dept B 79.pt 2:1296-1313, 1314-21 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1296-1313, 1314-21 '17
- Copper fungicides for vine diseases. F. de Castella. J Dept Ag Victoria 16:592-9 O '18
- Diseases of the vine. M. Blunno. Ag Gaz of New South Wales 27:146-7 F '16
- Diseases of the vine; preventive and remedial measures. A. H. Mazure. J Ag New Zealand 12:282-4 Ap '16
- Experiments on the control of eudemis and cochylys (polychrosis botrana and cochylys ambigua) in Piedmont, Italy. M. Topi. Int R Sci & Prac Ag 8,no 9:1328-9 S '17
- Fungoid diseases affecting the vine, and the grape crop failure; with discussion. H. E. Laffer. J Dept Ag S Australia 20:716-24 Ap '17
- Grape leafhopper (typhlocyba comes Say) in the Lake Erie valley. F. Johnson. il U S Ag B 19:1-47 '14
- Grape mealybug. R. L. Nougaret. il Cal State Comm Hort B v 7:511-14 S '18

- Grapes in Ontario; insects attacking grapes. L. Caesar. il Ontario Ag Dept B 237:39-48 '16
- Grapevine parasites and their treatment. Sci Am Sup (233 Broadway, N. Y. 10c) 86:15 Jl 6 '18
- How to spray grapes. Fruit-Grower 28:289 Je 1 '17; Same. Better Fruit 12:17 Jl '17
- Lead arsenate in vine culture. C. G. Mutterlet. Int R Sci & Prac Ag 7,no 12:1837-8 D '16
- Leaf-spot on vines. W. H. Dobson. Gard Chron (Lond) 59:267 My 20 '16
- Lygus spinolae and l. pratensis. Rhyncote pests on vines in Austria. L. Fulmek. Int R Sci & Prac Ag 7,no 12:1862-4 D '16
- Mealy bug of the muscat grape. F. K. Howard. il Cal State Comm Hort B v 5:67-8 F '16
- Mealy bug on vines. S. F. Anderson. J Ag New Zealand 16:166 Mr '18
- Non-parasitic malady of the vine. F. E. Gladwin. il N Y State Ag Exp B 449:99-110 '18
- Number of races of vine phylloxera. B. Grassi and M. Topi. Int R Sci & Prac Ag 8,no 9: 1322-7 S '17
- Phylloxera and American vine stocks. J Dept Ag S Australia 20:963-9 Jl '17
- Possibility of recovery of the slips of a vine suffering from bramble-leaf. E. Pantanelli. Int R Sci & Prac Ag 7,no 9:1373-5 S '16
- Scale insects as vine pests and their relations with other cultivated plants. J Jablonowski. Int R Sci & Prac Ag 8,no 2:316-17 F '17
- Spraying in Chautauqua belt. A. M. Loomis. Fruit-Grower 27:48 Ja 15 '16
- Sulpho-calcic solution for grapevine parasites. Sci Am Sup (233 Broadway, N.Y. 10c) 86:171 S 14 '18
- Vineyard spraying. F. de Castella. il J Dept Ag Victoria 16:141-56 Mr '18
- Winter injury of the grape in New York, 1917-1918. F. E. Gladwin. Rural N Y 77:1117 S 28 '18

*See also* Grape anthracnose; Grape berry worms; Grape leaf folder; Grape little-leaf; Grape mildew; Grape root-worms; Grape-vine aphids

**Marketing**

- Grape basket law. Fruit-Grower 27:495 N 15 '16
- Production and marketing of grapes in the Chautauqua belt. S. J. Lowell. N Y Ag Dept B 79.pt 2:1322-30 Ja '16; Same. N Y Ag Dept Rep 1916.pt 3:1322-30 '17
- Raising my income a third by selling direct to retailers. H. G. Darwin. il System on the Farm 2:170-2 My '18
- Selling Michigan certified grapes. G. E. Prater, jr. (In Nat. conf. on marketing and farm credits, 1316, p. 365-73) \$2 '17 C. W. Holman, sec., Madison, Wis.

**Statistics**

- Table showing the number of vines and production in pounds of grapes in New York state, by counties. N Y Ag Dept B 79.pt 2: 1339-40 Ja '16; Same. N Y Ag Dept Rep 1916.pt 3:1339-40 '17

**Laws**

- Décret n. 2274 ordonnant le recensement des vins et des huiles de la production 1915 ainsi que des stocks disponibles pour la consommation en Portugal. Int Yearbook Ag Leg 1916:23 '17

**Storage**

- Factors governing the successful storage of California table grapes. A. V. Stubenrauch and C. W. Mann. il U S Ag B 35:1-31 '13
- Storage for grapes. Country Gent 81:638 Mr 18 '16
- Storage of grapes. P. Thayer. Ohio Ag Exp B v 3:315-17 O '18

**Transportation**

- Loading American grapes. H. S. Bird and A. M. Grimes. (Markets Doc. 14) 23p il '18 U S Ag



Grapes —Continued

Varieties

- Experiments with new grape stocks at the Montpellier national school of agriculture, France. L. Ravaz. *Int R Sci & Prac Ag* 8, no 2:249-53 F '17
- Facts about wine grapes. *Country Gent* 81: 1336 J1 8 '16
- Grape notes from Missouri. L. R. Johnson. *Rural N Y* 77:38 Ja 12 '18
- How to grow grapes. L. R. Johnson. *il Green's Am Fruit Grower* 38:31 F '18
- Hybrid bearers in 1917 in France. E. Pée-Laby. *Int R Sci & Prac Ag* 9, no 3:331-6 Mr '18
- Hybrid direct bearers in the Seine-et-Marne district, France, in 1917. R. Salomon. *Int R Sci & Prac Ag* 8, no 12:1235-7 D '17
- Inheritance of certain characters of grapes (Tech B. 45). U. P. Hedrick and R. D. Anthony. *bibliog N Y State Ag Exp Rep* 1915:489-505 '16; Same. *J Ag Research* 4: 315-30 J1 '15
- Notes on hybrid direct bearers in the Seine-et-Marne district, France. R. Salomon. *Int R Sci & Prac Ag* 8, no 8:1125-7 Ag '17
- Notes on the Portuguese vine varieties. F. de Castella. *J Dept Ag Victoria* 14:565-70, 622-8, 673-86, 731-40 S-D '16
- \* Ohanez grape. (B. 11) 19p il '18 Cal. State bd. of viticultural comrs., Sacramento
- Portuguese varieties of wines. M. d'A. Burney. *il J Dept Ag Victoria* 14:398-408 J1 '16
- Rotundifolia or vulpina grapes. *Prog F* 33: 1364 D 14 '18
- Talk about grape varieties. F. E. Gladwin. *Rural N Y* 77:13, 35 Ja 5-12 '18
- Testing grape varieties in the vinifera regions of the United States. G. C. Husmann. *il map U S Ag B* 209:1-157 '15
- Varieties of grapes. U. P. Hedrick. *il N Y Ag Dept B* 79, pt 2:1228-37 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1228-37 '17
- Viticulture in South Africa. A. I. Perold. *Int R Sci & Prac Ag* 7, no 1:9-14 Ja '16

Argentina

- Viticultural industry of Mendoza and the Argentine agricultural crisis. *Int R Ag Econ* 9, no 1:53-9 Ja '18

Asia Minor

- \* Grape harvest in Asia Minor. I. M. Blake. *J Geography* (Appleton, Wis. 15c) 16:265-6 Mr '18

Australia

- Grape vine; its introduction into New South Wales. J. H. Maiden. *Ag Gaz of New South Wales* 28:427-33 Je '17
- Notes on the Portuguese vine varieties. F. de Castella. *J Dept Ag Victoria* 14:565-70, 622-8, 673-86, 731-40 S-D '16
- Portuguese varieties of vines. M. d'A. Burney. *il J Dept Ag Victoria* 14:398-408 J1 '16
- Viticultural nursery, Wahgunyah, visit of inspection. *il J Dept Ag Victoria* 14:345-53 Je '16

California

- \* California's grape industry. (B. 10) 30p '18 Cal. State bd. of viticultural comrs., Sacramento
- Girdling the Corinth grape to make it bear; the Zanth currant industry in California. G. C. Husmann. *il J Heredity* 9:201-10 My '18
- Grape growing in California. T. Gier. *Cal Ag Bd Rep* 1917:xvii-xix '18
- Have we reached the limit of profitable orchard and vineyard planting; with discussion. H. C. Dunlap. *Cal State Comm Hort B v* 7:48-52 Ja '18
- \* Ohanez grape. (B. 11) 19p il '18 Cal. State bd. of viticultural comrs., Sacramento
- Testing grape varieties in the vinifera regions of the United States. G. C. Husmann. *il map U S Ag B* 209:1-157 '15
- Topping and pinching vines. F. T. Bioletti and F. C. H. Flossfeder. *il Cal Ag Exp B* 296:371-84 '18

- Vine-growing in California. F. T. Swett. *Int R Sci & Prac Ag* 7, no 4:546-7 Ap '16

Canada

- European or vinifera grapes grown in the open at Ottawa. W. T. Macoun. *Ag Gaz of Canada* 5:554-5 Je '18
- Grape in Ontario. F. M. Clement. *il Ontario Ag Dept B* 237:1-48 '16

France

- Direct bearers: in the Department of the Isère; in the Department of the Loire (France). L. Caille; L. Rougier. *Int R Sci & Prac Ag* 9, no 5:574-5 My '18
- Extension of the limits of cultivation of the vine by means of various hybrids. L. Daniel and H. Teulié. *Int R Sci & Prac Ag* 9, no 4:459-60 Ap '18
- Hybrid direct bearers in the regions of Côtes du Rhône, France, in 1915. A. Desmoulins and V. Villard. *Int R Sci & Prac Ag* 7, no 7:981-3 J1 '16
- Mechanical methods of cultivation of vineyards. M. Ringelman. *Int R Sci & Prac Ag* 8, no 9:1278-9 S '17
- Observations on some direct bearers, in France. L. Degruilly. *Int R Sci & Prac Ag* 8, no 11:1101-2 N '17
- Observations on the cultivation of direct bearers in Savoy (France) in 1915. F. Cartier. *Int R Sci & Prac Ag* 7, no 4:544-5 Ap '16

Hawaiian Islands

- Grape experiments. *Hawaii Ag Exp Rep* 1917: 13-19 '18

Iowa

- Grape growing in southwest Iowa. *il Wallaces' F* 41:259 F 18 '16

Italy

- Experiments in Italy on the best time for pruning the vine. G. Dalmasso. *Int R Sci & Prac Ag* 7, no 4:543 Ap '16
- Selection and hybridisation of American vines in Italy. G. Patané. *Int R Sci & Prac Ag* 7, no 10:1393-1404 O '16

Michigan

- Michigan grape crop. R. H. Elsworth. *il Fruit-Grower* 27:506 D 1 '16

Minnesota

- Alpha grape adapted to Minnesota conditions. J. B. Katzner. *il Minn Hort* 46:177-81 My '18

Missouri

- Fruit notes from Missouri. L. R. Johnson. *Rural N Y* 77:554 Ap 13 '18
- Grape notes from Missouri. L. R. Johnson. *Rural N Y* 75:1364 O 28 '16

New York

- Cultural methods for the grape in New York. F. E. Gladwin. *il N Y Ag Dept B* 79, pt 2: 1272-95 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1272-95 '17
- Grape-growing sections of New York. F. E. Gladwin. *map N Y Ag Dept B* 79, pt 2:1238-45 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1238-45 '17
- Hybrid grapes at Geneva. R. D. Anthony. *il N Y Ag Dept B* 79, pt 2:1331-8 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1331-8 '17
- Table showing the number of vines and production in pounds of grapes in New York state. *N Y Ag Dept B* 79, pt 2:1339-40 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1339-40 '17
- Vinifera grapes in New York. R. D. Anthony. *il N Y State Ag Exp B* 432:8-105 '17; Summarized by F. H. Hall. (European grapes succeed in New York). *B* 432 Popular ed 7p

New Zealand

- Outdoor culture of the grape-vine in New Zealand. S. F. Anderson. *il J Ag New Zealand* 14:101-15, 197-215, 278-92, 363-77 F-My '17
- Work for the coming month; viticulture. S. F. Anderson. See monthly numbers of *Journal of agriculture of New Zealand*

**Grapes—Continued****North Carolina**

Grape growing in a thermal belt. H. S. Stabler. *il Country Gent* 81:1643-4 S 9 '16

**South Africa**

Viticulture in South Africa. A. I. Perold. *Int R Sci & Prac Ag* 7,no 1:1-30 Ja '16

**Spain**

Cultivation of grapes for export in the District of Almeria, Spain. S. Haro. *Int R Sci & Prac Ag* 8,no 12:1237-9 D '17

**Switzerland**

Observations upon direct bearers in the Vaudis vineyards (Switzerland). H. Faes and F. Porchet. *Int R Sci & Prac Ag* 7,no 3:385-8 Mr '16

\* Vine crop of Canton of Vaud. J. T. McCutcheon. (Commerce Reports no. 246) p 264-5 (O 19) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**United States**

Lake Erie grape belt. A. M. Loomis. *il Fruit-Grower* 27:353 J1 '15 '16

Some history of the grape in the United States. G. C. Husmann. *Mass Hort Soc Trans* 1916,pt 1:59-70 '16

**Grapevine aphid**

Life history of *macrosiphum illinoisensis*, the grapevine aphid. A. C. Baker. *il J Ag Research* 11:83-90 O 15 '17

**Graphite**

Graphite for removing boiler scale. A. Carr. *Power F* 25:60 Mr '16

**Grass. See Grasses****Grass army worm. See Fall army worm****Grass moths**

Commoner grass-moths of Quebec. J. A. Corcoran. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 71-7) '17

Crambid moths and light. G. G. Ainslie. *J Econ Entomol* 10:114-23 F '17

Notes off crambids. G. G. Ainslie. *J Econ Entomol* 9:115-19 F '16

Yellow-barred grass moth. W. W. Froggatt. *il Ag Gaz of New South Wales* 28:391-5 D '17

**Grass-peas**

Grass-pea. A. McTaggart. *il J Ag New Zealand* 12:461-3 Je '16

**Grass seed. See Grasses—Seed****Grass worm. See Fall army worm****Grasses**

Agricultural species of bent grasses. C. V. Piper and F. H. Hillman. *il U S Ag B* 692:1-26 '18

Axillary cleistogenes in some American grasses. A. Chase. *il Am J Bot* 5:254-8 My '18

Bulbs in grass land. *Rural N Y* 75:1539 D 16 '16

Capim jaraguá, (*andropogon rufus*, Kunth) a Brazilian fodder plant. M. P. Correa. *Int R Sci & Prac Ag* 8,no 12:1220-1 D '17

Choice of grasses to protect road embankments from erosion. W. C. Buetow. *Eng News-Record* (10th av. at 36th st., N.Y. 15c) 79:216 Ag 2 '17

Cutthroat grass (*panicum combsii*). C. V. Piper. *Am Soc Agron J* 10:162-4 Ap '18

Cyanogenesis in plants, studies on *tridens-flavus* (tall red top). A. Viehoever and others. *Int R Sci & Prac Ag* 9,no 5:548-9 My '18

District grasses and their relative feeding values. A. B. Feuerherdt. *J Dept Ag S Australia* 20:521-4 Ja '17

Fertilisation of gramineae and leguminosae in relation to selection. N. H. Frandsen. *Int R Sci & Prac Ag* 8,no 9:1231-3 S '17

Generic types with special reference to the grasses of the United States. A. S. Hitchcock. *Am J Bot* 5:248-53 My '18

Grass and ash trees. *J For* 15:502-4 Ap '17

Grass and clover planting program. *Prog F* 33:220 F 16 '18

Grass before livestock. C. B. Williams. *il Country Gent* 81:921 Ap 29 '16

Grass experiments at Grafton farm. K. B. MacPherson. *Ag Gaz of New South Wales* 27:393-4 Je '16

Grass experiments at Hawkesbury agricultural college, 1916-17. W. D. Kerle. *Ag Gaz of New South Wales* 28:809-13 N '17; Same cond. *Int R Sci & Prac Ag* 9,no 3:326-8 Mr '18

Grass-lands of New Zealand. A. H. Cockayne. *J Ag New Zealand* 16:210-20 Ap '18 (to be cont)

Grasses and clovers under irrigation. J. M. Pitt. *il Ag Gaz of New South Wales* 28:78-82 F '17

Grasses and fodder plants for Moss Vale. E. Breakwell. *Ag Gaz of New South Wales* 29:604-5 Ag '18

Grasses and leguminous crops in New York state. *il N Y Ag Dept B* 87:2709-992 S '16

Grasses for pasture and hay in Texas. G. M. Garren. *il Tex Ag Ext B* B-32:1-16 '16

Grasses for rotation. Wallaces' *F* 41:118 Ja 28 '16

Grasses, lucernes and clovers at Glen Innes experiment farm. G. G. C. St Potts. *il Ag Gaz of New South Wales* 28:281-91 Ap '17

Grasses most suitable to the South-east. D. W. Tucker. *J Dept Ag S Australia* 21:800-3 My '18

Grasses of Illinois. E. Mosher. bibliog *il Ill Ag Exp B* 205:261-425 '18

Grasses of Ohio. J. H. Schaffner. *Ohio State Univ (Columbus) B v* 21, no 28 256-439p '17 This is bulletin 9 of Ohio biological survey. 50c Apply to Prof. Herbert Osborn, Columbus, O.

Grasses of the West Indies. A. S. Hitchcock and A. Chase. (Contributions from U.S. Nat. herbarium, v. 18, pt. 7) 261-471p '17 U.S. National museum, Washington, D.C.; 30c Supt. of doc.

Grasses, sedges and some September flowers. R. W. Shufeldt. *il Am For* 24:551-5 S '18

Grasses under drought conditions at Hawkesbury agricultural college. W. D. Kerle. *il Ag Gaz of New South Wales* 27:694-7 O '16

Haying it in Florida. *il Country Gent* 81:962 My 6 '16

Identification of grasses by their vegetative characters. L. Carrier. *il U S Ag B* 461:1-30 '17 (5c Supt. of doc.)

Identification of the seeds of species of agropyron. R. C. Dahlberg. bibliog *il J Ag Research* 3:275-82 D '14

Important range plants: their life history and forage value. A. W. Sampson. *il U S Ag B* 545:1-63 '17

Kinds of grasses. Wallaces' *F* 42:1256 S 14 '17

Morphology of the monocotyledonous embryo and of that of the grass in particular. W. C. Worsdell. bibliog *il Ann Bot* 30:509-24 O '16

Native pasture grasses of the United States. D. Griffiths and others. *il U S Ag B* 201:1-52 '15

New grasses for California: *phalaris stenoptera* Hack. P. B. Kennedy. *il Cal Univ Pub Ag Sci v* 3, no 1:1-24 '17 (30c)

New or noteworthy grasses. A. S. Hitchcock. *Am J Bot* 2:299-310 Je '15

Nurse crop for newly sown grasses. Wallaces' *F* 41:210 F 11 '16

Pasture problems: indigenous plants in relation to habitat and sown species. R. G. Stapledon and T. J. Jenkin. bibliog *J Ag Sci* 8:26-64 S '16

Pastures in the spring. H. B. Arbuckle. *Am Sheep B & W* 36:283 My '16

Patrogenesis: a cross between two genera of grasses, *tripsacum* and *euchlaena*. G. N. Collins and J. H. Kempton. *il J Heredity* 7:106-18 Mr '16

Persistence of lawn and other grasses as influenced especially by the effect of manures on the degree of soil acidity. B. L. Hartwell and S. C. Damon. *il R I Ag Exp B* 170:1-24 '17



**Grasses—Continued**

- Popular descriptions of grasses. E. Breakwell. *il Ag Gaz of New South Wales* 28:715-18, 762-72, 824-6; 29:38-41, 159-66, 274-80, 387-95, 548-58, 627-31, 780-5 O '17-Ja, Mr-Ap, Je, Ag-S, N '18
- Redtop. L. Carrier. *il N Y Ag Dept B* 87: 2798-801 S '16
- Seeding and management of grass land. E. B. Stookey. *il Western Wash Ag Exp B* v 4:5-11 S '16
- Seeding grass and eradicating daisies. H. Dorsey. *Breeder's Gaz* 72:142 Ag 2 '17
- Seeding to grass and clover. H. J. Wheeler. (B. 3) 23p *il n.d. Am. agricultural chemical co., 92 State st., Boston*
- Seeding to tame grass. Wallaces' F 41:403 Mr 10 '16
- Some effects of legumes on associated non-legumes. M. W. Evans. *il Am Soc Agron J* 8:348-57 N '16
- \* Story of a grass; abstract. A. B. Rendle. *Nature* (St Martin's st, London, W. C. 6d) 101:317-18 Je 20 '18
- Summer seeding of grass. *Prac F* 112:280 Jl 15 '16
- Surface-sown grass-mixtures. A. H. Cockayne. *J Ag New Zealand* 14:169-77 Mr '17
- Twenty-year comparison of different rotations of corn, potatoes, rye and grass. B. L. Hartwell and S. C. Damon. *R I Ag Exp B* 167:1-38 '16
- Uses of *imperata cylindrica* in paper making; experiments in Italy. F. Vignolo-Lutati. *Int R Sci & Prac Ag* 9:no 5:615-17 My '18
- Vegetative succession under irrigation. J. F. Macbride. *il J Ag Research* 6:741-60 Ag 7 '16
- Victorian grasses. J. W. Audas. *il J Dept Ag Victoria* 15:711-23 D '17
- What is wire grass? *Va Ag Dept B* 121:11-12 S '17
- Winter grasses and clovers at Grafton experiment farm. K. B. Macpherson. *Ag Gaz of New South Wales* 27:768-71 N '16
- Yields of grass from various basic slags. A. W. Oldershaw. *J Bd Ag* 24:819-26 N '17
- See Also Feeding and feeding stuffs; Forage plants; Grazing; Hay; Lawns; Pastures and meadows; also names of grasses, e. g. Alfalfa, Aphanelytrum, Bermuda grass, Blue grass, Clover, Danthonia, Eragrostis, Iselima, Johnson grass, Napier's fodder grass, Natal grass, Orchard grass, Paspalum, Rhodes grass, Rye grass, Setaria, Spartan grasses, Sudan grass, Timothy, Western wheat grass

**Diseases and pests**

- Biologic forms of puccinia graminis on cereals and grasses. E. C. Stakman and F. J. Piemeisel. *bibliog il J Ag Research* 10:429-96 Ag 27 '17
- Grass insects. C. R. Crosby and M. D. Leonard. *il N Y Ag Dept B* 87:2745-56 S '16
- Influence of the host on the morphological characters of puccinia ellisiana and puccinia andropogonis. W. H. Long. *J Ag Research* 2:303-19 Jl '14
- Powdery mildews of avena and triticum. G. M. Reed. *Mo Ag Exp Research B* 23:1-19 '16
- See also Meadow-foxtail midges; Meadow plant bugs; Spike-horned leaf-miners

**Roots**

- Grass roots as feed. *Weekly N L* 5:7 F 20 '18

**Seed**

- Clover and grass seed inspected in 1914. C. P. Smith. *Md Ag Exp B* 197:1-58 '16; Same. *Md Ag Exp Rep* 1916-1917 '17
- Distinguishing the seeds of redtop and bent grasses. F. H. Hillman. *Assn Offic Seed Analysts Pro* 1916-1917:76-9 '17
- Experiments on the germination of seeds of gramineae. F. Kling. *Int R Sci & Prac Ag* 7:no 4:535-6 Ap '16
- How deep should grass seed be covered? Wallaces' F 41:262 F 18 '16
- Lawn grass mixtures. J. R. Dymond. *Ag Gaz of Canada* 4:359 My '17

Study of chaff in grass seed with special reference to bromegrass. O. A. Stevens. *Assn Offic Seed Analysts Pro* 1916-1917:66-7 '17

**Grasshoppers.** See Locusts

**Grasslands**

- Mountain grassland. G. D. Fuller. *Bot Gaz* 63:242-3 Mr '17
- Quadrat studies in a mountain grassland. F. Ramaley. *Bot Gaz* 62:70-4 Jl '16

**Gravel**

- Cow-pasture fortune; pumping gravel on an Ohio farm. *il Rural N Y* 76:641 My 5 '17

**Gravereaux, Jules, d. 1916**

- Death of Jules Gravereaux, famous rosarian. *Gard M* 23:342 Jl '16

**Gray, Charles**

- Portrait. *Breeder's Gaz* 69:665 Mr 23 '16

**Grayfish**

- Grayfish; try it. (Econ. C. 22) 8p '16 U. S. Bur. of fisheries, Washington, D.C.

**Grazing**

- Adaptation of national forests to the grazing of sheep. W. C. Barnes. *Am Sheep B & W* 36:73-5 F '16
- Big demand for national forest ranges. *Nat Wool Grower* 8:15 Ja '18
- Decision regarding grazing fees. D. F. Houston. *Nat Wool Grower* 7:27 F '17
- Differs on spring pasture. W. B. Doak. *Am Sheep B & W* 36:219 Ap '16
- Eradicating noxious weeds by grazing. M. E. Woods. *Nat Wool Grower* 8:13-15 Jl '18
- Forage utilization. M. Anderson. *il Nat Wool Grower* 8:17-18 Mr '18
- Grass as food and clothing. C. H. Shattuck. *Nat Wool Grower* 7:49 My '17
- Grazing allowances increased. W. C. Barnes. *Am Sheep B & W* 38:316-17 My '18
- Grazing experiments on the federal range reserves. W. C. Barnes. *Am Sheep B & W* 36:74-5 F '16
- Grazing fees in national forests. A. F. Potter. *Nat Wool Grower* 7:21-3 Ja '17
- Grazing industry of the bluegrass region. L. Carrier. *il map U S Ag B* 397:1-18 '16
- Grazing on forests. *Weekly N L* 5:8 Ja 2 '18
- Grazing the woodlot. *J Ag (Quebec)* 20:viii D '16
- Handling sheep under new methods. *Am Sheep B & W* 36:199 Ap '16
- Improvement and maintenance of far western ranges. J. T. Jardine. *il Am Sheep B & W* 38:427-9, 635-8 Jl, O '18
- Not to be raised; no further advance in national forest grazing. *Weekly N L* 5:6 D 5 '17
- Prevent waste; graze sheep and cattle together. M. Anderson. *il Nat Wool Grower* 7:21 D '17
- Range improvement by deferred and rotation grazing. A. W. Sampson. *il U S Ag B* 34:1-16 '13
- Sheep on cattle range. *Nat Wool Grower* 8:51 My '18
- Stock-raising homestead law; explanatory statement relative to the provisions of the act entitled An act to provide for stock-raising homesteads, and for other purposes, together with a copy of the act as approved by the President of the United States on December 29, 1916. (U.S. 64th Cong. 2d sess. S. Doc. 663) 8p '17 Apply to congressmen
- Value of grazing management on the Caribou national forest. C. H. Shattuck. *il Am For* 23:536-8 S '17
- Waste of forage through lack of grazing. *Am For* 23:748 D '17
- Winter grazing pays. *Weekly N L* 5:6 F 20 '18
- See also Forage plants; Pastures and meadows; Ranges
- Grease.** See Lubrication and lubricants
- Great Britain**
- See also subhead Great Britain under special subjects, e. g. Agriculture—Great Britain, Dairying—Great Britain
- Agriculture, Board of**
- Proceedings in 1915 under the tithe, copyhold, commons, and other acts. *J Bd Ag* 23:123-8 My '16

**Great Britain—Continued****Army****Veterinary service**

Report on the British army veterinary service. L. A. Klein and A. L. Mason. *Am Vet M Assn J* 53:417-29 Je '18

**Commerce**

Agricultural exports in 1915. *J Bd Ag* 22:1160-2 F '16

Imports of agricultural produce in 1915. *J Bd Ag* 22:986-97 Ja '16

**Development commission**

Report of the development commissioners, 1914-15. *J Bd Ag* 22:1172-5 F '16

**Great Danes**

Lordly Dane. W. A. Dyer. *il Country Life* 31:51-3 F '17

Where lies greatness. F. M. Seabury. *il Country Life* 31:72 F '17

**Great Lakes wool convention**

Great Lakes wool convention. *Am Sheep B & W* 37:541-2 S '17

**Great western egg exchange**

Work of art sent out unsigned by the Great western egg exchange. *N Y Prod R* 46:237 Je 12 '18

**Greece**

See also Food control—Greece; Forests and forestry—Greece

**National economy, Minister of**

Décret royal relatif à la codification des lois concernant le service central du ministère de l'économie Nationale et à leur groupement dans un texte unique portant le texte de la loi n. 241 sur l'organisation du service central du ministère de l'économie nationale. *Int Yearbook Ag Leg* 1916:804-19 '17

**Green apple aphid.** See Apple aphid

**Green bugs.** See Spring grain aphid

**Green clover worms**

Control of the green clover worm in alfalfa fields. C. C. Hill. *il map Farmers' B* 982:1-7 '18

**Green lacewing flies.** See Lacewing flies

**Green manuring**

Alfalfa as a green manure. L. L. De Bra. *Hoard's D* 55:94 F 8 '18

Alfalfa in the orchard, or better orchard farming. P. S. Darlington. *Better Fruit* 10:15-18 F '16

Apple culture in Victoria. J. Farrell. *il map J Dept Ag Victoria* 16:129-40 Mr '18

Best time to plow under green manure crops. *Prog F* 31:1255 O 28 '16

Best time to plow under weeds or cowpea vines. J. F. Duggar. *Prog F* 33:1293 N 23 '18

Chemical studies of the efficiency of legumes as green manures in Hawaii. A. R. Thompson. *Hawaii Ag Exp B* 43:1-26 '17

Comparative value of legumes as green manures. M. O. Johnson and others. *il Hawaii Ag Exp Press B* 52:1-14 '17

Comparison of annual cropping, biennial cropping, and green manures on the yield of wheat. B. A. Madson. *Cal Ag Exp B* 270:1-14 '16

Continuous growing of wheat and rye with and without a legume as green manure; Influence of bacteria carried in manure on the decomposition of green manures (legume and non-legume). *il N J Ag Exp Rep* 1916:380-3, 383-7 '17

Cowpeas for green manure. A. E. Grantham. *Country Gent* 82:1252 Ag 11 '17

Crimson-clover Bob; South Carolina po'land yields much cotton and other crops. H. S. Stabler. *il Country Gent* 81:1319-20 Jl 8 '16

Crimson clover for green manure. A. E. Grantham. *il Country Gent* 82:1346 S 1 '17

Crops that grow crops. W. H. Dean. *il Country Gent* 81:3-4 Ja 1 '16

Decomposition of green and stable manures in soil. R. S. Potter and R. S. Snyder. *bibliog J Ag Research* 11:677-98 D 24 '17

Decomposition of organic matter in soils. F. G. Merkle. *bibliog Am Soc Agron J* 10:281-302 O '18

Decomposition of sweet clover (*melilotus alba* Desr.) as a green manure under greenhouse conditions. L. A. Maynard. *bibliog il Cornell Ag Exp B* 394:121-49 '17

Forage and green manuring crops. *il Hawaii Ag Exp Rep* 1917:29-33 '18

Forage plants that feed and fertilize. A. Kruhm. *il Country Life* 34:60-1 My '18

Green manure. J. S. Welch. *Jersey B* 37:1382 Ag 28 '18

Green manure and sour soil myth. J. C. Temple. *Prog F* 31:322 Mr 4 '16

Green-manure crops for Michigan. C. P. Halligan. *il Country Gent* 81:437 F 26 '16

Green manure crops in southern California. W. M. Mertz. *il Cal Ag Exp B* 292:1-31 '18

Green manure in the rotation. L. W. Meeks. *Rural N Y* 75:147 Ja 29 '16

Green manure—the solution of the humus problem. G. Jordan. *Prac F* 113:8 Ja 1 '17

Green manures and manuring in the tropics, by P. de Sornay. *Review. Ag J of India* 12:340-2 Ap '17

Green manures; crops to be plowed under for fertilizers. B. L. Moss. *Prog F* 31:434 Mr 25 '16

Green manures for the South. C. B. Williams. *il Country Gent* 81:314 F 12 '16

Green manures in vineyard. F. E. Gladwin. *Rural N Y* 75:232 F 12 '16

Green manuring. *Gard Chron (Lond)* 64:160 O 19 '18

Green manuring. *J Ag (Quebec)* 21:151 Ap '18

Green manuring: a review of the American experiment station literature. A. J. Pieters. *Am Soc Agron J* 9:62-82, 109-26, 162-72 F-Ap '17

Green manuring and war prices. J. W. Pincus. *Rural N Y* 75:1231 S 23 '16

Green-manuring in India. A. C. Dobbs. *Int R Sci & Prac Ag* 7,no 4:520-2 Ap '16

Green-manuring in the Central Provinces, India. *Int R Sci & Prac Ag* 7,no 2:197 F '16

Growing of green manure crops. A. E. Grantham. *Prac F* 113:254 Jl 15 '17

Home garden; value of green manures in the garden. *il Country Gent* 83:36 O 12 '18

How to get rich lands; green manures or crops turned under to increase soil fertility. T. Butler. *Prog F* 32:791, 798 Jl 14-21 '17

Humus for Missouri soil. W. L. Nelson. *il Country Gent* 81:558 Mr 11 '16

Live-stock and maintenance of the soil; the value of green manure. E. O. Fippin. *Rural N Y* 75:931, 953 Jl 1-8 '16

Loss of organic matter in clover returned to the soil. G. E. Boltz. *Am Soc Agron J* 10:210-14 My '18

Loss of organic matter in clover returned to soil. G. E. Boltz and C. J. Schollenberger. *Ohio Ag Exp B v* 2:397-400 D '17

Loss of organic matter in green manuring. G. E. Boltz. *Ohio Ag Exp B v* 1:347-50 N '16; Same cond. *Ohio F* 138:615 D 16 '16

Manurial value of cover crops. *Rural N Y* 75:930 Jl 1 '16

Matkee—a green-manuring plant. *il Ag J of India* 12:161-2 Ja '17

Modified method of green-manuring. C. M. Hutchinson. *Int R Sci & Prac Ag* 8,no 7:978-90 Jl '17

Relation of green manures to nitrogen fixation. H. L. Fulmer. *bibliog Soil Sci* 4:1-17 Jl '17

Relation of green manures to the failure of certain seedlings. E. B. Fred. *bibliog il J Ag Research* 5:1161-76 Mr 20 '16; Abstract. *Int R Sci & Prac Ag* 7,no 3:348 Mr '16

Rye and vetch turned under. B. Howard. *il Country Gent* 81:1147 Je 3 '16

Securing organic matter in orchard soils. J. R. Mattern. *Better Fruit* 11:8 Ag '16

Seeding of green manure crops. *Prac F* 112:266 Jl 1 '16

Simple way to increase crop yields. H. A. Miller. *il Farmers' B* 924:8-12 '18

Snapshots at green manuring. R. W. Parra-more. *O Judd Farmer* 60:10 Ja 22 '16



**Green manuring—Continued**

- Soil acidity as influenced by green manures. J. W. White. *J Ag Research* 13:171-97 Ap 15 '18
- Studies of leguminous plants as green manure. N. Gangulee. *Int R Sci & Prac Ag* 8,no 12: 1194-5 D '17
- Tests of the value of stable manure, commercial fertilizer, and crimson clover for vegetable crops. T. H. White. *Md Ag Exp B* 199: 95-106 '16; Same. *Md Ag Exp Rep* 1916-1917 '17
- To feed or to plow under. *Nat Stock & F* 40: 1146 F 3 '17
- Use of green manure in the eastern states. *Prac F* 112:328 S 1 '16
- Winter vetch for green manure. A. E. Grant-ham. *il Country Gent* 82:1374 S 8 '17
- See also Legumes; Lespedeza; Rye

**Bibliography**

- Tabular summary of American experiment station literature. A. J. Pieters. *Am Soc Agron J* 9:173-90 Ap '17

**Green soldier bugs. See Soldier bugs**

- Greenall, Gilbert, 1867-**  
Portrait. *Breeder's Gaz* 70:85 Jl 20 '16

- Greene, Edward Lee, 1843-1915**  
Appreciation. J. N. Rose. *por Bot Gaz* 61:70-1 Ja '16

**Greenheart**

- Greenheart of commerce. C. D. Mell. *il Am For* 22:288-91 My '16

**Greenhouse pests**

- Cockroach pest of greenhouses. M. P. Zappe. *bibliog Conn State Ag Exp B* 203:302-13 '18
- Controlling aphid on lettuce. *Market Growers J* 22:149 F 15 '18
- Controlling the white fly. C. W. Waid. *Market Growers J* 21:104 S 1 '17
- Diestrammena marmorata* (tachycines asynamorus), an orthopteran from German greenhouses. R. Ebner. *Int R Sci & Prac Ag* 7,no 11:1720 N '16
- Fumigation of ornamental greenhouse plants with hydrocyanic-acid gas. E. R. Sasscer and A. D. Borden. *U S Ag B* 513:1-20 '17; Same cond. *il Farmers' B* 880:1-19 '17
- Greenhouse insects. J. J. Thapke. *il Country Gent* 81:24 Ja 1 '16
- Greenhouse insects and diseases. C. W. Waid. *Market Growers J* 22:393 Je 1 '18
- Insect problems of the florist. T. J. Headley. *Am Flor* 47:294 Ag 26 '16
- More important greenhouse insects. H. B. Weiss. *il N J Ag Exp B* 296:1-42 '16
- Seasonable notes on greenhouse crops. C. W. Waid. *Market Growers J* 23:131 O 1 '18
- Studies in greenhouse fumigation with hydrocyanic acid: physiological effects on the plant. W. Moore and J. J. Willaman. *bibliog il J Ag Research* 11:319-33 N 12 '17
- Three important greenhouse pests recently introduced into Canada. A. Gibson. (*In Report, Entomological soc. of Ontario, 1916, p. 111-22*) *il '17 Ontario ag. dept., Toronto*
- War on greenhouse pests. H. A. Gossard. *il Ohio Ag Exp B v* 2:394-6; v 3:21-2, 55-61 D '17-F '18

- See also Cyclamen mites; Millepedes; Red spiders; Rose canker; Violet rove beetles

**Greenhouses**

- Advice about a greenhouse. *Rural N Y* 75:245 F 12 '16
- All about the greenhouse business. E. J. Weaver. *il Rural N Y* 77:149 F 2 '18
- At the turn of winter. W. C. McCollom. *Gard M* 26:165 D '17
- Case of the Browns. P. H. Cox. *il Gard Chron Am* 20:138-42 Mr '16
- Cheap glass for hot houses; old glass plate negatives. *Farm Eng* 5:10 Mr '17
- Cleaning greenhouse glass. *Am Flor* 48:1112 Je 9 '17
- Economizing greenhouse room. C. W. Waid. *Market Growers J* 22:276 Ap 1 '18
- False economies. A. F. J. Baur. *Am Flor* 47: 923 N 18 '16
- Fruits and plants under glass. See weekly numbers of *Gardeners' chronicle* (London)

- Fumigation of greenhouses. E. N. Cory. *Md Ag Exp B* 205:263-82 '17; Same. *Md Ag Exp Rep* 1916-1917 '17
- Fumigation of greenhouses. G. E. Stone. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84: 235 O 13 '17
- Garden under glass. W. C. McCollum. *il Country Life* 33:57-61 N '17
- Garden work in mid winter. W. F. Massey. *Prac F* 114:4 Ja 1 '18
- Getting full use of a greenhouse. L. Papworth. *Market Growers J* 22:152 F 15 '18
- Getting the garden under glass. F. F. Rockwell. *il Gard M* 25:130-1 N '17
- Greenhouse and its equipment. *il Gard M* 24: 123-9 N '16
- Greenhouse building. C. W. Waid. *Market Growers J* 18:215 Mr 15 '16
- Greenhouse fumigation with hydrocyanic acid. W. Moore. (*In Report State entomologist, 1915-1916, p. 93-108*) *il '16 Minn. ag. exp. station, St Paul*
- Greenhouse management. L. C. Corbett. *Market Growers J* 23:71+, 93 Ag 15-S 1 '18; Same. *Am Flor* 51:130, 254, 352 Ag 10, 24, S 7 '18
- Greenhouse month to month. W. R. Fowkes. See monthly numbers of *Gardeners' chronicle of America*
- Greenhouse that isn't heated. W. N. Craig. *il Gard M* 26:129 N '17
- Greenhouse versus hotbeds. F. H. Gibbs. *il Minn Hort* 44:467-9 D '16
- Greenhouse without fuel. K. N. Marriage. *il Gard M* 28:105 N '18
- Greenhouses of the future. *Am Flor* 49:203 Ag 18 '17
- Growing plants as a greenhouse side line; symposium. *Market Growers J* 18:84+ F 1 '16
- Home-built greenhouse that succeeded. A. E. Wilkinson. *il plan Gard M* 24:141-2 N '16
- How to utilize the fireless greenhouse. W. H. Waite. *Gard Chron Am* 22:48 F '18
- January a busy time in the greenhouse. W. C. McCollom. *il Gard M* 24:219-20 Ja '17
- Making the greenhouses pay. *Am Flor* 50:717 Ap 27 '18
- Making the greenhouse really pay its way. W. C. McCollom. *il Gard M* 23:198 Ap '16
- Making the most of greenhouse space. *Am Flor* 49:1268 D 29 '17
- Quick way of making a small greenhouse. L. B. Pierce. *Rural N Y* 75:619 Ap 15 '16
- Real beginning of summer. W. C. McCollom. *il Gard M* 23:310 Je '16
- Rush jobs under glass. W. C. McCollom. *Gard M* 23:262 My '16
- Small greenhouse. L. M. Montgomery. *Ohio F* 140:23 Jl 14 '17
- Sterilizing greenhouse soils. C. W. Waid. *il Market Growers J* 20:204+ Mr 1 '17
- Taking care of the tender things. W. C. McCollom. *il Gard M* 24:104 O '16
- Utilizing the cool house—suggesting an alpine house. A. Cummings. *Gard Chron Am* 22:48 F '18
- War conditions in greenhouses. *Am Flor* 51: 89, 132 Ag 3-10 '18
- When a little glass is appreciated. W. C. McCollom. *il Gard M* 25:102-3 Mr '17
- Why you need a greenhouse. W. C. McCollom. *il Gard M* 23:31-2 F '16
- Work of the moment; July. W. C. McCollom. *il Gard M* 23:341 Jl '16
- See also Cold frames; Forcing (plants); also Florists' hail association

**Bee culture**

- Bees in the greenhouse. J. T. Rosa, jr. *il Country Gent* 82:2024 D 22 '17
- Can this be done? *il Gleanings* 45:120-2, 200-1, 280-1, 368-9, 439, 522 F-Jl '17

**Employees**

- Greenhouse help problem solved. S. L. Harper. *Am Flor* 50:720 Ap 27 '18
- Labor problem in greenhouses. *Am Flor* 50: 925 My 25 '18

## Greenhouses—Continued

## Experiments

Greenhouse experiments on the rust resistance of oat varieties. J: H. Parker. bibliog il U S Ag B 629:1-16 '18

## Flower growing

August plans for winter flowers. W. C. McCollom. il Gard M 24:14-15 Ag '16  
Bridging the gap from winter to spring. W. C. McCollom. il Gard M 25:166 Ap '17  
Forcing bulbs in a greenhouse. Gard M 26: 60 S '17  
Getting an early start indoors. W. C. McCollom. il Gard M 25:20-1 F '17  
Greenhouse month to month. W. R. Fowkes. See monthly number of Gardeners' chronicle of America  
Insect problems of the florist. T: J. Headley. Am Flor 47:294 Ag 26 '16  
Pittsburgh cut flower co. il Am Flor 47:988-9 N 25 '16  
Prepare in May for winter flowers. W. C. McCollom. il Gard M 25:238 My '17  
Some flowering plants for the cool greenhouse. H. E. Downer. il Gard Chron Am 22:231 S '18  
Spring bedding stock preparations. C. W. Johnson. Am Flor 50:50 Ja 26 '18  
With the growers at Philadelphia. Am Flor 49:804 N 3 '17  
With the growers at Springfield, O. Am Flor 48:331-2 Mr 3 '17  
With the growers: California plants and bulbs. Am Flor 49:150 Ag 11 '17  
With the growers: George Wittbold co., Chicago. Am Flor 47:1154 D 16 '16  
With the growers: Gude bros. co., Washington, D.C. Am Flor 46:1134 Je 17 '16  
With the growers: Henry A. Dreer, inc., optimists. Am Flor 49:104 Ag 4 '17  
With the growers: Joseph Heacock co., Wyncote, Pa.; Alfred M. Campbell, Strafford, Pa.; W. K. Harris, Philadelphia, Pa. il Am Flor 47:859-60 N 11 '16  
With the growers: M. A. Patten & co., Tewksbury, Mass. il Am Flor 47:490 S 23 '16  
With the growers: Peter Reinberg, Chicago. Am Flor 47:1040 D 2 '16  
With the growers: Poehlmann bros. co., Morton Grove, Ill., and others. il Am Flor 47: 1093-5 D 9 '16  
With the growers: R. Vincent, jr. & sons co., White Marsh, Md. Am Flor 46:1240 Jl 1 '16  
With the growers: Samuel J. Pearce, Chicago. il Am Flor 47:1287 D 30 '16  
With the growers: Storrs & Harrison co., Painesville, O., growers at Cleveland, O., and Baltimore, Md. il Am Flor 48:435-7 Mr 17 '17  
With the growers: T. J. Kirchner, Cleveland, O.; Springfield floral co. and George H. Mellen co. Am Flor 48:385 Mr 10 '17  
With the growers: W. H. Elliott, Madbury, N.H. Am Flor 47:489 S 23 '16  
With the growers: Washington, D.C., growers and J. M. Gasser co., Cleveland, O. Am Flor 48:952-4 My 19 '17  
With the growers: Vietor brothers, Chicago. Am Flor 47:1041 D 2 '16

## Heating

\* Adding radiation to heating plant in a greenhouse. Domestic Eng (407 S. Dearborn st, Chicago 10c) 84:470-1 S 28 '18  
Coal for greenhouse use cut one-half. Market Growers J 22:360 My 15 '18  
Coalless greenhouses that produce. W. C. McCollom. il Gard M 28:12 Ag '18  
Economical stoking. Gard Chron (Lond) 62: 195 N 17 '17  
Economizing on heat in the greenhouses. Gard Chron Am 21:397 N '17  
Fuel economies. Am Flor 50:1106 Je 22 '18  
Fuel for glasshouses. Gard Chron (Lond) 64: 6 Jl 6 '18  
Fuel oil for steam boilers. W. H. Culp. Am Flor 51:185-7 Ag 17 '18  
Growing on ground beds. C. W. Waid. Market Growers J 20:316 Ap 1 '17

Heating a conservatory and greenhouse. J. D. Hoffman. plans Trans Am Soc Heating & Ventilating Eng (29 W. 39th st., N.Y.) 22:565-70; Discussion. 570-2 '16  
Heating a little greenhouse. Rural N Y 76: 321 Mr 3 '17  
Heating a small greenhouse. Prac F 112:103 Mr 1 '16  
Heating economy record broken. il Am Flor 50:672-3 Ap 20 '18  
Heating greenhouses. C: L. Hubbard. Domestic Eng (407 S. Dearborn st, Chicago 10c) 82: 369-71+, 404-6+ Mr 9-16 '18  
Heating small greenhouse. Am Flor 45:1266 Ja 1 '16  
Heating small greenhouse with stove. Rural N Y 76:453 Mr 24 '17  
Little chat on greenhouse heating. J. N. MacArthur. il Gard M 26:127-8 N '17  
Ohio boiler law. Market Growers J 20:316 Ap 1 '17  
Producing food from wood and oil. W. C. McCollom. il Gard M 28:47-8 S '18  
Solving the fuel problem. Gard M 26:196 Ja '18  
Unsatisfactory forced return steam heating system. G: W. Loeber. Domestic Eng (407 S. Dearborn st, Chicago 10c) 78:2-4 Ja 6 '17  
Unsatisfactory greenhouse heating plant. Domestic Eng (407 S. Dearborn st, Chicago 10c) 82:136-7 Ja 26 '18  
Winter quarters for the tender plants. Gard M 28:123 N '18  
Wood as a substitute for heating greenhouses. A. Smith. Gard Chron Am 22:45 F '18  
Your greenhouse with the 50% coal allowance. Gard M 28:111 N '18

## History

Interesting story of gardening. Gard Chron Am 22:37-8 F '18

## Pests

See Greenhouse pests

## Vegetable growing

Bush beans in the greenhouse; forcing this crop may be a practical possibility in Ohio. S. N. Green. il Ohio Ag Exp B v 3:16-20 Ja '18  
Chat with a cucumber pioneer. il Rural N Y 76:1367 D 1 '17  
Cropping glass houses with vegetables in winter. J: Dunn. Gard Chron (Lond) 64:97 S 7 '18  
Eight management plans that cut costs. E. G. Searles. il System on the Farm 1:61-2 Ap '17  
Florists growing vegetables. C. W. Waid. Market Growers J 18:341 My 15 '16  
Food from the greenhouse this winter. W. N. Craig. il Gard M 26:97-8 O '17  
Food production under glass. Gard Chron (Lond) 61:174 Ap 28 '17  
Greenhouse crops for winter. C. W. Waid. Market Growers J 23:166 N 1 '18  
Greenhouse-grown endive. S. N. Green. il Ohio Ag Exp B v 3:247-50 Ag '18  
Greenhouse insects and diseases. C. W. Waid. Market Growers J 22:393 Je 1 '18  
Greenhouse tomato growing; with discussion. J. D. Nairn. (In Report, Ontario vegetable growers' assn., 1916, p 64-9) '17 Ontario ag. dept., Toronto, Canada  
Greenhouse vegetable production. P. Work. il N Y Ag Dept B 86:2572-8 Ag '16  
Greenhouse vegetables—how to grow them. W. H. Weinschenk. Market Growers J 21: 56 Ag 1 '17  
Greenhouses for truck. J. T. Rosa, jr. il Country Gent 83:47 Ja 5 '18  
Growing Boston's cukes. E. I. Farrington. il Country Gent 81:1472 Ag 5 '16  
Growing cucumbers under glass. C. W. Waid. Market Growers J 22:323 Ap 15 '18  
Growing lettuce between tomatoes. C. W. Waid. Market Growers J 22:234 Mr 15 '18  
Growing vegetables under glass. J. J. Davis. il (In Report, Ontario vegetable growers' assn., 1917, p. 43-6) '18 Ontario ag. dept., Toronto  
Harrison cuke plant at Kankakee, Illinois. C. E. Durst. Market Growers J 20:159 F 15 '17  
Head lettuce for Ohio greenhouses. S. N. Green. il Ohio Ag Exp B v 2:370-4 N '17



**Greenhouses—Vegetable growing—Continued**

- Head lettuce for the greenhouse. S. N. Green. Market Growers J 22:110 F 1 '18  
 Improving Grand Rapids lettuce. S. N. Green. Market Growers J 22:148 F 15 '18  
 Indoor tomatoes. R. W. Thatcher. Gard Chron (Lond) 63:153 Ap 13 '18  
 Intensive cucumber growing in hothouses. P. Aquatias. Gard Chron (Lond) 60:199 O 21 '16  
 Lettuce under glass at Boston. Am Flor 50: 228 F 16 '18  
 Massachusetts greenhouse lettuce. Market Growers J 21:282 D 15 '17  
 Outlook for vegetable forcing. C. W. Waid. Market Growers J 22:345 My 1 '18  
 Plant growing; symposium. Market Growers J 21:281-7 D 15 '17  
 Pollinating tomatoes. Am Flor 48:1342 Jl 7 '17  
 Profit from small greenhouse. E. J. Weaver. Rural N Y 76:32 Ja 13 '17  
 Radishes under glass. Am Flor 50:280 F 23 '18  
 Starting plants in the greenhouse. C. W. Waid. Market Growers J 18:126 F 15 '16  
 Summer treatment of greenhouse soil. W. J. Green and S. N. Green. Int R Sci & Prac Ag 7, no 10:1460-2 O '16  
 Training and pruning cucumbers. C. W. Waid. Market Growers J 21:104 S 1 '17  
 Using fertilizers in the greenhouse; results of acid phosphate on lettuce, tomatoes and cucumbers. S. N. Green. Ohio Ag Exp B v 3:275-8 S '18  
 Vegetable plants as catch crop. S. L. Harper. Am Flor 49:1388 Ja 12 '18  
 Vegetables all the year round. Am Flor 50:36 Ja 13 '18  
 Vegetables for under glass culture. A. Kruhm. il Gard M 26:157 D '17  
 Vegetables under glass. C. N. Crotzburg. il Fruit-Grower 28:126 F 15 '17  
 Watering greenhouse vegetables. Gard Chron Am 21:442 D '17

**Greens, Edible**

- Dandelions and asparagus. Mrs E. S. Faulkenham. O Judd Farmer 62:21 My 19 '17  
 Early spring greens. il Rural N Y 75:471 Mr 18 '16  
 Greens and other seasonable eatings. Ohio F 137:610 Ap 22 '16  
 Greens crops. S: H. Garekol. Country Gent 82: 941 My 26 '17  
 Greens for the table. Green's Fruit Grower 36:18 My '16  
 Grow garden greens. Wallaces' F 41:537 Mr 31 '16  
 Home canning; dandelions and some other wild greens. A. M. Johnson. Country Gent 82:917 My 19 '17  
 Salad plants. Weekly N L 4:10 Ap 25 '17  
 Salad plants for fall and winter. il Country Gent 83:30 Jl 13 '18  
 Summer salads. F. C. Gaylord. Purdue Ag 10: 43 Je '16  
 Vegetable possibilities of our common weeds. il Gard Chron Am 21:195-6 My '17  
 Wealth in weeds for winter. Ohio F 138:74 Jl 22 '16  
 Weeds for food; how to eat them. V. Inman. Ohio F 141:656 My 11 '18  
 Weeds that are edible. G: E. Walsh. Country Life 29:120 Mr '16  
*See also* Dandelions; Swiss chard; Turnip greens

**Greensand. See Marl**

**Griffons**

- Wire-haired pointing griffon. W. A. Dyer. il Country Life 33:68-70 N '17

**Grinding machines, Limestone. See Limestone grinding machines**

**Grindstones**

- Putting the grin in grindstone. Country Gent 82:1934 D 8 '17

**Grocery trade**

- Chain grocery store. Ag Digest 1:217 D '16  
 Housing of foodstuffs in small provision stores. Boston. il Women's municipal league of Boston B v 8 no 4:1-40 Mr '17  
 Inspection of grocery stores and markets; with discussion. H: C. Smith. Assn Am Dairy Food & Drug Offic Pro 1916:194-203

- Is the grocer or the customer dishonest? P. Fassig. J Home Econ 8:499-502 S '16  
 More placarding rules; kind, grade and price of food must be affixed to goods. N Y Prod R 45:289 Ja 2 '18  
 What retail merchants are doing for food conservation. S. Merrill. J Home Econ 10: 264-5 Je '18

**Grouch and the hobby; story. G: F: Stratton. il Country Gent 82:1736-7 N 10 '17**

**Ground nut. See Peanuts**

**Ground squirrels**

- Control of the California ground squirrel. J. Dixon. Cal Ag Exp C 181:1-14 '17  
 Exterminating ground squirrels. Country Gent 81:446 F 26 '16  
 Ground squirrel control. W. T. Shaw. il Wash Ag Exp Pop B 99:1-11 '16  
 Poisoning ground squirrels. W. L. Burnett. Cal State Comm Hort B v 6:365-6 S '17  
 Squirrel eradication; with discussion. W. C. Jacobsen. il Cal State Comm Hort B v 7:149-56 Mr '18  
 Squirrel eradication campaign in San Luis Obispo county. Cal. S. V. Christerson. il Cal State Comm Hort B v 6:369-73 S '17  
 Squirrel eradication in Kings county. Cal. F. K. Howard. Cal State Comm Hort B v 6:367 S '17  
 Suggestions for combating prairie-dogs, ground squirrels and other rodent pests. W. L. Burnett. (C. 24) 6p '17 Colorado State entomologist, Fort Collins  
 Wyoming ground squirrel in Colorado with suggestions for control. W. L. Burnett. (C. 20) 11p il '16 State entomologist, Fort Collins, Colo.

**Groundhogs. See Woodchucks**

**Grouse**

- Upland game birds: the grouse. A. A. Allen. il Am For 24:497-500 Ag '18

**Growth (animals)**

- Availability of the energy of food for growth. C. R. Moulton. Int R Sci & Prac Ag 9,no 4:472-4 Ap '18  
 How an animal grows. H. J. Waters. (In Pan American scientific congress Pro., 1915, v. 3, p. 510-17) '17  
 Nature and rate of growth in lambs during the first year. E. G. Ritzman. J Ag Research 11:607-24 D 10 '17  
 Present situation in nutrition. E. V. McCollum. il Hoard's D 51:989+; 52:3+, 32-3, 63 Jl 21-Ag 11 '16: Same (Effect of feeds on growth and health of animals). Hoard's D 54:625+, 653+, 684-5, 723 N 23-D 14 '17  
*See also* Vitamines

**Growth (plants)**

- Accelerated growth of spruce after cutting in the Adirondacks. A. B. Recknagel. J For 15:896-8 N '17  
 Action of the constituents of the ash on the life of plants. E. Egorov. Int R Sci & Prac Ag 9,no 2:158-9 F '18  
 Apple-bud selection apple seedlings from selected trees. C: S. Crandall. il Ill Ag Exp B 211:181-264 '18  
 Auxo-thermal integration of climatic complexes. D. T. MacDougal. Am J Bot 1:186-93 Ap '14  
 Behavior of plants in unventilated chambers. F. C. Newcombe and E. A. Bowerman. Am J Bot 5:284-94 Je '18  
 Breaking of the rhythm. F. W. Keeble. Gard Chron (Lond) 60:34-5, 47-8 Jl 15-22 '16  
 Causes of tree form. For Quar 14:500-2 S '16  
 Causes of tree form. For Quar 14:748-51 D '16  
 Climatic records in the trunks of trees. A. E. Douglass. il Am For 23:732-5 D '17  
 Daily transpiration during the normal growth period and its correlation with the weather. L. J. Briggs and H. L. Shantz. il J Ag Research 7:155-212 O 23 '16; Summary. Int R Sci & Prac Ag 8,no 2:216-18 F '17  
 Density of stand and rate of growth of Arizona yellow pine as influenced by climatic conditions. F. Shreve. J For 15:695-707 O '17

**Growth (plants).—Continued**

- Determination of increment by stem analysis. W. A. W. De Beuzeville. (B. 13) 14p '18 New South Wales Forestry comm., Sydney
- Ecological investigations upon the germination and early growth of forest trees. R. H. Boerker. 39p bibliog il '16 Univ. of Nebraska, Lincoln; Same. University Studies (Nebraska Univ., Lincoln) v 16, nos 1, 2:1-89 Ja-Apr '16
- Effect of hydrogen and hydroxyl ion concentration on the growth of barley seedlings. D. R. Hoagland. bibliog Soil Sci 3:547-60 Je '17
- Effect of season and crop growth in modifying the soil extract. G. R. Stewart. bibliog il J Ag Research 12:311-68 F 11 '18
- Effect of soil moisture on growth and maturity in maize. T. B. Hutcheson and T. K. Wolfe. bibliog Va Ag Exp Tech B 14:73-92 '17; Same. Va Ag Exp Rep 1915-1916:73-92 '17
- Effects of manganese and iron on the growth of wheat. W. E. Tottingham and A. J. Beck. Int R Sci & Prac Ag 8,no 4: 574-5 Ap '17
- Effects of rest and no-rest periods upon growth of solanum. W. F. Gericke. Bot Gaz 65:344-53 Ap '18
- Essential chemical elements for plant growth. Gard Chron Am 20:310 Jl '16
- Factors affecting the depth of sowing various crops. F. S. Harris and H. J. Maughan. bibliog Utah Ag Exp B 164:1-18 '18
- Forest succession and rate of growth in sphagnum bogs. G. B. Rigg. il J For 15: 726-39 O '17
- Freezing-point method as an index to variations in the soil solution due to season and crop growth. D. R. Hoagland. bibliog J Ag Research 12:369-95 F 11 '18
- Functions of phosphorus in plant growth. J. N. Harper. (B. 24) 8p n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Gliding growth and the bars of Sanio. J. G. Grossenbacher. bibliog il Am J Bot 1:522-30 D '14
- Growing time and seed time. Gard Chron (Lond) 59:327-8, 338 Je 17-24 '16
- Growth-forms of the flora of New York and vicinity. N. Taylor. Am J Bot 2:23-31 Ja '15
- Growth of forest tree roots. W. B. McDougall. bibliog Am J Bot 3:384-92 Jl '16
- Height growth of young spruce. For Quar 14:514-17 S '16
- How trees grow in size. For Quar 14:325-6 Je '16
- Influence of aeration of the nutrient solution in water culture experiments, remarks on the water culture method. W. Stiles and Jørgensen. Int R Sci & Prac Ag 9,no 1:44-5 Ja '18
- Influence of calcium and magnesium compounds on plant growth. F. A. Wyatt. bibliog il J Ag Research 6:589-620 Jl 17 '16; Abstract. Int R Sci & Prac Ag 7,no 12: 1758-61 D '16
- Influence of certain added solids upon composition and efficiency of Knop's nutrient solution. E. H. Toole and W. E. Tottingham. bibliog Am J Bot 5:452-61 N '18
- Influence of environment on tree growth. A. R. Proschowsky. J Heredity 9:80 F '18
- Influence of position of grain in the cob on the growth of maize seedlings. B. D. Halsted and E. J. Owen. Am Soc Agron J 9: 267-74 S '17; Same cond. Int R Sci & Prac Ag 9,no 3:299-302 Mr '18
- Influence of the moon on plant growth. C. F. Marvin. Rural N Y 76:935 Ag 4 '17
- Intermittent annual growth of woody plants. A. B. Stout. il Scientific Am Sup (233 Broadway, N.Y. 10c) 82:396-7 D 16 '16
- Laws of tall-tree growth investigated mathematically. R. D. Bohannan. J For 15:532-51 My '17
- Laws of tree growth. For Quar 14:114-17 Mr '16
- On the interpretation of the results of water culture experiments. W. Stiles. Ann Bot 30: 427-36 Jl '16
- Periods of rest and growth of forest trees. G. Klebs. For Quar 14:83-5 Mr '16
- Physiological water requirement and the growth of plants in glyccoll solutions. A. Dachnowski and R. Gormley. bibliog Am J Bot 1:174-85 Ap '14
- Plant and its food. B. L. Hartwell. Gard Chron Am 20:273-5 Je '16
- Plants and the rhythm of the seasons. Gard Chron (Lond) 59:260-1, 272 My 13-20 '16
- Plants' awakening. A. J. Bliss. Gard Chron (Lond) 59:224 Ap 22 '16
- Power of growth in plants. S. L. Bastin. il Scientific Am Sup (233 Broadway, N.Y. 10c) 82:412 D 23 '16
- Problems in light as a factor of forest growth. R. Zon. J For 15:225-32 F '17
- Quantitative method of ascertaining the mechanism of growth and of inhibition of growth of dormant buds. J. Loeb. Science (Science Press, Garrison, N.Y. 15c) n s 45: 436-9 My 4 '17
- Rate of growth and ecesis in lichens. B. Fink. Mycol 9:138-58 My '17
- Record for rapid growth. D. T. Mason. il Am For 22:737 D '16
- Relationship between the osmotic pressure of the soil solution and the growth of wheat. M. N. Toulakow. Int R Sci & Prac Ag 7,no 12:1741-4 D '16
- Ripening of growing parts of orchard trees and shrubbery. A. D. Selby. Ohio Ag Exp B v 1:206-8 Jl '16
- Senile changes in the leaves of vitis vulpina L., and certain other plants. H. M. Benedict. Int R Sci & Prac Ag 7,no 9:1260-3 S '16
- Simplified method of stem analysis. T. W. Dwight. J For 15:864-70 N '17
- Simplified precision auxanometer. W. T. Bovie. il Am J Bot 2:95-9 F '15
- Soil acidity; its relation to the growth of plants. E. Truog. bibliog Soil Sci 5:169-95 Mr '18
- Some observations on the growth of apple trees. J. H. Gourley. N H Ag Exp Tech B 12:1-38 '17
- Some peculiarities of plant life. W. C. Egan. Gard Chron Am 20:351-2 Ag '16
- \* Special growth-promoting substances and correlation. C. O. Appleman. Science (Science Press, Garrison, N.Y. 15c) n s 48 319-20 S 27 '18
- Squash that grew with a force of two and one half tons. il Scientific Am (233 Broadway, N.Y. 10c) 116:492 My 19 '17
- Starch congestion accompanying certain factors which retard plant growth. B. L. Hartwell. R I Ag Exp B 165:1-23 '16
- Stimulation of root growth in cuttings by treatment with chemical compounds. O. F. Curtis. bibliog il Cornell Ag Exp Memoir 14:75-138 '18
- Structure and mode of life of a form of horridium flaccidum. A. Braun. A. Piercy. il Ann Bot 31:513-37 Jl '17
- Study of variation in apples during the growing season. W. E. Whitehouse. Ore Ag Exp B 134:1-13 '16
- Tree growth and climate in the United States. K. W. Woodward. J For 15:521-31 My '17
- Tree growth in the vicinity of Grinnell, Iowa. H. S. Conard. J For 16:100-6 Ja '18
- Water requirements and growth of young cypress. W. R. Mattoon. il Soc Am For Pro 11:192-7 Ap '16
- See also Forcing (plants); Geotropism; Regeneration (botany); Soils and plant growth
- Grubs, Flax.** See Flax grubs
- Grubs, White.** See White grubs
- Guam.** See Botany—Guam
- Guam agricultural experiment station**  
Report of the Guam agricultural experiment station, 1916. Guam Ag Exp Rep 1916:1-58 '17
- Guanidine carbonate**  
Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. bibliog Ala Ag Exp B 196:65-82 '17
- Guano**  
Bat guanos of Porto Rico and their fertilizing value. P. L. Gile and J. O. Carrero. Porto Rico Ag Exp B 25:1-66 '18



**Guano—Continued**

Fertilizer materials statistics. (*In* Am. fertilizer hdbk., 1917, p. 27) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia  
Peruvian guano. *Am Fert* 45:25 S 30 '16

**Guano!**

Manuring tests with the new nitrogenous manure guanol in Germany. *Int R Sci & Prac Ag* 7, no 7:953 J1 '16

**Guatemala.** See Agriculture—Guatemala; Botany—Guatemala

**Guava, Pineapple.** See Pineapple guava

**Guavas**

Guava—a substitute for gooseberries in Florida. E. P. Powell. *Gard M* 22:234 Ja '16

**Guayacan.** See Lignum vitae

**Gudgell, Charles,** 1847-1916

Charles Gudgell, a great Hereford breeder. W. C. McGavock. *Breeder's Gaz* 70:722 O 19 '16  
Portrait. *Breeder's Gaz* 70:647 O 12 '16

**Guernsey, Island of**

American farmer in Guernsey. Wallaces' F 43:138 Ja 25 '18

History of the Guernsey breed. C: L. Hill. *il Kimball's D F* 14:133-4, 173+, 221-3, 261-3+ Mr 1-Apr 15 '16

Island of Guernsey and her cows. L. Young. Wallaces' F 41:1247 S 22 '16

**Guernseys**

Alderney cattle show. C: Kitts. *Hoard's D* 54:182 S 7 '17

Background of the Guernsey show. M. McKinney. *il Field* 11 27:352-3 My '17

Best producing Guernseys. W. H. Caldwell. *il Hoard's D* 52:760-1 D 22 '16

Breeds of dairy cattle. *il Farmers' B* 893:17-23 '17

Case of Guernsey prepotency. L. S. Gillette. *Breeder's Gaz* 73:156 Ja 24 '18

Creator of the Langwater May Roses; F. L. Ames. *Field* 11 26:415 My '16

Dairy dream coming true. H. R. O'Brien. *il Country Gent* 83:9 S 7 '18

Edgemoor farm, San Diego co., Cal. *il Hoard's D* 52:65 Ag 11 '16

Fleurette of Riverside farm. *il Kimball's D F* 14:89 F 15 '16

Fox brothers' Guernseys; Waukesha Guernsey farms. D. E. Andrews. *Kimball's D F* 14:453 J1 15 '16

Grade Guernsey registry. M. J. Thompson. *Country Gent* 81:1076 My 20 '16

Guernsey cattle in war time. B. Ananias. *Kimball's D F* 16:466 Je 1 '18

Guernsey characteristics. C. H. Hulburt. *Field* 11 26:418 My '16

Guernsey color markings. L. S. Riford. *Breeder's Gaz* 73:655 Mr 28 '18

Guernsey herd of Count Senni of Italy. *Hoard's D* 52:688 D 8 '16

Guernsey records showing estimated production and feed consumed; tabulation. N J Ag Exp Rep 1916:224-31 '17

Guernseys. W. M. Singleton. *il J Ag New Zealand* 12:41-4 Ja '16

Guernseys and the official test. W. H. Caldwell. *il Kimball's D F* 15:626 S 15 '17

Guernseys at the National. A. G. Morrell. *il Prac F* 112:395 N 1 '16

Guernseys at the National dairy show. *Hoard's D* 56:475 N 1 '18

Guernseys at Wollongbar experiment farm. A. H. Haywood. *il Ag Gaz of New South Wales* 28:704-14 O '17

Guernseys increase in fat production. *Kimball's D F* 14:38 Ja 15 '16

History of the Guernsey breed. C: L. Hill. *il Kimball's D F* 14:221-3, 261-3+, 302+, 333-4, 363-4+, 395-6+, 419-20+, 451-2+, 483, 506-7, 526-7+, 588, 634, 660, 694, 727, 770 Ap 1-D 1 '16

Home of Guernsey cattle. *il Hoard's D* 52:486 O 27 '16

Indiana Guernsey breeders' meeting. W. O. Mills. *Kimball's D F* 14:95 F 15 '16

Inheritance of yellow color in Guernsey milk. *Field* 11 26:228-9 Mr '16

Linden Girl of Harbor Hill 2d. C. H. Hechler. *il Hoard's D* 52:209 S 8 '16

Making profits and progress. Mixter farm at Hardwick, Mass. *il Field* 11 26:416-17 My '16  
Mixter farm; a Massachusetts milk plant, breeding establishment, and general farm. E. L. D. Seymour. *il Country Life* 31:50-1 Ja '17

Mixter Guernseys—a breeding herd. *il Hoard's D* 53:557-8 Ap 20 '17

National dairy show; the Guernseys. *Breeder's Gaz* 72:789 N 1 '17

New Minnesota champion Guernsey cow. *il Hoard's D* 53:776 My 25 '17

Notable year for a dairy breed. F. B. Hills. *il Breeder's Gaz* 72:1161 D 20 '17

Nugget's Primrose and Oaks farms. *il Field* 11 26:419 My '16

Nugget's Primrose breaks Guernsey two-year-old milk record. *il Hoard's D* 51:472 Ap 7 '16

Nugget's Primrose 48835. *Kimball's D F* 14:189 Mr 15 '16

Polled Guernseys. E. N. Wentworth. *Breeder's Gaz* 71:1016 My 17 '17

Polly's Beauty makes remarkable production. C. C. Allen. *il Hoard's D* 51:287 Mr 10 '16

Queen of foundation Guernseys. H. G. Gulliver. *il Field* 11 28:309-12+ My '18

Quest for the perfect Guernsey. H. G. Gulliver. *il map Field* 11 28:587-94 Ag '18

Record cows and what they were fed. *il Field* 11 26:322-3 Ap '16

Southern Guernsey progress. A. J. Ingham. *il Hoard's D* 54:295 S 28 '17

10th National dairy show. *Breeder's Gaz* 70:778 O 26 '16

Type in Guernseys. D. D. Tenney. *Breeder's Gaz* 72:1258 D 27 '17

Virginia Guernsey club. J. C. Courter. *Hoard's D* 51:247 Mr 3 '16

Why I chose the Guernsey cow. C: D. Cleveland. *il Country Life* 34:56-7 O '18

Year's Guernsey history. *Field* 11 27:502 Je '17

See also names of breeders' associations, e. g. American Guernsey cattle club, New York state Guernsey breeders' association, Waukesha county Guernsey breeders' association

**Price lists**

Combination Guernsey sale. *Field* 11 28:413, 502 Je-J1 '18

Florham Farms Guernsey sale. *Breeder's Gaz* 71:1081 My 24 '17

Guernseys' greatest sale. *Breeder's Gaz* 73:1098 My 23 '18; *Hoard's D* 55:810 My 31 '18; *Kimball's D F* 16:455 Je 1 '18

Hope Guernseys average \$577. *Hoard's D* 53:795 Je 1 '17

Hope sale of Guernseys. *Breeder's Gaz* 69:1125 My 25 '16; *Field* 11 26:517+ Je '16; *Kimball's D F* 14:385 Je 1 '16; *Hoard's D* 51:778 Je 2 '16

Langwater Guernsey sale. *il Breeder's Gaz* 70:730 O 19 '16; *Field* 11 26:940-1 N '16

Phillips' Guernseys make high average. *il Field* 11 27:34 Ja '17

Waukesha Guernsey sale. *Kimball's D F* 15:456 J1 1 '17

Waukesha Guernseys over the top. F. E. Fox. *Hoard's D* 55:954 Je 28 '18

**Guests**  
Company coming. N. K. Jones. *Country Gent* 81:1775 S 30 '16

**Guide posts, Concrete**  
Concrete guide posts. L. R. W. Allison. *il Country Life* 30:12d S '16

**Guides**  
Guiding in national parks. E. A. Mills. *Country Life* 29:58 Ja '16

**Guinea fowls**  
Growing guineas. J. M. Anthony. *Country Gent* 81:1560 Ag 19 '16

Guinea fowl. *Am P Advocate* 24:752 S '16

Guinea fowl. *il Rural N Y* 76:1220 O 20 '17

Guinea fowl. M. K. Boyer. *Am P Advocate* 25:580 Ag '17

Guinea fowl. A. S. Weiant. *il Farmers' B* 858:1-15 '17

Guineas are profitable. E. Jean. *Prac F* 112:397 N 1 '16

How to raise guineas. *Prog F* 31:94 Ja 15 '16

**Guinea fowls—Continued**

- Merits of guineas. M. A. Herold. *Nat Stock & F* 40:1026 Ja 6 '17  
 Money in guineas? F. H. Valentine. *Country Life* 30:61 Je '16  
 Raise more guineas. L. F. Strickler. *il Country Gent* 83:31 Jl 20 '18  
 Raise more guineas. B. M. Tyson. *Am P J* 47:1232 N '16  
 Raising guinea fowls. *Weekly N L* 5:5 O 10 '17; Same. *Am P Advocate* 25:712 N '17  
 Selling day-old guineas. *il Country Gent* 82:61 Ja 13 '17

**Guinea pigs**

- Abyssinian cavy. H. A. Johnson. *Am P Advocate* 26:663 N '18  
 Cavy or guinea-pigs. L. S. Crandall. *il Country Life* 31:78 D '16  
 Cavy raising. H. A. Johnson. *il Am P Advocate* 26:578 S '18  
 Color inheritance in mammals; the guinea-pig. S. Wright. *J Heredity* 8:476-80 O '17  
 Little-known industry. P. L. Ward. *Rural N Y* 75:478 Mr 18 '16  
 Pigmentation in guinea-pig hair. H. R. Hunt and S. Wright. *J Heredity* 9:178-81 Ap '18  
 Raising guinea pigs. Wallaces' *F* 42:149 Ja 26 '17  
 Raising guinea pigs. D. E. Lantz. *il Farmers' B* 525:1-11 '18 (rev.)

**Diseases and pests**

- Infectious disease of guinea pigs. A. K. Gomez. *il Am Vet M Assn J* 53:511-22 Jl '18

**Gulf Coast horticultural society**

- 2d annual meeting. Mobile, Ala., April 26-27, 1916. L. T. Rhodes. *Prog F* 31:634 My 6 '16

**Gullies. See Erosion****Gulls**

- Distribution and migration of North American gulls and their allies. W. W. Cooke. *il U S Ag B* 292:1-70 '15

**Gum arabic trees**

- Note on babul; *acacia arabica*. Willd. J. D. Maitland Kirwan. (*Forest B.* 35) 14p il '17  
 Inspector general of forests, Calcutta, India

**Gummosis**

- Monilia* sp., the cause of a specific gummosis of apricot tree, in Italy. V. Peglion. *Int R Sci & Prac Ag* 9,no 5:635-6 My '18  
 Treatment of gummosis with carbolineum. C. C. Miller. *il Cal State Comm Hort B v* 7:488-93 Ag '18

See also *Pythiacystis*

**Gums and resins**

- Detection of vegetable gums in food products. A. A. Cook and H. G. Woodman. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:530-3 Jl '18  
 Harvesting the spruce-gum crop. S. J. Record. *il Country Gent* 81:475 F 26 '16  
 Increased yield of turpentine and rosin from double chipping. A. W. Schorger and R. L. Pettigrew. *il U S Ag B* 567:1-9 '17  
 Influence of resin and tannin on the balance of nitrogen in the soil. A. Koch and A. Oelsner. *Int R Sci & Prac Ag* 7,no 7:936-7 Jl '16  
 Naval stores industry. A. W. Schorger and H. S. Betts. *bibliog il map U S Ag B* 229:1-58 '15  
 Naval stores production in Germany. *J For* 16:126-9 Ja '18  
 Resin secretion in *balsamorhiza sagittata*. E. C. Faust. *bibliog il Bot Gaz* 64:441-79 D '17  
 Resin-tapping from spruce, Scotch pine and black pine in the forests of Austria; results obtained in the year 1916. E. Friedrich. *Int R Sci & Prac Ag* 8,no 4:603-5 Ap '17  
 Some little-known resins. *Int R Sci & Prac Ag* 7,no 1:73 Ja '16  
 What is karaya gum? *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:393 D 16 '16

**Analysis**

- Report on balsams and gum resins. E. C. Merrill. *Assn Offic Ag Chem J* 2,no 1,pt 1: 82-7 My '16

**Statistics**

- Census of manufactures 1914; turpentine and rosin. J. B. Hopkins. 10p '17 U.S. Bur. of the census, Washington, D. C.  
 International trade. See United States Department of agriculture Yearbooks, also published as Separates

**Guncotton**

- Jersey justice for farms. *Rural N Y* 75:271 F 19 '16

**Gunnera**

- Gunnera petaloidea* Gaud., a remarkable plant of the Hawaiian islands. V. MacCaughey. *Am J Bot* 4:33-9 Ja '17

**Gutters (roof)**

- Roof gutters and leaders. B. A. Howes. *il Country Life* 30:55 My '16

**Gwynne-Vaughan, David Thomas, 1871-1915**

- Life and work. D. H. Scott. *por Ann Bot* 30: i-xxiii Ja '16

**Gymnonychus californicus. See Pear leaf-worms****Gymnosperms**

- Anatomy and phylogenetic position of the betulaceae. C. S. Hoar. *bibliog il Am J Bot* 3:415-35 O '16  
 Morphology and affinities of gnetum. W. P. Thompson. *bibliog il Am J Bot* 3:135-84 Ap '16

**Gymnosporangium**

- Anatomical study of gymnosporangium galls. A. Stewart. *bibliog il Am J Bot* 2:402-17 O '15  
 Asiatic species of gymnosporangium established in Oregon. H. S. Jackson. *bibliog il J Ag Research* 5:1003-10 F 28 '16  
 Gymnosporangium with repeating spores. J. C. Arthur. *Am J Bot* 3:40-5 Ja '16  
 Notes relating to the gymnosporangia on *myrica* and *comptonia*. B. O. Dodge and J. F. Adams. *bibliog il Mycol* 9:23-9 Ja '17  
 Perennial mycelium of gymnosporangium blasdaleanum. J. S. Boyce. *Phyt* 8:161-2 Ap '18  
 Studies in the genus *gymnosporangium*; the origin of the teleutospore. B. O. Dodge. *il Mycol* 10:182-93 Jl '18  
 Three cedar rust fungi, their life histories and the diseases they produce. J. L. Weimer. *bibliog il Cornell Ag Exp B* 390:509-49 '17  
 Undescribed species of gymnosporangium from Japan. W. H. Long. *J Ag Research* 1:353-6 Ja '14

See also *Rusts*

**Gypsum**

- Availability of potash in certain orthoclase-bearing soils as affected by lime or gypsum. L. J. Briggs and J. F. Breazeale. *J Ag Research* 8:21-8 Ja 2 '17; Summary. *Int R Sci & Prac Ag* 8,no 4:556-8 Ap '17  
 Influence of gypsum upon the solubility of potash in soils. P. R. McMiller. *bibliog J Ag Research* 14:61-6 Jl 1 '18  
 Land plaster and lime; why gypsum was formerly used. *Rural N Y* 76:541 Ap 14 '17

**Gypsy moths. See Gipsy moths****H****Habit**

- Genius and the plodder have the habit of work and so accomplish big deeds. *Prog F* 32:1016 S 29 '17  
 Habit. Wallaces' *F* 42:1286 S 21 '17

**Hackneys. See Horses****Hadena basilinea. See Rustic shoulder-knot moths****Hail insurance. See Insurance, Hail****Hair**

- Care of the hair. Mrs W. N. Hutt. *Prog F* 31: 88 Ja 15 '16  
 Heredity of hair-form. *il J Heredity* 7:412-13 S '16  
 Inheritance of white forelock. S. J. Holmes and R. O. Schofield. *J Heredity* 8:359-60 Ag '17

See also *Baldness*



**Hair birds.** See Chipping sparrows

**Halesia carolinum.** See Silver bell trees

**Halisidota caryae.** See Hickory tiger-moths

**Halloween**

Halloween fun for everyone. Country Gent 81:1921 O 28 '16

Hallowe'en menu and decorations. H. Mason. Ohio F 138:420 O 28 '16

Indoor Hallowe'en. Nat Stock & F 41:728 O 27 '17

Some Hallowe'en stunts. Mrs E. H. Ervin. Ohio F 140:382 O 27 '17

**Halls**

Four good halls that might be made better. C: A. Webb. il Country Life 30:22-3 O '16

Hospitable hall. A. R. Fairman. il Country Life 32:48-51 Je '17

**Haltica.** See Flea-beetles

**Hamburgs (poultry)**

Golden penciled Hamburg makes its bow to R. P. J. readers. J: A. Gamewell. il Reliable P J 23:973 D '16

**Hammers**

Replacing old hammer handles. E: H. Crusell. Country Gent 83:24 S 21 '18

Use of hand tools on the farm. Power F 26:14 Ja '17

**Hampden county improvement league**

Bay State gets together. J: R. McMahon. il Country Gent 83:6-7 F 23 '18

How business men and farmers have cooperated for big things. J: L. Scheuerle. il Banker-F 3:4 Ja '16

Venture in county improvement. J: H. Scheuerle. il Field II 26:585-6 Jl '16

**Hampshires (swine)**

Hampshire breed of swine. G: E. Starr. Rural N Y 76:654 My 5 '17

Hampshire hog. H. T. Morgan. il Country Gent 81:2186 D 23 '16

Hampshires at the National. Swine World 5:11 N '17

Rise of the Hampshires. E. C. Stone. il Field II 28:723 O '18

**Hampton normal and agricultural institute**

49th annual report of the principal. (Hampton B. v. 8, no. 3) 32p il '17 Hampton normal and agricultural institute, Hampton, Va.

49th annual report of the treasurer. Hampton (Hampton, Va.) B v 13:1-84 D '17

50th annual report of the principal. 1918. (Hampton B. v. 14, no. 4) 54p il '18 Hampton normal and ag. inst., Hampton, Va.

Summer course at Hampton. C. A. Lyford. J Home Econ 9:496-7 N '17

**Hand**

How do you clasp your hands? il J Heredity 8:155 Ap '17

**Hand carts**

Handy hand cart. J: L. Shawver. Power F 26:34 Mr '17

**Handicraft**

Native design in handicraft. H. Mowat. J Ag (Quebec) 22:30 Ag '18

**Handlers of food.** See Food handlers

**Handles**

Uses of wood; woods used in the manufacture of handles. H. Maxwell. il Am For 24:679-87 N '18

**Hanging of pictures.** See Pictures, Hanging of

**Hansen, Christian D. A., 1843-1916**

Memorial. J. D. Frederiksen. por N Y Prod R 42:582 Ag 2 '16

**Hard times.** Some causes for. Rural N Y 77:82 Ja 19 '18

**Hardhack.** See Spireas

**Hardware**

East African markets for hardware and agricultural implements. H: P. Starrett. (Special Consular Rep. 78) 27p '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Lure of the latch. W. P. Eaton. il Country Life 33:41-5 Ap '18

**Hardwood.** See Wood

**Hares**

Raising hares for market. R. L. Potter. Country Gent 81:2091 D 2 '16

See also Belgian hares; Black Siberian hares; Rabbits

**Harlem and Bronx live poultry associates**

Live poultry association disbands. N Y Prod R 45:397 Ja 23 '18

**Harlequin cabbage bugs**

Insects attacking cabbage. W. E. Britton and Q. S. Lowry. il Conn State Ag Exp B 190:17-18 '16

**Harness**

Buying work harness. P. T. Hines. Prog F 31:325 Mr 4 '16

Care of farm harness. R. H. Smith. Country Gent 81:1051 My 13 '16

Drive more than two. W. G. Kammlade. Country Gent 81:1369 Jl 15 '16

Overhauling a farm harness. Wallaces' F 43:488 Mr 15 '18

Style of team harness. J. L. Edmonds. Breeder's Gaz 69:558 Mr 9 '16

See also Bits

**Harris, Benjamin Franklin, 1811-1905**

Sketch. Hoard's D 51:898 Je 30 '16; O Judd Farmer 60:3 Je 17 '18

**Harrison, Fairfax, 1869-**

Portrait. Breeder's Gaz 70:465 S 21 '16

**Harrowing.** See Tillage

**Harrows**

About harrows—disk and drag. il Prog F 32:124 F 3 '17

Disk harrow and disk cultivator. G. H. Alford. Prog F 31:184 F 5 '16

Disk harrow on the farm. W. E. Taylor. Power F 25:30 Mr '16

Double disk harrow a dollar-maker. G. H. Dacy. Prog F 32:457 Ap 7 '17

Double disc-harrows for mechanical cultivation; Harrows with rotary spades. G. Manrin. il Int R Sci & Prac Ag 9,no 5:602-4 My '18

Getting the harrows ready. Wallaces' F 43:446 Mr 8 '18

Harrows: different kinds and their use on southern farms. G. H. Alford. il Prog F 31:614 My 6 '16

Harrows: kinds and use. G. H. Alford. Prog F 33:40 Ja 12 '18

Letters about harrows. Prog F 33:132 F 2 '18

Selecting a harrow for the spring work; our experience pool. Prac F 114:11 Ja 1 '18

Tractor hitch for disk harrows. I. W. Dickerson. Wallaces' F 43:498 Mr 15 '18

Use of the disk important. E. L. Watson. il Power F 26:16 O '17

Use the harrow freely. A. M. Latham. Prog F 31:482 Ap 1 '16

**Hartford county league**

By the farmers, for the farmers and every one who grows food or eats food. 8p n.d. Hartford county league, 450 Asylum st, Hartford, Conn.

**Harvest mites.** See Chigoes

**Harvesting**

Dozen plans for reducing harvest wastes. il System on the Farm 1:210-13 Ag '17

Harvesting grain compared with milking cows. G: R. Hushour. Hoard's D 54:527 N 2 '17

Harvesting hints. Weekly N L 4:6 Jl 25 '17

Harvesting with a tractor. E. R. Wiggins. il Country Gent 82:1257 Ag 11 '17

Harvesting with fewer men. il System on the Farm 3:7-9 Jl '18

New method for harvesting small grain and grass plots. A. G. McCall. Am Soc Agron J 9:138-40 Mr '17

See also subhead Harvesting under names of crops, e.g. Corn—Harvesting; Oats—Harvesting; Tomatoes—Harvesting; Wheat—Harvesting

**Costs**

Cost of harvesting wheat by different methods. A. P. Yerkes and L. M. Church. il U S Ag B 627:1-21 '18

**Harvesting machinery**

- Farm implements and machinery. G. H. Alford. *Prog F* 33:240 F 23 '18
- Fire protection for grain fields; with special reference to fire protective appliances for grain-harvesting machinery. W. Metcalf. *il Cal Ag Exp B* 295:351-68 My '18
- Fore-carriage for harvesting machines. W. Knobloch. *Int R Sci & Prac Ag* 7, no 9:1328-9 S '16
- Harvesting and thrashing wheat done in old California days. *Rural N Y* 77:1085 S 21 '18
- Harvesting with a tractor. M. Ringelmann. *plan Int R Sci & Prac Ag* 9, no 2:227-8 F '18
- Home-made header attachment. F. E. Fuller. *il Mont Ag Ext Pub* no 27 3p '18
- Improved stalk cutter; harvesting the tobacco crop. A. D. Shamel. *il Rural N Y* 77:955 Ag 10 '18
- New type of grain harvester. *il Rural N Y* 77:953 Ag 10 '18
- Potato and corn harvesting machinery; our experience pool. *Prac F* 114:259 Ag 1 '18
- Power harvesting. F. M. Loomis. *Farm Eng* 5:3 JI '17
- Saving labor in the sugar field. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:623 Je 23 '17
- Simultaneous harvesting and breaking-up of stubble with a tractor. M. Ringelmann. *plans Int R Sci & Prac Ag* 8, no 10:1399-1401 O '17
- Why not harvest and thresh at one operation? J. R. Stone. *il Power F* 27:9 F '18
- See also* Corn harvesting machinery; Farm machinery; Grain binders; Hay derricks; Hay making machinery; Mowing machines; Seed harvesting machinery; Soybean harvesters; Sweep-rakes

**Hasse, Hermann Edward, 1836-1915**

Hermann Edward Hasse—lichenist; with bibliography of works. B. Fink. *por Mycol* 8: 243-8 S '16

**Hatching eggs. See Eggs, Hatching****Haulage**

- \* Average loads in team hauling on country highways. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 50:479 N 20 '18
- Getting rid of horse hauling. J. B. Robertson. *il System on the Farm* 2:10-11 Ja '18
- Giving one horse the advantage. I. W. Dickerson. *Wallaces' F* 43:176 F 1 '18
- Horse as a farm motor. L. W. Chase. *il Field* 11:27-178 Mr '17
- Line of draft. *Wallaces' F* 42:450 Mr 9 '17
- Questions of draft. H. C. Ramsower. *Ohio F* 137:623 Ap 29 '16
- Rack for hauling hogs. H. S. Heath. *Ohio F* 138:494 N 18 '16
- Some experiments on pulling loads; with a discussion of the results. B. H. Brown. 16p 10c '16 Whitman college, Walla Walla, Wash.
- Using more horses—new hitches. W. Dinsmore. *il O Judd Farmer* 65:476 N 23 '18
- See also* Creameries—Haulage of cream; Tractors—Hitching and haulage

**Cost**

Comparison of horse and motor-truck hauling in Pennsylvania. G. F. Alderson. *Eng News* (10th av. at 36th st., N.Y. 15c) 77: 283-4 F 15 '17

**Hitching**

Five-horse eveners. *Wallaces' F* 43:783 My 10 '18

Hitches for big teams. P. S. Rose. *il Country Gent* 83:14+ Mr 9 '18

**Statistics**

- Hauling by wagon and motor truck, 1918. F. Andrews. *Monthly Crop Rep* 4:125 O '18
- Haulage of cream. *See* Creameries—Haulage of cream
- Hawaii agricultural experiment station**
- Report, 1916. *il Hawaii Ag Exp Rep* 1916:1-46 '17
- Report, 1917. *il Hawaii Ag Exp Rep* 1917:1-56 '18

**Hawaii territorial fair**

Hawaii territorial fair held at Honolulu, June 10-15. L. A. Hanke. *il Breeder's Gaz* 74:149 Ag 1 '18

**Hawaiian Islands**

*See also* subhead Hawaiian Islands under special subjects, e.g. Agriculture—Hawaiian Islands, Botany—Hawaiian Islands

**Description and travel**

Oahu rain forest. V. MacCaughey. *il Am For* 23:276-8 My '17

Visit to the crater of Kilauea (Kilauea). *Nat Stock & F* 41:430 JI 28 '17

**Industries and resources**

Economic woods of Hawaii. V. MacCaughey. *For Quar* 14:696-716 D '16

Saving the kokio tree. R. A. Young and P. Popenoe. *il J Heredity* 7:24-8 Ja '16

**Marketing division, Territorial**

Report of the superintendent for the period July 1, 1915 to Dec. 31, 1916. A. T. Longley. 15p '17 Supt. Territorial marketing division, Honolulu

**Hawke's Bay farming development association**

Good model organization. G. T. de S. Baylis. *J Ag New Zealand* 15:152-4 S '17

**Hawks**

Combating hawks and crows. W. F. Purdue. *Ohio F* 141:775 Je 15 '18

Diurnal birds of prey—hawks, eagles and vultures. A. A. Allen. *il Am For* 24:281-4 My '18

\* Hawks of the Canadian prairie provinces in their relation to agriculture. P. A. Taverner. (*Museum B.* 28) 18p *il '18 Canada Dept. of mines, Ottawa*

How I kill chicken hawks and save my fowls. C. C. Conger, jr. *il Prac F* 114:9 Ja 1 '18

Sparrow hawk. E. S. Jones. *Ohio F* 139:493 Mr 31 '17

True hawks. A. A. Allen. *il Am For* 24:357-61 Je '18

Two black sheep. E. S. Jones. *Ohio F* 137: 569 Ap 15 '16

*See also* Nighthawks; Sparrow hawks

**Hawkweeds**

Field hawkweed. G. T. French. *Va Ag Dept B* 126:67-9 '18

**Hawthorn**

Dwarf hawthorns. *Am Flor* 47:138 Ag 5 '16

North American hawthorns. R. A. Rolfe. *Gard Chron* (Lond) 60:215 N 4 '16

What is happening to the hawthorns? L. M. Standish. *bibliog il map J Heredity* 7:266-79 Je '16

**Diseases and pests**

Cherry and hawthorn sawfly leaf miner (*B.* 411). P. J. Parrott and B. B. Fulton. *il N Y State Ag Exp Rep* 1915:403-32 '16; *Same cond. J Ag Research* 5:519-28 D 20 '15

**Haxton, Charles**

Best farmer in Oklahoma. W. Stemmons. *il Country Gent* 83:6-8 Mr 30 '18

**Hay**

Alfalfa haying and the weather. L. F. Graber. *il Country Gent* 82:927 My 26 '17

California hay in the East; possibilities of insect pests. *Rural N Y* 77:1131 O 5 '18

Catch hay crops. F. E. Robbins. *il Purdue Ag* 10:19-20 Je '16

Cheap, simple aids in curing hay. E. F. Cauthen. *Prog F* 31:40 Ja 8 '16

Chemistry of hay preservation. *Rural N Y* 75:976 JI 15 '16

Cure clover in the shade. *Hoard's D* 53:991 JI 13 '17

Curing hay on trucks; a method by which a good quality of hay may be cured during unfavorable weather. H. B. McClure. *il Farmers' B* 956:1-18 '18

Curing pea-vine hay; stacked on tripods. L. B. Veeder. *il Country Gent* 81:654 Mr 18 '16

Curing the hay crop. W. P. Brooks. *J Ag* (Quebec) 21:7 JI '17

Cut hay early. C. E. Wallace. *Ohio F* 137:678 My 13 '16



**Hay—Continued**

Dry-matter content of field-cured and green forage. A. C. Army. *il Am Soc Agron* J 8: 358-63 N '16

Emergency hay crops. G. B. Mortimer. *Hoard's D* 55:645 My 3 '18

Farm practice in the production of hay in Steuben county, N.Y., and Washington county, Pa. H. B. McClure. *il U S Ag B* 641: 1-16 '18

Fence-rail method for curing hay. R. A. Hayne. *il Nat Stock & F* 41:321 Je 23 '17

Getting a hay crop. A. Fearing. *Country Life* 31:96 F '17

Getting in the hay crop. *Ohio F* 139:822 Je 30 '17

Good hay crop in a dry season. J. W. Ingham. *Ohio F* 137:734 My 27 '16

Handling alfalfa hay. *Rural N Y* 76:768 Je 9 '17

Handling alfalfa hay. J. W. Ames and G. E. Boltz. *Ohio Ag Exp B v* 2:178-80 Je '17

Handling the hay crop; symposium. *il Prac F* 113:200 My 15 '17

Harvesting emergency hay crops for hay or seed. G. B. Mortimer. *il Hoard's D* 55:947 Je 28 '18

Harvesting hay with the sweep-rake. A. P. Yerkes and H. B. McClure. *il Farmers' B* 838:1-12 '17

Harvesting the hay crop. H. B. McClure. *il N Y Ag Dept B* 87:2784-95 S '16

Hay and forage. (*In* Geography of the world's agriculture, p. 103-8) maps '17 U S Ag

Hay and pasture seedings. W. R. Hechler. *il Ia Ag Exp C* 39 11p '17; Same cond. *Hoard's D* 55:523 Ap 12 '18

Hay caps. H. B. McClure. *il Farmers' B* 977: 1-16 '18

Hay caps and weights. *Hoard's D* 51:707 My 19 '16

Hay insurance by hay caps. C. H. Knopf. *il Hoard's D* 51:621 My 5 '16

Hay making. Wallaces' *F* 43:828 My 17 '18

Haymaking. H. B. McClure. *il Farmers' B* 943:1-30 '18

Hay making suggestions. A. L. French. *Prog F* 31:591 Ap 29 '16

Hay on a Maine farm. F. E. Daggett. *Country Gent* 82:612 Mr 24 '17

Hay problems. Wallaces' *F* 41:818 Je 2 '16

Hay, there! the perennial money crop. H. P. Thurston. *il Am Coop J* 13:373-4+ My '18; Excerpt. *Ag Digest* 3:13 Jl '18

Hay weight and measurement. E. W. Ferguson, jr. Wallaces' *F* 41:611 Ap 21 '16

Haying. Wallaces' *F* 41:794 My 26 '16

Haying time in Idaho. J. C. Knollin. *Breeder's Gaz* 76:311 Ag 31 '16

How to make good hay. E. F. Cauthen. *Prog F* 33:940 Ag 24 '18

How to make prime hay. A. M. Ten Eyck. *il Kimball's D F* 16:436-7 Je 1 '18

Keeping best quality in hay. R. E. Dimick. *O Judd Farmer* 60:7 Je 10 '16

Learning when to cut hay. M. Coverdell. *Kimball's D F* 16:534 Jl 1 '18

Louisiana lespedeza hay versus western timothy hay. W. H. Dalrymple. *La Ag Bd* 7p n.d.

Maintenance of supplies of hay and other fodder crops. *J Bd Ag* 24:649-53 S '17

Making alfalfa and clover hay. A. O. Choate. *Hoard's D* 53:896 Je 22 '17

Making cowpea hay. W. F. Massey. *Prog F* 32:900 Ag 25 '17

\* Mechanical curing of alfalfa. E. M. Bassler. *il Am Soc Heating & Ventilating Eng* (29 W. 39th st. N.Y.) 23:561-3; Discussion. 563-9 '17

Moderate hay crop secured. B. W. Snow. *O Judd Farmer* 63:8 N 24 '17

More hay and less fodder-pulling. W. F. Massey. *Prog F* 31:752 Je 10 '16

Neglected hay crop. M. S. Hazen. 64p *il '16* Coe-Mortimer co., New York city

Peas and oats for hay. *Rural N Y* 76:543 Ap 14 '17

Right start in harvesting hay. *il O Judd Farmer* 60:3 Je 3 '16

Saving man power in haying. W. I. Chamberlain. *Nat Stock & F* 42:284 Je 15 '18

Saving the hay crop. W. A. Linklater. *Western Wash Ag Exp B v* 6:32-5 Je '18

Securing forage and food crops. *il O Judd Farmer* 62:3 Je 16 '17

Spontaneous combustion in clover and alfalfa. *Rural N Y* 76:1105 S 22 '17

Spontaneous combustion in hay and coal. A. R. Lamb. Wallaces' *F* 42:1214 S 7 '17

Substitute for hay. J. Vanderleek. *J Ag* (Quebec) 21:40 S '17

Supplemental hay crops. A. E. Grantham. *Prac F* 114:170 My 1 '18

Sweet clover utilization. H. S. Coe. *il Farmers' B* 820:1-32 '17; Same cond. *Nat Wool Grower* 7:52 Je '17; Same cond. *Hoard's D* 53:825 Je 8 '17

To promote the growing of more and better hay in Louisiana and Mississippi. *Prog F* 32:359 Mr 17 '17

Top-dressing grass lands. A. E. Grantham. *il Prac F* 112:415 N 15 '16

Unloading hay. *Country Gent* 81:1028 My 13 '16

Vermont hay farm. G. H. Dacy. *Country Gent* 82:961 Je 2 '17

Wheats for hay at Yanco. J. M. Pitt. *Ag Gaz of New South Wales* 29:259-61 Ap '18

When to cut the hay. L. L. Rummell. *il Country Gent* 83:7 Ap 6 '18

See also Alfalfa; Clover hay; Cowpea hay; Feeding and feeding stuffs—Hay; Pastures and meadows; Soybean hay; Stacks (hay, grain, etc.); Sudan-grass hay; Timothy hay; also National hay association, also headings beginning Hay

**Costs**

Cost of hay. F. R. Taylor. Wallaces' *F* 41: 281 F 18 '16

Cost of production of timothy and clover hay on some New York farms. C. E. Ladd. *N Y Ag Dept B* 87:2781-3 S '16

Study of haymaking crews and labor costs. H. B. McClure. *il U S Ag B* 578:1-50 '18

**Grading**

Grades of hay and straw. *N Y Ag Dept B* 87:2796-7 S '16

Inspection and sale act; the grades of hay and straw. *Ag Gaz of Canada* 5:757-8 Ag '18

National hay association grades. *Coop Manager & F* 7:80 S '17

**Marketing**

Auction market for hay. J. J. Dillon. *Rural N Y* 75:119 Ja 22 '16

**Measuring**

Measuring hay in ricks or stacks. H. B. McClure and W. J. Spillman. *U S Ag C* 67:1-10 '16; Same cond. *Am Sheep B & W* 38:371-4 Je '18

Rules for measuring hay. *Prog F* 33:200 F 16 '18

**Prices**

Profits and losses in hay production during the past sixty years. Wallaces' *F* 43:897 Je 7 '18

Règlement de la vente du foin, de la paille d'avoine et du blé en Grande-Bretagne, en Irlande, et dans l'île de Man. *Int Yearbook Ag Leg* 1916:383-4 '17

Watching the hay market. S. Sosland. *Country Gent* 82:803 Ap 28 '17

**Transportation**

Hay schooners of the Sacramento. L. L. DeBra. *Breeder's Gaz* 70:275 Ag 24 '16

Points on shipping hay. *O Judd Farmer* 61:4 S 16 '16

**Hay balers**

Hay baler saves labor. G. W. Iverson. *il O Judd Farmer* 62:5 Je 16 '17

**Hay baling**

Note on the baling of shaftal and lucerne hay for army transport. A. Howard. *Ag J of India* 13:717-18 O '18

Wire bale ties. H. E. Horton. *il Am Soc Ag Eng Trans* 11:20-31 '18; Same cond. Wallaces' *F* 43:1680 N 15 '18; Same cond. *Farm Eng* 7:13 Ap '18

**Hay derricks**

Essential features of a hay derrick. E. V. Laughlin. *Farm Eng* 4:30 Ag '16

**Hay drying machines**

Machine takes place of sunshine. *il Farm Eng* 5:22 Ap '17

**Hay fever**

Hay fever and its prevention. *il Rural N Y* 75:1313 O 14 '16

Hay fever and military efficiency. *Rural N Y* 76:965 Ag 11 '17

Hay-fever season is here. H. R. Cox. *il Country Gent* 81:1467 Ag 5 '16

Relation of farm weeds to hay fever. H. M. Hall. *il Cal State Comm Hort B v* 6:41-7 F '17

**Hay forks**

Secure hay fork. *il Ag Digest* 1:81 Je '16

**Hay handling**

Handling hay in stack and barn. H. Shearer. *il Farm Eng* 3:279 Je '16

*See also* Hay derricks

**Hay making**

Labor saving practices in hay making shown pictorially. H. B. McClure. *il Farmers' B* 987:1-20 '18

**Hay making machinery**

Baling and selling hay. J. L. Justice. *il O Judd Farmer* 61:5 Jl 1 '16

Curing the hay crop. *il O Judd Farmer* 60:5 Je 10 '16

Handling the hay crop on my farm. *il Power F* 26:34+ My '17

Haying machinery. G. H. Alford. *Prog F* 33: 348 Mr 16 '18

Hay-making machinery. J. R. Bond. *J Bd Ag* 24:129-42 My '17

How we secure our hay crop. G. Dietz. *il Power F* 27:47 My '18

Popular hay harvest methods. *il O Judd Farmer* 60:5 Je 17 '16

*See also* Hay balers; Hay drying machines; Hay forks; Hay rakes; Hay stackers; Mowing machines; sweep-rakes

**Hay racks**

Plan for hay rack. I. W. Dickerson. *Wal-laces' F* 43:1112 Ag 2 '18

Plan for hay-rack. H. P. Miller. *Ohio F* 138: 22 Jl 8 '16

**Hay rakes**

Hay rakes a good investment. G. H. Alford. *Prog F* 32:872 Ag 11 '17

Side-delivery hay rake. J. Marsh. *Hoard's D* 51:927 Jl 7 '16

*See also* Sweep-rakes

**Hay sheds**

Economical hay shed. W. E. Frudden. *il Hoard's D* 52:726 D 15 '16

**Hay stackers**

Homemade hay stacker; a device that helps in the alfalfa harvest. H. R. Richardson. *Country Gent* 82:763 Ap 21 '17

**Hay stacks.** *See* Stacks (hay, grain, etc.)**Hay trade**

Cincinnati has ideal hay inspection system. *Coop Manager & F* 7:82 D '17

Shady spots in the hay trade; National hay association against dishonest practices. S. Sosland. *il Country Gent* 81:1106+ My 27 '16

Some essentials in the hay business. J. V. Taylor. *Coop Manager & F* 6:85 Ja '17

Trade rules, the National hay association, revised July 8, 1918. *Coop Manager & F* 8:88 S '18

*See also* National hay dealers' association  
**Statistics**

Hay acreage. *Monthly Crop Rep* 3:55 Je '17  
Hay in the United States. *See* United States Department of agriculture Yearbooks, also

**Hazel**

Sources of supply of hazel-nuts. *Int R Sci & Prac Ag* 7,no 12:1792-5 D '16

Study in the anatomy of hazel-wood with reference to conductivity of water. M. G. Holmes. *Ann Bot* 32:553-67 O '18

**Diseases and pests**

Hazel woods in the province of Messina invaded by caterpillars. L. Savastano. *Int R Sci & Prac Ag* 7,no 3:460 Mr '16

Observations on *coelodes ruber*, a coleopteron injurious to hazel trees in Italy. F. Silvestri. *Int R Sci & Prac Ag* 9,no 5:647-8 My '18

**Hazlett, Robert H.**

Portrait. *Breeder's Gaz* 69:819 Ap 13 '16

He made his wife his partner; story. H. I. Dodge. *il Country Gent* 83:11-12 D 21 '18  
(to be cont)

**Head (animals)**

Some points on the surgical anatomy of the anterior part of the head, including a preliminary study of the teeth and sinuses of the horse. H. S. Murphey. *bibliog il Ia Ag Coll Offic Pub v* 14,no 36:56-156 '16

**Diseases**

Diseases of the head of the horse; with discussion. H. E. Bemis. *il Ia Ag Coll Offic Pub v* 14,no 36:157-80 '16

**Head smut.** *See* Smuts

**Headlights, Automobile.** *See* Automobiles—Lighting

**Health boards**

\* Rural health administration under the cooperative or local health district plan. G. F. Ruediger. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:406-11 Je '18

\* Rural health administration under the state health district plan. F. W. Sears. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:412-16 Je '18

Your state board of health. C. H. Lerrigo. *Country Gent* 81:407 F 19 '16

*See also* Public health

**Heard, Dwight Bancroft, 1869-**

Portrait. *Breeder's Gaz* 69:361 F 17 '16

**Hearing**

*See also* Deafness

**Heart****Diseases**

*See also* Foramen of Botal

**Heart rot**

Fungi producing heart-rot of apple trees. B. O. Dodge. *il Mycol* 8:5-15 Ja '16

Heart-rot of oaks and poplars caused by *polyporus dryophilus*. G. G. Hedcock and W. H. Long. *il J Ag Research* 3:65-78 O '14

Honey comb heart-rot of oaks caused by *sterium subpileatum*. W. H. Long. *J Ag Research* 5:421-8 D 6 '15

Preliminary report on the occurrence of western red-rot in *pinus ponderosa*. W. H. Long. *U S Ag B* 490:1-8 '17; Same cond. *Mycol* 8: 178-9 My '16

Study of heart-rot in western hemlock. J. R. Weir and E. E. Hubert. *il U S Ag B* 722: 1-37 '18

Three undescribed heart-rots of hardwood trees, especially of oak. W. H. Long. *il J Ag Research* 1:109-28 N '13

**Heather**

Heather of northern Europe successfully grown in this country. *Am Flor* 47:426 S 9 '16

**Heather-land association of Denmark**

Work of fifty years. *Kimball's D F* 15:48+ F 1 '17

**Heating**

Adding heating and plumbing systems. *plans Farm Eng* 5:12 Ap '17

Equipping the farm home heating systems. *il plans Farm Eng* 6:12 Ja '18

Farm residence heating. L. W. Eggleston. *il Am Soc Ag Eng Trans* 9:41-9 '16

Gas steam and electric systems. C. F. Herington. *Country Gent* 81:140 Ja 15 '16

Heating and lighting the suburban house. J. R. McMahon. *il Country Gent* 81:1583 Ag 26 '16

Heating by hot air. K. J. T. Ekblaw. *O Judd Farmer* 61:9 S 23 '16

Hot water heat for farm home. K. J. T. Ekblaw. *O Judd Farmer* 63:6 O 6 '17

House heating. J. L. Mowry. *il Mo Ag Bd B v* 14:1-24 '16; Same abr. *Minn Ag Ext B* 60:1-15 '16



**Heating—Continued**

- Modern heat for the home. K. J. T. Ekblaw. O Judd Farmer 61:9 S 16 '16  
 Primitive heating methods. K. J. T. Ekblaw. O Judd Farmer 61:16 S 9 '16  
 Steam heat in farm home. K. J. T. Ekblaw. O Judd Farmer 61:10 S 30 '16  
 Vapor-vacuum heating. C. E. Herington. Country Gent 81:2019 N 18 '16

See also Fuel; Greenhouses—Heating; Steam heating; Stoves

**Heating apparatus**

- Summer care of heating apparatus. C. F. Herington. Country Life 29:86 F '16

**Heaves. See Horses—Diseases and pests****Hébert, Louis**

- Unveiling of the monument at Quebec to Hébert the first Canadian farmer. il J Ag (Quebec) 22:101 D '18

**Hedges**

- Desirable plants for hedges. Gard Chron Am 21:206 My '17  
 Facts about hedges. J. S. Kerr. Prog F 31: 730 Je 3 '16  
 Flowering hedges. Gard Chron Am 22:58 F '18  
 Flowering shrubs as hedge plants. G. H. Sinclair. il Gard M 25:24-5 F '17  
 Fundamentals of a good hedge. J. J. Levison. il Am For 23:34-6 Ja '17  
 Green backgrounds for brilliant blooms—roses for hedges. H. M. Sharpe. Gard M 22: 222 Ja '16  
 Hedge fence problem. J. Marsh. Ohio F 142: 498 N 23 '18  
 Hedge of althæa. G. W. Kerr. Country Gent 81:455 F 26 '16  
 Hedges and hedge-planting. W. H. Taylor. J Ag New Zealand 15:69-72 Ag '17  
 Hedges, ornamental and defensive. Prog F 32:1200 N 17 '17  
 Ornamental hedges. W. F. Massey. Rural N Y 76:75 Ja 20 '17  
 Osage orange. C. C. Osborne. il Country Life 33:80b F '18  
 Planting for privacy of the home. W. Miller. il Gard M 25:169-70 Ap '17  
 Plants for an ornamental hedge. Prog F 32:61 Ja 20 '17  
 Plea for rose hedges. E. T. Ellis. Gard Chron Am 20:193 Ap '16  
 Popular hedge plants for general use. M. Free. il Gard Chron Am 20:307-8 Jl '16  
 Rose hedges. Gard Chron (Lond) 59:217-18 Ap 22 '16  
 Shrubs for use and ornament. E. P. Powell. il Gard M 25:179-80 Ap '17

See also Landscape gardening; Shrubs

**Hedysarum conarium. See Sulla****Helipus lauri. See Avocado weevils****Helianthus. See Sunflowers****Heliotrope**

- Magnificent window plan. Gard Chron Am 22: 214 Ag '18

**Hellebore**

- Common medicinal plants. A. Retlas. Ohio F 137:723 My 20 '16

**Hematoporphyrin**

- Formation of hematoporphyrin in ox muscle during autolysis. R. Hoagland. J Ag Research 7:41-5 O 2 '16

**Hemerocampa leucostigma. See White-marked tussock moths****Hemerophila pariana. See Apple and thorn skeletonizer****Hemileuca oliviae. See New Mexico range caterpillar****Hemiptera**

- Catalogue of the hemiptera of America north of Mexico, excepting the aphididae, coccidae and aleurodidae. E. P. Van Duzee. Cal Univ Pub Entomology v 2 i-xiv, 1-902p '17 (\$5)

**\* Food of aquatic hemiptera. C. F. C. Riley. Science (Science Press, Garrison, N.Y. 15c) n s 48:545-7 N 29 '18**

- Monograph of the North American species of orthotylus (hemiptera). E. P. Van Duzee. (Pro. v. 6, no. 5) 87-128p 50c '16 California academy of sciences, San Francisco

New or little known genera and species of orthotylini (hemiptera). E. P. Van Duzee. Cal Univ Pub Entomology v 1, no 4 217-27p '16 (10c)

Notes on some hemiptera taken near Lake Tahoe, California. E. P. Van Duzee. Cal Univ Pub Entomology v 1, no 5 229-49p '16 (20c)

Studies of the homopterous family cercopidae and jassoidea with special reference to the South African fauna. E. S. E. Cogan. (Reprinted from Ohio journal of science, v. 16, no. 5, p. 161-200, no. 7, p. 299-325) (Contribution no. 46) 161-322p bibliog il '17 Dept. of zoology and entomology, Ohio state univ., Columbus

See also Cicadas; Lygus; Membracidae; Plant lice; Scale insects

**Hemlock**

- Eastern hemlock. E. H. Frothingham. il map U S Ag B 152:1-43 '15  
 Hemlock for wind-break. J. W. Stephen. Rural N Y 75:190 F 5 '16  
 Miscellaneous conifers of the Rocky Mountain region; generic characteristics of hemlocks. G. B. Sudworth. il U S Ag B 680:11-21 '18  
 Relation of stimuli to the cone production of western hemlock. R. Watson. J For 16: 168-75 F '18

**Diseases and pests**

- Study of heart-rot in western hemlock. J. R. Weir and E. E. Hubert. il U S Ag B 722: 1-37 '18

See also Hemlock borers

**Hemlock borers**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16, no 26:49-52 '16

**Hemoglobin**

- Coloring matter of raw and cooked salted meats. R. Hoagland. bibliog il J Ag Research 3:211-26 D '14

**Hemorrhagic septicemia**

- Fowl cholera and other hemorrhagic septicemia immunization experiments. B. Gallagher. Am Vet M Assn J 50:708-28 F '17  
 Hemorrhagic septicaemia. A. T. Kinsley; D. F. Luckey. Mo Ag Bd Yearbook 1916: 462-5  
 Hemorrhagic septicemia. H: J. Washburn. U S Ag B 674:1-9 '18; Same cond. Jersey B 37:2065-6 D 11 '18  
 Hemorrhagic septicemia a fatal sheep disease. W. H. Lytle. Am Sheep B & W 36:604 O '16  
 Hemorrhagic septicemia and its control in Pennsylvania. J. B. Hardenbergh and F. Boerner, jr. Am Vet M Assn J 53:482-93 Jl '18  
 Hemorrhagic septicemia in mules. J. B. Hardenbergh and F. Boerner, jr. Am Vet M Assn J 51:817-22 S '17  
 Hemorrhagic septicemia, its clinical diagnosis. H. Jensen. Am Vet M Assn J 54:39-47 O '18  
 Hemorrhagic septicemia of cattle. A. E. Moore. Ag Gaz of Canada 4:764-6 S '17  
 Hemorrhagic septicemia; stockyards fever, swine plague, fowl cholera, etc. H: J. Washburn. Farmers' B 1018:1-8 '18  
 Reports of cases of hemorrhagic septicemia; with discussion. W. S. Ferrand. Am Vet M Assn J 53:648-58 Ag '18  
 Serum treatment of hemorrhagic septicemia; with discussion. W. B. Mack and E. Records. Am Vet M Assn J 52:810-19 Mr '18  
 Studies to diagnose a fatal disease of cattle in the mountainous regions of California; with discussion. K. F. Meyer. Am Vet M Assn J 48:552-65 F '16  
 Study of five members (or so-called species) of the septicemia hemorrhagica (pasteurella) group of organisms with special reference to their action on the various carbohydrates. A. M. Besemer. bibliog J Bact 2:177-84 Mr '17  
 Study of hemorrhagic septicaemia, observations in sheep and in mouflon-sheep hybrids. N. Mori. Int R Sci & Prac Ag 8, no 7:1010-12 Jl '17

**Hemorrhagic septicemia—Continued**

Vaccinations against hemorrhagic septicemia. J. B. Hardenbergh and F. Boerner, jr. *Am Vet M Assn J* 49:55-9; 50:868-76 Ap '16, Mr '17

**Hemp**

Ambari or deccan hemp, *hibiscus cannabinus* L., in South Africa. I. B. Pole-Evans. *Int R Sci & Prac Ag* 9,no 4:455 Ap '18  
Change of sex in hemp. F. J. Pritchard. *il J Heredity* 7:325-9 Jl '16  
Come-back of hemp. R. T. Gunn. *il Country Gent* 81:1323 Jl 8 '16  
Flax and hemp. (*In* Geography of the world's agriculture, p. 55-6) map '17 U S Ag  
Hemp culture in California. J. Heaney. *Rural N Y* 75:473 Mr 18 '16  
Hemp for shoes, ships and twine. A. H. Wright. *il Country Gent* 83:1+ Ag 17 '18  
Hemp nurds as paper-making material. L. H. Dewey and J. L. Merrill. *il U S Ag B* 404: 1-26 '16  
Industrial retting of textile plants by microbiological action. G. Rossi. *bibliog Int R Sci & Prac Ag* 7,no 8:1067-75 Ag '16  
To revive hemp growing. O Judd Farmer 65: 290 O 5 '18  
Wisconsin's hemp industry. A. H. Wright. *il Wis Ag Exp B* 293:1-46 '18; Summary. Hoard's D 56:383 O 11 '18

**Diseases and pests**

Fungous disease of hemp. V. K. Charles and A. E. Jenkins. *il J Ag Research* 3:81-4 O '14  
*See also* Hemp mildew

**Statistics**

Indian hemp fibre; with statistics of quantity and value exported from India, 1904-1914. C. D'Lima. *Ag J of India* 11:31-41 Ja '16

\* Manial hemp production and exports. (Commerce Reports no. 260) p 487-9 (N 5) '18  
U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Hemp mildew**

Observations on hemp mildew in Italy. V. Peglion. *Int R Sci & Prac Ag* 9,no 1:118-19 Ja '18

Hen coops. *See* Poultry coops

Hen-houses. *See* Poultry houses

Henequen. *See* Sisal hemp

**Henna**

Investigations in reference to henna. F. Cortesi and G. Tommasi. *Int R Sci & Prac Ag* 7,no 7:974-5 Jl '16

Hens. *See* Poultry

Hepaticae. *See* Liverworts

Her uninteresting neighbors; story. H. C. Bennett. *Am Coop J* 13:202-4 Ja '18

Herb Barbara. *See* Yellow rocket

Herbage. *See* Grasses

**Herbs**

Chaplet of herbs: its fragrance and flavor. M. M. Higgins. *il Touchstone* (118 E. 30th st, N. Y. 35c) 2:574-81+ Mr '18

Comparative study of winter and summer leaves of various herbs. J. P. Stober. *Bot Gaz* 63:89-109 F '17

Culinary herbs in Lancashire. J. Ed Ag 23: 882-4 D '16

Garden herbs; culture and uses. L. Marshall. *il Ohio F* 137:51 Ja 8 '16

Growing and storing herbs. *Prac F* 114:145 Ap 1 '18

Herb garden. *il Nat Stock & F* 40:919 D 9 '16

Herb growing. E. E. Pescott. *J Dept Ag Victoria* 16:617-19 O '18

Herb production. G. Quinn. *J Dept Ag S Australia* 21:308-11 N '17

Money from her yard. Mrs M. A. Wilson. *Country Gent* 82:669 Mr 31 '17

New herbaceous plants from China. E. H. Wilson. *il Gard M* 23:226-9 My '16

Pin money in roots and herbs. Mrs H. M. Woodward. *Ohio F* 137:33 Ja 15 '16

Put herbs in garden corners. J. A. Wolfe. O Judd Farmer 64:31 Mr 2 '18

Window garden; fresh flavorings for the cook all winter. E. A. Cassavant. *il Country Gent* 82:1859 N 24 '17

*See also* Angelica; Belladonna; Bidens; Comfrey; Dill; Drosera; Gunnera; Horse-mint; Lady's thumb (herb); Lavender; Lovage; Parsley; Pennyroyal; Pentstemons; Peppermint; Sage; Spearmint

Herbs, Medicinal. *See* Botany, Medical

Herd books. *See* Breeding—Record books

Herd laws. *See* Live stock laws

**Heredity**

Arboreal man. *il J Heredity* 8:531-42 D '17

Chlorophyll inheritance in maize. E. W. Lindstrom. *bibliog il Cornell Ag Exp Memoir* 13:1-68 '18

Collocation of plasmas within the cell. L. Legrand. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:60-4, 76-7 Ja 26-F 2 '18

Color inheritance in mammals. S. Wright. *J Heredity* 8:224-35, 373-8, 426-30, 473-80, 521-7, 561-4; 9:33-8, 87-90, 139-44, 227-40 My, Ag-D '17, Ja-Mr, My '18

Constitutional vigor in the ancestry of Thomas A. Edison. *J Heredity* 7:414-15 S '16

Contribution to the study of hereditary unsoundness in horses. W. A. N. Robertson. *J Dept Ag Victoria* 16:289-303 My '18 (to be cont)

Corn and education. A. F. Blakeslee. *il J Heredity* 8:51-7 F '17

Correlation between the size of cannon bone in the offspring and the age of the parents. C. Wriedt. *bibliog J Ag Research* 7:361-71 N 20 '16

Degree of resemblance of parents and offspring with respect to birth as twins for registered Shropshire sheep. H. L. Rietz and E. Roberts. *J Ag Research* 4:479-510 S '15

Eliminating feeble-mindedness. R. C. Punnett. *J Heredity* 8:464-5 O '17

Evolution and man. M. M. Metcalf. *J Heredity* 7:356-64 Ag '16

Feebly inhibited; nomadism, or the wandering impulse, by C. B. Davenport. Review. *J Heredity* 7:169-72 Ap '16

Hairless dog. *il J Heredity* 8:519-20 N '17

Hereditary nose bleed. W. C. Lane. *J Heredity* 7:132-4 Mr '16

Hereditary transmission of the curly wool character of karakul sheep in crosses between the karakul and Rambouillet breeds; research carried out in Austria. L. Adametz. *Int R Sci & Prac Ag* 8,no 6:906-8 Je '17

Heredity. W. Bateson. (*In* Smithsonian inst. Report 1915, p 359-94) '16 Smithsonian inst., Washington, D. C.

Heredity and disease. C. Herrman. *J Heredity* 9:77-80 F '18

Heredity and mutation as cell phenomena. R. R. Gates. *Am J Bot* 2:519-28 D '15

Heredity and sex. *J Heredity* 7:9-11 Ja '16

Heredity and the mind. P. Popenoe. *J Heredity* 7:456-62 O '16

Heredity causes and importance of white marks on the coats of equine animals; research in Italy. C. Gugnioni. *Int R Sci & Prac Ag* 8,no 12:1251-2 D '17

Heredity laws applied to cattle breeding. C. B. Davenport. *Jersey B* 36:1832-3 N 21 '17

Heredity of hair-form. *il J Heredity* 7:412-13 S '16

Heredity studies in the morning-glory. E. E. Barker. *bibliog il Cornell Ag Exp B* 392:1-38 '17

Heredity vs. environment. A. H. Estabrook. *J Heredity* 8:41-2 Ja '17

How do you clasp your hands? *il J Heredity* 8:155 Ap '17

Influence of heredity in stammering. F. A. Bryant. *J Heredity* 8:46-7 Ja '17

Inheritance of a bi-lobed ear. R. Schofield. *il J Heredity* 8:517-18 N '17

Inheritance of baldness. D. Osborn. *il J Heredity* 7:347-55 Ag '16



**Heredity—Continued**

- Inheritance of certain characters of grapes (Tech B. 45). U. P. Hedrick and R. D. Anthony. bibliog N Y State Ag Exp Rep 1915: 489-505 '16; Same. J Ag Research 4:315-30 J1 '15
- Inheritance of coat colours in horses. W. S. Anderson. Int R Sci & Prac Ag 7,no 3:399-400 Mr '15
- Inheritance of color and horns in blue gray cattle. O. Lloyd-Jones and J. M. Evvard. bibliog il Ia Ag Exp Research B 30:67a-106a '16
- Inheritance of endosperm color in maize. O. E. White. bibliog Am J Bot 4:396-406 J1 '17
- Inheritance of fertility in swine. E: N. Wentworth and C. E. Aubel. bibliog J Ag Research 5:1145-60 Mr 20 '16; Abstract. Am Soc Animal Production Pro 1915-1916:33-5 '17
- Inheritance of Jersey colors. J. J. Hooper. Jersey B 37:1009 Je 26 '18; Same. Breeder's Gaz 74:264 Ag 22 '18
- Inheritance of length of pod in certain crosses. J: Belling. bibliog il J Ag Research 5:405-20 D 6 '15
- Inheritance of rams used by T. S. Minton. England. W. C. Coffey and B. O. Severson. Am Sheep B & W 38:430-4 J1 '18
- Inheritance of sex in vitis rotundifolia. L. R. Detjen. bibliog il N C Ag Exp Tech B 12: 1-42 '17
- Inheritance of white forelock. S. J. Holmes and R. O. Schofield. J Heredity 8:359-60 Ag '17
- Inheritance of winter egg production. H. D. Goodale. Science (Science Press, Garrison, N.Y. 15c) n s 47:542-3 My 31 '18
- Inheritance studies in pisum; interrelation of the genetic factors of pisum. O. E. White. bibliog J Ag Research 11:167-90 O 22 '17
- Insects as material for studies in heredity. W. Lochhead. (In Report, Entomological soc. of Ontario, 1916, p. 66-72) bibliog '17 Ontario ag. dept., Toronto
- Is twinning hereditary? C. H. Danforth. il J Heredity 7:194-202 My '16
- Jukes in 1915. il J Heredity 7:469-74 O '16
- Modern conceptions of heredity and genetic studies at the Scripps institution. F. B. Sumner. (B. no. 3) 24p '17 Scripps institution for biological research, San Diego, Cal.
- Musical ability. Mrs E. F. Copp. il J Heredity 7:297-305 J1 '16
- New physiological theory of heredity. E. Raubaud. Int R Sci & Prac Ag 8,no 10:1362-4 O '17; Same. Ag Gaz of Canada 5:416-17 Ap '18
- Observations on the inheritance of anthocyan pigment in paddy varieties. G. P. Hector. Int R Sci & Prac Ag 8,no 8:1113-14 Ag '17
- Office-holding family. M. T. Goodrich. J Heredity 8:227-83 Je '17
- \$1000 for data on heredity: C. L. Redfield's offer. J Heredity 7:66-9 F '16
- Parents of great men. J Heredity 8:400-8 S '17
- Pigmentation in guinea-pig hair. H. R. Hunt and S. Wright. J Heredity 9:178-81 Ap '18
- Pitted ear lobes of congenital origin. A. E. Jenks. il J Heredity 7:553-4 D '16
- Polled Hereford bloodlines. E. H. Gifford. Breeder's Gaz 69:868 Ap 20 '16
- Polydactylism and tooth color. S. Sinha. J Heredity 9:96 F '18
- Redfield explains and broadens his offer of \$1,000. C. L. Redfield. J Heredity 7:286-7 Je '16
- \* Review of some recent attempts to influence the germ plasmas of animals. W. M. Barrows. bibliog School Sci and Math (2059 E. 72d place, Chicago 30c) 18:152-6 F '18
- Sex in livestock breeding. E. N. Wentworth. bibliog J Heredity 7:29-31 Ja '16
- Sex-limited color in Ayrshire cattle. E: N. Wentworth. bibliog J Ag Research 6:141-7 Ap 24 '16
- Sex-linked inheritance of (spangling in poultry). E. H. Rucker (J. Am. Assn. Instr. and Invest. Poultry Husb., 3, no. 1 6-p '16). Exp Sta Record 38, no 3:275 '18
- Significant accuracy in recording genetic data. E. M. East. Am J Bot 3:211-22 My '16
- Significant evidence for mental heredity. F: A. Woods. J Heredity 8:106-11 Mr '17
- Slit-eyed people. H. P. Stuckey. il J Heredity 7:146-7 Ap '16
- Studies in inheritance of certain characters of crosses between dairy and beef breeds of cattle. J: W. Gowen. bibliog il J Ag Research 15:1-58 O 7 '18
- Studies of teratological phenomena in their relation to evolution and the problems of heredity. O. E. White. bibliog il Am J Bot 1:23-36 Ja '14
- Suggestion on polled beginnings. R. C. Auld. Breeder's Gaz 72:6 J1 5 '17
- Variability curve following law of chance. il J Heredity 7:280 Je '16
- Women's eyes and potato skins. il J Heredity 7:475-7 O '16
- See also Breeding; Consanguinity; Defectives; Eugenics; Evolution; Hybridization; Mendelism; Natural selection; Osteosathyrosis; Plant breeding; Polydactylism; Prepotency; Species; Variation (biology)

**Herefords**

- American and English Herefords. Breeder's Gaz 70:976 N 23 '16
- Are Hereford prices too high? A. Burhans. il Country Gent 83:6 D 14 '18
- Back of the grand champions. F. W. Van Natta. il Breeder's Gaz 73:911 My 2 '18
- Best farmer in Indiana; Warren T. McCray, breeder of \$10,000 Herefords. J: R. McMahon. il Country Gent 83:10-11 S 28 '18
- Champion carlot of Hereford yearlings. J. W. Frazier. il Breeder's Gaz 71:384 F 22 '17
- Conclusion of a Hereford story. F. W. Van Natta. Breeder's Gaz 73:971 My 9 '18
- Handling Herefords in New England. W. Kinsman. Breeder's Gaz 74:112 J1 25 '18
- Hereford affairs in England. W. H. Woodcock. Breeder's Gaz 72:732 O 25 '17
- Hereford cattle for beef. W. Kinsman. Breeder's Gaz 73:1196 Je 6 '18
- Hereford herd management in the Middle West. Breeder's Gaz 69:667-8 Mr 23 '16
- Hereford progress on the Pacific coast. D. O. Lively. Breeder's Gaz 74:44 J1 11 '18
- Hereford reminiscences. W. C. McGavock. Breeder's Gaz 73:546 Mr 14 '18
- Hereford-shorthorn range controversy. J. E. Painter. Breeder's Gaz 70:468 S 21 '16
- Hereford type. W. Kinsman. Breeder's Gaz 73:1252; 74:152 Je 13, Ag 1 '18
- Hereford type—and some other things. il Breeder's Gaz 74:7 J1 4 '18
- Herefords at the International. Breeder's Gaz 70:1111 D 14 '16
- Herefords hustle profits. O Judd Farmer 62:3 Ap 21 '17
- Herefords in Alabama. R. J. Goode, jr. Breeder's Gaz 73:14 Ja 3 '18
- Herefords in New England. W. Kinsman. Breeder's Gaz 73:1086 My 23 '18
- Herefords in Wyoming. H: Altman. Breeder's Gaz 74:76 J1 18 '18
- Herefords, meat and wheat in England. Breeder's Gaz 72:1034 D 6 '17
- Herefords on the Pacific Coast. D. O. Lively. Breeder's Gaz 72:547, 782 O 4, N 1 '17
- Herefords past and present. Breeder's Gaz 74: 261 Ag 22 '18
- High qualities of Hereford cattle. G. R. Hartshorn. il Rural N Y 77:386 Mr 9 '18
- In defense of English-bred Herefords. W. G. C. Britten. Breeder's Gaz 69:554 Mr 9 '16
- In the land of white-faces; old Herefordshire, England, has hung out the sign: business as usual. W: H. Dean. il Country Gent 83: 10 J1 27 '18
- Leading Hereford sires in the United States. R. E. Hunt. Breeder's Gaz 71:919 My 3 '17
- Making headway with Herefords. A. W. Sampson. Breeder's Gaz 73:754 Ap 11 '18
- New era in the Hereford trade. C. H. Makin. il Breeder's Gaz 72:1138-9 D 20 '17
- Old days among the Herefords. W. C. McGavock. Breeder's Gaz 73:481 Mr 7 '18
- Opportunities for beef production in New England. S. R. Morrison. il Rural N Y 75: 596, 636, 668 Ag 8-22 '16
- Range Hereford herd management. W. C. McConnell. Breeder's Gaz 74:222 Ag 15 '18

**Herefords—Continued**

Return of the Herefords. R. V. Hoffman. il Field II 26:667-9 Ag '16  
 Secretary Britten to breeders in Hereford. Breeder's Gaz 72:208 Ag 16 '17  
 Showyard as a proving place; with illustrations from Hereford history. E. H. Taylor, jr. Breeder's Gaz 73:1029 My 16 '18  
 Story of the Anxiety Herefords. W. C. McGavock. Breeder's Gaz 70:47-8, 124-5 Jl 13, 27 '16  
 \$31,000 Hereford bull Ardmore. C. B. Smith. Breeder's Gaz 73:11 Ja 3 '18  
 Through the Hereford country. R. V. Hoffman. il Field II 26:108-10, 208-9, 315-16, 410-11 F-My '16  
 Trend of the times in the American Hereford trade. W. C. McGavock. il Breeder's Gaz 70:1190-1 D 21 '16  
 Value of good sires among the Herefords. J. K. Wright. il Mo Ag Bd B v 14:49-53 S '16  
 What Harris did with Herefords. W. L. Nelson. il Country Gent 81:1961 N 11 '16  
 Winter care of pure-bred Herefords. il Breeder's Gaz 69:233 F 3 '16

**Price lists**

Bartlett Hereford sale. Breeder's Gaz 71:1169 Je 7 '17  
 Blue ribbon Hereford sale. Breeder's Gaz 71:1168 Je 7 '17  
 Bowman Hereford sale list. Breeder's Gaz 72:989 N 29 '17  
 Cassidy Hereford auction. Breeder's Gaz 71:930 My 3 '17  
 Col. Taylor's sale makes world Hereford average. Breeder's Gaz 73:1261 Je 13 '18  
 Cornish Herefords average \$872. Breeder's Gaz 70:1300 D 28 '16  
 Davis' 120 Herefords bring \$110,000. Breeder's Gaz 72:852 N 8 '17; Prog F 32:1182 N 10 '17; il Field II 27:954-5 D '17  
 Des Moines Hereford sale. Breeder's Gaz 74:22 Jl 4 '18  
 Dixie Herefords in demand. Breeder's Gaz 69:782 Ap 6 '16  
 Fairview Herefords sell well. Breeder's Gaz 69:1165 Je 1 '16  
 Ferguson Bros.' Herefords. Breeder's Gaz 73:1147 My 30 '18  
 Fifty-six Herefords bring \$51,000. Breeder's Gaz 72:626 O 11 '17  
 Fox Herefords average \$1,331. Breeder's Gaz 73:1146d My 30 '18  
 Good Herefords sell well. Breeder's Gaz 70:22 Jl 6 '16  
 Gooch Herefords make \$1,038. Breeder's Gaz 72:18 Jl 5 '17  
 Gooch Hereford sale. Breeder's Gaz 73:117 Ja 17 '18  
 Good-Wilson Herefords average \$638. Breeder's Gaz 72:626 O 11 '17  
 Gross & Son's Hereford sale. Breeder's Gaz 73:1207 Je 6 '18  
 Gross-Gibbons Herefords average \$264. Breeder's Gaz 69:684 Mr 23 '16  
 Gross Herefords at \$481. Breeder's Gaz 71:642 Mr 22 '17  
 Gudgell & Simpson's Hereford dispersion. Breeder's Gaz 70:21 Jl 6 '16  
 Hager Herefords sell well. Breeder's Gaz 69:683-4 Mr 23 '16  
 Harrah's Hereford auction. Breeder's Gaz 69:313 F 10 '16  
 Hartnett's Herefords average \$365. Breeder's Gaz 69:683 Mr 23 '16  
 Hereford average \$641 at Denver. Breeder's Gaz 69:191 Ja 27 '16  
 Hereford round-up sale in Kansas City. Breeder's Gaz 73:553 Mr 14 '18  
 Herefords for Minnesota. il Field II 28:583 Ag '18  
 Logan Herefords at \$708. Breeder's Gaz 71:461 Mr 1 '17  
 McCray makes record sale of Herefords in America. Breeder's Gaz 71:1080 My 24 '17  
 McCray sale establishes new record. Breeder's Gaz 73:1146d My 30 '18; Field II 28:519 Jl '18  
 Mayne & Brazie Herefords make \$537. Breeder's Gaz 70:731 O 19 '16  
 Mousel Herefords average \$460. Breeder's Gaz 69:435 F 24 '16

Mousel Herefords bring \$120,950. Breeder's Gaz 72:1274a D 27 '17  
 Northwest Missouri breeders' sale. Breeder's Gaz 69:626 Mr 16 '16  
 O. Harris & sons' sensational auction. Breeder's Gaz 69:561 Mr 9 '16; Field II 26:332 Ap '16  
 144 Herefords for \$184,450. Breeder's Gaz 71:526 Mr 8 '17  
 Orchard Lake Herefords average \$1,287. Breeder's Gaz 69:1124 My 25 '16  
 Record price in a Hereford sale. Breeder's Gaz 70:22 Jl 6 '16  
 Royal Herefords average \$863. Field II 26:953 N '16  
 Sensational International sales. Breeder's Gaz 72:1105 D 13 '17  
 Shadeland Hereford sale. Breeder's Gaz 71:834 Ap 19 '17  
 Shadeland Hereford sale list. Breeder's Gaz 73:213 Ja 31 '18  
 Shadeland Herefords average \$278. Breeder's Gaz 69:500 Mr 2 '16  
 Shadeland's thirty-third Hereford auction. Breeder's Gaz 73:1208 Je 6 '18  
 60 Velie Herefords bring \$54,515. Breeder's Gaz 73:385 F 21 '18  
 Taylor sale breaks all records. il Field II 28:503 Jl '18  
 Tow's Herefords average \$876. Breeder's Gaz 71:930 My 3 '17  
 260 Harris Herefords bring \$396,375. Breeder's Gaz 72:17-18 Jl 5 '17  
 Van Natta Herefords average \$865. Breeder's Gaz 71:1081 My 24 '17  
 Van Natta Herefords make \$957. Breeder's Gaz 73:1147 My 30 '18  
 Watson Hereford auction. Breeder's Gaz 69:247 F 3 '16  
 Wm. Galloway sale, Waterloo, Ia. Breeder's Gaz 73:984 My 9 '18  
 Woodford 6th brings \$15,000. il Field II 27:38 Ja '17

**Herefords, Polled**

Breeding polled Herefords. O. Lloyd-Jones. Breeder's Gaz 69:1014 My 11 '16  
 Facts about polled Herefords. B. O. Gammon. Breeder's Gaz 69:668 Mr 23 '16  
 Pedigreed and polled Herefords. O. Lloyd-Jones. Breeder's Gaz 69:489-90 Mr 2 '16  
 Polled Hereford bloodlines. E. H. Gifford. Breeder's Gaz 69:868 Ap 20 '16  
 Polled Herefords in the limelight. Breeder's Gaz 71:338 F 15 '17  
 Polled Hereford week in Des Moines. Wallaces' F 43:286 F 15 '18  
 Polled Herefords for beef-making. N. M. Leonard. Breeder's Gaz 73:154 Ja 24 '18  
 Present and future of hornless whitefaces. B. O. Gammon. il Breeder's Gaz 72:1153 D 20 '17

See also National polled Hereford association

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Notable polled Hereford week. Breeder's Gaz 73:385 F 21 '18  
 Polled Herefords realize \$475. Breeder's Gaz 69:375 F 17 '16

**Hernia**

Abdominal hernias. C. A. Cary. Am Vet M Assn J 50:823-30 Mr '17

**Heron**

Blue heron—the farmer's friend. E. T. Martin. il Country Life 31:122 Ap '17  
 Inherited feeding habit of herons. J. T. Zimmer. J Heredity 9:271 O '18

**Herring**

\* Value of the herring as food. Nature (St Martin's st, London, W.C. 6d) 102:6-7 S 5 '18

**Herzegovina.** See subhead Herzegovina under Agricultural credit, Agriculture and Forests and forestry**Hessian flies**

Beating the Hessian fly. Farm Eng 4:35 Ag '16  
 Combating the Hessian fly. A. E. Grantham. Prac F 112:296 Ag 1 '16  
 County cooperation to control Hessian fly. H. A. Gossard and G. R. Eastwood. Ohio Ag Exp B v 1:230-2 Ag '16; Same cond. J Econ Entom 9:142-4 F '16



**Hessian flies—Continued**

- County-wide survey to determine the effect of time of seeding and presence of volunteer wheat upon the extent of damage by the Hessian fly. T. H. Parks. *J Econ Entomol* 10:249-53 Ap '17
- Eupelminius saltator Lindm. as a parasite of the Hessian fly. W. R. McConnell. *il J Econ Entomol* 11:168-75 Ap '18
- First German invader, the Hessian fly. J. W. Henceroth. *il Am Coop J* 13:467 Ag '18
- He's in the stubble! *il Power F* 25:14 S '16
- Hessian fly. *il Wallaces F* 41:972 Jl '14 '16
- Hessian fly. C. E. Sanborn and O. Wade. *il Okla Ag Ext C* 78 3p '18
- Hessian fly in California. C. M. Packard. *il Cal State Comm Hort B v* 7:174-7 Ap '18
- Hessian fly in Kansas wheat fields. B. W. Snow. *O Judd Farmer* 60:6 Je '17 '16
- Hessian fly train. G. D. Dean. *il J Econ Entomol* 9:139-41 F '16
- How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:3-6 '17
- Investigation of the supposed immunity of some varieties of wheat to the attack of Hessian fly. L. Haseman. *J Econ Entomol* 9:291-4 Ap '16
- Life histories and methods of rearing Hessian-fly parasites. C. M. Packard. *il J Ag Research* 6:367-82 Je 5 '16
- Relation of kinds and varieties of grain to Hessian-fly injury. J. W. McColloch and S. C. Salmon. *J Ag Research* 12:519-27 F 25 '18
- Results of ten years of experimental wheat sowing to escape the Hessian fly; with discussion. G. A. Dean. *map J Econ Entomol* 10:146-62 F '17
- Spring activities of the Hessian fly. Wallaces' *F* 41:486 Mr 24 '16
- Wind as a factor in the dispersion of the Hessian fly. J. W. McColloch. *bibliog J Econ Entomol* 10:162-70 F '17

Hester Wallace's little scheme; story. H. Richmond. *Nat Stock & F* 40:504 Ag 12 '16

*Heterodera radiculicola*. See Nematodes

*Heterosis*. See Hybridization

*Hevea brasiliensis*. See Para rubber trees

*Hevea canker*. See Para rubber trees—Diseases and pests

**Hickory**

- Commercial uses of the hickory. *il Am For* 22:455-7 Ag '16
- Grafting walnuts and hickories. J. R. Smith. *il Country Gent* 81:195-6 Ja 29 '16
- Hickories. S: B. Detwiler. *il Am For* 22:451-4 Ag '16
- Notes on North American trees: carya. C. S. Sargent. *Bot Gaz* 66:229-58 S '18
- Trees of Vermont; the hickories. G. P. Burns and C. H. Otis. *il Vt Ag Exp B* 194:82-91 '16

**Diseases and pests**

Witches-brooms on hickory trees. F. C. Stewart. *il Phyt* 7:185-7 Je '17

See also Hickory bark beetles

**Hickory bark beetles**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16, no 26:78-86 '16

**Hickory tiger-moths**

Orchard injury by the hickory tiger-moth. D. Isely. *bibliog il U S Ag B* 598:1-14 '18

**Hides and skins**

- Bacteriological study of methods for the disinfection of hides infected with anthrax spores. F. W. Tilley. *bibliog J Ag Research* 4:65-92 Ap '15
- Better prices reward farmer who skins animals well and takes care of hides. *Weekly N L* 6:7 S 4 '18
- Consumer's dollar in hide. *Rural N Y* 77:1229 N 2 '18
- Gashes in hides lower value. *O Judd Farmer* 65:408 N 2 '18
- Goat and sheep skins in the Caucasus. *Am Sheep B & W* 36:45 Ja '16
- Hide import rules. *Weekly N L* 5:4 Ja 23 '18

Hides and leather products. Wallaces' *F* 43:529 Mr 22 '18

Hides and skins: production, foreign trade, supply, and consumption. G: K. Holmes. *U S Ag Yearbook* 1917:125-46

Pig skins for leather negligible. *O Judd Farmer* 63:20 D 1 '17

Production and prices of hides and skins in Tunis. *Doc Leaflets* 1, no 3:40-1 S '17

Purchase of hides by the government. *J Ag New Zealand* 14:333-5 Ap '17

See also Curing; Fur; Leather; Sheep skins; Tanning

**Statistics**

Statistics of farm animals and their products. See United States Department of agriculture Yearbooks

**High-hole woodpecker**. See Flickers

**High school libraries**

- High school library and home economics. M. J. Booth. *J Home Econ* 8:118-21 Mr '16
- Textbooks and reference works; bibliography. (*In* Library and laboratory equipment for classified high schools. W. F. Doughty.) (B 55) p 36-9 '16 Texas Dept. of educ., Austin

**High schools**

- Christian rural high school movement. H. D. Maydole. *Rural Manhood* 9:186-8 My '18
- High school friendship campaign. A. Miller. *Rural Manhood* 9:193-4 My '18
- Information concerning high schools affiliated with the University of Texas, 1917. *Texas Univ B* 1734:1-46 '17
- Oakwood a model rural high school. *il O Judd Farmer* 64:3 F 9 '18

**Agricultural courses**

- Agricultural education in secondary schools. L. S. Hawkins. *il map Univ. of the state of N Y (Albany)* B 624 87p O 1 '16
- Agricultural exhibits and contests. H. P. Barrows. (Doc. 42) 8p '17 U. S. States relations service, Washington, D.C.
- Agricultural instruction in the high schools of six eastern states. C. H. Lane. *map plans* (B. 1918, 3) 73p U. S. Bur. of educ., Washington, D.C.
- Agricultural training for city high school boys. W: J. Bogan. *il Manual Training* (Manual Arts Press, Peoria, Ill. 25c) 19:297-301 My '18
- Agriculture in Lebanon high school. P. S. Lowe. *il Purdue Ag* 11:24-7 F '17
- Agriculture in secondary schools with special reference to the state of Minnesota. A. V. Storm. (*In* Pan American scientific congress Proc., 1915, v. 5, p. 345-53) '17
- Agriculture in the high school. H. N. Goddard and J. A. James. 191p *il '17 Wis. Dept. of public instruction, Madison*
- Beef production; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 81) 11p '18 U. S. States relations service, Washington, D.C.
- \* Courses in agriculture in the recognized high schools. (C. 129) 48p '18 Ill. Dept. of public instruction, Springfield
- Courses in secondary agriculture for southern schools. H. P. Barrows. *bibliog U S Ag B* 521:1-53 '17
- Courses in secondary agriculture for southern schools, third and fourth years. H. P. Barrows. *U S Ag B* 592:1-40 '17
- Farm records and accounts. H. P. Barrows. (Doc. 38) 10p '17 U. S. States relations service, Washington, D.C.
- Food requirements of the human body; suggestions for teachers in secondary schools. (Doc. 50) 6p '17 U. S. States relations service, Washington, D.C.
- High school laboratory equipment for agriculture. (*In* Library and laboratory equipment for classified high schools. W. F. Doughty.) (B 55) p 56-9 '16 Texas Dept. of educ., Austin
- Home floriculture and home-ground improvement; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 62) 12p '17 U. S. States relations service, Washington, D.C.

**High schools—Agricultural courses—Continued**

- Increasing production on the farm; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 73) 12p '17 U.S. States relations service, Washington, D.C.
- Instruction in sheep and goat husbandry; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 76) 12p '18 U.S. States relations service, Washington, D.C.
- Judging horses as a subject of instruction in secondary schools. H. P. Barrows. il U S Ag B 487:1-31 '17
- Judging sheep as a subject of instruction in secondary schools. H. P. Barrows. il U S Ag B 593:1-30 '17
- Marketing farm products. H. P. Barrows. (Doc. 72) 12p U.S. States relations service, Washington, D.C.
- Propagation and pruning of plants; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 63) 12p '17 U. S. States relations service, Washington, D.C.
- Raising ducks, geese, and turkeys; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 57) 10p '17 U.S. States relations service, Washington, D.C.
- Rural high school courses. T: E. Finegan. North Carolina high school bulletin (Univ. of N. C., Chapel Hill, N. C.) 7:156-60 O '16
- Rural relations of high schools. C. J. Galpin and J. A. James. il maps Wis Ag Exp B 288:1-44 '18
- Study of organization and method of the course of study in agriculture in secondary schools. T. H. Eaton. (Contributions to educ. no. 86) 183p '17 Teachers College, Columbia univ., N.Y.
- Types and breeds of farm animals; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 58) 12p '17 U.S. States relations service, Washington, D.C.

**Bibliography**

- \* Texts and references for secondary schools; lists, frequently revised, of secondary school texts and manuals on agricultural subjects, elementary school texts of same kind, and sources of teaching material and supplies. U. S. States relations service, Office of ag. instruction, Washington, D. C. (Typew)

**Courses of study**

- Report on correlation of chemistry and home economics in high schools. M. E. Moore and others. J Home Econ 9:114-17 Mr '17

**Highway accounting**

- \* Classification of expenditures for highway cost accounting. Good Roads (150 Nassau st, N.Y. 10c) n s 16:178-9 N 9 '18
- Highway cost keeping. J. J. Tobin and A. R. Losh. U S Ag B 660:1-52 '18

**Highway administration**

- Reorganization of the Office of public roads and rural engineering. Good Roads (150 Nassau st., N.Y. 10c) n s 12:236 D 2 '16

**Highway law**

- Arkansas new highway legislation. Good Roads (150 Nassau st, N.Y. 10c) n s 14:206-8 O 20 '17

- Constitution and statutes relating to roads, highways, bridges and ferries, including the laws of 1917. 216p '17 Ore. Sec. of state, Salem

- Federal aid rules and regulations. C: H: Davis. Good Roads (150 Nassau st, N.Y. 10c) n s 14:228 O 27 '17

- Full text of road bill (H. B. 550, referred to the people). Oregon Voter (Portland, Ore. 10c) 8:249-55 F 24 '17

- Good roads law; advance copy of an act of the legislature of West Virginia, regular session 1917. 76p '17 Legislative reference bur., Dept. of archives & history, Charleston, W.Va.

- Highway law; laws of 1909, chapter 30 constituting chapter 25 of the consolidated laws as amended, acts of legislature 1910-1917 with annotations and the general highway traffic law, 1917. 317p '17 N.Y. State commission of highways, Albany

- Highway law of Washington. Good Roads (150 Nassau st, N.Y. 10c) n s 14:153-9 S 22 '17

- Highway maintenance. Ohio F 142:570 D 7 '18
- Iowa road law. Wallaces' F 41:1265 S 29 '16
- Iowa road patrol law. Wallaces' F 42:1186 Ag 31 '17

- Kansas state highway administration law. W. S. Gearhart. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:458-61 D 5 '17

- Minnesota road laws; as amended by chapters 119, 259 and 479, session laws of 1917 (together with chapters 52 and 75, session laws of 1917). L. A. Smith, comp. 51p n. d. Minn. Sec. of state, St Paul

- New York highway legislation. Good Roads (150 Nassau st, N.Y. 10c) n s 14:222, 224 O 27 '17

- Old law vs. the new; Iowa law. F. R. White. il Wallaces' F 41:1297-8+ O 6 '16

- Political road bill. Wallaces' F 42:438 Mr 9 '17

- Rules and regulations of the secretary of agriculture for carrying out the federal aid road act. U S Ag C 65:1-19 '16

- Rural highways in Canada. il Ag Gaz of Canada 3:525-42 Je '16

**Highways. See Roads****Hilgard, Eugene Woldemar, 1833-1916**

- Sketch. por Soil Sci 1:1 Ja '16
- Sketch. C: B. Lipman. Am Soc Agron J 8: 160-2 My '16

**Hill, Ellsworth Jerome, 1833-1917**

- Collector, taxonomist and ecologist. J. M. Coulter. por Bot Gaz 64:165-6 Ag '17

**Hill, James Jerome, 1838-1916**

- Jim Hill—farmer. H. R. Smith. Field il 26: 782 S '16
- Railroad man and farmer. por Ag Digest 1:19 My '16
- Portrait. Breeder's Gaz 69:1199 Je 8 '16
- Recollections of James J. Hill. P. M. Babcock. Breeder's Gaz 70:353 S 7 '16
- Stockman and farm-builder. Breeder's Gaz 69:1208 Je 8 '16

**Hippeastrum. See Amaryllis****Hippuris vulgaris. See Mare's tail**

- His cousin Joyce; story. M. Wonsen. O Judd Farmer 63:21 D 8; 18 D 15; 18 D 29 '17

**Historic houses**

- Island garden from 1652; Sylvester Manor at Shelter Island, New York. T: Tryon. il Country Life 30:19-21 Jl '16
- Lindens—a house with a history. W. Fales. il Country Life 33:46-9 Mr '18
- One of the oldest houses in New England, the Spencer house (1651), Newbury, Mass. L. F. Spencer. il Country Life 30:38-9 Je '16
- Unknown historic mansion of Pennsylvania. il Country Life 33:50-1 Ja '18
- Westover restored; photographs. L. H. Bock. Country Life 30:25-7 Ag '16

See also Mount Vernon, Virginia

**Hoard, William Dempster, 1836-1918**

- As he spoke in public. Hoard's D 56:655-6 D 6 '18
- Pioneer for Americanization. W: H. Hobbs. Hoard's D 56:653 D 6 '18
- Portrait. Wallaces' F 43:1737 N 29 '18
- Sketch. N Y Prod R 47:97 N 27 '18; Jersey B 37:2028 D 4 '18; Hoard's D 56:658 D 6 '18; por Nat Stock & F 42:805 D 7 '18; por Rural N Y 77:1359 D 7 '18
- Tributes by prominent men. Hoard's D 56:651-3 D 6 '18

**Hockey**

- Building up American hockey. H. Reed. il Country Life 31:58-9 D '16

**Hodgkin's disease**

- Hodgkin's disease in a mule. Am Vet M Assn J 48:746-7 Mr '16

**Hoes**

- Practical weeder-hoe. J: W. Chamberlin. il Gard M 28:40 S '18
- Wheel hoes. R. E. Rogers. Gard M 25:114 Mr '17

**Hog cholera**

- Cell inclusions in hog cholera. L. R. Himmelberger. il Am Vet M Assn J 48:450-3 Ja '16



**Hog cholera—Continued**

- Cholera in Colorado. T. J. Delohery. *il Country Gent* 81:125 Ja 15 '16
- Cholera-proof hogs. G. H. Dacy. *il Country Gent* 82:1446 S 22 '17
- College course in hog cholera. H. P. Hoskins. *Country Gent* 81:1402 Jl 22 '16
- Community control of hog cholera. C. G. Starr. *Breeder's Gaz* 69:128 Ja 20 '16
- Control of hog cholera. J. S. McDaniel. *Mo Ag Ext C* 17:1-8 '17
- Control of hog cholera in Missouri. D. F. Luckey; J. Moyes. *map Mo Ag Bd B v* 16:1-16 F '18
- Control of hog cholera, with a discussion of the results of field experiments. A. D. Melvin and M. Dorset. *U S Ag B* 534:1-18 '17
- Disease control in Michigan. H. H. Halladay. *Kimball's D F* 16:175 Mr 1 '18
- Effective hog cholera control. R. C. Bishop. *Swine World* 5:1 F '18
- Etiology of hog cholera. F. Proescher and H. A. Seil. *bibliog il Am Vet M Assn J* 51: 64-9, 609-23 Ap, Ag '17
- Experimental studies in hog-cholera. *Ind Ag Exp B* 204:1-12 '17
- Experimental study of hog cholera and factors concerned in immunity against the disease. *Mo Ag Exp B* 151:59-61 '17
- Further studies on hog cholera with reference to spirochaeta hyos. W. E. King and R. H. Drake. *bibliog il Am Vet M Assn J* 50:168-88 N '16
- Help to halt hog cholera ravages. *Swine World* 6:34 O '18
- \* Hog cholera. (*In* 5th biennial report, p. 42-57) *il '18 La. State live stock sanitary bd., Baton Rouge*
- Hog cholera. (*In* 6th annual report, 1917, p. 34-9) (*Pub. Doc. no. 98*) '18 Mass. Dept. of animal industry, Boston
- Hog cholera. (*In* Report, 1917, Live stock branch, p. 20-4) '18 Ontario ag. dept., Toronto
- Hog cholera. *N J Ag Exp Rep* 1916:132-6 '17
- Hog cholera. E: A. Cahill. *Am Vet M Assn J* 49:245-50 My '16; Same. *Rural N Y* 75:821, 844, 868 My 27-Je 10 '16
- Hog cholera. R. W. Duck. *il Penn State F* 9: 321-2 F '16
- Hog cholera. G: Hilton. *Ag Gaz of Canada* 4: 119-22 F '17
- Hog cholera. F. R. Jones. *Tex Ag Dept B* 52: 141-3 '16
- Hog cholera and its control. H. E. Schuman. *il Purdue Ag* 11:40-3 My '17
- Hog cholera and swine plague and how to prevent it. (*In* Report, 1916, p. 59-70) '17 Oregon state live stock sanitary board, Salem
- Hog-cholera control. R. A. Craig and L. C. Kigin. *il Ind Ag Exp C* 62:1-8 '17
- Hog cholera control in Missouri. D. F. Luckey. *Mo Ag Bd Yearbook* 1917:253-8
- Hog cholera control in Oklahoma. L. L. Lewis. *il Okla Ag Ext C* 40 4p '16
- Hog cholera globulin. *Nat Stock & F* 40:674 S 30 '16
- Hog cholera in Kansas. *Country Gent* 81:446 F 26 '18
- Hog-cholera investigations. M. Dorset. (*In* Report, 1917, Bur. of animal industry, p. 46-9) '17 U S Ag
- Hog cholera; its economic importance and prevention. R. R. Birch. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 6:450-7 My '18
- Hog cholera; its prevention and control. A. J. Holt. *il W Va Ag Dept B* 28:1-18 '17
- Hog cholera maxims. *Kimball's D F* 14:468 Jl 15 '16
- Hog cholera: prevention and treatment. M. Dorset and O. B. Hess. *il map Farmers' B* 834:1-32 '17
- Hog cholera problem in Arkansas. C. O. Carpenter. *Prog F* 32:765 Jl 7 '17
- Hog cholera; symptoms and treatment. *il Hoard's D* 52:112 Ag 18 '16
- Hog cholera transmission through infected pork. R. R. Birch. *Am Vet M Assn J* 51: 303-30 Je '17
- Hog regulations of Wisconsin department of agriculture. *Hoard's D* 56:278 S 20 '18
- How hog cholera spreads. *Va Ag Dept B* 111:17-18 Ap '16
- How to deal with hog cholera. *Prog F* 33:194 F 16 '18
- How to prevent hog diseases—cholera. T. Butler. *Prog F* 33:458 Ap 6 '18
- How to prevent the spread of hog cholera. L. P. Beechy. *il Nat Stock & F* 40:1055 Ja 13 '17
- How to rid premises of cholera infection. L. P. Beechy. *Nat Stock & F* 40:1277 F 24 '17
- Important points in determining the presence of hog cholera in the herd. *il Va Ag Dept B* 126:90-102 '18
- Indiana controls hog cholera. L. E. Northrup. *Ohio F* 142:50 Jl 20 '18
- Investigations concerning the sources and channels of infection in hog cholera. M. Dorset and others. *J Ag Research* 13:101-31 Ap 8 '18
- Items in recent history of veterinary medicine. J. Law. *Am Vet M Assn J* 51:663-6 Ag '17
- Man who had to be shown. B. J. Woods. *Country Life* 30:47 Jl 16 '16
- Management of herd in an outbreak of cholera. *Swine World* 5:16 Mr '18
- New hog cholera order. O Judd Farmer 63:10 Ag 25 '17
- Occurrence of petechial hemorrhages in the larynx and kidneys in hog cholera. H. P. Hoskins. *il Am Vet M Assn J* 49:478-83 Jl '16
- Plan to control hog cholera. O. E. Dyson. *Breeder's Gaz* 71:824 Ap 19 '17
- Prevention and treatment of hog cholera. J. H. McNeil and T. W. Munce. *N J Ag Dept B* 13:575-94 '18
- Principal points in combating hog cholera. *il Ind Ag Ext Leaflet no* 58:1-4 '16
- Protect the hog crop from cholera. *Prog F* 32: 527 Ap 28 '17
- Reduce hog cholera. *Weekly N L* 5:3 O 31 '17
- Sanitary measures to prevent hog cholera. R. Graham. *Ill Ag Exp C* 203:1-8 '17
- Shadow of the buzzard. J. E. Pickett. *il Country Gent* 82:2044-5 D 29 '17
- Sick hogs; act quickly when hog cholera is suspected. *Weekly N L* 4:3 Je 13 '17
- So-called hog cholera cures. H. C. Harpending and H. B. Harpending. *Hoard's D* 51: 662 My 12 '16
- Swine industry in New Jersey with suggestions relative to the control of hog cholera. *N J Ag Dept B* 1:36-48 '16
- To control hog cholera. *Ohio F* 138:102 Ag 5 '16
- Township hog-cholera control. T. W. Harvey. *Country Gent* 81:811 Ap 8 '16
- Virulence of hog-cholera blood at different periods during the disease. R. A. Whiting. *Am Vet M Assn J* 51:477-93 Jl '17
- Way to control hog cholera. O. E. Dyson. *Country Gent* 82:1386 S 8 '17
- When hog cholera appears. *Nat Stock & F* 41:727 O 27 '17

**Preventive inoculation**

- Advise vaccination of hogs bought for feeding; stop hog cholera spread. *Weekly N L* 6:14 O 2 '18
- Anti-hog-cholera serum. C. H. Hays. *Va Ag Dept B* 113:9-11 Jl '16
- Attenuation of hog cholera virus and its effect upon normal hogs. C. L. McArthur. *Ark Ag Exp B* 139:1-28 '17
- Avoiding bad results from vaccination. C. G. Starr. *Breeder's Gaz* 69:1291 Je 22 '16
- Bad results with vaccination. C. G. Starr. *Breeder's Gaz* 70:275 Ag 24 '16
- Better ways to control cholera. O Judd Farmer 60:8 F 12 '16
- Combating hog cholera. M. C. Thomas. *Nat Stock & F* 41:1008 Ja 12 '18
- Concerning a new cholera vaccine. W. H. Dalrymple. *Breeder's Gaz* 69:723 Mr 30 '16
- Conquering hog cholera. W: R. Butler. *il Country Life* 29:62-3 Mr '16
- Farmers immunize hogs. *Ohio F* 138:383, 410, 434, 570 O 21-N 4, D 9 '16
- Farmers immunize hogs? C. H. Coon. *Ohio F* 139:71 Ja 20 '17

**Hog cholera—Preventive inoculation—Cont.**

- Farmers immunize hogs? L. R. Coulter, Ohio F 138:662 D 30 '16
- Farmers immunize hogs? W. E. Dobbs, Ohio F 138:618 D 23 '16
- Farmers immunize hogs? M. A. Pugh, Ohio F 137:210 F 12 '16
- Fighting hog cholera, H. W. Doyle, il Country Gent 82:893 My 19 '17
- Hog cholera and its control, V. A. Moore, il Field 11 26:1032 D '16
- Hog cholera prevention and the serum treatment, P. T. Petersen, il Cal Ag Exp C 176: 1-15 '17
- Hog cholera serum, J. Reichel, Am Vet M Assn J 48:623-4 F '16
- Hog cholera serum and virus, R. A. Craig, Am Vet M Assn J 49:119-20 Ap '16
- Hog-cholera treatment aids traffic in feeder animals, Weekly N L 6:9 O 2 '18
- Illinois hog cholera serum plant, il Breeder's Gaz 70:929 N 16 '16
- Inoculating the mortgage lifters, C. H. Claudy, Hoard's D 53:962 J1 6 '17
- Is hog cholera conquered? W. H. Dean, Country Gent 81:569 Mr 11 '16
- Meeting of committee appointed to recommend best methods of vaccination, control and eradication of hog cholera, Ind Ag Exp C 56:1-20 '16
- More anti-hog cholera serum being used, Ohio F 142:478 N 16 '18
- More hog-cholera serum is used despite less disease, Weekly N L 6:1 S 18 '18; Same, Swine World 6:19 O '18
- New method of preparing serum, Breeder's Gaz 69:1257 Je 15 '16
- Observations on 2800 pigs inoculated with hog cholera virus, H. P. Hoskins, Am Vet M Assn J 49:817-29 S '16
- Pigs is pigs; unless they get the hog cholera, il Am Coop J 13:380, 415 My-J1 '18
- Problems of the swine breeder, H. B. Harpending, N Y Ag Dept B 80:1592-8 F '16; Same, N Y Ag Dept Rep 1916, pt 3:1592-8 '17
- Production and application of anti-hog cholera serum, F. V. Hawkins, (In Report, 1917, Live stock branch, p. 24-9) '18 Ontario ag. dept., Toronto
- Production of anti-hog-cholera serum, Ind Ag Exp Rep 1917:64-6 '18
- Production of clear and sterilized anti-hog-cholera serum, M. Dorset and R. R. Henley, J Ag Research 6:333-8 My 29 '16
- Progress with serum, Country Gent 81:1541 Ag 19 '16
- Refined, filtered, and sterile hog cholera serum, H. T. Morgan, Hoard's D 51:903 Je 30 '16; Same, Prog F 31:834 J1 1 '16
- Report of experiments on immunizing against hog cholera, L. L. Lewis and C. H. McElroy, Okla Ag Exp B 119:1-15 '18
- Requirements concerning hog-cholera virus and anti-hog-cholera serum, (Service and regulatory announcements, Bur. of animal industry 122) 68-76p '17 U S Ag
- Serum test influenced by ascaris infestation, R. R. Birch, Am Vet M Assn J 51:694-6 Ag '17
- Serum treatment for hog cholera, il Rural N Y 75:109 Ja 22 '16
- Serum treatment for swine fever, J Bd Ag 23:383-5 J1 '16
- Serum treatment of hog cholera, R. Graham, il Ill Ag Exp C 207:1-10 '17
- Sterile hog cholera serum, H. T. Morgan, Ohio F 137:790 Je 10 '16
- Sterile hog cholera serum a fact, il O Judd Farmer 62:3 Je 2 '17
- Summary of observations on 1,470 hogs, hyperimmune to hog cholera, H. C. H. Kernkamp, Am Vet M Assn J 51:537-40 J1 '17
- Technique of vaccinating hogs, R. W. Casady, Breeder's Gaz 70:12 J1 6 '16
- Using hog cholera serum and virus, il Hoard's D 52:148 Ag 25 '16
- Veterinary problems, Prog F 33:91 Ja 26 '18
- Veterinary work in Indiana, C. H. Clink, Breeder's Gaz 71:1117 My 31 '17
- Hog contests**
- Hog contest, H. Cooper, Nat Stock & F 40: 917 D 9 '16
- Hog cots.** See Swine houses
- Hog crates**
- Hog crate for shipping, S. M. Henderson, O Judd Farmer 60:15 Ap 29 '16
- Hogs.** See Swine
- Hoisting machinery**
- Homemade hoist, Farm Eng 5:10 Mr '17
- Portable farm elevators, Power F 26:23 Ja '17
- See also Hay derricks
- Holbert, A. B., 1853-1916**
- Death of A. B. Holbert, por Breeder's Gaz 70: 1297 D 28 '16
- Hollis-Moss rural credits bill.** See Agricultural credit—United States
- Hollow tile**
- Hollow blocks for farm buildings, J. L. Ahart, Farm Eng 5:12 F '17
- Hollow clay blocks for farm buildings, M. L. King, Am Soc Ag Eng Trans 10,no 2:62-7 '17
- Hollow tile on the farm, il Jersey B 35:987 Je 21 '16
- Holly**
- Hollies and their cultivation, Gard Chron Am 20:358 Ag '16
- Holly lore, H. Wilbur, Catholic World (120-122 W. 60th st, N.Y. 25c) 106:346-9 D '17
- Hollyhocks**
- Diseases and pests**
- How to control hollyhock rust, Gard Chron Am 21:158 Ap '17
- Holsinger, Frank, 1836-1916**
- Life and work, por Fruit-Grower 27:92 F 1 '16
- Holstein-Friesian association of America**
- Holstein extension, Kimball's D F 16:881 N 15 '18
- Large memberships in breeders' associations, D. D. Aitken, il Breeder's Gaz 71:1115 My 31 '17
- President Aitken comments on our report of Holstein meeting; voting by proxy, D. D. Aitken, Hoard's D 55:1051 J1 19 '18; Kimball's D F 16:603 Ag 1 '18
- Solomon Hoxie; father of advanced registry, M. H. Gardner, Breeder's Gaz 72:75-6 J1 19 '17
- 31st annual meeting, Detroit, June 7, 1916, Breeder's Gaz 69:1257 Je 15 '16; Kimball's D F 14:404 Je 15 '16; Hoard's D 51:842 Je 16 '16; Nat Stock & F 40:304 Je 17 '16; Field 11 26:603 J1 '16
- 32d annual meeting, Worcester, Mass., June 6, 1917, Hoard's D 53:886 Je 22 '17; Breeder's Gaz 71:1205 Je 14 '17
- 32d annual meeting, Worcester, Mass., June 6, 1917, J. Andrews, Kimball's D F 15:452 J1 1 '17
- 33d annual meeting, June 5, Hoard's D 55:887 Je 14 '18; Kimball's D F 16:488 Je 15 '18; Field 11 28:490+ J1 '18
- Holstein-Friesian cattle**
- Aaggie smashed records, R. E. Jones, il Country Gent 82:2068 D 29 '17
- Advance of Holsteins in the South, J. B. Bowles, Breeder's Gaz 72:1075 D 13 '17
- Baton Rouge Holstein sale, R. G. Miller, Kimball's D F 15:194 Mr 15 '17
- Black-and-white cow is an efficient machine, D. D. Aitken, il Breeder's Gaz 72:1163 D 20 '17
- Breeding and developing Holsteins, I. M. Avery, il Hoard's D 52:4 J1 28 '16
- Breeding up Holstein cattle, J. G. Morse, il Rural N Y 75:1600 D 30 '16
- Breeds of dairy cattle, il Farmers' B 893:23-9 '17
- Building the Mt Hermon herd, T. E. Elder, il Hoard's D 55:1043 J1 19 '18
- California Holstein champion, R. E. Jones, il Kimball's D F 16:3 Ja 1 '18
- Capital city Holstein herd at Soldiers' Home farm near Washington, D. C., J. B. Bain, il Kimball's D F 15:3-4 Ja 15 '17
- Certificate-of-record cows, W. M. Singleton, il J Ag New Zealand 16:15-20 Ja '18



**Holstein-Friesian cattle—Continued**

Champion for Minnesota; Beauty Girl Pontiac Segis. il Kimball's D F 14:331 My 15 '16  
Chimacum stock farms. A. B. Nystrom. il Hoard's D 52:907 Ja 19 '17  
Cleveland's record Holstein; Jolie Topsy Pauline De Kol. il Kimball's D F 14:427 Jl 1 '16  
Dairy herd at National soldiers' home. W. C. Barnes. il Breeder's Gaz 74:115 Jl 25 '18  
Daisy Hill farm and its Holsteins. il Kimball's D F 16:651+ S 1 '18  
Detroit Holstein sale to be held June 8-9. Field II 26:520 Je '16  
Economy of production by dairy cows. R. I. Grady. Ohio Ag Exp B v 2:334-8 O '17  
Enterprising Holstein combination. Field II 26:337 Ap '16  
Fancher Farm Maxie's record. A. M. Loomis. il Kimball's D F 15:185 Mr 15 '17  
Farm successes in milk production. H. Stanford. O Judd Farmer 60:3 Mr 18 '16  
Fat producing Holstein cows. J. G. Morse. Rural N Y 77:530 Ap 6 '18  
Feeding a world record Holstein. A. Hansen. il Field II 27:447 Je '17  
First 40-pound Holstein in the far West. C. L. Hughes. Breeder's Gaz 73:374 F 21 '18  
Friesland farm herd. B. B. Davis. il Kimball's D F 15:14 Ja 15 '17  
Galloway-Messer Holstein sale; with price list. Kimball's D F 16:142+ F 15 '18  
Geauga county dairy herd. T. B. Waters. Ohio F 137:628 Ap 29 '16  
Getting into pure-breds. G. A. Sell. il Hoard's D 55:423 Mr 29 '18  
Good cows to found herd. A. E. Doggett. il Kimball's D F 15:529 Ag 1 '17  
He had a great mother; does high production pass on from mother to daughter or through the male line. H. G. Gulliver. il Field II 28:405-9+ Je '18  
History of the Holstein. Hoard's D 52:294 S 22 '16  
Holstein breed in Canada. W. M. Tait. Hoard's D 52:691 D 8 '16  
Holstein breeding center. U. J. Downey. Breeder's Gaz 72:668 O 18 '17  
Holstein-Friesian afterthoughts. E. A. Powell. Breeder's Gaz 71:12 Ja 4 '17  
Holstein-Friesians and the official test. M. H. Gardner. Kimball's D F 15:625 S 15 '17  
Holstein notes and summaries. Kimball's D F 14:36, 212 Ja 15, Mr 15 '16  
Holstein pioneer. il Hoard's D 53:639 My 4 '17  
Holstein 700-lb. herd average. J. W. Goodman. Jr. Jersey B 37:312 F 27 '18  
Holsteins and Jerseys. H. McAlister. Breeder's Gaz 69:960 My 4 '16  
Holsteins as beef animals. T. Butler. Prog F 21:899 Jl 22 '16  
Holsteins at Berry experiment farm. J. G. McMillan. il Ag Gaz of New South Wales 28:197-207 Mr '17  
Holsteins at the National. A. G. Morrell. il Prac F 112:469 D 15 '16  
Holsteins at the National dairy show. Hoard's D 56:475 N 1 '18  
Holsteins at the Virginia college of agriculture. O. A. Thomas. il Hoard's D 51:141 F 18 '16  
Holsteins came; city and country cooperated to bring them to a Missouri county. C. M. Long. il Banker-F 5:16 My '18  
Holsteins for Missouri. Kimball's D F 15:749 O 15 '17  
Holsteins in Gage co., Nebraska. Hoard's D 52:692 D 8 '16  
Holsteins in Jamaica. I. M. Mapp. il Hoard's D 53:817 Je 8 '17  
How one Iowa breeder gained success. S. P. Cowgill. il Hoard's D 52:203 S 8 '16  
Jerseys and Holsteins. H. W. Lane. Breeder's Gaz 73:257 F 7 '18  
Jolie Topsy Pauline De Kol. il Ohio F 137:713 My 20 '16  
Jones' high-testing cows. O. C. Cunningham. Ohio F 138:104 Ag 5 '16  
Katy Gerben. il Kimball's D F 14:124 F 15 '16  
Largest fat record Holstein-Friesians. M. H. Gardner. il Hoard's D 52:766-7 D 22 '16  
Little visits to big Holstein farms. H. G. Van Pelt. il Kimball's D F 16:438+ Je 1 '18  
Long distance producer. L. A. Hazen. il Hoard's D 51:50 F 4 '16

Masterpieces in black and white; King Segis Pontiac Alcartra. il Field II 26:531-3 Je '16  
Michigan breeders meet. Kimball's D F 14:124 F 15 '16  
National dairy show; the Holstein-Friesians. Breeder's Gaz 72:790 N 1 '17  
Nebraska's wonder calf; Juliana Tirania De Kol. il Kimball's D F 15:516 Ag 1 '17  
New dairy queen; Ormsby Jane Segis Aaggie. Kimball's D F 14:48 F 1 '16  
New Holstein butter record. M. S. Prescott. il Field II 27:115 F '17  
New junior two-year-old record. H. E. Colby. il Hoard's D 55:935 Je 21 '18  
New York Holstein men meet. E. W. Gage. Kimball's D F 14:88 F 15 '16  
Official world's record; Zarilda Clothilde 3d De Kol. il Kimball's D F 16:76 F 1 '18  
Ohio University Holsteins. C. R. Arnold. il Hoard's D 53:562 Ap 20 '17  
Ormsby Jane Segis Aaggie. T. C. Niemann. il Hoard's D 51:20 Ja 28 '16  
Pabst record Holsteins. C. L. Cramton. il Hoard's D 55:835 Je 7 '18  
Pelletier at Pontiac. il Hoard's D 53:467 Ap 6 '17  
Perpetuating blood lines. il Kimball's D F 16:493 S 15 '18  
Prolificacy in Holstein-Friesians. H. McAlister. Breeder's Gaz 71:1196 Je 14 '17  
Pure-bred increase from an old cow. il Wallaces' F 41:643 Ap 21 '16  
Queen is dead; Duchess Skylark Ormsby. Kimball's D F 16:67 F 1 '18  
Rival stock farm. D. E. Andrews. il Kimball's D F 14:175 Mr 15 '16  
Score for Holstein-Friesian bulls and cows adopted by the Holstein-Friesian association of America. E. G. Bennet. Int R Sci & Prac Ag 7, no 11:1634-7 N '16  
Seven-day Holstein record showing estimated production and feed consumed; tabulation. N J Ag Exp Rep 1916:211-16 '17  
Show ring and milk pail. E. A. Powell. il Field II 26:506-7+ Je '16  
Some Holstein-Friesian farms in the eastern townships. il J Ag (Quebec) 22:40-1 S '18  
Some representative Holsteins; photographs. Field II 27:448-9 Je '17  
Southern Illinois and Holsteins. R. N. Thompson. O Judd Farmer 64:487 My 4 '18  
Story of a Holstein cow; Fancher Farm Maxie, the world's champion four year old. P. Wing. il Field II 27:444 Je '17  
Story of fifteen years of Holstein public sales. H. McAlister. Hoard's D 51:6 Ja 28 '16  
Story of Parana. G. W. Rogers. Prac F 114:110 Mr 15 '18  
Story of three cows. W. W. Swett. il Hoard's D 55:551-4 Ap 19 '18  
10th National dairy show. Breeder's Gaz 70:780 O 26 '16  
Three great Holstein cows. il Kimball's D F 15:136 Mr 1 '17  
Tillie's new record. R. E. Jones. il Country Gent 81:972 My 6 '16  
Tilly Alcartra, a notable Holstein cow. Breeder's Gaz 69:772 Ap 6 '16  
Tilly Alcartra still has the habit. C. L. Hughes. Hoard's D 55:169 F 15 '18  
Two new world's records. M. S. Prescott. il Kimball's D F 16:829 N 1 '18  
Type, production, or both? E. M. Hastings and F. S. Prescott. il Field II 26:504-5 Je '16  
Whiteside dairy accomplishment. O Judd Farmer 63:1 S 29 '17  
Why I chose the Holstein. F. Pabst. Field II 27:444 Je '17  
World's yearly records broken by Holsteins. F. T. Price. il Hoard's D 56:482 N 1 '18

See also names of breeders' associations, e.g. Holstein-Friesian association of America, Jefferson valley Holstein dairymen's association, Minnesota state Holstein breeders' association, Waukesha county Holstein breeders' association, Wisconsin Holstein breeders' association

**Price lists**

A. W. Green's Holstein sale. Breeder's Gaz 74:56 Jl 11 '18; Kimball's D F 16:565 Jl 15 '18; Field II 28:578 Ag '18; Hoard's D 56:169 Ag 30 '18

**Holstein-Friesian cattle**—Price lists—*Continued*  
 Buffalo Holstein sale. Kimball's D F 15:356 My 15 '17  
 Cabana's Holstein sale. il Kimball's D F 16:496 Je 15 '18  
 Comments on the big Holstein sale. C: F. Chase. Kimball's D F 16:487 Je 15 '18  
 Dairyman's convention sale of Holsteins. Hoard's D 54:846 Ja 4 '18  
 Famous Holstein herd sold; Brookside herd. Hoard's D 53:826 Je 8 '17  
 First Fond du Lac sale. Hoard's D 55:779 My 24 '18  
 Fond du Lac Holsteins sell well. Hoard's D 53:689 My 11 '17  
 Holstein breeders' sale company consignment sale. Hoard's D 56:670 D 6 '18  
 Inter-county Holstein sale. Hoard's D 51:588 Ap 28 '16  
 Iowa Holstein breeders association sale, Des Moines. Hoard's D 55:622 Ap 26 '18; Kimball's D F 16:308 Ap 15 '18  
 Irwin Holstein sale. Kimball's D F 16:492 Je 15 '18  
 Lake Mills and Watertown sales. Hoard's D 51:779 Je 2 '16  
 Lake Mills Holstein consignment sale. Hoard's D 54:512 N 2 '17  
 Lake Mills Holstein sale, Oct. 22-3. Hoard's D 56:525 N 8 '18  
 Lake Mills 17th consignment sale, April 30-May 2. Hoard's D 55:772 My 24 '18  
 Liverpool sale & pedigree co., sale. Breeder's Gaz 69:251 F 3 '16  
 Madison square garden sale. Kimball's D F 14:275 Ap 15 '16  
 National dairymen's sale. M. S. Prescott. Hoard's D 54:594 N 16 '17  
 National dairymen's sale at Columbus. il Field 11 27:949 D '17  
 National Holstein sale. il Kimball's D F 16:486+ Je 15 '18; Hoard's D 55:923 Je 21 '18  
 National Holstein sale, Detroit, Mich., June 8-9. il Breeder's Gaz 69:1261 Je 15 '16; Hoard's D 51:874 Je 23 '16; Kimball's D F 14:435+ J1 1 '16; Field 11 26:609+ J1 '16  
 National Holstein sale makes world record prices. Hoard's D 53:888 Je 22 '17  
 New England Holsteins bring high prices. Field 11 26:681 Ag '16  
 \$106,000 for a Holstein bull calf. A. E. Haswell. il Kimball's D F 16:486 Je 15 '18  
 Pine Grove Holstein sale. Field 11 28:514 J1 '18  
 Record-breaking Holstein sale at Worcester. Breeder's Gaz 71:1212 Je 14 '17  
 Second Fond du Lac sale. Hoard's D 55:902 Je 14 '18  
 Stephenson farm herd dispersion. Hoard's D 53:625 Ap 27 '17  
 Washington Holstein sale. Hoard's D 51:875 Je 23 '16  
 Watertown, Wis., Holstein sale. Hoard's D 55:572 Ap 19 '18  
 Waukesha county, Wisconsin, Holstein breeders sell. Hoard's D 55:783 My 24 '18  
 Waukesha county, Wis. Holstein sale. Hoard's D 54:699 D 7 '17  
 Waukesha Holsteins sell very well. Hoard's D 56:628 N 29 '18  
 Wisconsin demonstration sale. Hoard's D 55:778 My 24 '18  
 Woodcrest-Kearsarge dispersion nets top figure. il Field 11 27:114 F '17  
 Woodlake and Clover farms Holstein sale. Hoard's D 55:955 Je 23 '18  
 Worcester Holstein sale. J: Andrews. il Kimball's D F 15:454 J1 1 '17  
 Worcester sale a record breaker. il Field 11 27:554 J1 '17  
 World's greatest Holstein sale. J: Andrews. il Kimball's D F 15:414+ Je 15 '17

**Holy Land.** See Palestine

## Home

British home. A. Bennett. J Home Econ 9:177-81 Ap '17  
 Home and the community. A. R. Mann. J Home Econ 8:569-76 N '16  
 Home management. A. Boylen. J Home Econ 9:233-4 My '17  
 How a home grew. Country Gent 81:2063 N 25 '16

Mrs Jones' ideas of making a home. A. G. Vestal. Power F 27:36 O '18  
 My big problem. Fruit-Grower 27:30 Ja 1 '16  
 Significance of the home. M. W. Glenn. J Home Econ 8:463-75 S '16

See also Farm homes

**Home decoration.** See House decoration

**Home demonstration centers.** See Housekeeping centers

**Home demonstration work.** See Farm home demonstration work; Housekeeping centers

## Home economics

All's fair in love; story. H. C. Bennett. il Country Gent 81:1383+ J1 15 '16  
 Aunt Amelia learns that it costs to live in the city. H. Richmond. O Judd Farmer 63:24 O 13 '17  
 Before cleaning time. Mrs H. S. Miller. O Judd Farmer 60:42 F 5 '16  
 Bogies. J Home Econ 8:148-9 Mr '16  
 Business of homemaking. Mrs H. M. Hickok. J Home Econ 8:441-7 Ag '16  
 Club programs in home economics. H. L. Johnson. J Home Econ 9:223-8 My '17  
 Comforts and conveniences for farm homes. X. Caverno. il Field 11 26:752 S '16  
 Cooking for a crew. N. K. Jones. Country Gent 81:1563 Ag 19 '16  
 Cooking in hot weather; symposium. Prac F 113:202 My 15 '17  
 Cooling the cook. A. G. Vestal. il Power F 26:25 Je '17

Cooperative extension work in agriculture and home economics, 1916; part II of report on experiment stations and extension work in the United States, 406p '17 U S Ag

Second report on the receipts, expenditures, and results of cooperative agricultural extension work in the 48 states under the provisions of the act of Congress of May 8, 1914 (agricultural extension act), and of similar work conducted in connection therewith under cooperative agreements between the United States Department of agriculture, the state agricultural colleges, and county governments and organizations

Development of home economics. I. Bevier. J Home Econ 9:1-7 Ja '17  
 Development of home economics in social work. W. S. Gibbs. J Home Econ 8:68-74 F '16

Disregarding the handicap. il Fruit-Grower 27:222 Mr 15 '16

Domestic art or science, which? C. M. Dixon. Penn State F 10:175 N '17

Domestic forces. E. Aria. Fortnightly Review (249 W. 13th st., N.Y. 50c) 106:863-70 N '16; Same. Living Age (6 Beacon st., Boston 15c) 291:669-74 D 16 '16

Don't waste food and clothing; what to do with the things you throw away. M. Woolley. Farm Eng 5:5 D '17

Easy ways. il O Judd Farmer 64:24 Ja 26 '18

Echoes from the federation. Wallaces' F 41:850 Je 9 '16

Exhibit of instructive visiting housekeeping. J. T. Dahlman. J Home Econ 8:33-5 Ja '16  
 Extension circulars. Mass Ag Ext C 37, 39, 40, 41, 47 '17

Titles are: Methods of saving fats; Preparation wastes; Table wastes; Storage wastes; How to save wheat flour

Farm dishwashing. Nat Stock & F 41:846 D 1 '17

Farm efficiency; how it depends on efficient equipment for living. X. Caverno. 48p '16  
 Xenophon Caverno, Kewanee, Ill.; Same. Am Soc Ag Eng Trans 9:12-29 '16

Few possible helps. O Judd Farmer 64:24 Ja 26 '18

Food and food administration. I. Bevier. Assn Am Ag Coll & Exp Pro 1917:129-31 '18

Food economy ideas. Ohio F 139:459 Mr 24 '17

Food waste at home. Weekly N L 4:6 Je 20 '17

For the women of the South. W. H. Dean. il Country Gent 81:185+ Ja 22 '16

4th annual convention of the Quebec homemakers' clubs. J Ag (Quebec) 21:30 Ag '17

Growing a home. C. L. Gebhart. Fruit-Grower 27:146 F 15 '16

Heads and feet. E. C. Morgan. Kimball's D F 15:647 S 15 '17



**Home economics—Continued**

- Hints to housewives. 111p '17 Mayor Mitchel's Food supply committee, 71 Broadway, N.Y. Hobbyizing housework. E. G. Hall. Nat Stock & F 42:862 D 21 '18
- Home economics. H. Calvin and C. A. Lyford. (*In Report*, U.S. Comr. of educ., 1916, v. 1, p. 271-88) '16 U.S. Bur. of educ., Washington, D. C.
- Home economics and the community center. J. Collier. J Home Econ 9:319-21 J1 '17
- Home economics in all high schools. S. F. Hinkle. Nat Stock & F 42:538 S 7 '18
- Home industries of Prince Edward Island. J Ag (Quebec) 21:31 Ag '17
- Home labour-saving devices. H. E. Winter. Ag Gaz of Canada 3:431-3 My '16
- Home making after a plan. M. L. Westcott. Fruit-Grower 27:247 Ap 1 '16
- Home making in the rural communities. A. C. Perry. il Penn State F 11:89-90 Mr '18
- Home management. N. S. Knowles and others. il Ia Ag Ext Home Econ B 6:1-22 '17-'18 (rev.)
- Home with an income. A. Harvey. J Home Econ 9:262-6 Je '17
- Homemaking as a profession. L. D. Widstoe. J Home Econ 9:29-32 Ja '17
- Housekeeper and the food problem. C. P. Gilman. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:123-30 N '17
- Housekeeper's schedule. E. C. Salisbury. Ariz Ag Ext C 9 4p '16
- \* Housekeeping and the public health. M. Talbot. Am J Pub Health (126 Massachusetts av., Boston \$4 per yr.) 7:1026-30 D '17
- Housewife and the eight-hour day. J Home Econ 9:87-8 F '17
- How Iowa is carrying out better living. G. C. Jessup. il Country Gent 81:301+ F 5 '16
- How the housekeeper may economize. Mrs W. N. Hutt. Prog F 31:1206 O 14 '16
- How to economize in preparing foods. Mrs W. N. Hutt. Prog F 31:190 F 5 '16
- Improved housekeeping. Fruit-Grower 27:66 Ja 15 '16
- International office of home economics. J Home Econ 8:8-9 Ja '16
- Keeping mother out of the Martha class. E. R. Wilson. Rural N Y 75:1106 Ag 19 '16
- Labor-saving devices. M. R. McPheeters. il Okla Ag Ext C 55:1-4 '17
- Learning to make beds. Mrs W. N. Hutt. Prog F 31:886 J1 15 '16
- Let's have easily prepared suppers. Prog F 31:1106 S 16 '16
- Look for leaks these days of high prices. G. V. Gray. il Farm Eng 4:68-9 O '16
- Making housework lighter. Mrs M. E. Underwood. Kimball's D F 15:535 Ag 1 '17
- Man's idea about home. Fruit-Grower 27:219 Mr 15 '16
- Meal preparation helps. Ohio F 139:652 My 5 '17
- Modern equipment for home. il O Judd Farmer 61:11 O 28 '16
- Ounce is worth more than the pound to-day. W. B. Hankins. Am Fruit Grower 38:8 O '18
- Our food page. S. Puerden. See monthly numbers of Gleanings in bee culture beginning March 1917
- Pet economy. M. K. Dunne. Country Gent 82:1158 J1 14 '17
- Planning and serving meals. N. S. Knowles and others. il Ia Ag Ext Home Econ B 1:1-32 '17
- Planning by seasons. N. K. Jones. Country Gent 81:1419 J1 22 '16
- Planning the day's work. N. K. Jones. Country Gent 81:1277 Je 24 '16
- Planning the week. N. K. Jones. Country Gent 81:1347 J1 8 '16
- Practical side of farm life. Mrs C. L. Herren. Va Ag Dept B 109:45-8 '16
- Preparedness in the home. V. C. Lee. O Judd Farmer 63:17 S 8 '17
- Price of a home. E. Childe. New Republic (421 W. 21st st, N.Y. 10c) 13: 78-9 N 17 '17
- Program for April meeting, first year, Virginia home demonstration clubs. E. A. Roberts. Va Ag Ext B 28:1-16 '18
- Rational home economics. Mrs N. A. Ras-mussen. Wis Hort Soc Rep 1917:38-41

- Relation of the housewife to the food problem. N. D. Hitchcock. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:130-40 N '17
- Save your steps. G. V. Gray. Farm Eng 3:210 Mr '16
- Saving mother. Mrs H. F. Echternach. O Judd Farmer 64:27 Mr 9 '18
- Saving steps. Mrs C. S. Muth. il Hoard's D 54:760 D 21 '17
- Saving steps is important now. W. B. Hankins. il Am Fruit Grower 38:10-11 S '18
- Saving time and strength in housekeeping. M. L. Matthews. Purdue Ag 12:236-7 Ja '18
- School of home economics bulletins. Ky Univ B v 8, no 1 5 nos. '15

Titles are: Household sanitation; Yeasts, molds and bacteria; Bread; Hints on cleaning and dyeing of textures; Textile adulterations and tests; Choice of food for a balanced ration

- Seasonable work. Nat Stock & F 40:1202 F 10 '17
- Social welfare study. D. E. Mitchell. J Home Econ 8:541-4 O '16
- Some recent magazine articles on the standard of living. L. Perry. J Home Econ 9:550-8 D '17 (to be cont)
- Special war duty for home economics teachers. School and Soc (Science Press, Garrison, N.Y. 10c) 6:558 N 10 '17
- Squeamishness and waste. Nat Stock & F 41:308 Je 16 '17
- Stop kitchen waste. L. Brownlow. Kimball's D F 15:874 D 1 '17
- Summer work. Mrs F. S. Arrington. Prog F 32:720 Je 23 '17
- Teachers' cottages and rural home economics. J. Preston. il J Home Econ 8:109-12 Mr '16
- Teaching Martha efficiency. M. B. Brooks. O Judd Farmer 60:18 My 13 '16
- Things a handy man can make. il Power F 26:30 Ja '17
- Thrift. M. O. Wauch. Nat Stock & F 41:200 My 12 '17
- Thrift in buying. Nat Stock & F 41:408 J1 21 '17
- Time necessary to do the work in a seven room house for a family of three. M. Rowe. J Home Econ 9:569-73 D '17
- Time required for housework in a family of five with small children. M. Woodbury. J Home Econ 10:226-30 My '18
- Uplift farm adviser. Rural N Y 76:985 Ag 18 '17
- What the new housekeeping means to the farm home. C. M. Frederick. Mo Ag Bd Yearbook 1917:35-44
- When Marjorie turned efficient. H. C. Bennett. il Country Gent 81:949+ Ap 29 '16
- When saving is wasting. E. C. Salisbury. Country Gent 81:1855 O 14 '16
- Wide-awake girls learn every-morning house-cleaning. Mrs W. N. Hutt. Prog F 31:862 J1 8 '16
- Wide-awake girls learn good housekeeping. Mrs W. N. Hutt. Prog F 31:18 Ja 1 '16
- Wide-awake girls learn to wash the dishes. Mrs W. N. Hutt. Prog F 31:812 Je 24 '16
- Your head versus your heels. H. Philipson. O Judd Farmer 61:17 J1 8 '16

See also Baking; Breakfasts; Cleaning; Cookery; Cooperative buying; Cost of living; Diet; Dinners; Domestic finance; Efficiency; Domestic; Farm home demonstration work; Fireless cookers; Food; Furniture; Heating; Homemakers' clubs; House cleaning; House decoration; Household pests; Housekeeping centers; Kitchen utensils; Kitchens; Laundry; Needlework; Servants; Sewing; Women's institutes; also Alabama home economics association, American home economics association

**Bibliography**

- Bibliography of food economy for the housewife. Wash State Coll Lib (Pullman) B 5:1-59 Mr '18 (2d ed 25c)
- Bibliography of home economics. See monthly numbers of Journal of home economics
- Books on agriculture and household science. O. J. Stevenson. Ontario Ag Dept B 259: 1-14 '18

**Home economics—Bibliography—Continued**

- Government publications of interest to home economics teachers and students. (Home Econ. C. 5) 8p '18 U.S. Bur. of educ., Washington, D.C.
- Home economics publications issued by the Bureau of education. 2p mim (Ag 15) '17 U. S. Bur. of educ., Washington, D. C.
- Pedagogical literature dealing with home economics. School Review (Univ. of Chicago Press 20c) 26:215-24 Mr '18
- Textbooks and reference works; bibliography. (In Library and laboratory equipment for classified high schools. W. F. Doughty.) (B 55) p 41-4 '16 Texas Dept. of educ., Austin
- Valuable books and bulletins on home economics. 1a Ag Ext Home Econ C 6:1-8 '17-'18
- Study and teaching**
- Babies in the curriculum. A. E. Hamilton. il J Heredity 7:387-94 S '16
- Brief courses in home making for normal schools; with outlines of courses and short bibliographies. 11p '17 U. S. Bur. of educ., Washington, D.C.
- \* Broad view of home economics. School R (Univ. of Chicago Press, Chicago 20c) 26:606-10 O '18
- Choose a good course in home economics. Prog F 31:1082 S 9 '16
- College course in home economics. E. C. Jenkins. J Home Econ 9:301-14 Jl '17
- Contest and the tales it told. A. M. East. J Home Econ 8:294-5 Je '16
- Demonstration-lecture courses for women's institutes. G. A. Putnam. Ag Gaz of Canada 3:264-6 Mr '16
- Development of home economics at the University of Washington. E. I. Raitt. J Home Econ 9:314-19 Jl '17
- Domestic art in the high school commercial course. C. M. Steele. J Home Econ 8:112-17 Mr '16
- Experiment in teaching citizenship; lessons in the use of substitute flours. E. M. Routh. J Home Econ 10:311-13 Jl '18
- First year course in home economics for southern agricultural schools. L. Stanley. U S Ag B 540:1-56 '17
- \* Food and the schools. School and Soc (Science Press, Garrison, N.Y. 10c) 8:385-6 S 28 '18
- Food requirements of the human body; suggestions for teachers in secondary schools. (Doc. 50) 5p '17 U.S. States relations service, Washington, D.C.
- High school library and home economics. M. J. Booth. J Home Econ 8:118-21 Mr '16
- Home attitude towards the school. V. C. Meredith. Breeder's Gaz 69:1114 My 25 '16
- Home economics correspondence courses of collegiate grade. A. Loomis. J Home Econ 8:227-31 My '16
- Home economics courses in state normal schools. School and Soc (Science Press, Garrison, N.Y. 10c) 8:167-8 Ag 10 '18
- Home economics in the Detroit schools. C. Keen. J Home Econ 8:479-87 S '16
- Home economics in the public schools under war conditions. A. A. Johnson. J Home Econ 10:369-70 Ag '18
- Home economics in the winter course at Purdue. il Purdue Ag 10:43 Ap '16
- Home economics practice house at the Oregon agricultural college. A. V. Milam. il plan J Home Econ 9:71-4 F '17
- \* Home economics studies in grades seven to twelve. A. M. Cooley and others. Teachers Coll Record (525 W. 120th st. N.Y. 40c) 19: 119-30, 229-58 Mr-May '18 (to be cont)
- Home economics teacher in the rural schools. H. Graham. J Home Econ 10:157-61 Ap '18
- Home economics teaching under present economic conditions. 11p '17 U. S. Bur. of educ., Washington, D. C.
- Home making. E: M. Tuttle. Cornell Rural School Leaflet v 11, no 1:211-52 '17
- Home project work in vocational home economics in secondary schools. M. G. Adams. J Home Econ 10:358-62 Ag '18
- Homemakers' course at Kansas agricultural college. M. P. Van Zile. J Home Econ 9:174-6 Ap '17
- Household-arts arithmetic. K. F. Ball and M. E. West. School Review (Univ. of Chicago Press, Chicago 20c) 25:722-30 D '17
- Household arts; teachers' manual and course of study for grades 7 to 10, inclusive. (B. 78) 154p '16 Mass Bd. of educ. Boston
- Household physics and practice cottage work. B. L. Steele. J Home Econ 10:162-7 Ap '18
- Household science in normal schools in the provinces. il Ag Gaz of Canada 4:400-7 My '17
- International interests in home economics. B: R. Andrews. J Home Econ 8:595-6 N '16
- Junior work in home economics. C. Nye. N Y Farms & Markets Dept Ag B 97:109-12 Jl '17
- Luncheon as a project in elementary and secondary education. J. H. Snow. J Home Econ 9:361-4 Ag '17
- Manual training and household science in rural schools. A. H. Leake. Ag Gaz of Canada 5:809-11 Ag '18
- Massachusetts boys' and girls' home economics club; primer of instruction. L. Comstock and E. H. Nash. il Mass Ag Ext B 12: 1-15 '17
- Mathematics applied to the household arts. K. F. Ball. J Home Econ 8:521-6 O '16
- Modern college girl's thesis. V. C. Meredith. Breeder's Gaz 70:13 Jl 6 '16
- New phase of extension work in the South. E. Ingham and F. Culver. J Home Econ 8: 536-9 O '16
- Outline of the content of special methods courses for students preparing to teach home economics. L. Stanley. J Home Econ 9:210-12 My '17
- \* Outline study of a short course in domestic science. G. F. Palmer. Education (120 Boylston st, Boston 35c) 39:22-35 S '18
- Part time education in household arts. C. Murtland. J Home Econ 9:51-8 F '17
- Practical home economics in high schools. S. F. Hinkle. Nat Stock & F 41:150 Ap 28 '17
- Practice houses for students in home economics. I. E. Lord. J Home Econ 9:151-62 Ap '17
- Principles and policies in home economics education. H. W. Calvin. (Home econ. C. 4) 12p '18 U.S. Bur. of educ., Washington, D.C.
- Programs and suggestions for study clubs in home economics. A. M. Turley. Ore Ag Ext B 167:1-8 '16
- Programs for study clubs in home economics. Cornell Ag Exp Rep 1916, v 2:994-1012 '17
- Project in home economics teaching. W. W. Charters. J Home Econ 10:114-19 Mr '18
- \* Public schools and food conservation. Ping Ling. Pedagogical Seminary (Worcester, Mass. \$1.50) 25:191-210 Je '18
- Report on correlation of chemistry and home economics in high schools. M. E. Moore and others. J Home Econ 9:114-17 Mr '17
- Scope of home economics and its subject matter in universities and colleges. A. Ravenhill. J Home Econ 9:393-404 S '17
- Short courses in agriculture and home economics in the provinces. il Ag Gaz of Canada 4:363-86 My '17
- Simple course in home economics for rural schools with suggestions for school noon lunch. M. E. Gearing and others. Texas Univ (Austin) B 49:1-162 S 1 '16
- Smith-Hughes act; the training of vocational teachers in home economics. J. T. Berry. Assn Am Ag Coll & Exp Pro 1917:103-16 '18
- Some administrative problems in home economics in the public schools. H. W. Calvin. J Home Econ 9:199-204 My '17
- Some colored schools of the South. K. B. Vaughn. J Home Econ 8:588-91 N '16
- Some facts concerning manual arts and home-making subjects in one hundred fifty-six cities. J. C. Park and C. L. Harlan. (B. 32) 25p '16 U. S. Bur. educ., Washington, D. C.
- Standards for high school textbooks in home economics. A. K. Hanna. J Home Econ 8: 349-52 Jl '16
- Suggestions as to domestic science equipment. E. L. Murphy. il J Home Econ 8:353-5 Jl '16



**Home economics—Study and teaching—Cont.**

- Suggestions for teaching household arts and agriculture. 63p il '17 Ga. Dept. of educ., Atlanta
- Teaching of food values in the elementary schools. R. Biery. J Home Econ 10:353-7 Ag '18
- Teaching of home making. L. Hartman. il Penn State F 11:92 Mr '18
- Teaching of household science in the provinces. Ag Gaz of Canada 3:1093-1103; 4:143-8 D '16, F '17
- Teaching the clothing budget. J. G. Cation. J Home Econ 10:437-43 O '18
- Terminology and the Smith-Hughes bill. H. Kinne. J Home Econ 8:186-8 Ap '16
- Three short courses in home making. C. A. Lyford. (B. 23) 104p il '17 U. S. Bur. of educ., Washington, D.C.
- Training of high school teachers in an agricultural college. G. M. Wilson. J Home Econ 8:180-6 Ap '16
- Unique college exhibit. A. B. Milam. J Home Econ 8:238-40 My '16
- Unit courses in household science for Montclair housewives and maids. S. H. Bridge. Industrial Arts Magazine (129 Michigan st., Milwaukee, Wis. 25c) 6:18-19 Ja '17
- War and the home economics teachers of England. School and Soc (Science Press, Garrison, N.Y. 10c) 7:104-5 Ja 26 '18
- What should general chemistry contribute to the home economics course? N. E. Goldthwaite. J Home Econ 8:173-8 Ap '16
- What the home economics teacher can do. J Home Econ 9:365-6 Ag '17
- See also Cookery—Study and teaching; Cooking clubs; Farm home demonstration work; also Hampton normal and agricultural institute

**War economy**

- Appeal to women from the secretary of agriculture. Weekly N L 4:1 My 16 '17; Same. J Home Econ 9:267-8 Je '17
- Behind the lines; what can our American homemakers do? H. W. Calvin. il Country Gent 82:1013 Je 9 '17
- Food thrift will help to win the war—we must starve the garbage pail. C. L. Pack. Banker-F 4:12 Jl '17
- Household conservation. Ia Ag Ext Emergency Leaflet 4:1-8; 5:1-4; 6:1-4; 7:1-4 '17
- Housekeeping in war time. M. Aldis. J Home Econ 10:73-9 F '18
- Production and conservation series no. 3, 11-20, 31-9, 50-2. Vt Ag Ext '17 (Typew)
- Titles are: How can we best use skim milk; Save all bottles; Uses of asparagus; Substitute breads; Utilization of waste fats in the home; Uses of various fats; Home-made soap; Carrots and beets; Greens; Rhubarb; Needs of the body; Growth and repair foods; Regulating foods; Preservation of eggs; Three meals a day; Calorie-idea in feeding the family; Iceless refrigerator; Jar rubbers; Making fat compound at home; Grapes; Oatmeal; Sweets that save sugar
- Speeding up the household in war time. B. R. Andrews. il Ohio F 141:297+ Mr 2 '18
- Stop food waste. Weekly N L 4:6 Ap 11 '17
- We pledge ourselves. M. C. Hessler. Country Gent 82:947 My 26 '17
- What are you going to do about it? Nat Stock & F 41:248 My 26 '17
- Woman's patriotic war duties. G. V. Gray. Farm Eng 5:16 N '17

**Bibliography**

- Books for housewives in war time. Mass Ag Ext Lib Leaflet 28 1p '17
- Home economics association, American.** See American home economics association
- Home economics day**
- Home economics day, 1916. J Home Econ 8: 532-4 N '16
- Home economics exhibits**
- Home economics exhibit of Montana state college. A. McCone. J Home Econ 8:296 Je '16
- Household exhibits at fairs. I. M. K. Allison. il Colo Ag Ext Ser 105:1-16 n. d.
- Suggestions for household exhibits. Ia Ag Ext Home Econ C 5:1-8 '17-'18

War time suggestions for home economics exhibits at county or community fairs. M. Bunch and N. Newburn. Ill Ag Ext C 25:1-16 '18

**Judging**

- Domestic science and home economics score cards. Prog F 33:598 My 11 '18
- Home economics extension work**
- Extension service in home economics. Ill Ag Ext C 8:1-10 '17
- Extension work in mill villages. M. E. Frayser. J Home Econ 9:562-5 D '17
- Food demonstration work for congested city neighborhoods. 18p '17 Charity organization society. 105 E. 22d st., N.Y. (supply exhausted)
- Home economics demonstration car, 1917-1918. il Ill Ag Ext C 15:1-6 '17
- Home economics extension in its relation to (1) woman's work in the home, by E. White; (2) rural engineering and architecture, by R. J. Baldwin; (3) rural health and personal hygiene, by H. L. Russell. Assn Am Ag Coll & Exp Pro 1916:292-7, 297-300, 300-3 '17
- Home-economics extension work in the northern and western states. (In Cooperative extension work, 1916, pt. 2, p. 157-64) '17 U S Ag
- Home economics funds. Weekly N L 4:4 Ja 3 '17
- Illinois domestic science car. Wallaces' F 41: 20 Ja 7 '16
- New work in cities. Weekly N L 5:8 N 7 '17
- Organization and administration under the Smith-Lever act as related to home economics departments and the farm home. R. A. Pearson; A. M. Soule; V. P. Moore. Assn Am Ag Coll & Exp Pro 1916:115-18, 118-29, 129-31 '17
- Organization and methods in home economics extension. Mrs H. W. Calvin. Assn Am Ag Coll & Exp Pro 1915:241-7
- Report of general activities of Florida university for 1917 with financial statement for the fiscal year ending June 30, 1917. il map Fla Ag Ext Rep 1917:1-95 '18
- Splendid work in Champaign county, Ill. O Judd Farmer 64:542 My 18 '18
- What organization should precede food emergency agents in a county? M. C. Burritt; J. T. Caine, 3d. Assn Am Ag Coll & Exp Pro 1917:274-82 '18

See also Farm home demonstration work

**Home economics schools**

- List of official domestic science schools in Quebec for the year 1916-17 with the date of the foundation of each. (In Report, 1917, p. 72-3) '17 Quebec ag. dept., Quebec
- See also Roberval household science school

**Home economics surveys**

- Study of housekeeping. (In Educ. B. 21; Ind. survey ser. 6, v. 2, p. 219-310) '17 Indiana state board of education, Indianapolis

**Home education.** See Education of children

**Home nursing.** See Nurses and nursing

**Home project work**

- Correlating agriculture with the public school subjects in the northern states. C. H. Lane and F. E. Heald. il U S Ag B 28:1-42 '15
- Home credits in country schools. O. Wrenn. O Judd Farmer 60:22 Ja 8 '16
- Home floriculture and home-ground improvement; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 62) 12p '17 U. S. States relations service, Washington, D.C.
- Home project as a phase of vocational agricultural education. (B. 21; Ag. ser. 3) 41p '18 U. S. Federal bd. for vocational educ., Washington, D.C.
- Home project in secondary-school agriculture. L. H. Dennis. (In Pro., Nat. educ. assn., 1916, p. 622-6) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Home project work. C. Hornaday. il Purdue Ag 11:15-18 D '16
- Home project work in the schools. J. E. McLarty. Ag Gaz of Canada 5:79-80 Ja '18

**Home project work—Continued**

- Home project work in vocational home economics in secondary schools. M. G. Adams. *J Home Econ* 10:358-62 Ag '18
- How Cook county, Illinois links the country school and home. E. J. Tobin. *il Banker-F* 3:11 Ag '16
- Junior home project work. F. L. Griffin. *il Cornell Countryman* 14:283-6 Ja '17
- Junior work in home economics. C. Nye. *N Y Farms & Markets Dept Ag B* 97:109-12 Jl '17
- Laporte county home project work. F. R. Farnam. *il Purdue Ag* 12:69-70 N '17
- Poultry project school work. *Ag Gaz of Canada* 5:381-2 Ap '18
- The project. W. W. Reitz. *il Penn State F* 11:86-7 Mr '18
- Propagation and pruning of plants; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 63) 12p '17 U.S. States relations service, Washington, D.C.
- Raising ducks, geese, and turkeys; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 57) 10p '17 U.S. States relations service, Washington, D.C.
- School credit for home gardens and other home work. S. Laird. *J Ag (Quebec)* 19:252 Je '16
- School credit for home practice in agriculture. F. E. Heald. *U S Ag B* 385:1-27 '16
- School credits for home work. B. Highlands. *Ohio F* 137:601 Ap 22 '16
- Suggestions for organizing and supervising junior home project work. F. L. Griffin. *bibliog il Cornell Rural School Leaflet v* 11, no 2:325-72 '17
- Supervised home project work. (Educ. B 19) 42p il '17 Ind. State bd. of educ., Indianapolis
- To encourage the boys and girls; New York bankers back school-home project work. A. L. Peck. *il Banker-F* 5:10 My '18
- Types and breeds of farm animals; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 58) 12p '17 U.S. States relations service, Washington, D.C.
- Home surveys**
- Home survey—why? E. H. Forristall. *N Y Farms & Markets Dept Ag B* 97:115-18 Jl '17
- Homemakers' clubs**
- Homemakers' club. B. Bell. *Mo Ag Ext C* 19:1-4 '17
- Home makers' clubs. L. A. Jenkins. *Hampton Leaflets* 7,no 8:1-10 '16
- Homemakers' clubs of Quebec**
- Annual convention, MacDonald College, June 12-13. *J Ag (Quebec)* 22:13 Jl '18
- Homestead law**
- Application of the Ferris stockraising homestead bill to our western grazing lands. J. J. Thornber. *Am Sheep B & W* 36:166 Mr '16
- Extensive land frauds attempted under new law. *Irr Age* 32:90 Ap '17
- Grazing homestead bill. W. C. Barnes. *Breeder's Gaz* 71:141 Ja 18 '17
- Homesteads in the national forests. (Misc. L-4) 12p '17 U.S. Forest service, Washington, D.C.
- Livestock trails; important features of the 640-acre homestead act. *Nat Wool Grower* 7:37 Ap '17
- Loi concernant les homesteads servant à l'élevage du bétail et visant aussi d'autres fins aus États-Unis d'Amérique. *Int Yearbook Ag Leg* 1916:1029-32 '17
- Loi modifiant la loi relative aux homesteads au Canada. *Int Yearbook Ag Leg* 1916:1032-4 '17
- Loi pour la concession de homesteads et de prêts d'amélioration des homesteads aux soldats libérés au Canada. *Int Yearbook Ag Leg* 1916:1117-21 '17
- Make applications for stock trails under stock raising homestead law. H. S. Hinricks. *Nat Wool Grower* 7:35 My '17
- Read the 640-acre act; facts regarding the homestead law. *Am Sheep B & W* 37:138-41 Mr '17
- Ruling concerning soldiers homestead rights. *Irr Age* 32:86 Ap '17
- 640-acre homestead law. *Nat Wool Grower* 7:43+ Ja '17
- Soldiers' widows and public land. C. M. Bruce. *Rural N Y* 76:696 My 19 '17
- Square mile of land for the asking. W. C. Barnes. *il Am For* 24:213-18 Ap '18
- Statutes and regulations governing entries and proofs under the desert-land laws, together with suggestions to persons desiring to make entries under said laws. (C. 474) 44p '16 U.S. General land office, Washington, D.C.
- Stock-raising homestead law; explanatory statement relative to the provisions of the act entitled An act to provide for stock-raising homesteads, and for other purposes, together with a copy of the act as approved by the President of the United States on December 29, 1916. (U. S. 64th Cong. 2d sess. S. Doc. 663) 8p '17 Apply to congressmen
- Homing pigeons.** See Pigeons
- Homogenized cream.** See Cream, Homogenized
- Homogenized milk.** See Milk, Homogenized
- Honduras.** See subhead Honduras under Dairying and Forests and forestry
- Honey**
- Agricultural situation for 1918; more honey needed. *U S Ag C* 87:1-8 '18
- As glimpsed thru the camera. H. H. Root. *il Gleanings* 44:674-6 Ag 1 '16
- Bees and how to keep them. F. W. L. Sladen. p 22-33 il '16 Canada Ag
- Bees busy, yes! honey has become valuable food crop. *Weekly N L* 6:14 Ag 7 '18
- Being sweet without sugar. M. G. Phillips. *Am Bee J* 58:198-9 Je '18
- Beware fermented honey. H. H. Root. *il Gleanings* 46:398 Jl '18
- Canning with honey. A. L. Andrea. *il Country Gent* 83:33 Jl 20 '18
- Changing from comb to extracted honey. C. P. Dadant. *Am Bee J* 58:200 Je '18
- Clean section honey. F. Jager. *il Am Bee J* 56:17 Ja '16
- Color of honey from goldenrod and aster. C. C. Miller. *Am Bee J* 57:332 O '17
- Comb honey and bulk comb honey. E. F. Phillips. *Prog F* 31:617 My 6 '16
- Comb honey, extracted honey, and increase. *Minn Hort* 44:232 My '16
- Comb to extracted honey. *Gleanings* 46:145-7 Mr '18
- Comb versus extracted honey. *Gleanings* 45:91-2 F '17
- Creating a demand for honey. T. P. Robinson. *il Am Bee J* 57:9 Ja '17
- Crop report and market conditions. *Am Bee J* 58:140 Ap '18
- Crop reports and market conditions. *Am Bee J* 57:320 S '17
- Danger-point in heating honey. G. Shiber. *Gleanings* 44:853 S 15 '16
- Efficient production of extracted honey in California. G. W. Bercaw. *Gleanings* 44:489-90 Je 15 '16
- Exportation of American honey into Germany. *Gleanings* 44:965 O 15 '16
- Fruit and vegetables canned in honey. *Gleanings* 45:443 Je '17
- Granulation of comb honey. *Gleanings* 44:467 Je 15 '16
- Hive and honey dew mediums for distributing fire blight; with discussion. H. A. Gossard. *il J Econ Entom* 9:59-67 F '16
- Holland honey and honey crops. J. H. J. Hamelberg. *il Gleanings* 44:977-8 O 15 '16
- Honey and good health. *Am Bee J* 58:240 Jl '18
- Honey and its uses in the home. *J Home Econ* 8:87-90 F '16
- Honey as a food. M. Sterritt. *Minn Hort* 46:349 S '18
- Honey as a sugar substitute. S. Puerden. *Rural N Y* 76:1336, 1347 N 17-24 '17
- Honey as food. *Am Bee J* 56:62 F '16
- Honey—compared with other sweets. A. C. Baxter. *Am Bee J* 57:200 Je '17
- Honey-crop conditions and prices; the effect of the drouth. *Gleanings* 44:710 Ag 15 '16
- Honey in hive where bees froze. W. S. Pangburn. *Wallaces' F* 43:550 Mr 22 '18
- Honey is a wholesome sweet. *Am Bee J* 56:349 O '16



**Honey—Continued**

- Honey production and prices. Monthly Crop Rep 3:85 S '17  
 Honey versus sugar. Am Bee J 58:406 D '18  
 Honeybee and honey. Gleanings 44:186 Mr 1 '16  
 Honeybees and honey production in the United States. S. A. Jones. U S Ag B 685:1-61 '18  
 Honeybees: wintering, yields, imports and exports of honey. S: A. Jones. U S Ag B 325:1-12 '15  
 How about honey for a side line? R. Wilmot. Gleanings 44:529-30 J1 1 '16  
 How an Illinois farmer succeeds with 500 hives. F. C. Pellett. il Country Gent 81:286 F 5 '16  
 Importance of honey production. E. R. Root. Mass Ag Bd C 81:1-10 '18  
 Is honey a luxury? J. A. Brown. Gleanings 45:686-7 S '17  
 Liquefying and packing honey. G. M. Ranum. Am Bee J 58:272 Ag '18  
 Liquefying granulated honey. Gleanings 44:98 F 1 '16  
 Money from honey. C. P. Dadant. il Ill Farmers Inst Household Sci 1917:171-6 '18  
 More honey is wanted. J Ag (Quebec) 21:132 Mr '18  
 Necessity for increasing the honey crop. E. F. Phillips. Am Bee J 57:156 My '17  
 New England honeys and honey markets. A. Latham. Am Bee J 56:128 Ap '16  
 Nourishment in honey. M. A. Porter. Am Bee J 58:95-6 Mr '18  
 Only substitute for sugar. J: W. Love. il Country Gent 82:1813 N 24 '17  
 Our honey surplus. Country Gent 81:260 F 5 '16  
 Producing saleable honey. A. C. Miller. Am Bee J 57:275 Ag '17  
 Quality vs. quantity. A. C. Miller. Gleanings 45:600-2 Ag '17  
 Race between honey and wax. A. J. Wright. Gleanings 44:441 Je 1 '16  
 Rock honey of India. N. Tournour. Gleanings 44:1033-4 N 1 '16  
 Short cuts to big production. Am Bee J 57:336-7 O '17  
 Some theories on the color variation in honey. W. I. Lively. Gleanings 44:923 O 1 '16  
 Sugar shortage is honey's opportunity. C. Gano. Am Bee J 58:116-17 Ap '18  
 Ticking the palate of a nation. Gleanings 44:34 Ja 1 '16  
 Unsanitary conditions and unwholesome methods surrounding the manipulation, packing and marketing of honey. E. F. Lein. Am Bee J 58:121 Ap '18  
 Usefulness of bees in horticulture, and the value of honey as a diet. C. P. Dadant. il Ill Farmers Inst Rep 1917:176-86 '17  
 Wasted sugar supply. E. F. Phillips. il U S Ag Yearbook 1917:395-400  
 Weather and honey production. L. A. Kenoyer. Ia Ag Exp B 169:15-26 '17  
 Why sugar-fed honey is never found on the market. W: Cox. Gleanings 44:805 S 1 '16  
*See also* Bees; Nectar secretion; also National conference on honey production

**Analysis**

- Detection of artificial invert sugar in honey. F. L. Shannon. Assn Offic Ag Chem J 2,no 3,pt 1:169-74 N '16

**Bibliography**

- Bees and honey; selected list prepared by A. L. A. committee on food information. 4p mim '18 Univ. of Ill., Coll. of ag., Urbana

**Composition**

- Chemical composition of Hungarian honey. Int R Sci & Prac Ag 7,no 1:147-8 Ja '16  
 Honey: some qualities not generally known. J. A. Heberle. Gleanings 44:494 Je 15 '16

**Costs**

- Cost of honey production. A. C. Miller. Gleanings 44:591-2 J1 15 '16  
 Production costs and how to figure them. A. C. Miller. Am Bee J 56:271 Ag '16  
 Production costs—how to figure them. C. P. Dadant. Am Bee J 56:272 Ag '16

**Exhibits**

- Advertising at New England fairs. A. W. Yates. il Am Bee J 56:129 Ap '16  
 Honey at the Panama Pacific exposition. C: D. Stuart. Am Bee J 56:203-4 Je '16  
 Honey exhibits at the Kansas state fair. J. P. Lucas. il Gleanings 44:1072-3 N 15 '16  
 Remarkable display of honey by the Connecticut beekeepers' association, Hartford fair, September 6-11, 1915. B. N. Gates. il Gleanings 44:530-2 J1 1 '16

**Extraction**

- Advantages of the central extracting-plant. W. H. Crawford. Gleanings 44:189-90 Mr 1 '16  
 Agitator in the hive. il Gleanings 44:15-16 Ja 1 '16  
 Apiary building and equipment. Am Bee J 58:379 N '18  
 Efficient solar extractor. C. D. Cheney. Gleanings 44:447 Je 1 '16  
 Extracted honey. E. F. Phillips. Prog F 31:729 Je 3 '16  
 Extracting honey. E. I. Farrington. Country Life 34:72-6 Ag '18  
 Extracting-house on wheels. T. E. Holmes. Gleanings 44:198-9 Mr 1 '16  
 Extracting on a trailer. H. H. Root. il Gleanings 45:598-600 Ag '17  
 Gravity method of straining honey in New Mexico. W. H. Crawford. Gleanings 44:495 Je 15 '16  
 How to get all the honey from cappings. H. H. McIntyre. Gleanings 44:596 J1 15 '16  
 In the hives but not in the cans. F. Greiner. Gleanings 44:854 S 15 '16  
 It takes no more trips to operate outyards from a central extracting-plant. A. B. Mann. Gleanings 44:357-8 My 1 '16  
 Let the bees do the work; cleaning honey from combs after extracting. G. A. Deadman. il Gleanings 44:597-9 J1 15 '16  
 1915 with the wire escape-board. A. J. Knox. Gleanings 44:66-7 Ja 15 '16  
 Nix on the solar. W. H. Oates. Gleanings 44:445 Je 1 '16  
 Portable extracting-outfit vs. the central plant. J. F. Archdekin. Gleanings 44:452 Je 1 '16  
 Profitable production of beeswax; running combs and honey thru the solar extractor. J. Gray. il Gleanings 44:444 Je 1 '16  
 Some experiments with portable extracting outfits. H. H. Root. il Gleanings 44:733-5 Ag 15 '16  
 Strained honey. J. E. Crane. Am Bee J 58:87 Mr '18  
 Uncapping-room arranged on the gravity plan. P. C. Chadwick. il Gleanings 44:187-9 Mr 1 '16  
 Using the Severin separator with the Peterson melter. J. E. Jordan. Gleanings 44:446 Je 1 '16  
 Wisconsin beekeeper tells how he provided an extracting equipment. E. E. Colien. il Gleanings 46:213 Ap '18

**Grading**

- Central grading stations for comb honey. L. A. Knemeyer. il Am Bee J 57:261 Ag '17  
 Grading and packing. F. Jager. Minn Hort 44:327 Ag '16  
 Grading comb honey. W. Foster. il Country Gent 81:1629 S 2 '16  
 Honey grading rules. Gleanings 44:699-700 Ag 15 '16; Same. Gleanings 44:1003 N 1 '16  
 Necessity for adequate grading. J: W. Love. Gleanings 44:667 Ag 1 '16

**Marketing**

- Advertising. W. S. Pangburn. Am Bee J 57:340 O '17  
 Advertising—a reply to Bonney's criticism. F. C. Pellett. il Am Bee J 56:275 Ag '16  
 Advertising honey. A. F. Bonney. il Am Bee J 56:274 Ag '16  
 Advertising honey. J. Smith. il Am Bee J 58:89 Mr '18  
 Advertising of honey. W. Foster. Gleanings 44:265 Ap 1 '16

**Honey—Marketing—Continued**

- Appearance the most important advertisement. R. C. Gifford. *Gleanings* 44:537 J1 1 '16
- Art in advertising. A. F. Bonney. *il Am Bee* J 57:273 Ag '17
- Beekeeping for women. D. Q. Wright. *il Country Gent* 83:58 Mr 16 '18
- Cash for your honey. F. C. Pellett. *il Country Gent* 82:1127 J1 7 '17
- Cheap advertising. *il Gleanings* 44:544 J1 1 '16
- Comb honey and the federal net weight law. F. Rauchfuss. *Am Bee* J 56:167 My '16
- Co-operative selling pays Texas honey producers. C. Gano. *Am Bee* J 58:158, 192 My-Je '18
- Developing the home market. F. C. Pellett. *il Am Bee* J 57:259-60 Ag '17
- Disposing of the honey crop. G. C. Greiner. *il Am Bee* J 56:262 Ag '16
- Getting your honey to market. *il Am Bee* J 56:187-90 Je '16
- Girls as home sellers. E. C. Walker. *il Gleanings* 45:112-13 F '17
- Honey for cooking. B. N. Gates. *Am Bee* J 58:225 J1 '18
- Honey-labels. J. Tinsley. *il Gleanings* 44:24 Ja 1 '16
- How co-operative associations distribute and sell. R. C. Gano. *Am Bee* J 58:377 N '18
- How I dispose of the crop. W. S. Pangburn. *Am Bee* J 57:302-3 S '17
- How I study conditions for developing home markets. E. Hassinger, jr. *System on the Farm* 1:297 O '17
- I am not a salesman. G. C. Greiner. *Gleanings* 44:670 Ag 1 '16
- Inexpensive but effective advertising. F. Kittinger. *il Gleanings* 44:533 J1 1 '16
- Interpretation of the net weight regulations for marking packages of honey. B. N. Gates. *Mass Ag Bd Yearbook* 1917, pt 2: 146-51 '18
- Many ideas on selling honey and honey prices. *Gleanings* 45:593-7 Ag '17
- Marketing. A. C. Millar. *Am Bee* J 56:191 Je '16
- Marketing farm honey. S. H. Cobb. *Ohio F* 140:508 D 1 '17
- Marketing honey. A. F. Bonney. *Am Bee* J 57: 56-7 F '17
- Marketing honey. C. P. Dadant. *Am Bee* J 56: 414 D '16
- Marketing honey. J. W. Love. *Country Gent* 81:413 F 19 '16
- Marketing honey. E. F. Phillips. *Prog F* 31:955 Ag 5 '16
- Marketing honey locally. J. Gray. *Gleanings* 44:673 Ag 1 '16
- Marketing honey on rubber tires. L. L. Winship. *Gleanings* 44:677 Ag 1 '16
- National publicity campaign for honey; suggestions of an advertising specialist. R. C. Gano. *il Am Bee* J 56:79-81 Mr '16
- New National honey-producers' association. W. Foster. *Gleanings* 44:659-60 Ag 1 '16
- New sizes of bulk- comb-honey packages. *Gleanings* 44:52 Ja 15 '16
- Packages for extracted honey. M. Pettit. *Am Bee* J 58:197-8 Je '18
- Personal experience in marketing honey direct to the consumer. R. R. Bent. *Am Bee* J 57: 267 Ag '17
- Problems of marketing get attention of Indiana bee-keepers. *Gleanings* 44:65 Ja 15 '16
- Put yourself in the customer's place. R. C. Gifford. *il Gleanings* 44:669-70 Ag 1 '16
- Right and wrong way of advertising honey. J. W. Love. *Gleanings* 44:540 J1 1 '16
- Roadside marketing. *il Gleanings* 45:13-19 Ja '17
- Scheme to raise money for advertising. W. S. Ponder. *Gleanings* 44:151-2 F 15 '16
- Scientific honey marketing. N. W. Peck. *Am Bee* J 58:302-3 S '18
- Selling a crop by sample; home trade vs. wholesale. G. Dodds. *Gleanings* 44:678 Ag 1 '16
- Selling honey by automobile in Montana. G. W. York. *Am Bee* J 57:17 Ja '17
- Selling honey—what points to emphasize. E. M. Cole. *Am Bee* J 56:404 D '16
- Selling my first car of honey. E. G. Le Stourgeon. *Am Bee* J 56:55 F '16

Shall we carton our comb honey. F. Greiner. *Am Bee* J 57:338 O '17

Some conditions of honey-selling and some suggestions. A. C. Miller. *Gleanings* 44:665-7 Ag 1 '16

Some of my advertising schemes. A. F. Bonney. *Gleanings* 44:543 J1 1 '16

Western New York honey-producers' association. W. F. Vollmer. *Gleanings* 44:657 Ag 1 '16

What I have learned in selling my own crop. W. Garabrant. *Gleanings* 44:671 Ag 1 '16

*See also* Beekeepers' associations

**Prices**

Eternal price question. A. F. Bonney. *Gleanings* 46:600 O '18

High prices of honey in France. *Am Bee* J 58:374 N '18

Present and future of beekeeping. E. R. Root. (*In Report*, Beekeepers' assn. of Ontario, 1917, p. 29-32) '18 Ontario ag. dept., Toronto

\* Value and moral effect of the price committee. E. Hassinger, jr. (*In Report*, 1917, p. 79-91) '18 Ill. State beekeepers' assn., Springfield

**Statistics**

Commercial stocks of honey, Jan. 1. U S Food Surveys 1:11-13 Je 14 '18

Commercial stocks of honey, July 1. U S Food Surveys 2:9-11 S 18 '18

Honey bees and honey plants. *Monthly Crop Rep* 3:88 S '17

Honey report. *Monthly Crop Rep* 3:113 N '17

Honey yields and prospects, 1917. *Monthly Crop Rep* 3:57 J1 '17

Honey yields and prospects, 1918. *Monthly Crop Rep* 4:80 J1 '18

**Storage**

How best to store the honey and combs after the harvest. G. M. Doolittle. *Gleanings* 46: 469 Ag '18

Keeping comb honey in Florida. E. G. Baldwin. *Gleanings* 44:1121 D 1 '16

Use of barrels for honey. *il Am Bee* J 57:266 Ag '17

**Transportation**

Hearing on comb honey freight rates. *Gleanings* 44:1106 D 1 '16

Needless loss of honey. H. H. Root. *il Gleanings* 46:465-7 Ag '18

Paper containers for honey. F. W. L. Sladen. *il J Ag (Quebec)* 21:179 Je '18

Safe methods of shipping comb honey. G. Dodds. *il Gleanings* 45:265-6 Ap '17

Shipping comb honey. *Gleanings* 44:912 O 1 '16

Shipping comb honey by parcel post. J. L. Byer. *Gleanings* 44:234 Mr 15 '16

**Honey dew melons**

Honey dew melon. M. L. Williams. *Country Gent* 81:1615 S 2 '16

**Honey houses. See Bee and honey houses****Honey plants**

Acacias. W. A. Pryal. *il Am Bee* J 58:273 Ag '18

Bee-keeping in Victoria; honey flora of Victoria. F. R. Beuhne. *il J Dept Ag Victoria* 14:170-7, 244-9, 479-86, 687-93; 15:36-41, 113-16, 303-7 Mr-Apr, Ag. N '16. Ja-F. My '17

Bees in the lower Rio Grande valley. F. C. Pellett. *il Am Bee* J 58:187-9 Je '18

Bees in the Middle West; sweet clover favorable for honey production. E. R. Root. *il Gleanings* 45:512-16 J1 '17

Bird flowers often listed as honey-plants. J. H. Lovell. *il Gleanings* 46:20-1 Ja '18

Buckwheat for bee food. *Rural N Y* 76:1344 N 24 '17

Bumblebee flowers. J. H. Lovell. *il Am Bee* J 57:264-6 Ag '17

Dandelion as a honey-plant and as a nuisance. E. R. Root. *il Gleanings* 45:252 Ap '17

Flowers of California. W. A. Ryal. *Am Bee* J 58:129 Ap '18

Glimpses of southern beekeeping—boneset. J. S. Scott. *Am Bee* J 58:267 Ag '18

Goldenrods as honey plants. F. C. Pellett. *il Am Bee* J 57:300-1 S '17

Growing sweet clover. *il Am Bee* J 58:84-5 Mr '18



**Honey plants—Continued**

- Hawaiian algaroba. L. Burr. *il* Gleanings 45: 23-6 Ja '17
- Honey flora of New England. J: H. Lovell. *il* Am Bee J 56:122-3 Ap '16
- Honey from bitterweed. J. S. Scott. Am Bee J 58:386 N '18
- Honey plant regions of North America. J: H. Lovell. maps Am Bee J 57:115-17 Ap '17
- Honey-plants on the island of Oahu. L. Burr. *il* Gleanings 44:104-5 F 1 '16
- Honey-producing plants. F. C. Pellett. *il* Am Bee J 56:16, 53, 90, 162, 200, 236, 269, 311, 340-1, 379, 418; 57:16 Ja-Mr, My '16-Ja '17
- Honey sources in Tennessee. A. Getaz. Am Bee J 56:87 Mr '16
- Honey sources of Canada. F. W. L. Sladen. Am Bee J 56:376 N '16
- Honey-yielding flowers of British Columbia. W. J. Sheppard. Am Bee J 57:381 N '17
- My neighbor's garden. C: D. Stuart. *il* Am Bee J 57:19-20 Ja '17
- Native honey-plants of New Zealand. W. B. Bray. *il* Gleanings 44:1122-4 D 1 '16
- Notes on asters as sources of nectar. F. C. Pellett. *il* Am Bee J 58:331-3 O '18
- Notes on honey plants: buckbrush or Indian currant and snowberry. *il* Am Bee J 58:54-5 F '18
- Palmettos of Florida. *il* Am Bee J 58:408-9 D '18
- Pastures for bees. J. R. Cavaugh. Purdue Ag 10:37-8 Ap '16
- Pollen-grains as source-indicators of honey. R. Waters. *il* J Ag New Zealand 12:279-81 Ap '16
- Present and future sources of honey in New Zealand. A. H. Cockayne. J Ag New Zealand 13:27-35 Jl '16
- Red clover as a honey plant. F. C. Pellett. *il* Am Bee J 58:238-9 Jl '18
- Russian oleaster a valuable overlooked honey plant. L. H. Pammel. *il* Am Bee J 57:374 N '17
- Sages of California. F. C. Pellett. *il* Am Bee J 57:403-4 D '17
- Some of the honey-plants of Paraguay. J. Brown. Gleanings 44:807 S 1 '16
- Sources of honey in the Ozark mountains. O. A. Griffith. *il* Gleanings 44:278 Ap 1 '16
- Sow sweet clover right where you are—lots of it and keep at it. V. Weaver. Gleanings 46:150 Mr '18
- Sweet clover as a farm crop. *il* Am Bee J 58: 7-8 Ja '18
- Sweet clover in the Northwest. R. A. Morgan. Am Bee J 57:378 N '17
- Sweet clover—its value to the beekeeper. M. G. Dadant. *il* Am Bee J 56:51 F '16
- Two varieties of the eucalyptus. L. Burr. *il* Gleanings 44:979-80 O 15 '16
- Work of the bee division of the Dominion experimental farms. F. W. L. Sladen. Am Bee J 57:228 Jl '17
- See also* Pollen plants

**Statistics**

- Honey bees and honey plants. Monthly Crop Rep 3:88 S '17
- Honey, trunks and trouble;** story. M. G. Phillips. Gleanings 46:402-3 Jl '18
- Honeydew**
- Honeydew—its origin. J. A. Heberle. Am Bee J 56:381 N '16
- Plant lice and honeydew. B. N. Gates. Am Bee J 57:346 O '17
- Honeysuckles**
- Bush honeysuckles. Am Flor 46:1070 Je 3 '16
- Lonicera griffithii. Gard Chron (Lond) 60:42 Jl 22 '16
- Honourary advisory council for scientific and industrial research.** *See* Council for scientific and industrial research
- Hooker, Joseph D.**
- Life and letters of Sir Joseph D. Hooker, by L. Huxley. Review by H. J. Elwes. Gard Chron (Lond) 64:65 Ag 17 '18
- Hoosier schoolmaster.** E: Eggleston. *See* weekly numbers of Progressive farmer beginning Oct. 27, 1917

**Hoover, Herbert Clark, 1874-**

Hoover, organizer. B. Adams. Cornell Coun-tryman 14:739 Je '17

**Hop mildew**

- Fungicidal properties of certain spray-fluids. J. V. Eyre and E. S. Salmon. J Ag Sci 7: 473-507 Ap '16
- Further studies on the spread and control of hop mildew (B. 395). F. M. Blodgett. bibliog *il* N Y State Ag Exp Rep 1915:239-90 '16
- Mildew resistant hops. Gard Chron (Lond) 63:46 F 2 '18
- On forms of the hop (*humulus lupulus* L.) resistant to mildew (*sphaerotheca humuli* (DC.) Burr.). E. S. Salmon. bibliog J Ag Sci 8:455-60 D '17

**Hop redbugs**

- Hop redbug (*paracalocoris hawleyi* Knight). I. M. Hawley. *il* J Econ Entom 10:545-52 D '17

**Hopperdozer**

- Hopperdozer for catching grasshoppers in oil or tar. Power F 26:20 Ag '17

**Hops**

- Aroma of hops: a study of the volatile oil with relation to the geographical sources of the hops. F. Rabak. bibliog J Ag Research 2: 115-59 My '14
- Austrian hop situation. W. J. Young. (Com-merce Reports 99) p 369-71 (Ap 28) '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.
- Crisis in hops and co-operation. Int R Ag Econ 63:44-5 Mr '16
- Experiments with potash manures on hops in Germany. F. Ancker. Int R Sci & Prac Ag 7,no 11:1619-21 N '16
- Hops that raise bread. E. W: Gage. Rural N Y 77:185, 225 F 9-16 '18
- Improvement of hops by crossing and selec-tion. E. S. Salmon. Int R Sci & Prac Ag 8, no 12:1207-8 D '17
- Presence of arsenic in hops. W. W. Stock-berger and W. D. Collins. U S Ag B 568:1-7 '17
- Relative precision of formulæ for calculating normal plot yields. W. W. Stockberger. Am Soc Agron J 8:167-75 My '16
- Trials of hop cultivation in Italy. A. Guse-lotto. Int R Sci & Prac Ag 7,no 6:834-5 Je '16
- Two new seedling hops of commercial prom-ise. E. S. Salmon. *il* J Bd Ag 23:47-51 Ap '16

**Diseases and pests**

- Spraying with black leaf 40 to control aphid and red spider on hops (B. 3-L) 8p *il* '16
- Kentucky tobacco product co., Louisville
- See also* Hop mildew

**Marketing**

- See also* California hop growers' associa-tion

**Statistics**

- Hop production and consumption. Monthly Crop Rep 3:106 N '17
- Hops in the United States and other coun-tries, including imports and exports. *See* United States Department of agriculture Yearbooks,

**Storage**

- Study of the soft resins in sulphured and un-sulphured hops in cold and in open storage. G. A. Russell. U S Ag B 282:1-19 '15

**Hormones.** *See* Secretions (botany)

**Hornets**

- Paper-making in the insect world. R. W. Shu-feldt. *il* Am For 23:431-2 Jl '17
- Yellow peril. C: D. Stuart. *il* Am Bee J 56:337-8 O '16

**Horns**

- Denorn the feeders. plans Weekly N L 5:2 O 10 '17
- Dehorning and castrating cattle. F. W. Far-ley. *il* plans Farmers' B 949:1-13 '18
- Dehorning cattle. R. L. Buchanan. Country Gent 81:1027 My 13 '16
- Dehorning cattle. I. W. Carpenter. Prog F 32:904 Ag 25 '17

**Horns—Continued**

- Dehorning of cattle. A. C. Shideler. *Purdue Ag* 10:26-7 My '16  
 Dehorning of cattle. A. R. Young. *il J Ag New Zealand* 16:7-11 Ja '18  
 Horned horses. J. E. Miller. *il J Heredity* 8:303-5 Jl '17  
 How to dehorn cattle. *Weekly N L* 5:1 My 8 '18  
 How to dehorn cattle. G. S. Templeton. *il Prog F* 31:74 Ja 15 '16  
 More about horns. *Jersey B* 36:1722 O 31 '17

**Horse beans. See Beans****Horse breeders' societies**

- Community effort in draft horse breeding. J. L. Edmonds. *il N Y Ag Dept Rep* 1916, pt 2:216-20 '17  
 From *N Y Ag Dept B* 76  
 Community horse breeding. *Breeder's Gaz* 71:17 Ja 4 '17  
 Company stallion buying profitable. C. M. McConnell. *Ohio F* 140:214 S 15 '17  
 Co-operative shipments of draft geldings. *Ag Digest* 1:103 S '16  
 How a breeders' association sells Percherons. C. M. Baker. *Breeder's Gaz* 70:594 O 5 '16  
 Successful county horse breeders' association. C. M. Baker. *il Ohio F* 138:429 N 4 '16

*See also* Indiana draft horse breeders' association; Iowa draft horse breeders' association; Missouri draft horse breeders' association; Missouri saddle horse breeders' association; Percheron society of America

**Horse breeding**

- Ancestry of Ethan Allen. *Breeder's Gaz* 69:81 Ja 13 '16  
 Artificial insemination. E. H. Riley. *il Mont Ag Exp C* 63:57-66 '17  
 Back to the cavalry horse. W. L. Nelson. *Breeder's Gaz* 70:1107 D 14 '16  
 Belgians as related to future breeding. F. B. Holbert. *Breeder's Gaz* 72:1267 D 27 '17  
 Better horses for Kansas. F. B. Nichols. *Country Gent* 81:715 Mr 25 '16  
 Better horses for Utah. W. E. Carroll. *Utah Ag Exp C* 18:1-10 '16  
 Better horses; industry can be rapidly built up in the United States by elimination of the inferior stallion. *il J Heredity* 8:512-16 N '17  
 Bloodlines of great Percheron sires. W. Dinsmore. *Breeder's Gaz* 72:211 Ag 16 '17  
 Breeding a horse for general purposes in the hills. F. E. Place. *J Dept Ag S Australia* 21:229-34 O '17  
 Breeding farm mares. W. H. Tomhave. *Prac F* 112:237 Je 1 '16  
 Breeding horses. F. E. Place. *J Dept Ag S Australia* 20:785-90 My '17  
 Breeding horses for the army. W. H. Carter. *Breeder's Gaz* 69:967 My 4 '16  
 Breeding horses for the United States army. H. H. Reese. *il U S Ag Yearbook* 1917:341-56; Same. Separate 754  
 Breeding horses to color. W. S. Anderson. *Breeder's Gaz* 70:95 Jl 20 '16  
 Breeding polo ponies. A. H. Godfrey. *Breeder's Gaz* 70:1069 D 7 '16  
 Capsule method of breeding mares. W. E. Carroll and H. J. Frederick. *Utah Ag Exp C* 20:1-6 '16  
 Cavalry horse. L. E. Clement. *Wallaces' F* 41:240 F 11 '16  
 Choosing the draft sire. W. L. Houser. *Breeder's Gaz* 70:1106 D 14 '16  
 Clydesdale breeding in Scotland. *il Field* 11:28:436 Je '18  
 Coital exanthema with secondary pus infection; with discussion. H. Simpson. *Am Vet M Assn J* 52:257-62 D '17  
 Community breeding in Hometown, Ind. C. M. McConnell. *il Ohio F* 141:585+ Ap 27 '18  
 Community horse breeding. *Breeder's Gaz* 71:17 Ja 4 '17  
 Contribution to the study of hereditary unsoundness in horses. W. A. N. Robertson. *J Dept Ag Victoria* 16:468-78 Ag '18 (to be cont)  
 Correlation between the size of cannon bone in the offspring and the age of the parents. C. Wriedt. *bibliog J Ag Research* 7:361-71 N 20 '16  
 Decadence of horse breeding. H. M. Jones. *il J Heredity* 9:125-30 Mr '18  
 Does horse breeding pay? L. Slack. *il Ohio F* 141:771 Je 15 '18  
 Encouragement and improvement of light horse-breeding in 1914-15. *J Bd Ag* 22:1252-9 Mr '16  
 Encouragement and improvement of light horse breeding, 1915-16. *J Bd Ag* 23:1194-1202 Mr '17  
 Encouragement and improvement of light horse-breeding, 1916-17. *J Bd Ag* 24:1384-8 Mr '18  
 Enrollment records and breeding progress. W. Dinsmore. *Breeder's Gaz* 71:1121 My 31 '17  
 Exceptional fecundity and longevity. H. M. Jones. *il J Heredity* 7:562-4 D '16  
 Farmer's brood mare. J. M. Bell. *Rural N Y* 75:564 Ap 1 '16  
 Fundamentals in horse-breeding. *Breeder's Gaz* 74:190 Ag 8 '18  
 Getting started in horse breeding. W. Dinsmore. *il Country Gent* 83:8-9 Mr 2 '18  
 Good farm horses. A. H. Covey. *il Country Gent* 81:633 Mr 18 '16  
 Government assistance to horse breeding. W. Dinsmore. *Breeder's Gaz* 73:1338 Je 27 '18  
 Government stallions for remount breeding. S. R. Winters. *Breeder's Gaz* 74:229 Ag 15 '18  
 Hackney-Percheron cross. A. H. Godfrey. *Breeder's Gaz* 73:206 Ja 31 '18  
 Henry Fairfax as a horse breeder. A. H. Godfrey. *Breeder's Gaz* 70:316 Ag 31 '16  
 Hereditary unsoundnesses in horses. C. W. McCampbell. *Breeder's Gaz* 70:935 N 16 '16  
 Honor roll for draft sires. C. N. Kennedy. *Breeder's Gaz* 69:495 Mr 2 '16  
 Hoosier farmer's horse family. C. M. McConnell. *il Country Gent* 81:45-6 Ja 8 '16  
 Horse-breeding in India. *Ag J of India* 13:152-7 Ja '18  
 Horse breeding in Oregon. *Breeder's Gaz* 69:80 Ja 13 '16  
 Horse-breeding industry in the United States. P. L. Koenig. *Penn State F* 9:430-1 O '16  
 Horsebreeding situation. C. M. McConnell. *il Ohio F* 141:491 Ap 6 '18  
 Horse-breeding suggestions for farmers. H. H. Reese. *il Farmers' B* 803:1-21 '17  
 Horse breeding; with discussion. M. W. Harper. *N Y Ag Dept B* 80:1528-36 F '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1528-36 '17  
 Horse industry in New York state (B, 76). *il N Y Ag Dept Rep* 1916, pt 2:1-278 '17  
 Horse for work and play; the quarter-horse. D. D. Casement. *il Field* 11:26:513+ Je '16  
 Horses for the army. G. A. Bell. *il Country Life* 32:33-5 Jl '17  
 Illustrated lectures on the hackney. A. H. Godfrey. *Breeder's Gaz* 72:248 Ag 23 '17  
 Improving horses in the Southwest. R. H. Williams. *Breeder's Gaz* 72:318 S 6 '17  
 Indiana horse breeding. C. M. McConnell. *il Ohio F* 141:219 F 16 '18  
 Influence of the International on heavy horse breeding. J. H. S. Johnstone. *il Field* 11:26:1013+ D '16  
 Influence of the stallion keeper. C. M. McConnell. *il Ohio F* 140:57 Jl 28 '17  
 Information for horse breeders. L. L. Lewis and W. P. Shuler. *Okla Ag Exp C* 43:1-11 '17  
 Inheritance of color in horses. L. P. McCann. *Breeder's Gaz* 69:1331 Je 29 '16  
 Iowa's position in draft horse breeding, by W. Dinsmore; Problems confronting the farmer breeder, by D. L. Berry. (*In* 5th annual report Stallion registration division, p. 33-41) '17 Ia. ag. dept., Des Moines  
 Lack of uniformity in horses. L. Ogilvy. *Breeder's Gaz* 69:774-5 Ap 6 '16  
 Managing Percheron mares and foals on a cornbelt farm. *il Breeder's Gaz* 69:769 Ap 6 '16  
 Mare in horse improvement. H. E. McCartney. *Breeder's Gaz* 69:133 Ja 20 '16



**Horse breeding—Continued**

Missouri saddle horse breeders' association; report of annual meeting. Mo Ag Bd Year-book 1916:155-69

National horse. R. V. Agnew. Am Vet M Assn J 49:251-3 My '16

Needed horse improvement. C. M. McConnell. Ohio F 140:581 D 22 '17

Organized effort brings success in Percheron horse breeding. O. H. Pollock. il Breeder's Gaz 72:1134-5 D 20 '17

Percentage of foals. J Ag (Quebec) 21:24 Ag '17

Planning for better horses. Country Gent 81:506 Mr 4 '16

Present tendencies in horse breeding. H. C. McCartney. Purdue Ag 12:134-6 D '17

Problems of successful horse breeding. L. Ogilvy. Breeder's Gaz 69:496 Mr 2 '16

Progress of a horse breeding experiment. P. A. Ingvason. il Breeder's Gaz 71:729 Ap 5 '17

Prospects facing the purebred industry. il Ohio F 137:211 F 12 '16

Prospects for horse breeding. J. Bright. (In Report, Live stock branch, 1916, p. 57-60) '17 Ontario ag., dept., Toronto, Canada

Proving utility value as a means of increasing sales. G. R. Crouch. il System on the Farm 1: 19-20 Mr '17

Purebred sires pay. Weekly N L 5:7 D 12 '17

Reconstruction of horse breeding. il Breeder's Gaz 72:979 N 29 '17

Roaring in horses as it relates to horse breeding. W. L. Williams. Am Vet M Assn J 51:624-35 Ag '17

Saddle horse breeders at Louisville. Breeder's Gaz 69:826-7 Ap 13 '16

Selecting and mating the mares. C. M. McConnell. il Ohio F 139:550 Ap 14 '17

Selection of breeding draft horses. C. N. Arnett. il Mont Ag Exp C 69:17-32 '17

Shire in the Northwest. G. E. Brown. Breeder's Gaz 69:870 Ap 20 '16

Small breeder. W. Dinsmore. Nat Stock & F 40:626 S 16 '16

Small breeder's opportunity. H. E. McCartney. Breeder's Gaz 73:159 Ja 24 '18

Some important essentials in profitable horse production. C. W. McCampbell. Kan Ag Exp Inspec C 2 4p '16

Soundness as related to horse improvement. E. N. Wentworth. Breeder's Gaz 70:239 Ag 17 '16

Stallion legislation and the horse-breeding industry. C. C. Glenn. il map U S Ag Year-book 1916:289-99; Same. Separate 692

Standardizing horse improvement. G. E. Brown. Breeder's Gaz 70:353 S 7 '16

Sterility in mares, with recommendations to breeders of heavy horses. F. H. A. Marshall and W. P. Crosland. J Bd Ag 24:1357-64 Mr '18

Stimulus to heavy horse breeding in Scotland. Wallaces' F 41:264 F 18 '16

Story of the Texas cow pony. F. S. Hastings. il Breeder's Gaz 70:195 Ag 10 '16

Stud books and associations recognized by the state veterinarian, for state registration of stallions and jacks. (In Live stock laws of Wyoming, p. 56-8) '17 State veterinarian, Cheyenne, Wyo.

Successful horse breeding. C. M. McConnell. Ohio F 142:94 Ag 3 '18

Supply of horses for military purposes. J Bd Ag 22:1022-4 Ja '16

Test of mares. Country Gent 81:1369 Jl 15 '16

Thirty years of Percheron breeding. D. Augstin. Breeder's Gaz 70:1290 D 28 '16

Tripling the colt income. W. Hartman. il System on the Farm 1:260 S '17

Use pure-bred sires. T. R. Plank. Nat Stock & F 41:1211 F 23 '18

Value of good sires; the thoroughbred. J. K. Wright. Mo Ag Bd B v 14:15-35 S '16

War and our horses. Country Gent 81:742 Ap 1 '16

What constitutes horse prosperity? E. N. Wentworth. Breeder's Gaz 69:370 F 17 '16

What is a grade draft mare worth? W. J. Kennedy. Breeder's Gaz 69:133 Ja 20 '16

See also Percherons—Price lists; Stallion law; Stallions

**Horse chestnut**

Aesculus at the Arnold arboretum. Am Flor 46:1370 Jl 15 '16

Feeding value of the horse-chestnut. E. J. Crane. Ohio F 138:103 Ag 5 '16

Use of horse-chestnuts for the production of alcohol. Int R Sci & Prac Ag 9,no 1:111-12 Ja '18

Utilisation of the horse-chestnut. A. Goris. Int R Sci & Prac Ag 8,no 10:1414-16 O '17

**Diseases and pests**

Leaf blotch disease of horse-chestnut. V. B. Stewart. il Cornell Ag Exp B 371:411-19 '16; Same. Cornell Ag Exp Rep 1916:411-19 '17

Leaf blotch disease of horse-chestnut. V. B. Stewart. il Phyt 6:5-20 F '16

**Horse flesh**

Appeal for equine meat as a food. W. H. Hoskins. Am Vet M Assn J 53:77-80 Ap '18

Are you fond of horse steak? Survey (112 E. 19th st, N.Y. 10c) 40:71-2 Ap 20 '18

Eating horse meat. Ohio F 141:23 Ja 5 '18

Horse flesh as human food. L. Price. bibliog Am Vet M Assn J 51:679-92 Ag '17

Horse meat. G. H. Glover. Am Vet M Assn J 53:372-5 Je '18

Horse meat in Europe. J. W. Thompson. Breeder's Gaz 72:1078 D 13 '17

Horseflesh. Am Vet M Assn J 53:2-4 Ap '18

Neglected hen feed; horse meat is a cheap and effective egg producer. J. Hillis. il Country Gent 83:51 Mr 9 '18

Shall we eat horses. G. E. Wentworth. Breeder's Gaz 72:891 N 15 '17

Utilization of horse meat to relieve meat shortage. Mondell and others. Congressional Record (Washington, D.C.) 56:1432-4 Ja 28 '18

**Horse nettles**

Insects of solanum carolinense and their economic relations. M. P. Somes. J Econ Entom 9:39-44 F '16

**Horse racing**

American trotting families. P. M. Babcock. Breeder's Gaz 69:774 Ap 6 '16

Fast hosses. R. A. Hayne. il Nat Stock & F 41:215 My 19 '17

Fast trotting hackneys. il Field II 26:426 My '16

Grand circuit races. il Field II 26:529 Je '16

Horse's horse power. G. E. Wentworth. Country Gent 81:1197 Je 10 '16

Lexington. C. R. Garner. Breeder's Gaz 70:472-3 S 21 '16

Light harness horses; with list and speed of century sires. il Field II 26:600 Jl '16

New champion. Nat Stock & F 40:744 O 21 '16

New study of thorough-bred locomotion. E. L. D. Seymour. Country Life 31:126 Mr '17

Record broad jump. J. W. Webb. Breeder's Gaz 72:145 Ag 2 '17

Reforming the war horse. J. R. McMahon. il Country Gent 83:12-13 O 12 '18

Renascence of amateur horse racing. R. M. Cleveland. il Country Life 30:26-7 Jl '16

Speed hunter; H. C. Moody a wizard. C. E. Gapen. il Country Gent 81:1393 Jl 22 '16

Speed limit. P. M. Babcock. Country Gent 81:1933 N 4 '16

Trotting and pacing revival. il Field II 26:427 My '16

See also Race tracks

**Horse shows**

Alberta spring show. il Field II 27:472-3 Je '17

Beech Grove grange colt show. F. Carey. il Ohio F 139:742 Je 2 '17

Boston and its horses. E. L. Quaife. Breeder's Gaz 69:1252 Je 15 '16

Breeders' greatest horse show at International. Breeder's Gaz 72:1094-7+ D 13 '17

Brooklyn horse show. Breeder's Gaz 69:920 Ap 27 '16

Bryn Mawr horse show. P. M. Babcock. il Field II 26:935 N '16

Chenoa colt show. D. O. Thompson. il Country Gent 82:184 F 3 '17

Classification for horses at county fairs. J. J. Hooper. Ky Ag Dept Rep 1916-1917:363-5 '18

Clydesdale show in Scotland. A. Mowat. Breeder's Gaz 69:1070 My 18 '16

**Horse shows—Continued**

Colt shows an aid to breeding. *il* Breeder's Gaz 71:917-18 My 3 '17

Colt shows and better horses. O Judd Farmer 61:12 O 14 '16

Devon hackney show. *il* Field II 27:560 JI '17

Devon horse show. Breeder's Gaz 71:1162 Je 7 '17

Devon horse show. P. M. Babcock. *il* Country Gent 81:1321 JI 8 '16

Devon triumphs again. P. M. Babcock. *il* Field II 26:596-7 JI '16

Draft colt futurity an advertising medium. C. M. McConnell. *il* Ohio F 142:270 S 21 '18

Draft horse futurity reforms. R. B. Ogilvie. Breeder's Gaz 73:488 Mr 7 '18

Draft horse show at Iowa state fair. Breeder's Gaz 72:330-2 S 6 '17

Durland horse show. Breeder's Gaz 69:1021 My 11 '16

Eastern Percheron breeders' show. C. T. Conklin. Nat Stock & F 42:677 O 26 '18

Eastern Percheron futurity. D. J. Kays. *il* Ohio F 137:705 My 20 '16

Eastern Percheron futurity nominations. D. J. Kays. *il* Ohio F 139:314 Mr 3 '17

England's shire horse show. *il* Breeder's Gaz 69:673 Mr 23 '16

English charity horse show. Breeder's Gaz 70:56 JI 13 '16

Far-western college horse show. C. N. Kennedy. Breeder's Gaz 69:616 Mr 16 '16

1st eastern Percheron breeders' show. Ohio F 142:404 O 26 '18

Grange colt show. F. Carey. *il* Nat Stock & F 40:1156 F 3 '17

Greatest saddle-horse contest. Nat Stock & F 41:626 S 29 '17

Hackneys feature Rochester show. *il* Field II 26:942-3 N '16

History, purpose and popularity of colt shows. R. P. Speer. Breeder's Gaz 69:1201-2 Je 8 '16

Horse improvement in Indiana. C. M. McConnell. Ohio F 140:26 JI 14 '17

Horse show as an educational force. C. M. McConnell. *il* Ohio F 141:789 Je 22 '18

Horse show at Brockton fair. A. H. Godfrey. Breeder's Gaz 72:787 N 1 '17

Horse show expenses and benefits. A. H. Godfrey. Breeder's Gaz 71:168 Ja 25 '17

Horses at Illinois state fair. O Judd Farmer 61:9 O 7 '16

Horses at the English royal show. Breeder's Gaz 70:95 JI 20 '16

Horses at the New York state fair. H. S. Wende. *il* N Y Ag Dept Rep 1916, pt 2:193-206 '17

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Illinois' state fair, 1918. Breeder's Gaz 74:309-10 Ag 29 '18; Wallaces' F 43:1222 Ag 30 '18

Iowa state fair, 1918. Wallaces' F 43:1228, 1260 Ag 30-S '18

Lessons of the futurities. H. E. McCartney. Breeder's Gaz 71:1275 Je 28 '17

Live stock awards of 1916 Iowa state fair. *il* Ia Ag Bd Yearbook 1916:152-175

London hackney horse show; with list of winners. Field II 26:528 Je '16

London hackney show; and London's light horse show. Breeder's Gaz 69:728 Mr 30 '16

London shire horse show. Breeder's Gaz 71:632 Mr 22 '17

Louisville saddle stakes. Breeder's Gaz 72:503 S 27 '17

Managing a colt show. H. E. McCartney. Breeder's Gaz 70:411 S 14 '16

National capitol horse show. W. C. Barnes. *il* Breeder's Gaz 69:1118 My 25 '16

Ohio Percheron show. *il* Ohio F 142:271 S 21 '18

Organized community's horse show. C. M. McConnell. *il* Breeder's Gaz 70:728 O 19 '16

Percherons at Calgary and Edmonton. Breeder's Gaz 72:87 JI 19 '17

Preparing for the colt show. J. G. Fuller. *il* Hoard's D 54:76 Ag 10 '17

Proposes Percheron breeders' show. W. H. Butler. Breeder's Gaz 72:375 S 13 '17

Rochester horse show. *il* Field II 28:722 O '18

Rochester horse show. H. G. Gulliver. *il* Field II 27:764 O '17

Surprising equine exhibit at the International. Breeder's Gaz 70:1125-6a+ D 14 '16

Two fall horse shows. D: M. Fyffe. Ohio F 138:26 JI 8 '16

*See also* Stallion shows; also Association of American horse shows; National horse show; also names of state fairs

**Horse stables.** *See* Barns and stables—Horse stables

**Horse training**

Breaking horses. G. E. Brown. Breeder's Gaz 73:160 Ja 24 '18

Breaking horses for the army. G: F: Stratton. *il* Wallaces' F 41:1664 D 22 '16

Breaking the colt to lead. Hoard's D 51:142 F 18 '16

Breaking the young horse. A. M. Latham. Ohio F 137:763 Je 3 '16

Changing a horse's gait. Breeder's Gaz 74:120 JI 25 '18

Fixing good habits in the young horse. R. B. Rushing. Rural N Y 76:207 F 10 '17

Kindergarten training for the colt. E. Paige-Loomis. *il* Country Life 29:46-7 Ap '16

Making an army horse. A. Burhans. Breeder's Gaz 72:984 N 29 '17

Speed hunter; H. C. Moody a wizard. C: E. Gapen. *il* Country Gent 81:1393 JI 22 '16

That colt. E. C. A. Smith. *il* Country Life 32:62-3 Je '17

Tom Bass, the famous American trainer, rider and exhibitor of high school horses. W. L. Nelson. *il* Breeder's Gaz 71:209-10 F 1 '17

Training of the colt. D. Prowant. Ohio F 141:179 E 9 '18

Training the colt. Hoard's D 51:856 Je 16 '16

Training the colt. H. E. Hopkins. N Y Ag Dept Rep 1916, pt 2:161-6 '17

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**Horsemanship**

How to jump a horse. W: Mitchell. *il* Country Life 30:19-22 S '16

Saddles and seats. E. C. Anderson. Country Life 29:90 F '16

*See also* Coaching

**Horsemint**

Commercial production of thymol from horse-mint. S. C. Hood. U S Ag B 372:1-12 '16; Same cond. Am Flor 46:1020 My 27 '16

**Horsepower**

Determining the engine's horse power. Rural N Y 77:1309 N 23 '18

Horse's horse power. G. E. Wentworth. Country Gent 81:1197 Je 10 '16

Some experiments on pulling loads; with a discussion of the results. B: H. Brown. 16p 10c '16 Whitman college, Walla Walla, Wash.

What horse power means. O Judd Farmer 61:16 D 23 '16

**Horseradish**

Crop of horseradish. R. W. De Baun. Rural N Y 76:38 Ja 13 '17

Experiences with horseradish; symposium. Market Growers J 23:117-19 S 15 '18

Growing horseradish commercially. Fruit-Grower 27:237 Ap 1 '16

Horseradish. C. O. Ormsbee. Market Growers J 19:242 N 15 '16

Horseradish. J. T. Rosa, jr. *il* Country Gent 82:378 F 24 '17

Horse-radish patch. Country Gent 81:861 Ap 15 '16

St Louis, big center for horseradish culture. J. T. Rosa, jr. Market Growers J 23:203 D 1 '18

**Diseases and pests**

*See also* Horseradish flea-beetles

**Horseradish flea-beetles**

Horse-radish flea-beetle; its life history and distribution. F. H. Chittenden and N. F. Howard. bibliog *il* U S Ag B 535:1-16 '17

**Horses**

Ancient hackneys and an English author. Breeder's Gaz 70:888 N 9 '16

As others see us. Nat Stock & F 40:1272 F 24 '17



**Horses—Continued**

- Bad habits in horses. J Ag (Quebec) 20:xi My '17
- Boys and horses. C. M. McConnell. il Ohio F 140:502 D 1 '17
- Buy a tractor and raise better horses. il Power F 26:8 Ap '17
- Care and feeding of horses. Nat Stock & F 41:1050 Ja 19 '18
- Character in horses. J Ag (Quebec) 20:240 Je '17
- Christmas tree for horses. W. C. Barnes. il Breeder's Gaz 69:132-3 Ja 20 '16
- City horses and farm horses. E. McFarland. Breeder's Gaz 73:707 Ap 4 '18
- Color in horses. J. W. Thompson. Breeder's Gaz 69:1020 My 11 '16
- Color inheritance in mammals. S. Wright. J Heredity 8:561-4 D '17
- Community and its horses. H. E. McCartney. Breeder's Gaz 73:19 Ja 3 '18
- Conservation of the horse. B. E. Pontius. Breeder's Gaz 73:1299 Je 20 '18
- Contribution to the study of hereditary unsoundness in horses. W. A. N. Robertson. J Dept Ag Victoria 16:289-303, 426-33 My, Jl '18
- Cow horse. R. A. Hayne. il Nat Stock & F 40:865 N 25 '16
- Curing halter pullers. il Farm Eng 5:11 Mr '17
- Demand for good horses. J. L. Buchanan. Nat Stock & F 41:322 Je 23 '17
- Depreciation in value of horses. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:319-20 O 17 '17
- Distribution of horses. E. N. Wentworth. Breeder's Gaz 70:167 Ag 3 '16
- Economy and weight. Nat Stock & F 41:820 N 24 '17
- Encouragement to small breeders. R. A. Hayne. Nat Stock & F 41:1007 Ja 12 '18
- Establishing a horse business. Breeder's Gaz 71:1161 Je 7 '17
- Evolution of the horse. il J Heredity 8:168-9 Ap '17
- Evolution of the horse. R. W. Cilento. J Dept Ag S Australia 20:751-7 Ap '17
- Examination of a horse for soundness. N. E. McEwen. J Ag (Quebec) 20:34 Ag '16
- Examining horses for soundness. K. W. Stouder. il Ja Ag Ext B 47:1-16 '16
- Facing the present horse conditions. C. M. McConnell. Ohio F 140:606 D 29 '17
- Fall worries with horses. N. E. McEwen. J Ag (Quebec) 22:79 N '18
- Family of pioneer horsemen. C. M. McConnell. il Ohio F 140:394 N 3 '17
- Farm horses and tractors. R. A. Hayne. Nat Stock & F 40:816 N 11 '16
- Farm tractor and horse production. E. L. Watson. il Power F 26:8 Ja '17
- Fast horses. R. A. Hayne. il Nat Stock & F 41:215 My 19 '17
- Fat and horses. L. Ogilvy. Breeder's Gaz 73:604 Mr 21 '18
- Fat on a horse. E. N. Wentworth. Country Gent 81:23 Ja 1 '16
- Foot of the horse. V. E. LeRoy. il Breeder's Gaz 70:654 O 12 '16
- Future of the horse. A. Galbraith. Breeder's Gaz 73:111 Ja 17 '18
- Future position of horse breeding. J Bd Ag 24:93-7 Ap '17
- Gaining the colt's confidence. L. Ogilvy. Breeder's Gaz 72:83 Jl 19 '17
- Give foals a chance. C. M. McConnell. Ohio F 141:746 Je 8 '18
- Give him another chance; safe family horse. J: Marsh. il Rural N Y 77:717 My 25 '18
- Good times in the horse business. J: Mason. Nat Stock & F 40:603 S 9 '16
- Growing colts the first year. C. M. McConnell. il Ohio F 139:714 My 26 '17
- Growing good horses. W. A. Graham. Prac F 113:277 Ag 1 '17
- Growing horses to suit the demand. E. A. Wendt. Prac F 113:417 D 1 '17
- Hackney criticism answered. P. M. Babcock. il Field 11 26:677 Ag '16
- Hackney's dual mission. A. H. Godfrey. il Field 11 28:820-1 N '18
- Hackneys vs. Arabs for endurance. P. M. Babcock. il Field 11 26:326 Ap '16
- Halter pullers. R. A. Hayne. Nat Stock & F 40:1234 F 17 '17
- Handling horses during harvest. G: H. Dacy. Prac F 113:237 Je 15 '17
- Home-bred horses. R. A. Hayne. Nat Stock & F 40:1022 Ja 6 '17
- Horned horses. J. E. Miller. il J Heredity 8:303-5 Jl '17
- Horse and mule on the farm. G: C. Faville. il Hampton Leaflets v 7, no 10 11p '17
- Horse and sheep experience letters. Prog F 32:1203 N 17 '17
- Horse and the tractor. C. M. McConnell. Ohio F 140:266 S 29 '17
- Horse breeders' responsibility. C. M. McConnell. il Ohio F 140:60 Jl 28 '17
- Horse buyer's prophecy. Nat Stock & F 41:282 Je 9 '17
- Horse famine after the war. Nat Stock & F 41:969 Ja 5 '18
- Horse for work and play: the quarter-horse. D. D. Casement. il Field 11 26:513+ Je '16
- Horse in rural industry and recreation. C. W. Gay. (In Pan American scientific congress Pro., 1915, v. 3, p 315-19) '17
- Horse industry. il Purdue Ag 12:342-3 Mr '18
- Horse: level feet prevent trouble and loss. J. Seiter. il Nat Stock & F 40:74 Ap 15 '16
- Horse management. E. L. Potter and C. N. Kennedy. 48p il n.d. Dept. of animal husbandry, Oregon ag. college, Corvallis
- Horse production. W. Dinsmore. il Ohio Ag Dept B v 9:12-17 Ag '18
- Horse situation encouraging. W. Dinsmore. O Judd Farmer 63:3 O 27 '17
- Horse; with Readings on the horse to accompany Lessons 3, 4, 5. J. L. Edmonds. 12p il n. d. B. D. Butler, dir., U.S. Boys' working reserve, Room 47, 120 W. Adams st, Chicago, Ill.
- Horses and mules. Mo Ag Bd B v 15:1-47 O '17
- Horses and the war. W. W. Hunter. il Nat Stock & F 41:511 Ag 25 '17
- Horses and tractors. G: F. Henning, Jr. Breeder's Gaz 73:552 Mr 14 '18
- Horses for the dry-farming country. R. H. Williams. Breeder's Gaz 71:827 Ap 19 '17
- Horses, mules and asses. (In Geography of the world's agriculture, p. 109-16) maps '17 U S Ag
- How to detect lameness. A. S. Alexander. Breeder's Gaz 74:49 Jl 11 '18
- Hunter. A. H. Godfrey. Breeder's Gaz 70:655 O 12 '16
- Hunter and jumper. J. W. Webb. Breeder's Gaz 71:1070 My 24 '17
- Inheritance of coat colours in horses. W. S. Anderson. Int R Sci & Prac Ag 7, no 3:399-400 Mr '16
- Kitty goes to war. W: H. Carter. il Breeder's Gaz 72:1152 D 20 '17
- Limitations of horses and tractors. il Ag Digest 2:585 Ag '17
- Lines and points in relation to the symmetry of the horse. F. E. Place. J Dept Ag S Australia 21:319-32 N '17
- Mischief's champion. R. A. Hayne. Nat Stock & F 41:1361 Mr 23 '18
- Mistakes with mares. R. A. Hayne. Nat Stock & F 41:53 Ap 7 '17
- More about absence of chestnuts. Breeder's Gaz 69:871 Ap 20 '16
- My kingdom for a horse. O. B. Messick. il Prac F 113:325 S 15 '17
- On the life duration of the horse spermatozoon outside of the body. S. Satō (Acta Scholae Med. Univ. Imp. Kioto, 1. no. 3 361-74p '16). Exp Sta Record 38:170 F '18
- One answer to the help problem and 10 other management plans. M. Meyer. il System on the Farm 2:45-7 F '18
- Our export trade. W. Dinsmore. Nat Stock & F 40:1234 F 17 '17
- Plows and horses. R. H. Fisher; J. H. Rittenhouse. Nat Stock & F 42:210 My 18 '18
- Points from my experiences with cows and horses. E. A. Wendt. il Prac F 112:319 Ag 15 '16
- Proper comparisons. X. W. Putnam. Nat Stock & F 40:912 D 9 '16
- Rhapsody—chiefly raps—on the horse. W. B. Jones. Power F 27:13 S '18

**Horses—Continued**

- \* Shall we return to horses? J: R. Eustis. *il Independent* (119 W. 40th st, N. Y. 10c) 95: 164 Ag 3 '18
- Sidelights on horse buying. G. E. Wentworth. *Breeder's Gaz* 72:498 S 27 '17
- Sorrel color in horses. L. P. McCann. *J Heredit* 7:376-2 Ag '16
- Things that are not commonly known about horses. A. S. Alexander. *il Rural N Y* 76: 1116, 1133 S 22-29 '17
- Thoroughbred horse. J. I. Teesdale. *Breeder's Gaz* 71:167 Ja 25 '17
- Time to sell a horse. G. Gusler. *il Country Gent* 81:379 F 19 '16
- Tom Bass, the famous American trainer, rider and exhibitor of high school horses. W. L. Nelson. *il Breeder's Gaz* 71:209-10 F 1 '17
- Tractor will affect horse breeding. *il O Judd Farmer* 63:8 J1 21 '17
- Tractors and horses. I. W. Dickenson and J. L. Edmonds. *Breeder's Gaz* 69:1210 Je 8 '16
- Two kinds of horses. R. A. Hayne. *il Nat Stock & F* 42:18 Mr 30 '18
- Types of saddle horses. L. Ogilvy. *Breeder's Gaz* 69:559 Mr 9 '16
- Untrained horses. C. H. Sapp. *Nat Stock & F* 40:1053 Ja 13 '17
- What horse shall the farmer breed? J. H. S. Johnstone. *Nat Stock & F* 40:1356 Mr 10 '17
- What will horses be worth? J. A. Rickart. *Country Gent* 82:1646 O 27 '17
- When buying a horse. A. S. Alexander. *Rural N Y* 75:1080 Ag 12 '16
- Where are the Steel Dusts? R. H. Williams. *Breeder's Gaz* 72:11 J1 5 '17
- Wintering horses for market. *Rural N Y* 75: 204 F 5 '16
- World horse scarcity will bolster prices. *il O Judd Farmer* 65:501 N 30 '18

*See also* Asses and mules; Bits; Broncos; Harness; Horse breeding; Horse racing; Horse shows; Horse training; Horsemanship; Horses, Age of; Horses, Army; Horses, Care of; Horses, Draft; Horses in war; Horseshoeing; Ponies; Stallion laws; Stallion shows; Stallions; also names of societies, e. g. *Mutuelle chevaline suisse*

**Breeds**

- Adaptability of breeds. E: N. Wentworth. *Field* 11 26:502-3 Je '16
- Arab horses as cavalry remount sires. *map Ag Digest* 1:20-1 My '16
- Arabian a family horse. *O Judd Farmer* 60: 23 F 19 '16
- Breed ideals and soundness. E: N. Wentworth. *Breeder's Gaz* 70:538 S 28 '16; Same. *J Ag (Quebec)* 20:136 D '16
- Breeds and types of horses. W. W. Hunter. *Nat Stock & F* 41:462 Ag 11 '17
- Breeds of horses in Norway. C. Wriedt. *Breeder's Gaz* 70:94 J1 20 '16
- Breeds of light horses. H. H. Reese. *il Farmers' B* 952:1-16 '18
- Has the thoroughbred the right to exist? L: L. Taylor. *Nat Stock & F* 41:1172 F 16 '18
- Horse industry in New York state (B. 76). *il N Y Ag Dept Rep* 1916, pt 2:1-278 '17
- Judging draft horses. E. S. Ham. *il Cornell Reading Course* 113:183-93 Je '16
- Justin Morgan—the man and the horse. C. A. Benton. *Am Vet M Assn J* 53:756-65 S '18
- Those Arabian horses; good to look at, but useless for practical purposes. P. M. Babcock. *il Country Gent* 83:20 Ag 3 '18

*See also* names of breeds, e. g. Belgians (horses); Clydesdales; Morgans; Percherons; Shires (horses); Suffolks (horses)

**Care of mares**

- Brood mare at foaling time. W. C. Fair. *Ohio F* 139:667 My 12 '17
- Care of brood mare and foal. W. L. Blizzard. *Oklahoma Ag Exp C* 44:27-30 '18
- Care of brood mares. D. Prowant. *Nat Stock & F* 41:1255 Mr 2 '18
- Care of dual-purpose mares. L. Ogilvy. *Breeder's Gaz* 72:1036 D 6 '17

Care of mares before foaling. *Prac F* 114:80 F 15 '18

Care of the brood mare and her colt. L. Roudebush. *il N Y Ag Dept Rep* 1916, pt 2:148-54 '17

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Care of the brood mare at foaling time. C. M. McConnell. *il Ohio F* 139:358 Mr 10 '17

Care of the farm mare. G: Hill. *J Dept Ag S Australia* 20:484-6 Ja '17

Caring for the mare and colt. K. Perkins. *Prog F* 32:98 Ja 27 '17

Mare and her foal. J. H. McKenney. *Nat Stock & F* 40:1312 Mr 3 '17

Preparing the mare for foaling. H. E. McCartney. *Breeder's Gaz* 71:519 Mr 8 '17

Treatment of the mare in foal. W. J. Reid. *J Ag (Quebec)* 19:220 Ap '16

**Costs**

- Cost of horse labor. W. Dinsmore. *il Country Gent* 83:19 S 21 '18
- Cost of horse labor. F. R. Taylor. *Wallaces' F* 41:188 F 4 '16
- Cost of horse labor on the farm. O. R. Johnston and R. M. Green. *maps Mo Ag Exp B* 152:1-32 '18
- Cost of keeping a horse. A. C. Adams. *Nat Stock & F* 41:110 Ap 21 '17
- Cost of keeping farm horses and cost of horse labor. M. R. Cooper. *il U S Ag B* 560:1-22 '17
- Cost of keeping horses. *Ohio F* 138:171 Ag 26 '16
- Reducing the cost of horse labor. W: E. Stone. *Country Gent* 82:1796 N 17 '17
- Tractor vs. horse. F. L. Morrison. *Farm Eng* 5:6 Mr '17

**Diseases and pests**

- Acute interstitial nephritis of the equine. E. T. Hallman and I. F. Huddleson. *Am Vet M Assn J* 51:696-701 Ag '17
- Animal parasites affecting equines. C. P. Fitch. *bibliog Am Vet M Assn J* 53:312-30 Je '18
- Antitetanic serum and magnesium sulphate in treating tetanus. H: Theobald. *Am Vet M Assn J* 48:460-7 Ja '16
- Army veterinary service. D. A. McAuslin. *Am Vet M Assn J* 53:536-46 J1 '18
- Azoturia—causes and treatment. W. C. Fair. *Ohio F* 137:465 Mr 25 '16
- Bacteriology of catarrhal fever, stock yards fever or shipping fever. A. T. Kinsley. *Am Vet M Assn J* 49:179-82 My '16
- Blood is the life. F. E. Place. *J Dept Ag S Australia* 21:851-2 Je '18
- Botryomycosis. R. W. Gannett. *bibliog Am Vet M Assn J* 49:523-7 J1 '16
- Cerebrospinal meningitis (forage poisoning). J: R. Mohler. *U S Ag B* 65:1-14 '14
- Certain aspects of the pathology of spavin. S. A. Goldberg. *Am Vet M Assn J* 54:136-9 N '18
- Chronic effusive pleurisy; cause unknown. R. R. Bolton. *Am Vet M Assn J* 51:231-5 My '17
- Coital exanthema with secondary pus infection; with discussion. H. Simpson. *Am Vet M Assn J* 52:257-62 D '17
- Colic in the horse. D. H. Udall. *Ia Ag Coll Offic Pub v* 14, no 36:35-47 '16
- Common diseases of the digestive organs of horses and cattle. J. H. Reed. *Ontario Ag Dept B* 264:1-38 '18
- Contribution to the study of hereditary unsoundness in horses. W. A. N. Robertson. *J Dept Ag Victoria* 16:468-78 Ag '18 (to be cont)
- Curative treatment of epizootic lymphangitis by vaccinothérapie; preparation of a polyvalent pyovaccine. *Int R Sci & Prac Ag* 9, no 3:342-3 Mr '18
- Disease resembling forage poisoning in horses and mules. R. Graham and others. *Am Vet M Assn J* 48:574-90 F '16
- Diseases of the head of the horse; with discussion. H. E. Bemis. *il Ia Ag Coll Offic Pub v* 14, no 36:157-80 '16



**Horses—Diseases and pests—Continued**

- Diseases of the limbs and bony structure, by J. F. DeVine; Distemper and diseases of the respiratory organs, by E. L. Volgenau; Colic and azaturea, by M. Hamilton. *il N Y Ag Dept Rep* 1916, pt 2:234-62 '17
- From N Y Ag Dept B 76
- Draft stallions not heirs to grease, A. S. Alexander. *il Field II* 27:693 S '17
- Empyema of the chest and gangrenous necrosis of lungs, D. D. LeFevre. *Am Vet M Assn J* 53:106-13 Ap '18
- Epidemiology of equine influenza. *Am Vet M Assn J* 49:848-9 S '16
- Etiology of infectious anemia of the horse. *Am Vet M Assn J* 51:707-9 Ag '17
- Experience with different treatments for shipping fever in a sales stable. W. J. Lentz. *Am Vet M Assn J* 51:193-200 My '17
- Fistula and poll evil. *Prog F* 33:947 Ag 31 '18
- Fistula of the withers. H. E. Bemis. *Am Vet M Assn J* (Pro no) 50:421-3 D 15 '16
- Foot wounds, A. L. Danforth. *Am Vet M Assn J* 51:374-9 Je '17
- Further investigations of the etiology and control of infectious abortion in mares. E. S. Good and W. V. Smith. *bibliog il Ky Ag Exp B* 204:337-96 '16
- Halting or lameness in the horse. F. T. Daubigny. *Am Vet M Assn J* 49:648-53 Ag '16
- Heaves and horse feeding. *Field II* 27:875 N '17
- Help our horses; a plea from Palestine. *il J Dept Ag S Australia* 22:213-15 O '18
- Historical facts concerning the pathology of spavin, S. A. Goldberg. *bibliog Am Vet M Assn J* 53:745-56 S '18
- Horse flu another kind; how to treat this disease. *Weekly N L* 6:1 N 6 '18; *Excerpts. Ohio F* 142:479 N 16 '18
- Horse forage poison conquered. *il O Judd Farmer* 63:1 J1 28 '17
- Horse owners warned; carbon bisulphid sold fraudulently as remedy for bots and worms. *Weekly N L* 4:5 J1 4 '17
- Horse surgery at the front. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:272-3 O 13 '17
- Horse's feet. T. J. Delohery. *il Country Gent* 82:1138 J1 14 '17
- Influenza with special reference to some important complications. G. W. Dunphy. *Am Vet M Assn J* 52:423-7 Ja '18
- Joint-ill in colts. *Wallaces' F* 41:886 Je 16 '16
- Judging draft horses. E. S. Ham. *il Cornell Reading Course* 113:204-8 Je '16
- Lameness and its most common cause. J. McDonough. *il Am Vet M Assn J* 49:653-8 Ag '16
- Lameness in horses. J. H. Reed. *Prac F* 112:162, 181, 200, 221, 239, 259, 286, 302 Ap 1-Je 15, J1 15-Ag 1 '16
- Lameness of obscure origin and some of its causes. G. H. Berns. *Am Vet M Assn J* 54:217-22 D '18
- Maceration and decomposition of the fetus in mares. S. R. Howard. *Am Vet M Assn J* 49:259-63 My '16
- Marasmus of army horses. M. Urbain. *Am Vet M Assn J* 53:778-82 S '18
- Methods to control blind staggers in horses. *il Va Ag Dept B* 109:165-7 '16
- Mice and moulds; their relationship with paralysis and death in horses. F. E. Place. *J Dept Ag S Australia* 21:27-31 Ag '17
- Modification of the technic of the operation for penetrating street nail. *Am Vet M Assn J* 50:234-6 N '16
- Moon blindness, or periodic ophthalmia. *Wallaces' F* 41:550 Mr 31 '16
- Navel disease, joint-ill or scours. *Wallaces' F* 42:548 Mr 23 '17
- Navel ill, S. L. Stewart. *Am Vet M Assn J* 51:402-6 Je '17
- Navel ill in foals. R. Graham. *O Judd Farmer* 64:504 My 11 '18
- Necrobacillosis in horses and mules. W. F. Nolechek. *Am Vet M Assn J* 54:150-5 N '18
- Notes in regard to horse lice, trichodectes and haematopinus. M. C. Hall. *il Am Vet M Assn J* 51:494-503 J1 '17
- Notes on a form of nerve derangement in horses. C. J. Reakes. *il J Ag New Zealand* 12:364-8 My '16
- Nymphomania of mares; with discussion. H. Fulstow. *Am Vet M Assn J* 51:45-59 Ap '17
- Observations on the treatment of fistulous withers. W. J. Wadsworth. *Am Vet M Assn J* 50:47-51 O '16
- Oesophageal spasms in colts. R. R. Bolton. *Am Vet M Assn J* 50:876-9 Mr '17
- Oxyurosis in equines. *Am Vet M Assn J* 53:6-9 Ap '18
- Perforated bowel in the horse. A. P. Drew. *Am Vet M Assn J* 49:85-6 Ap '16
- Periodic ophthalmia. R. F. Avery. *Am Vet M Assn J* 51:78-81 Ap '17
- Preventing grease. G. E. Brown. *Breeder's Gaz* 72:736 O 25 '17
- Problem of horse sickness in South Africa. A. Theiler. *Int R Sci & Prac Ag* 7, no 3:394-5 Mr '16
- Roaring in horses as it relates to horse breeding. W. L. Williams. *Am Vet M Assn J* 51:624-35 Ag '17
- Rules to be followed for the prevention and cure of mange in horses. *J Bd Ag* 25:582-4 Ag '18
- Sclerostomes in horses. W. J. Hartman. *bibliog il Mont Ag Exp C* 58:221-36 '16
- Shipping fever a scourge. *Breeder's Gaz* 71:390 F 22 '17
- Shipping fever as met with in a large city practice. G. B. McKillip. *Am Vet M Assn J* 50:692-6 F '17
- Shipping fever from the army standpoint. W. G. Turner. *Am Vet M Assn J* 50:594-600 Ja '17
- Shipping fever of horses. J. R. Mohler. *Am Vet M Assn J* 49:169-78 My '16; *Breeder's Gaz* 69:1117 My 25 '16
- Shipping fever of horses; plans of the Bureau of animal industry. J. R. Mohler. *Am Vet M Assn J* 50:817-23 Mr '17
- So-called Australian stringhalt of horses. *J Ag New Zealand* 15:20-3 J1 '17
- So-called staggers in horses caused by the ingestion of pteris aquilina, the common bracken. S. Hadwen. *Am Vet M Assn J* 50:702-4 F '17
- Some biological and control studies of gastrophilus haemorrhoidalis and other bots of horses. W. E. Dove. *bibliog il U S Ag B* 597:1-51 '18
- Some notes on the treatment of equine ascariasis and oxyuriasis. M. C. Hall and others. *Am Vet M Assn J* 54:56-7 O '18
- Some points on the surgical anatomy of the anterior part of the head, including a preliminary study of the teeth and sinuses of the horse. H. S. Murphey. *bibliog il Ia Ag Coll Offic Pub v* 14, no 36:56-156 '16
- Sore necks and shoulders. *Rural N Y* 76:1274 N 3 '17
- Sore shoulders. *il Nat Stock & F* 40:1432 Mr 24 '17
- Sores on horses. *Va Ag Dept B* 109:120-1 '16
- Splints on horses. *Prog F* 33:1219 N 9 '18
- Sterility in mares, with recommendations to breeders of heavy horses. F. H. A. Marshall and W. P. Crosland. *J Bd Ag* 24:1357-64 Mr '18
- Studies on contagious abortion in mares. L. Cominotti. *Int R Sci & Prac Ag* 8, no 3:395-6 Mr '17
- Studies on piroplasmic infection in horses. *Int R Sci & Prac Ag* 7, no 1:97-8 Ja '16
- Tetanus during lactation in a mare. E. V. Veld. *Am Vet M Assn J* 50:66 O '16
- Treatment and management of shipping fever in rural districts; with discussion. J. D. Fair. *Am Vet M Assn J* 49:183-98 My '16
- Treatment of equine pneumonia. R. C. Moore. *Am Vet M Assn J* 52:47-56 O '17
- Treatment of suppurating corns in horses with a case. R. W. Shufeldt. *il Am Vet M Assn J* 53:767-71 S '18
- Two preventable diseases of the horse. *Field II* 27:773 O '17
- Vaccination against infectious arthritis of foals due to b. abortus equi. J. B. Hardenbergh. *bibliog il Am Vet M Assn J* 50:331-49 D '16
- Vesicular stomatitis of horses and cattle. J. R. Mohler. *il U S Ag B* 662:1-10 '18; Same. *Am Vet M Assn J* 52:410-22 Ja '18

**Horses—Diseases and pests —Continued**

- Veterinary notes for horse-owners. E. I. Siddall. J Ag New Zealand 12:464-6 Je '16  
 Veterinary problems; eczema or summer itch. Prog F 33:975 S 7 '18  
 Veterinary problems; lameness. Prog F 33:503 Ap 20 '18  
 Veterinary problems; spavin—bone and bog. Prog F 33:659 Je 1 '18  
 Veterinary problems; sweeten. Prog F 33:583 My 11 '18  
 Volvulus, intussusception and hernia through the omentum in the horse and new born foal. J. F. DeVine. Am Vet M Assn J 52: 160-7 N '17  
 Water, air and food as factors in disease. N. E. McEwen. il J Ag (Quebec) 19:218 Ap '16  
 What to do in case of trouble. C. M. McConnell. Ohio F 140:346 O 20 '17  
 When Dobbin gets the flu; horse grip costs many lives. C. E. Gopen. il Country Gent 83:5 D 21 '18  
*See also* Dourine; Glanders; Purpura in horses; Strongylidosis

**Feeding**

- Alfalfa for horses. L. Ogilvy. Breeder's Gaz 70:473 S 21 '16  
 British horse rations. Nat Stock & F 41:302 Je 16 '17  
 By-products of the decortication of rice (pula vergine) as a substitute for wheat in feeding horses. R. Giuliani. Int R Sci & Prac Ag 8,no 8:1138-9 Ag '17  
 Corn and oats for work horses. B. E. Carmichael. Ohio Ag Exp B v 2:7-9 Ja '17  
 Cost of a horse. il Nat Stock & F 40:997 D 30 '16  
 Cottonseed for horses. Breeder's Gaz 71:777 Ap 12 '17  
 Developing the draft colt. Wallaces' F 41:875 Je 16 '16  
 Economy in the feeding of horses. J Bd Ag 24:854-8 N '17  
 Effect of feeding grain. L. Ogilvy. Breeder's Gaz 71:68 Ja 11 '17  
 Exact calculation of a balanced ration. S. Babcock. Breeder's Gaz 69:26-7 Ja 6 '16  
 Experiments on the feeding of draught horses made in Sweden from 1908-1915. N. Hansen. Int R Sci & Prac Ag 7,no 11:1630-3 N '16  
 Fattening draft horses. H. H. Havner. il Field II 26:26-7 Ja '16  
 Fattening horses for market. L. Ogilvy. Breeder's Gaz 69:1209-10 Je 8 '16  
 Feed and care of the horse. F. C. Minkler. N Y Ag Dept Rep 1916,pt 2:187-92 '17  
 From N Y Ag Dept B 76  
 Feed the colts. Nat Stock & F 41:462 Ag 11 '17  
 Feeding experiments with work horses. J Bd Ag 23:275-6 Je '16  
 Feeding farm horses. J. H. McKenney. Breeder's Gaz 72:145 Ag 2 '17  
 Feeding for big draft colts. G. Frerichs. il Breeder's Gaz 72:49 Jl 12 '17  
 Feeding for bone strength. W. G. Kammlade. O Judd Farmer 64:11 Mr 9 '18  
 Feeding horses. C. N. Arnett. Mont Ag Exp C 65:73-82 '17  
 Feeding horses and mules. Prog F 31:594 Ap 29 '16  
 Feeding horses for efficiency. L. Ogilvy. Breeder's Gaz 73:551 Mr 14 '18  
 Feeding pure-bred draft fillies. J. L. Edmonds. il Ill Ag Exp B 192:427-48 '16; Same cond. Breeder's Gaz 70:1281 D 28 '16; Same cond. Wallaces' F 41:1695 D 29 '16; Same cond. Country Gent 82:102 Ja 20 '17; Same cond. Ohio F 139:70 Ja 20 '17; Same cond. Field II 27:95-7 F '17; Abstract. Hoard's D 54:472 O 26 '17  
 Feeding the farm horses. W. H. Tomhave. Prac F 114:166 Ap 15 '18  
 Feeding work horses. C. W. McCampbell. Kan Ag Exp C 62:1-16 '17  
 Few hints on the feeding of horses. W. M. Lerew. J Dept Ag Victoria 16:315-16 My '18  
 Field investigations of forage poisoning in cattle and horses. H. P. Rusk and H. S. Grindley. il Ill Ag Exp B 210:163-76 '18  
 Forage and shires in the South. G. E. Brown. Breeder's Gaz 73:1211 Je 6 '18  
 Good home-mixed feed for work horses. T. Butler. Prog F 31:247 F 19 '16  
 Grain for Percheron fillies. L. Ogilvy. Breeder's Gaz 71:391 F 22 '17  
 Horse feeding problem. Breeder's Gaz 73:815 Ap 18 '18  
 Horses in late winter. L. Ogilvy. Breeder's Gaz 69:615-16 Mr 16 '16  
 Horses (rationing) order, 1917. J Bd Ag 24: 362-3 Je '17  
 How Archie Robison feeds colts. O Judd Farmer 64:3 Ja 5 '18  
 Illinois station experimental colt feeding. C. M. McConnell. il Ohio F 140:445 N 17 '17  
 Increasing the horse's efficiency. H. Sage. Country Life 31:74 N '16  
 New Illinois experiment. Breeder's Gaz 71:391 F 22 '17  
 Paddy melon for horses. F. E. Place. J Dept Ag S Australia 20:865-6 Je '17  
 Palatability of farm grasses. C. G. Williams. Ohio Ag Exp B v 1:70-2 Mr '16  
 Pasture for horses. L. Ogilvy. Breeder's Gaz 73:1210 Je 6 '18  
 Pastures and green feeds for horses. L. Ogilvy. Breeder's Gaz 70:15 Jl 6 '16  
 Proper feeding of work animals. W. M. Burson. O Judd Farmer 61:5 Jl 15 '16  
 Raising big Percherons in Illinois. E. T. Robbins. Breeder's Gaz 71:218 F 1 '17  
 Reasonable feeding of cottonseed meal will not injure horses. Prog F 32:671 Je 9 '17  
 Studies in forage poisoning. O Judd Farmer 63:6 Ag 18 '17  
 Summer feeding of work horses. R. E. Hutton. il Purdue Ag 11:26-7 Je '17  
 Supplementing nature in raising colts. il Breeder's Gaz 72:39 Jl 12 '17  
 Timothy and alfalfa hay for horses being fed cottonseed meal and oats. Prog F 32:751 Jl 7 '17  
 Ten horses without grain. T. S. Parsons. il Country Gent 81:1402 Jl 22 '16  
 Unbalanced rations cause depraved appetites in horses. Prog F 33:63 Ja 19 '18  
 Utilization of seaweed for feeding of horses. (Commerce Reports no. 82) p 108-9 (Ap 8) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Winter feeding of idle farm horses. J. L. Edmonds. il Ill Ag Ext C 16:1-4 '18  
 Wintering horses cheaply. Breeder's Gaz 69: 81 Ja 13 '16  
 Wintering of idle horses. J Ag (Quebec) 21: ix Ja '18  
 Wintering the idle horse. J. L. Buchanan. Ohio F 137:35 Ja 8 '16  
 Work horse ration. Wallaces' F 41:642 Ap 21 '16  
*See also* Feeding and feeding stuffs

**Fitting for show**

- Decorating a draft horse for show or sale. il Purdue Ag 10:23-6 My '16  
 Fitting and showing draft horses. W. L. Blizard. Breeder's Gaz 72:82 Jl 19 '17  
 Fitting and showing the colt. C. T. Conklin. Ohio F 140:78 Ag 4 '17  
 Fitting horses for showing. A. W. Griffin. (In 5th annual report Stallion registration division, p. 30-2) '17 la. ag. dept., Des Moines  
 Tuning up for the tanbark. A. Galbraith. il Field II 27:815 Ag '17

**History**

- Evolution and history of the horse. M. W. Harper. N Y Ag Dept Rep 1916,pt 2:11-13 '17  
 From N Y Ag Dept B 76

**Judging**

- American hackney in the showing. A. H. Godfrey. Breeder's Gaz 72:319 S 6 '17  
 Draft horse. il Hoard's D 51:914 Je 30 '16  
 Draft horses. il Wallaces' F 43:1724 N 22 '18  
 How to select a sound horse. H. H. Reese. il Farmers' B 779:1-26 '17  
 Judging draft horses. E. S. Ham. bibliog il Cornell Reading Courses 113:183-212 '16; Same. Cornell Ag Exp Rep 1916, v 2:1285-1311 '17



**Horses—Judging—Continued**

- Judging horses as a subject of instruction in secondary schools. H. P. Barrows. *il U S Ag B* 487:1-31 '17  
Object lesson for horsemen. W. W. Hunter. *il Nat Stock & F* 41:85 Ap 14 '17  
Picking champions from foals. A. Galbraith. *il Field II* 26:673 Ag '16

**Laws**

- Regulations affecting the rearing, feeding and disposal of horses. *J Bd Ag* 25:691-4 S '18  
*See also* Live stock laws; Stallion laws

**Marketing**

- Cooperative shipments of draft geldings. G. E. Wentworth. *Breeder's Gaz* 70:15 JI 6 '16; Same cond. *Ag Digest* 1:103 S '16  
Disposing of farm horses. *Breeder's Gaz* 73:377 F 21 '18  
How a breeders' association sells Percherons. C. M. Baker. *Breeder's Gaz* 70:594 O 5 '16

**Price lists**

- Horses at Grand Island, Neb. *Breeder's Gaz* 69:625-6 Mr 16 '16  
Young trotters bring high prices. *Breeder's Gaz* 69:558-9 Mr 9 '16

**Prices**

- Ups and downs of horse prices. *Wallaces' F* 43:1557 O 25 '18

**Statistics**

- Estimated number and value on farms, January 1, 1914-1917, by states. *Monthly Crop Rep* 3:2 Ja '17  
\* Horses and cattle in Ontario. (In Report, Bur. of Industries, 1917, p. 40-1) '18 Ontario ag. dept., Toronto  
Horses: estimated number and value on farms, January 1, 1915-1918, by states. *Monthly Crop Rep* 4:10 F '18  
Increase of horses. *Weekly N L* 5:15 Ap 17 '18  
Statistics of farm animals and their products. *See* United States Department of agriculture Yearbooks  
Statistics relative to horses on farms in New York state. *N Y Ag Dept Rep* 1916, pt 2:269-70 '17  
From *N Y Ag Dept B* 76

**Terminology**

- Terms used by horsemen. H. W. Vaughan. *Breeder's Gaz* 69:1295 Je 22 '16

**Transportation**

- Shipping single horses. D: Gray. *Country Gent* 82:1797 N 17 '17

**Argentina**

- Horse-breeding in the Argentine republic at the present day. G. Martinoli. *Int R Sci & Prac Ag* 8, no 6:819-25 Je '17

**Canada**

- Report of division of animal husbandry; horses. (In *Experimental farms*, 1916. v. 1, p. 506-31) *il* 45c '17 Canada Ag

**France**

- France as seen by an American importer. S: H. Bell. *Breeder's Gaz* 71:390 F 22 '17  
Horse supply in France. W: H. Dean. *il Country Gent* 83:5+ Ap 27 '18

**Great Britain**

- Clydesdale situation in Scotland. A. Chrystal. *il Field II* 26:113-14 F '16  
Co-operative horse insurance societies in Great Britain. *Int R Ag Econ* 69:49-65; 70:39-48 S-O '16; Same (pt. 2). *J Bd Ag* 23:279-86 Je '16  
Livestock situation in Great Britain. E. G. Preece. *il Field II* 26:214 Mr '16

**Iceland**

- Ancient Icelandic stallion fights. P. A. Ingvason. *Breeder's Gaz* 70:1025 N 30 '16

**India**

- Horse-breeding in India. *Ag J of India* 13:152-7 Ja '18

**Kentucky**

- Reforming the war horse. J: R. McMahon. *il Country Gent* 83:12-13 O 12 '18

**Missouri**

- Saddle horses in Missouri. R. A. Hayne. *il Nat Stock & F* 42:860 D 21 '18

**New York**

- Horse industry in New York state (B. 76). *il N Y Ag Dept Rep* 1916, pt 2:1-278 '17

**North Dakota**

- Horse production in North Dakota. W. H. Peters. *il N D Ag Ext B* 8:1-25 '17

**Norway**

- Breeds of horses in Norway. C. Wriedt. *Breeder's Gaz* 70:94 JI 20 '16

**Ohio**

- Methods of an Ohio horse-breeding center. C. T. Conklin. *Breeder's Gaz* 72:177 Ag 9 '17  
Ohio horse standards. C. T. Conklin. *Ohio F* 138:228 S 9 '16  
Old-time Ohio horses. H. W. Phelps. *Nat Stock & F* 42:408 JI 27 '18  
Status of horse production. D. J. Kays. *il Ohio Ag Dept B v* 9:16-22 My '18

**Peru**

- Horses in Peru. A. H. Godfrey. *Breeder's Gaz* 72:429 S 20 '17

**Philippine Islands**

- Philippine horses. D: B. Mackie. *il J Heredity* 7:373-82 Ag '16

**Tennessee**

- Tennessee horse affairs. *Breeder's Gaz* 73:206 Ja 31 '18

**United States**

- American saddle horse. M. F. Grimes. *il Penn State F* 9:323-4 F '16  
American saddle horse. C: E. Railey. *Breeder's Gaz* 70:540 S 28 '16  
American saddle horse in the making. E. A. Trowbridge. *il Country Life* 30:44-5 S '16  
American saddle horses. R. A. Hayne. *Nat Stock & F* 41:820 N 24 '17  
Horse in Congress. I. R. Sherwood. *Nat Stock & F* 41:1292 Mr 9 '18  
Lack of uniformity in American horses. *Breeder's Gaz* 72:500 S 27 '17  
Saddle horse breeders at Louisville. *Breeder's Gaz* 69:826-7 Ap 13 '16

**Horses, Age of**

- Carrying the horse's age into court. W. M. Bell. *Am Vet M Assn J* 52:863 Mr '18  
Future utility of the Fessina method for determining the age of horses. R. Disselhorst. *Int R Sci & Prac Ag* 8, no 2:265-6 F '17; Same. *Am Vet M Assn J* 52:864-6 Mr '18  
Influence of age on the value of dairy cows and farm work horses. J: C. McDowell. *U S Ag B* 413:1-12 '16  
Judging horse's age. *Weekly N L* 4:4 Ja 17 '17

**Horses, Army**

- American cavalry horse. *Breeder's Gaz* 69:1294 Je 22 '16  
American cavalry horse. P. M. Babcock. *il Nat Stock & F* 40:964 D 23 '16  
Arab horses as cavalry remount sires. map *Ag Digest* 1:20-1 My '16  
Army has more than 344,000 animals against 66,145 when war was declared. *Am Vet M Assn J* 52:735-6 F '18  
Army horse and mule requirements. W. Dinsmore. *Breeder's Gaz* 71:924 My 3 '17; Same. *Wallaces' F* 42:788 My 11 '17; Same. *Nat Stock & F* 41:196 My 12 '17; *Prac F* 113:205 My 15 '17; Same. *Hoards D* 53:755 My 25 '17; Same cond. *O Judd Farmer* 62:8 My 19 '17; Same cond. *Ag Digest* 2:489 Je '17  
Army horse trade in Ohio. C. T. Conklin. *Ohio F* 140:167 S 1 '17  
Army horses. *Wallaces' F* 42:952 Je 22 '17

**Horses, Army—Continued**

Army horses and mules. G. H. Conn. il Ohio F 142:74 J1 27 '18  
 Army horses direct from farmers. J. G. Fuller. Breeder's Gaz 73:917 My 2 '18  
 Army remount depots. W. H. Carter. Breeder's Gaz 72:890 N 15 '17  
 Artillery horse routine. E. N. Wentworth. Breeder's Gaz 72:554 O 4 '17  
 Auxiliary remount depots for the army. G. H. Conn. Breeder's Gaz 74:267 Ag 22 '18  
 Back to the cavalry horse. W. L. Nelson. Breeder's Gaz 70:1107 D 14 '16  
 Breaking a horse for army work. L. Ogilvy. Breeder's Gaz 74:49 J1 11 '18  
 Breaking horses for the army. G. F. Stratton. il Wallaces' F 41:1664 D 22 '16  
 Breeding horses for the army. W. H. Carter. Breeder's Gaz 69:967 My 4 '16  
 Breeding horses for the United States army. H. H. Reese. il U S Ag Yearbook 1917:341-56; Same. Separate 754  
 British and French army horses. R. B. Ogilvie. il Breeder's Gaz 71:971 My 10 '17  
 Buying army horses. W. S. Anderson. Wallaces' F 42:1094 Ag 3 '17  
 Buying horses and mules for the army. G. H. Conn. Breeder's Gaz 73:428-9 F 28 '18  
 Buying horses for war. G. E. Wentworth. Breeder's Gaz 72:428 S 20 '17  
 Cavalry horse. L. E. Clement. Wallaces' F 41:240 F 11 '16  
 Change in horse-buying methods. Breeder's Gaz 72:176 Ag 9 '17  
 Direct purchase of army horses. J. J. Hooper. Breeder's Gaz 72:1268 D 27 '17  
 Farm boys for cavalry service. W. W. Hunter. Nat Stock & F 41:142 Ap 28 '17  
 Good horses wanted. Weekly N L 5:7 Ag 22 '17  
 Government horse purchases. Wallaces' F 42:1166 Ag 24 '17  
 Government remount stations. W. Dinsmore. il Wallaces' F 43:1367 S 27 '18  
 Government war horse buying. Breeder's Gaz 71:1241 Je 21 '17  
 Home-sick horses. Nat Stock & F 42:109 Ap 20 '18  
 Horse breeding on sound basis. G. E. Wentworth. Field 11 29:498 J1 '18  
 Horse buying plans criticised. C. Allen. Breeder's Gaz 71:1241 Je 21 '17  
 Horses essential in warfare. O Judd Farmer 63:11 O 13 '17  
 Horses for army purposes. A. H. Godfrey. Country Life 32:19 S '17  
 Horses we need; types that have shown their worth in war. il Country Gent 81:1466 Ag 5 '16  
 Ideal and actual remounts. G. E. Wentworth. Breeder's Gaz 70:201 Ag 10 '16  
 Making an army horse. A. Burhans. Breeder's Gaz 72:984 N 29 '17  
 Mules to the front. Nat Stock & F 41:342 Je 30 '17  
 Observations on the convoy of remounts. H. C. Crawford. Am Vet M Assn J 52:212-18 N '17  
 Our horse reserves. G. E. Wentworth. il Country Gent 82:923 My 26 '17  
 Our real war horse. Ag Digest 2:834 F '18  
 Our supply of war horses. Breeder's Gaz 70:130 J1 27 '16  
 Range horses for the army. R. A. Hayne. il Nat Stock & F 40:404 J1 15 '16  
 Red star and the war horse. R. C. Craven. il Breeder's Gaz 74:82 J1 18 '18  
 Reforming the war horse. J. R. McMahon. il Country Gent 83:12-13 O 12 '18  
 Report on veterinary department auxiliary remount depot, Fort Bliss, Texas. A. L. Mason. plan Am Vet M Assn J 51:842-50 S '17  
 Saddle horses in cavalry work. L. Ogilvy. Breeder's Gaz 73:661 Mr 28 '18  
 Southern cattle and army horses at the Denver yards. W. C. Barnes. il Breeder's Gaz 69:75-6 Ja 13 '16  
 Supply of animals for the army. J. S. Fair. 33p '17 U.S. Quartermaster general of the army, Washington, D.C.  
 Supply of horses for military purposes. J Bd Ag 22:1022-4 Ja '16

Thinking to sample. G. E. Wentworth. Breeder's Gaz 72:144 Ag 2 '17  
 Transport horses at work. L. Ogilvy. Breeder's Gaz 73:918 My 2 '18  
 Treatment of war horses. Nat Stock & F 40:374 J1 8 '16  
 U. S. army against the allies in buying its animals. D. E. Buckingham. Am Vet M Assn J 50:697-9 F '17  
 United States army horses. G. E. Wentworth. Breeder's Gaz 71:1201 Je 14 '17  
 War horse trade. Breeder's Gaz 70:596 O 5 '16  
 War horses. il Nat Stock & F 40:650 S 23 '16  
 War horses in mediaeval England. J. W. Thompson. Breeder's Gaz 70:167-8 Ag 3 '16  
 What type of horses for the cavalry? W. H. Carter. Breeder's Gaz 73:661 Mr 28 '18  
 Workaday war horse; Foxhall. il Country Gent 81:687 Mr 25 '16  
*See also* Horses in war

**Transportation**

Army veterinary service. D. A. McAuslin. Am Vet M Assn J 53:536-46 J1 '18

**Horses, Care of**

Care of horses' feet. W. E. Carter. il Field 11 26:211 Mr '16  
 Care of the colt. R. A. Hayne. Nat Stock & F 41:1114 F 2 '18  
 Care of the colt's feet. W. G. Weigle. il Purdue Ag 11:43-4 Mr '17  
 Care of the new born foal. A. S. Alexander. il Wis Ag Ext C 61:1-8 '16  
 Care of the spring colt. il Purdue Ag 10:25-6 F '16  
 Careless feeding and watering may kill horse. G. H. Glover. Prac F 112:224 My 15 '16  
 Caring for work horses. R. A. Craig. Purdue Ag 10:11-12 Mr '16  
 Colt that pays. J. M. Trueman. il Country Gent 81:228 Ja 29 '16  
 Colt's first winter. Nat Stock & F 40:793 N 4 '16  
 Condition of the sources of efficiency. L. Ogilvy. Breeder's Gaz 73:488 Mr 7 '18  
 Consider the horse. Wallaces' F 41:522 Mr 31 '16  
 Critical seasons for the foal. C. H. Sapp. Nat Stock & F 40:1156 F 3 '17  
 Draft horse production. H. D. Van Matre. il Purdue Ag 10:25-7 Je '16  
 Feeding and care of the colt. J. L. Greenway. Prog F 31:1262 O 28 '16  
 Foaling time and afterward. C. H. Sapp. Nat Stock & F 40:207 My 20 '16  
 For better colts. R. Perkins. Prog F 33:177 F 9 '18  
 Getting horses in condition. W. H. Tomhave. il Prac F 113:153 Ap 1 '17  
 Good teeth and old age. R. A. Hayne. il Nat Stock & F 41:916 D 22 '17  
 Hooks in horses and mules. W. H. Dalrymple. Prog F 31:659 My 13 '16  
 Horse and stable management. W. Hislop and others. il Wash Ag Ext Pub Ser 1,no 22:1-28 '16  
 Horse-breeding suggestions for farmers. H. H. Reese. il Farmers' B 803:1-21 '17  
 Horse in hot weather. Wallaces' F 41:981 J1 14 '16; Same. Prac F 112:288 J1 15 '16  
 Horse's feet and their care; Care of horses' teeth. C. W. Brodhead. il N Y Ag Dept Rep 1916,pt 2:167-86 '17  
 From N Y Ag Dept B 76  
 Horse's foot. Wallaces' F 42:1603 N 23 '17  
 Horses' shoulders in summer. R. L. Rinckwitz. il Country Life 30:46 J1 '16  
 Ideal horse-tractor power combination. G. Dietz. il Power F 26:7-8 Ap '17  
 Making the colt good at the ground. il Va Ag Dept B 109:112-15 '16  
 Managing horses in summer. L. Ogilvy. Breeder's Gaz 69:1069 My 18 '16  
 Overheating a neglected horse. Breeder's Gaz 70:239 Ag 17 '16  
 Points about jibbing horses. J Dept Ag Victoria 16:56-8 Ja '18  
 Rays from the lamp of experience. Breeder's Gaz 71:390 F 22 '17  
 Rearing draft colts. E. M. Christen. Purdue Ag 11:24-5 D '16



**Horses, Care of --Continued**

- Scotch way of keeping horses fit. A. W. Ross. Breeder's Gaz 70:1289 D 28 '16
- Selling the horse. C. M. McConnell. Ohio F 141:646 My 11 '18
- Sore-backed horses. A. D. Read. Breeder's Gaz 72:283 Ag 30 '17
- Sore necks and horse collars. Wallaces' F 43:1194 Ag 23 '18
- Sore necks and shoulders. A. S. Alexander. Rural N Y 76:1274, 1304 N 3-10 '17
- Spring work and the horse. L. C. McQuat. J Ag (Quebec) 21:168 My '18
- Stabled horse. J Dept Ag Victoria 16:122-3 F '18
- Summer care of work horses. H. H. Havner. II Field II 27:624 Ag '17
- Supplementing nature in raising colts. il Breeder's Gaz 72:39 JI 12 '17
- Trooper's care of his horse. L. Ogilvy. Breeder's Gaz 72:736 O 25 '17
- Watching the horse's teeth. J. H. Reed. Prac F 112:sup3 Mr 1 '16
- Water externally and internally. L. Ogilvy. Breeder's Gaz 73:918 My 2 '18
- Weaning the farm colt. H. E. McCartney. O Judd Farmer 60:9 Mr 11 '16
- Weanlings in winter. L. Ogilvy. Breeder's Gaz 70:1025 N 30 '16
- Winter care of the colt. D. Prowant. Ohio F 141:44 Ja 12 '18
- Wintering idle horses cheaply. J Ag (Quebec) 20:127 D '16
- Work horses in hot weather. Hoard's D 53:957 JI 6 '17
- Work horses in summer. W. F. Purdue. Ohio F 141:670 My 18 '18

See also Horses—Care of mares

**Horses, Draft**

- Best type of draft horse. R. A. Hayne. il Nat Stock & F 41:1139 F 9 '18
- Big horses pay. H. T. Morgan. il Country Gent 82:861 My 12 '17
- Breed the big mares. Nat Stock & F 41:1292 Mr 9 '18
- Breed the mares. W. Dinsmore. Nat Stock & F 41:170 My 5 '17
- Case of draft horse conformation. R. A. Hayne. Breeder's Gaz 73:1036 My 16 '18
- Care of farm horses. Prac F 113:173 Ap 15 '17
- Comparing tractors and horses. L. M. Frederick. Farm Eng 5:8 Ap '17
- Developing draft foals. E. H. Hughes. il Breeder's Gaz 70:352 S 7 '16
- Developing pure-bred draft colts. E. McFarland. il O Judd Farmer 62:3 Ja 20 '17
- Draft breeds of France. by E. S. Akin; Belgian, by E. S. Akin; Draft breeds of Great Britain, by E. S. Akin; Best horse for the farmer to breed, by J. H. S. Johnstone. il N Y Ag Dept Rep 1916, pt 2:71-103, 134-40 '17
- From N Y Ag Dept B 76
- Draft horse ancestry Breeder's Gaz 71:120 Ja 18 '17
- Draft horse futurity movement. D. J. Kays. il Field II 27:184+ Mr '17
- Draft horse situation. Hoard's D 54:708 D 7 '17
- Draft horse utility in city and country. D. J. Kays. il Breeder's Gaz 74:300 Ag 29 '18
- Draft horses. il Hoard's D 51:1006 JI 21 '16
- Draft horses. il Wallaces' F 43:1724 N 22 '18
- Draft horses scarce. G. P. Williams. il Nat Stock & F 40:13 Ap 1 '16
- Drafters need speed. R. A. Hayne. Nat Stock & F 42:370 JI 13 '18
- Drafters pay as farm horses. E. McFarland. Breeder's Gaz 69:558 Mr 9 '16
- Efficiency with farm teams. Breeder's Gaz 69:430 F 24 '16
- Efficient horse power on the farm. W. L. Robison. il Ohio F 137:594 Ap 22 '16
- Efficient work horse. B. E. Carmichael. Nat Stock & F 41:240 My 26 '17
- Farm horse power. H. P. Miller. il Ohio F 137:739 My 27 '16
- Farm horse situation. C. W. McCampbell. Breeder's Gaz 72:247 Ag 23 '17
- Farm power requirements. W. Dinsmore. il Breeder's Gaz 74:183 Ag 8 '18
- Future of draft horses. W. Dinsmore. Breeder's Gaz 69:26 Ja 6 '16
- Future of draft horses in cities. W. Dinsmore. il Breeder's Gaz 72:137-8 Ag 2 '17
- Futurity and draft horse progress. D. J. Kays. il Breeder's Gaz 72:781 N 1 '17
- Give the work horse good treatment. H. W. Swope. Green's Fruit Grower 36:22 O '16
- Good farm horses. A. H. Covey. il Country Gent 81:633 Mr 18 '16
- Good return from draft colts. T. W. Harvey. il Ohio F 137:627 Ap 29 '16
- Growing draft colts. C. W. McCampbell. il Kan Ag Exp C 57:1-16 '16
- Growing drafters on the average farm. W. Hartmann. Wallaces' F 42:725 Ap 27 '17
- Heights and weights of draft horses. J Ag (Quebec) 21:vil S '17
- Hitching teams to big implements. Breeder's Gaz 69:919 Ap 27 '16
- Horse as a farm motor. L. W. Chase. il Field II 27:178 Mr '17
- Horse power on 300 farms. R. A. Hayne. Nat Stock & F 42:229 My 25 '18
- Horse sense about draft horses. G. E. Wentworth. il Field II 28:410-11 Je '18
- Horse that we'll keep. W. Stemmons. il Country Gent 83:11+ My 4 '18
- Horses and spring work. L. Ogilvy. Breeder's Gaz 69:727 Mr 30 '16
- Horses and tractors. W. E. Duckwall. Breeder's Gaz 73:604 Mr 21 '18
- Horses in cities. R. A. Hayne. Nat Stock & F 42:494, 640 Ag 24, O 12 '18
- Horses in food production. W. Dinsmore. il Field II 27:539-40 JI '17
- How to get the farm work stock needed. Prog F 32:1210 N 17 '17
- Iowa's position in draft horse breeding. W. Dinsmore. (In 5th annual report Stallion registration division, p. 33-41) '17 Ia. ag. dept., Des Moines
- Kind of horses to raise. E. P. Snyder. Nat Stock & F 42:370 JI 13 '18
- Missouri draft horse breeders' association 7th annual meeting. Mo Ag Bd Yearbook 1916:170-81
- Necessary draft horse. W. L. Houser. Breeder's Gaz 69:183-4 Ja 27 '16
- New York's situation in draft-horse production. W. Dinsmore. N Y Ag Dept B 94:37-46 Ap '17
- Old and new horses. E. M. Timberlake. Nat Stock & F 42:450 Ag 10 '18
- Outlook bright for draft horses. W. Dinsmore. map O Judd Farmer 60:6 Ja 15 '16
- Outlook for draft horse breeding. J. L. Edmonds. Breeder's Gaz 73:63 Ja 10 '18
- Preparing horses for spring work. J. H. Reed. Prac F 112:sup4 F 15 '16
- Present-day horse interests. E. McFarland. il Breeder's Gaz 73:135-16 F 14 '18
- Prices for draft horses. C. M. McConnell. il Ohio F 140:98 Ag 11 '17
- Profitable farm teams. E. McFarland. Breeder's Gaz 70:467 S 21 '16
- Purebred draft mares on the farm. C. M. McConnell. il Ohio F 138:657 D 30 '16
- Raising draft horses. C. M. McConnell. il Ohio F 141:562 Ap 20 '18
- Raising or buying work horses. L. Ogilvy. Breeder's Gaz 73:159 Ja 24 '18
- Reconstruction of horse breeding. il Breeder's Gaz 72:979 N 29 '17
- Save horse feed. F. Baumgardner. Nat Stock & F 42:330 Je 29 '18
- Selection of breeding draft horses. C. N. Arnett. il Mont Ag Exp C 69:17-32 '17
- Some points to be considered by the horse master. E. H. Edmonds. J Dept Ag S Australia 22:269-71 O '18
- Spring work for the team. Rural N Y 75:672 Ap 22 '16
- Suitable farm horses for South Australia. E. E. Place. J Dept Ag S Australia 20:954-60 JI '17
- Tractor aids draft horse raising. il O Judd Farmer 61:3 JI 29 '16
- Tractors vs. horses on the farm. W. Dinsmore. Breeder's Gaz 73:320 F 14 '18
- Why farmers should breed draft horses. W. Dinsmore. Nat Stock & F 41:1053 Ja 13 '17
- Same. Field II 27:510 Je '17
- Why we must have the horse. F. Crissey. il Country Gent 82:1547-8+ O 13 '17

**Horses, Draft—Continued**

- Will it pay to raise draft colts? C. M. McConnell. *il Ohio F 139:638 My 5 '17*  
 Winter feeding of idle farm horses. J. L. Edmonds. *il Ill Ag Ext C 16:1-4 '18*  
 Winter management of farm horses. Rural N Y 75:20, 54 Ja 1-8 '16  
 Work horses in summer. W. F. Purdue. *Ohio F 141:670 My 18 '18*  
 Young drafter. B. E. Carmichael. *Nat Stock & F 40:670 S 30 '16*

**Feeding**

*See Horses—Feeding*

**Judging**

- Judging of draft horses. W. H. Palmer. *il Ohio Ag Ext B v 13, no 15 24p '17-'18*

**Horses, Farm. See Horses, Draft****Horses in war**

- Army veterinary corps; with discussion. C. J. Marshall. *Am Vet M Assn J 50:583-94 Ja 17*  
 Cavalry and the science of war. L. Ogilvy. *Breeder's Gaz 70:239 Ag 17 '16*  
 Changed status of the horse in war. O. Schwarzkopf. *Am Vet M Assn J 49:59-70 Ap '16*  
 First aid for the war horse. W. H. Dean. *il Country Gent 83:3-4 N 30 '18*  
 Horses are indispensable in war. H. J. Reilly. *Breeder's Gaz 71:1201 Je 14 '17*; Same. *Nat Stock & F 41:302 Je 16 '17*; Same. *Hoard's D 53:889 Je 22 '17*; Same. *Prac F 113:251 Jl 1 '17*; Same. *Country Gent 82:1236 Ag 4 '17*  
 \* Horses' gallant part in the war. *Literary Digest (354 4th av., New York 10c) 59:44-7 N 23 '18*  
 Life of a war horse. G. E. Wentworth. *Country Gent 81:1720 S 23 '16*

**Horseshoeing**

- Care of horses' feet. W. E. Carter. *il Field 11 26:211 Mr '16*  
 Good blacksmith and the horse. H. Asmus. *il Cornell Countryman 15:469-71 My '18*  
 Hints on shoeing. W. F. Purdue. *il Nat Stock & F 40:771 O 28 '16*  
 Modern requirements in the shoeing of horses—especially in cities. R. W. Ellis. *Am Vet M Assn J 49:790-6 S '16*  
 Pricking of horse's foot. J. G. Clayton. *J Ag New Zealand 12:30-1 Ja '16*  
 Shoeing horses. P. T. Hines. *Prog F 31:594 Ap 29 '16*  
 Shoeing hunters for winter. *Country Life 31: 92 D '16*

**Horticultural associations**

- Eleventh annual report of the horticultural societies of Ontario, 1916. 128p *il '17 Ontario dept. of agric., Toronto*

*See also* Garden clubs; also names of associations. e. g. Canadian horticultural association; Egyptian horticultural society; National congress of horticulture; Northern great plains official horticulturists association; Peninsular horticultural society; Pomological society of Quebec; Royal horticultural society; Western New York horticultural society; also names of state associations

**Horticultural commissioners**

- Advisers' and commissioners' united action for county and state. H. M. Armitage. *Cal State Comm Hort B v 6:339-41 Ag '17*  
 Cooperation—state and county commissioners. C. W. Beers. *Cal State Comm Hort B v 6:341-2 Ag '17*  
 Varied duties of county horticultural commissioners. *Cal State Comm Hort B v 6:415 N '17*

**Horticultural education**

- Agricultural and horticultural courses for women in the Middle Atlantic states; tables. 2p *'17 Woman's nat. farm and garden assn., 600 Lexington av., N.Y.*  
 Emergency courses in horticulture. *School and Soc (Science Press, Garrison, N.Y. 10c) 6:761-2 D 29 '17*

**Horticultural extension work**

- Progress of extension work in horticulture. A. F. Mason. *Penn State F 9:389+ My '16*

**Horticultural inspection**

- Exclusion legislation and fruit tree production. V. B. Stewart. *Phyt 8:360-4 Jl '18*  
 Nursery inspection: the importance of legislation against crop pests. H. B. Weiss. *il map N J Ag Dept B 2:53-64 '16*  
 Parcel post horticultural material dangers. H. M. Armitage. *Cal State Comm Hort B v 6:454-7 N '17*

*See also* Horticultural commissioners; Quarantine, Agricultural; also American association of official horticultural inspectors

**Arizona**

- Plant inspection and quarantine laws, orders and regulations applying in the state of Arizona. 52p *'18 Arizona Comm. of ag. and horticulture, Phoenix*

**California**

- Forced control of insect pests in Los Angeles county. W. Wood. *Cal State Comm Hort B v 6:435-6 N '17*  
 Method for standardizing orchard inspections. J. D. Neuls. *Cal State Comm Hort B v 7: 411-13 Je '18*  
 Urgent need for state inspection of potatoes. H. B. Nielsen. *Cal State Comm Hort B v 7:519-20 S '18*

**Canada**

- Fumigation and inspection of imported nursery stock under federal legislation. A. Gibson. *il Ag Gaz of Canada 3:1046-51 D '16*  
 Inspection of nurseries in Canada. G. Maheux. *Ag Gaz of Canada 4:132-4 F '17*  
 Inspection of nursery stock in the provinces. *Ag Gaz of Canada 3:1083-7 D '16*  
 Regulations under the destructive insect and pest act. C. G. Hewitt. 12p *'17 Canada Ag*

**Egypt**

- Report on the first two years' working of the plant protection law (law no. 5 of 1913). G. Storey. *Egypt Ag Tech & Sci B 1:1-37 '16 (10c)*

**Florida**

- Digest of law governing shipment of nursery stock into Florida. F. M. O'Byrne. *Fla State Plant Bd C 8 3p '17 (Typew)*  
 Nursery inspection in Florida. F. M. O'Byrne. *J Econ Entom 9:224-6 F '16*  
 Report for quarter ending September 30, 1918. *Fla State Plant Bd Quar B v 3:18-19 O '18*  
 Report of the Florida state plant board for year ending April 30, 1916. *Fla State Plant Bd Quar B v 1:57-127 Ap '17*  
 Rules and regulations made by the State plant board pursuant to the Florida plant act of 1915, up to and including April 9, 1917. *Fla State Plant Bd Quar B v 1:130-53 Ap '17*

**Great Britain**

- Plant export certificates; import regulations. *J Bd Ag 23:513-14 Ag '16*

**Illinois**

- Plant inspection service. P. A. Glenn. *Ill State Hort Soc Trans 1917:45-50 '18*

**Kentucky**

- Inspection of nursery stock in Kentucky. H. Garman. *il Ky Ag Dept Rep 1916-1917:409-19 '18*

**Massachusetts**

- Act relative to nursery agents and to define the powers of the (Mass.) state nursery inspector. *Mass Ag Bd Yearbook 1916, pt 2:269-71*

- Law of Massachusetts relating to destruction of gypsy and brown tail moth. W. E. Hannan, comp. 18p *'18 N.Y. (state) Lib, legislative reference section*

Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew 90c)

**Minnesota**

- Entomologist's report on inspection of Minnesota nurseries and imported nursery stock for the year 1915. F. L. Washburn. *il Minn Entom C 37:1-20 '16*



**Horticultural inspection**—Minnesota—*Continued*  
Report on nursery and orchard inspection and inspection of foreign stock for the years 1915-1916. F. L. Washburn. (*In* Report State entomologist, 1915-1916, p. 28-58) il '16 Minn. ag. exp. station, St Paul

**Missouri**

Missouri nursery inspection service. L. Hase-man. J Econ Entom 11:120-2 F '18

**New Jersey**

Control of imported pests recently found in New Jersey. H. B. Weiss. J Econ Entom 11:122-5 F '18

Report of the inspection service. N J Ag Dept B 17:139-45 '18

**New York**

Inspection work of the Department of agriculture in relation to horticulture. G. G. Atwood. N Y Ag Dept B 79,pt 1:684-93 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:684-93 '17

**Ohio**

Ohio inspection system. N. E. Shaw. J Econ Entom 9:227-31 F '16

**Oregon**

Orchard inspection and law enforcement. A. C. Allen. (*In* 8th annual report, 1916, p. 91-6) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.

**Tennessee**

\* Report of nursery inspections and a list of Tennessee nurserymen for 1917-1918. G. M. Bentley. (B. 23) 24p '17 Tenn. State bd. of entomology, Knoxville

**Texas**

Texas orchard and nursery inspection laws and digest of laws and regulations of different states, covering interstate shipment of nursery stock. E. L. Ayers. Tex Ag Dept B n s 19:1-29 n.d.

**United States**

Activities of the federal horticultural board at the port of New York. H. B. Shaw. J Econ Entom 10:217-19 F '17

Enforcement of our horticultural laws. J. W. Pomeroy. Better Fruit 10:21+ Je '16

Important foreign insect pests collected on imported nursery stock in 1915. E. R. Sasser. J Econ Entom 9:216-19 F '16

Important foreign insect pests collected on imported nursery stock in 1916. E. R. Sasser. J Econ Entom 10:219-23 F '17

Important foreign insect pests collected on imported nursery stock in 1917. E. R. Sasser. J Econ Entom 11:125-9 F '18

Inspection facilities in the District of Columbia. E. R. Sasser. il J Econ Entom 9:219-23 F '16

Model state horticultural inspection law. J. G. Sanders. J Econ Entom 9:206-12 F '16

\* Shipping instructions for nurserymen (revised to October, 1916). G. M. Bentley. (B. 16) 32p '16 Tenn. State bd. of entomology, Knoxville

16th annual meeting of the section on horticultural inspection of the American association of economic entomologists, Pittsburgh, Pa., Jan. 1, 1918. J Econ Entom 11:118-48 F '18

State nursery and orchard inspection laws. il Ky Ag Dept Rep 1916-1917:419-24 '18

\* Synopses of state laws regulating nursery shipments (revised to July 1, 1917). G. M. Bentley. (B. 21) 31p '17 Tenn. State bd. of entomology, Knoxville

Weakness of our present system of inspection with regard to foreign shipments. W. J. Schoene. J Econ Entom 10:216-17 F '17

**West Virginia**

State crop pest law and rules and regulations of the commissioner. W Va Ag Dept B 24:1-13 '17

**Horticultural research**

Experimental work in horticulture. J. Oskamp. Purdue Ag 12:75-7 N '17

First report of the state experiment orchard, Berri, River Murray. G. Quinn and C. G. Savage. J Dept Ag S Australia 22:215-23 O '18 (to be cont)

Orchard experimental work by Stoke fruit-growers' association. J Ag New Zealand 17:225-30 O '18

Research in horticulture. U. P. Hedrick. Penn State F 9:386-7+ My '16

**Horticulture**

Closer relation of horticulture to the cannery.

A. Rupert. Better Fruit 13:13 Jl '18

Horticulture as a profession. J. Donald. Gard Chron Am 22:154-5 My '18

Horticulture, old and new. Nat Stock & F 41: 369 Jl 7 '17

Horticulture's influence upon civilization. J. C. Blair. Ill State Hort Soc Trans 1916: 129-39 '17

Horticulturist's duty to the nation at the present time. S. V. Blair. Ill State Hort Soc Trans 1917:102-13 '18

Organisation of horticulture. Gard Chron (Lond) 60:191-2 O 21 '16

Some recent significant facts in horticulture. J. G. Moore. Wis Hort Soc Rep 48:142-6 '18

*See also* Flats (horticulture); Floriculture; Fruit culture; Gardening; Nurseries (horticulture); Nursery stock

**Study and teaching**

Horticulture in the public schools. J. G. Boyle. il Purdue Ag 10:12-14 Ja '16

Science degrees in horticulture. Royal Hort Soc J 42,pt 1:148-54 O '16

**Belgium**

State of Belgian horticulture. H. Van Orshoven. Gard Chron (Lond) 59:317-18 Je 17 '16

**California**

Orchards and vineyards. (*In* Statistical report, 1916, p. 119-80) '17 Cal. State bd. of ag., Sacramento

*See also* California—Horticulture, State commissioner of; California association of county horticultural commissioners

**Canada**

Horticulture in western Canada. F. W. Brod-rick. Minn Hort 45:290-5 Jl '17

Report from the division of horticulture for the year ending March 31, 1916. (*In* Experimental farms, 1916. v. 2, p. 601-997) il 35c '17 Canada Ag

Report of the division of horticulture, 1916-1917. (*In* Report, 1917, p. 127-32) il '17 Quebec ag. dept., Quebec

Some places of horticultural interest in the eastern townships. il J Ag (Quebec) 22:19 Ag '18

*See also* Canadian horticultural association; Ontario horticultural experiment station; Pomological society of Quebec

**France**

Cultivation and marketing of flowers and early produce on the Riviera. from Toulon to Mentone. M. Foncin. Int R Sci & Prac Ag 7,no 11:1623-4 N '16

**Great Britain**

Annual report of the Horticulture branch for the year 1916. J Bd Ag 24:142-58 My '17

Chamber of horticulture. Gard Chron (Lond) 64:170 O 26 '18

Scottish horticultural; president's address. J. Phillips. Gard Chron (Lond) 61:89 F 24 '17

Trade re-organisation and co-ordination. Gard Chron (Lond) 64:36 Jl 27 '18

*See also* Royal horticultural society

**Idaho**

*See also* Idaho state horticultural society

**Illinois**

*See also* Illinois nurserymen's association; Illinois state horticultural society

**Horticulture—Continued****Indiana**

Indiana horticulture; a bird's-eye view. *il* Purdue Ag 11:12-14 Mr '17

*See also* Indiana horticultural society

**Maryland**

*See also* Maryland state horticultural society

**Massachusetts**

*See also* Massachusetts—Nursery inspector, State

**Michigan**

*See also* Michigan state horticultural society

**Minnesota**

Heroes of Minnesota horticulture. C. Wedge. *Minn Hort* 45:419-23 N '17

Minnesota as a horticultural state. R. S. Mackintosh. *Minn Hort* 46:90-4 Mr '18

*See also* Minnesota state horticultural society

**Missouri**

*See also* Missouri horticultural society

**Nebraska**

Horticultural resources of Nebraska. G. E. Condra. *il* (*In* Nebraska Horticulture v. 6, no. 12, p. 28-34) (F) '17 Neb. state hort. soc., Lincoln

*See also* Nebraska state horticultural society

**Netherlands**

Dutch market-gardening and its organization. H. M. R. Leopold. *Int R Ag Econ* 81:1-6 S '17

**New Hampshire**

*See also* New Hampshire horticultural society

**New Jersey**

*See also* New Jersey state horticultural society

**New York**

Spraying service in Niagara county in 1917. L. F. Strickland and N. R. Peet. *il* maps N Y Farms & Markets Dept Ag B 106:1-147 Ap '18

*See also* Western New York horticultural society

**Ohio**

*See also* Ohio state horticultural society

**Oregon**

*See also* Oregon state horticultural society

**Pennsylvania**

Opportunities in Pennsylvania horticulture. S. W. Fletcher. *Penn State F* 10:173-4 N '17

*See also* State horticultural association of Pennsylvania

**South Dakota**

Horticultural extension work in South Dakota. *Am Flor* 46:708 Ap 15 '16

**Southern states**

Agriculture and horticulture in the South. J. A. Hearn. (*In* Proceedings, 10th annual meeting, Railway development association, p 64-7) '16 D. C. Welty, sec., St. Louis, Iron Mountain & Southern ry., St. Louis, Mo.

**United States**

How the American trade is meeting the world's demands; enormous acreages devoted to ornamental plants, bulbs, flower and vegetable seeds, etc.; pictures. *Gard M* 28:50-1 S '18

War arouses American horticulture. *Gard M* 28:39 S '18

*See also* United States—Horticultural board, Federal

**Washington**

*See also* Washington state horticultural association

**Wyoming**

Licensed nurseries; war-time horticulture. (Special B. v 1, no. 6) 56p *il* '18 Wyo. State bd. of horticulture, Laramie

**Hose**

Hose in housecleaning. M. E. S. Hymers. *Rural N Y* 75:842 Je 3 '16

**Hospitals**

County hospital and the visiting nurse. M. H. Talbott. *il* Country Gent 81:1311 Jl 1 '16

*See also* Diet kitchens; Tuberculosis—Hospitals and sanatoriums

**Hospitals, Military**

Work of the dietitian in the Canadian military hospitals. V. M. Ryley. *J Home Econ* 10:108-13 Mr '18

Hot-beds. *See* Hotbeds

**Hot water supply**

Simple hot water system. *Farm Eng* 7:24 Mr '18

**Hotbeds**

Bedding plant notes. C. W. Johnson. *Am Flor* 48:633 Ap 7 '17

Build a hot-bed for the home garden. Hoard's D 53:385 Mr 23 '17

Building the hot bed. M. L. Frederick. *Farm Eng* 5:6 Mr '17

Dipping hotbed sash. *il* Country Gent 82:730 Ap 14 '17

Early gardener. L. Clement. *il* Fruit-Grower 27:121 F 15 '16

Electricity for heating frames. W. C. McCollom. *Gard M* 26:125-6 N '17

Evolution from the hotbed. E. G. Ames. *il* Gard M 24:133-4 N '16

Forcing vegetables for home use. C. Watson. *il* Purdue Ag 11:41 Ja '17

Forcing with hot-beds seventy years ago. *Gard Chron* (Lond) 61:17 Ja 13 '17

Getting the garden under glass. F. F. Rockwell. *il* Gard M 26:130-1 N '17

Greenhouse versus hotbeds. F. H. Gibbs. *il* Minn Hort 44:467-9 D '16

Growing plants for sale. G. W. Kerr. *Country Gent* 81:174 Ja 22 '16

Home garden; you can grow vegetables for winter in cold frames and hotbeds. *il* Country Gent 82:1413 S 15 '17

Home made hotbed mats. E. O. Orpet. *il* Gard M 23:118 Mr '16

Hot and cold frames (C. 35). J. W. Wellington. N Y State Ag Exp Rep 1915:669-72 '16

Hot water hot bed. *Gard M* 25:42 F '17

Hotbed and cold-frame crops; with list of vegetables and time of planting. H. W. Doyle. *Country Gent* 81:456 F 26 '16

Hotbed and cold-frame making. *il* Country Gent 81:1880 O 21 '16

Hotbed construction. C. B. Sprague. *il* Wash Ag Exp Pop B 98:1-15 '16

Hotbed—how to make and to plant it. *il* Country Gent 81:64 Ja 8 '16

Hotbed off the ground. E. S. Boyer. *il* Country Gent 81:574 Mr 11 '16

Hotbed points and wrinkles. *Fruit-Grower* 27:177 Mr 1 '16

Hotbed with a lamp. J. P. Poland. *Rural N Y* 77:279 F 23 '18

Hot beds and cold frames. *il* Mass Ag Ext C 58 6p '18

Hot beds and cold frames. *Prog F* 31:1144 S 30 '16

Hotbeds and cold frames. *Prog F* 32:109 Ja 27 '17

Hot beds and cold frames. C. S. Adams. *il* Ky Ag Exp C 11:1-22 '16

Hotbeds and cold frames. T. F. Limbocker. *Colo Ag Exp B* 22:1-8 '17

Hotbeds and coldframes. A. H. Mac Lennan. *il* J Ag (Quebec) 19:165 F '16

Hotbeds and cold frames. W. F. Massey. *il* Prog F 33:95 Ja 26 '18

Hotbeds and cold frames. J. L. Stahl. *Western Wash Ag Exp B v* 6:92-3 O '18

Hotbeds and cold frames for the home gardener. *il* Country Gent 82:257 F 10 '17

Hotbeds and cold frames for the home garden. R. E. Marshall and C. Woolsey. *Va Ag Ext B* 22:1-14 '17



**Hotbeds —Continued**

- Hotbeds and cold frames nine months in the year; with discussion. N. A. Rasmussen. *il* Minn Hort 45:162-6 Ap '17
- Hotbeds—cold frames. J. T. Rosa, jr. *il* Country Gent 82:345 F 17 '17
- Hotbeds, cold frames and forcing boxes. E. L. Kirkpatrick. *il* Rural N Y 75:35 Ja 8 '16
- Hotbeds, cold frames and plant forcers. B. S. Brown and R. T. Muller. *Maine Ag Ext B* 115:1-13 '18
- Hotbeds for early planting. O Judd Farmer 64:15 F 2 '18
- Hotbeds for early vegetables. G: W. Kerr. *Gard Chron Am* 20:66 F '16
- Hotbeds for home gardens. W. E. Lommel. *il* Ind Ag Exp C 77:1-8 '18
- Hot-beds for small holders. J Bd Ag 23:997-1000 Ja '17
- How to construct a flue-heated hot bed. J. C. C. Price. *Ala Ag Ext C* 15 4p '18
- How to make a hotbed. E. F. White. *Prog F* 31:111 Ja 22 '16
- How to make and care for the hotbed. E. L. Kirkpatrick. *il* Ohio F 139:256 F 17 '17
- How to make hotbeds. H. D. Hemenway. *Mass Ag Bd B* 5:80-3 '18 (3d ed. rev.)
- How to make hotbeds and cold frames. C. J. Hayden. *il* Prog F 31:1306 N 11 '16
- Lamp-heated hotbed. Rural N Y 77:140 F 2 '18
- Make a hotbed. G. A. Meredith. *Ohio F* 141:393 Mr 16 '18
- Making and managing a hotbed. J. S. Underwood. *Green's Fruit Grower* 37:17 Mr '17
- Making hotbed mats at home. *Gard M* 22:237 Ja '16
- Making sweet-potato beds. Rural N Y 75:151 Ja 29 '16
- Over the top with a hotbed. L. M. Montgomery. *Ohio F* 141:432 Mr 23 '18
- Preserving hotbed sash frames. J. T. Rosa, jr. *il* Market Growers J 20:10 Ja 1 '17
- Producing vegetables for winter under glass. A. Kruhm. *il* Gard M 24:132-3 N '16
- Putting it simply, for the beginner; making hotbeds and coldframes, sowing seeds, watering. *Gard M* 27:70-2 Mr '18
- Raising plants for gardeners. C. Kennard. *Country Gent* 81:393 F 19 '16
- Starting early vegetables in greenhouse or hotbed. *il* Country Gent 81:396-7 F 19 '16
- Starting seeds in hotbed. Rural N Y 77:229 F 16 '18
- Starting seeds indoors. W. A. Crandall. *Gard M* 23:110 Mr '16
- Stove-heated hotbed. B. Stude. *Country Gent* 81:516 Mr 4 '16
- Use of hotbeds and cold frames. *il* Country Gent 83:42 Ja 26 '18
- Useful hotbed. E. L. Kirkpatrick. *il* Rural N Y 77:194, 227 F 9-16 '18
- Vegetables out of season. J. G. Boyle. *il* Fruit-Grower 27:123 F 15 '16
- War garden hotbed. C. E. Durst. *il* Ill Ag Exp C 215:1-8 '18

*See also* Cold frames; Forcing (plants)

**Hotels**

- Saving the country hotel. M. H. Clark. *il* Country Life 30:52 Ag '16

**Houdans (poultry)**

- Mottled Houdan. W. H. Card. *il* Country Gent 81:460 F 26 '16
- Origin and good qualities in the new white variety of Houdans. F. D. Baerman. *il* Reliable P J 23:568+ J1 '16
- Regeneration of the practical and beautiful Houdan. J. Abernethy and F. L. Sewell. *il* Reliable P J 23:484-6+ Je '16
- Shares his knowledge about mating Houdans with our readers. J. Abernethy. *Reliable P J* 23:643+ Ag '16

**Hounds**

- Kennel management. A. H: Higginson. *il* plans Country Life 32:76-9 My '17

*See also* Borzoi; Deerhounds; Wolfhounds

**Hours of labor**

- Hours of labor; how many does the average cheesemaker put in each day? N Y Prod R 47:20 N 6 '18
- Housewife and the eight-hour day. J Home Econ 9:87-8 F '17

Report on the regulation of wages, hours and working conditions of women and minors in the fruit and vegetable canning industry of California. (B. 1) 176p *il* '17 Cal. Industrial welfare comm., 525 Market st, San Francisco

**House cleaning**

- Begin early—modern house-cleaning, etc. G. Shull. *Fruit-Grower* 27:287 My 1 '16
- Hose in housecleaning. M. E. S. Hymers. Rural N Y 75:842 Je 3 '16
- House cleaning any time. *il* Ohio F 141:442-3 Mr 23 '18
- It has been my experience; housecleaning. O Judd Farmer 62:16 My 5 '17
- Path of least resistance in housecleaning. A. G. Vestal. *il* Power F 25:30 My '16
- We discuss the ins and outs of spring cleaning. *Country Gent* 82:670 Mr 31 '17

**House decoration**

- Beautifying home interiors. Mrs W. N. Hutt. *il* Prog F 31:986 Ag 12 '16
- Decorating service. J. C. Marshall. *See* monthly numbers of *Country Life* in America for 1916 and 1917
- Doing over four corners. H. D. Eberlein. *il* Country Gent 81:430-1 F 19 '16
- Doing over the farmhouse. M. Greenleaf. *il* Country Gent 82:818-19 Ap 28 '17
- Fundamental principles of interior decoration. F. A. Parsons. *il* plan Country Life 31:23-36 F '17
- Furnishing and decorating the summer home. A. R. Fairman. *il* Country Life 32:35-46 My '17
- Furnishing on a budget. L. D. P. Lee. *il* Country Life 31:48-51, 80 Mr '17
- Home decoration. L. R. Miner. *il* Hampton Leaflets v 8, no 1 14p '17
- Home furnishing. W. S. Gettemy. *il* plan Ia Ag Ext Home Economics B 7:1-36 '16
- House and some of its problems. L. M. Bailey. J Ag (Quebec) 21:95 D '17
- House planning and furnishing. E. Miller. J Home Econ 8:219-26 My '16
- How to hang pictures in the home. A. G. Vestal. *il* Power F 27:42-3 D '18
- How to select and apply paint. *Prog F* 32:1066 O 13 '17
- Ideas about home making. G. Shull. *Fruit-Grower* 27:335 Je 15 '16
- Indoor decorations from the garden. A. D. Evans. *il* Gard M 27:269 J1 '18
- It isn't in the books. S. Kerr. *il* Country Life 31:63-5 Ap '17
- Living room and bedrooms. N. K. Jones. *Country Gent* 81:1207 Je 10 '16
- Living room—meeting place of family. G. V. Gray. *il* Farm Eng 3:182-3 F '16
- Making decorating fabrics do their bit. J. M. Breese. *il* Country Life 34:78+ Ag '18
- Matter of paint. B. B. Troxell. *il* Country Gent 82:471 Mr 3 '17
- My fifty-cent garden; choosing my flowers to fit my rooms. J. Story. *il* Country Gent 83:51 Ja 5 '18
- New note in the magazines and books on house furnishing. L. Hope. J Home Econ 9:573-5 D '17
- Plants and flowers in interior decoration. G. Taber. *il* Country Life 33:49-52 F '18
- Question of color combination. Nat Stock & F 41:32 Mr 31 '17
- See also* Curtains; Furniture; Mantels; Pictures; Rugs; Wall coverings
- House flies. *See* Flies
- House painting**
- Paint a good investment. *Prog F* 31:1124 S 23 '16
- Painting for protection. L. W. C. Tuthill. *il* Country Life 34:64 O '18
- Painting the home. Mrs W. N. Hutt. *Prog F* 31:1121 S 23 '16
- Painting the house. G: E. Walsh. *Country Life* 30:74 My '16
- Yellow trim. L. H. Lennox. *Country Life* 33:96 Mr '18
- House plants**
- After blooming—what? A. M. Burke. *il* Gard M 26:158-60 D '17

**House plants—Continued**

- Beautifying of home grounds; house plants. E. Hansen. *il* Utah Ag Ext C v 5, no 28: 20-6 '17
- Care of house plants. W. N. Hutt. *Prog F* 33: 21 Ja 5 '18
- Days of a potted plant. J. H. Sperry. *Country Gent* 82:152 Ja 27 '17
- Decorative plants for inside the house. *il* Gard M 24:174-5 D '16
- Feeding plants in pots. *Gard Chron Am* 22: 214 Ag '18
- Home garden; the care of house plants during the winter. *Country Gent* 83:27 N 23 '18
- Home-made potted plant fumigator. *il* Gard M 26:184 Ja '18
- House plant season. H. F. Major. *Kimball's D F* 14:841 Ja 1 '17
- In my window garden. F. Spring. *il* Country Gent 81:1951 N 4 '16
- Live trees for Christmas. *il* Country Life 31: 36-7 D '16
- Making the Christmas dollar buy a dollar's worth. F. F. Rockwell. *il* Gard M 28:142 D '18
- Miscellaneous plants for the house. *Gard Chron Am* 20:470 N '16
- Plants and flowers in interior decoration. G. Tabor. *il* Country Life 33:49-52 F '18
- Plants for winter. *Nat Stock & F* 40:776 O 28 '16
- Potted plants for Christmas. F. F. Rockwell. *il* Independent (119 W. 40th st, N.Y. 10c) 92:414-15 D 1 '17
- Selection and care of house plants. F. E. Palmer. *Am Flor* 46:1286-8 Jl 8 '16
- Some desirable plants for hanging baskets. M. Free. *Gard Chron Am* 20:227 My '16
- Sport of raising your house plants from seeds. N. De Philipps. *il* Gard M 24:135-6 N '16
- What house plants require. *Gard Chron Am* 20:476 N '16
- Winter hanging baskets. *Am Flor* 49:100 Ag 4 '17
- Winter house plants. M. B. Rogers. *Rural N Y* 77:1121 S 28 '18
- See also Aspleniums; Begonias; Florists' plants; Fuchsias
- Diseases and pests**
- House plant troubles. J. T. Timmons. *Ohio F* 141:157 F 2 '18
- Insects destructive to house plants. E. H. Jones. *J Ag (Quebec)* 20:96 N '16
- Saving sick house plants. J. H. Sperry. *Country Gent* 81:2202 D 23 '16
- Sciara maggots injurious to potted plants. H. B. Hungerford. *bibliog il* J Econ Entom 9:538-49 D '16
- House wrens.** See Wrens
- Household accounting.** See Domestic finance
- Household decoration.** See House decoration
- Household economics.** See Home economics
- Household expenses.** See Domestic finance
- Household management.** See Home economics
- Household pests**
- Buprestid household insect (chrysophana placida Lec.). H. E. Burke. *J Econ Entom* 10:406-7 Ag '17
- Eradicating the little house ant or Pharaoh's ant from a dwelling house. M. P. Zappe. *Conn State Ag Exp B* 203:314-15 '18
- Household insects. C. G. Randell. *il* Purdue Ag 12:164-5 D '17
- \* Household insects. F. L. Washburn and C. W. Howard. (C. 44) 14p *il* '17 Minn. State entomologist, St Paul
- Household pests and their treatment. H. Garman. *il* Ky Ag Exp C 15:63-90 '17
- Insects and rodents injurious to stored products. E. N. Cory and H. S. McConnell. *il* Md Ag Ext B 8:122-44 D '17
- Insects; common forms in relation to public health and methods for their destruction. Pa Health B (State department of Health, Harrisburg) 93:1-21 My '17
- Remedies for household pests. *Prog F* 32:426 Mr 31 '17
- Results of experiments with miscellaneous substances against bedbugs, cockroaches, clothes moths, and carpet beetles. E. W. Scott and others. *U S Ag B* 707:1-36 '18
- Troublesome household pest (attagenus plebius Sharp) of Hawaii. J. F. Illingworth. *il* J Econ Entom 10:340-4 Je '17
- See also Ants; Bedbugs; Cockroaches; Flies; Insects; Injurious and beneficial; Mice; Mosquitoes; Rats
- Household science.** See Home economics
- Housekeeping.** See Home economics
- Housekeeping centers**
- City housekeeping center. R. Ransom and J. Wilkins. *J Home Econ* 8:417-18 Ag '16
- Florida's first home demonstration center. S. W. Partridge. *J Home Econ* 8:414-16 Ag '16
- Housekeeping center. A. R. Gott. *J Home Econ* 9:359-60 Ag '17
- Houses.** See Architecture, Domestic; Country houses; Farmhouses; House decoration
- Houses, Historic.** See Historic houses
- Houses, Remodeled**
- Old houses under new roofs. R. Dean. *il* Country Life 32:45-9 O '17
- Housing problem**
- Housing problem. L. Veiller. *J Home Econ* 9:492-5 N '17
- Housing problem, Rural**
- City comforts in the country; how one group shares the expense and profits. Mrs W. J. McLondon. *il* plan *Prog F* 32:314 Mr 10 '17
- Hover-flies.** See Syrphidae
- How Christmas came to Valley farm; story.** E. L. Gilbert. *Ohio F* 140:590 D 22 '17
- Hoxie, Solomon, 1829-1917**
- Father of advanced registry. M. H. Gardner. *por* Breeder's Gaz 72:75-6 Jl 19 '17
- Hudson River fruit exchange**
- Conception and organization. finances, etc. W. Y. Vellie. *il* N Y Ag Dept B 79, pt 1: 731-40 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 2:731-40 '17
- Huisache**
- Diseases and pests**
- Huisache girdler. M. M. High. *il* U S Ag B 184:1-9 '15
- Human milk.** See Milk, Human
- Humble-bees.** See Bumblebees
- Humidity**
- New interpretation of the relationships of temperature and humidity to insect development. W. D. Pierce. *J Ag Research* 5:1183-91 Mr 20 '16
- Humming birds**
- Buzz. S. P. Morris. *il* Country Life 35:74 N '18
- Humming-birds and swifts. A. A. Allen. *il* Am For 24:160-4 Mr '18
- Story of a young Allen hummingbird. H. W. Myers. *il* Country Life 30:80 My '16
- Humogen.** See Peat as fertilizer
- Humpback wheat.** See Wheat—Varieties
- Humus**
- Action of neutral salts on humus and other experiments on soil acidity. L. J. Gillespie and L. E. Wise. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 40:796-813 My '18
- Amount of humic substances in decomposing leaves. A. C. Trusov. *Int R Sci & Prac Ag* 7, no 8:1696-8 Ag '16
- Composition of soils and the formation of humus. *J For* 16:115-19 Ja '18
- Dead leaves valuable. *Am For* 23:731 D '17
- Decomposition of organic matter in soils. F. G. Merkle. *bibliog Am Soc Agron J* 10: 281-302 O '18
- Effect of additions on the availability of soil potash, and the preparation of sugar humus. G. S. Fraps. *Tex Ag Exp B* 190:1-30 '16
- Effect of decomposing organic matter on the solubility of certain inorganic constituents of the soil. C. A. Jensen. *J Ag Research* 9: 253-68 My 21 '17



**Humus—Continued**

- Grow your own humus. Prog F 33:36 Ja 12 '18
- Helping nature help herself. J. S. Groupe. il Prac F 113:281 Ag 15 '17
- How to get rich lands; crop residues or remains and their importance in maintaining soil fertility. T. Butler. Prog F 32:756 Jl 7 '17
- How to get rich lands; humus: how to keep up and increase the supply. T. Butler. Prog F 32:746 Je 30 '17
- How to get rich lands; humus: the part it plays in soil fertility. T. Butler. Prog F 32:714 Je 23 '17
- Humification of plant constituents. Int R Sci & Prac Ag 7,no 1:46 Ja '16
- Humus. H. J. Bower. il Kan Ag Ext C 5:1-7 n. d.
- Humus and its value. D: Shropshire. Prac F 112:152 Ap 1 '16
- Humus and soil fertility. I. H. Walbridge. Hoard's D 54:492 N 2 '17
- Humus content of the soil. H. J. Wheeler. il Am Assn Farmers' Inst Workers Prog 1916:79-90 '17
- Humus for Missouri soil. W. L. Nelson. il Country Gent 81:558 Mr 11 '16
- Humus holds water. Irr Age 33:49 Ap '18
- Humus in arid soil. T. S. Parsons. il Country Gent 81:690 Mr 25 '16
- Humus in mulched basins, relation of humus content to orange production, and effect of mulches on orange production. C: A. Jensen. bibliog J Ag Research 12:505-18 F 25 '18
- Humus or organic matter in the soil. T. Butler. Prog F 31:141 Ja 29 '16
- Influence of humus forming materials of different nitrogen-carbon ratios on bacterial activities. P. E. Brown and F. E. Allison. la Ag Exp Research B 36:1-30 '16
- Is the humus content of the soil a guide to fertility? R. H. Carr. bibliog Soil Sci 3:515-24 Je '17
- Keep the soil filled with humus. W. F. Massey. Prog F 31:700 My 27 '16
- Loess soils of the Nebraska portion of the transition region: humus, humus-nitrogen and color. F: J. Alway and M. J. Blish. bibliog map Soil Sci 1:239-58 Mr '16
- Maintaining the supply of soil humus. F. S. Prince. il Ohio F 138:537-8 D 2 '16
- Nitrogen content of the humus of arid soils. F: J. Alway and E. S. Bishop. bibliog J Ag Research 5:909-16 F 14 '16
- Organic matter of the soil: on the production of humus from manures. R. A. Gortner. bibliog Soil Sci 3:1-8 Ja '17
- Organic matter of the soil: some data on humus, humus carbon and humus nitrogen. R. A. Gortner. bibliog il Soil Sci 2:395-441 N '16
- Organic matter of the soil: some data on humus-phosphoric acid. R. A. Gortner and W: M. Shaw. bibliog Soil Sci 3:99-111 F '17
- Plant food and humus. F. F. Rockwell. il Country Gent 81:31+ Ja 1 '16
- Plant food materials in the leaves of forest trees. P. Serex, jr. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:1286-96 Je '17
- Report of the committee on humus. H. J. Wilder. N Y Farms & Markets Dept Ag B 97:78-82 Jl '17
- Slow change of vine wood buried in the soil. E. Pantanelli. Int R Sci & Prac Ag 8,no 5:701-3 My '17
- See also Leaf mold
- Hungary.** See Corn—Hungary; Potatoes—Hungary; Sheep—Hungary; Wheat—Hungary
- Hunting**
- Farmer and the city hunter. E. L. Cronk. Rural N Y 76:289 F 24 '17
- Farmer and the hunter. Rural N Y 75:1362 O 28 '16
- Game laws and the farmer. A. C. Weed. Rural N Y 76:107 Ja 27 '17
- No trespassing; why the farmer has a legitimate kick against hunters. W: H. Dean. il Country Gent 82:1681 N 3 '17

- Two views of the hunting nuisance. K. H. Atwood. Rural N Y 76:33 Ja 13 '17
- See also Bird dogs; Bounties; Fox hunting; Hunting clubs; Trapping
- Hunting clubs**
- Huntingdon Valley hunt club. A. Stoddart. il Country Life 31:26-8 N '16
- Myopia hunt club. E. L. D. Seymour. il Country Life 29:30-2 Ja '16
- Huntingdon dairymen's association**
- 34th annual convention, Hemingsford, Que., Feb. 18. J Ag (Quebec) 19:222 Ap '16
- Huntingdon fair**
- Annual fair, Sept. 7-8. il J Ag (Quebec) 20:74 O '16
- Huntingdon, Tennessee, farmers' cooperative association.** See Farmers' cooperative association, Huntingdon, Tennessee
- Hunziker, Otto Fred, 1873-**
- Professor Hunziker to leave Purdue. por Creamery 5:39 Je '17; Same. N Y Prod R 44:242 Je 6 '17; Same. Hoard's D 53:858 Je 15 '17
- Hyacinths**
- Miniature Dutch hyacinths. C. W. Johnson. Am Flor 46:273 F 26 '16
- Prepare now for hyacinths and narcissii when the ground is white. Weekly N L 6:4 N 6 '18
- Roman hyacinths. Am Flor 51:307 Ag 31 '18
- Hyalopteris pruni.** See Plum aphid, Mealy
- Hybridism.** See Hybridization
- Hybridization**
- Crossbreeding. F. S. King. Nat Wool Grower 7:25-6 Ja '17
- Evolution by hybridization, by J. P. Lotsy. Review by E. C. Jeffrey. J Heredity 9:25-8 Ja '18
- Experiments with dogs in connection with the Mendelian laws of heredity. O. Wellmann. Int R Sci & Prac Ag 7,no 8:1137-9 Ag '16
- Observations on the skulls of hybrids between wild and domestic horses and cattle. Int R Sci & Prac Ag 7,no 2:246-8 F '16
- Studies in inheritance of certain characters of crosses between dairy and beef breeds of cattle. J: W. Gowen. bibliog il J Ag Research 15:1-58 O 7 '18
- Two pheasant crosses. J: C. Phillips. il J Heredity 7:12-16 Ja '16
- See also Breeding; Mendelism
- Hybridization, Vegetable**
- Alfalfa hybridization. W: Southworth. Ag Gaz of Canada 3:445-6 My '16
- Anatomy of a hybrid equisetum. R. Holden. il Am J Bot 2:225-37 My '15
- Aphis immunity of teosinte-corn hybrids. W. B. Gernert. Science (Science Press, Garrison, N.Y. 15c) n s 46:390-2 O 19 '17
- Bearing of heterosis upon double fertilization. D. F. Jones. bibliog il Bot Gaz 65:324-33 Ap '18
- Breeding at Arlington farms. il Am Flor 48:795 Ap 28 '17
- Budding incompatible cottons. J Heredity 9:181 Ap '18
- Carman's wheat-rye hybrids. C. E. Leighty. il J Heredity 7:420-7 S '16
- Colour of the seed in the descendants of a natural hybrid of two varieties of phaseolus vulgaris, in Sweden. J: Lundberg and A. Akerman. Int R Sci & Prac Ag 8,no 11:1091-3 N '17
- Effect of hybridization on maturity and yield in corn. T. B. Hutcheson and T. K. Wolfe. bibliog Va Ag Exp Tech B 18:161-70 '17; Same. Va Ag Exp Rep 1915-1916:161-70 '17
- Effects of age on the hybridisation of pisum sativum: researches in Austria. E. Zederbauer. Int R Sci & Prac Ag 8,no 11:1093-4 N '17
- Experimental study of genetic relationships. H. H. Bartlett. Am J Bot 2:132-55 Mr '15
- Experiments in crossing varieties of tomato in the United States. D. F. Jones. Int R Sci & Prac Ag 8,no 12:1209-11 D '17

**Hybridization, Vegetable—Continued**

- Experiments on the artificial hybridisation of rice in Java. L. Kock. *Int R Sci & Prac Ag* 8, no 9:1240-1 S '17
- Factors influencing flower size in nicotiana with special reference to questions of inheritance. T. H. Goodspeed and R. E. Clausen. *biolog il Am J Bot* 2:332-74 J1 '15
- Genetic study of plant height in phaseolus vulgaris. R. A. Emerson. *biolog il Neb Ag Exp Research B* 7:1-73 '16
- Heredity of color in phlox Drummondii. A. W. Gilbert. *il J Ag Research* 4:293-302 J1 '15
- Heredity studies in the morning-glory. E. E. Barker. *biolog il Cornell Ag Exp B* 392:1-38 '17
- How the modern lilac came to be. T. A. Havemeyer. *il Gard M* 25:232-4 My '17
- Hybrid between the pear and quince. L. Trabut. *il J Heredity* 7:416-18 S '16
- Hybrid fruits that have made good. F. A. Waugh. *il Country Gen* 82:1746 N 10 '17
- Hybrid grapes at Geneva. R. D. Anthony. *il N Y Ag Dept B* 79, pt 2: 1331-8 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1331-8 '17
- Hybrid oaks. G. B. Sudworth. *il Am For* 23: 683-5 N '17
- \* Hybrid sunflowers. T. D. A. Cockerell. *Nature* (St Martin's st, London, W. C. 6d) 102:25-6 S 12 '18
- Hybrid trees. W. H. Lamb. *il J Heredity* 7: 311-19 J1 '16
- Hybridisation tests between spelt and wheat in Holland. H. M. Gmelin. *Int R Sci & Prac Ag* 8, no 9:1236-9 S '17
- Hybridizing as a winter sport. G. C. Thomas, jr. *il Country Life* 30:26-8 S '16
- Hybrids of zea mamosa and zea tunicata. G. N. Collins. *biolog il J Ag Research* 9: 383-96 Je 11 '17
- Imperfection of pollen and mutability in the genus rosa. R. D. Cole. *il Bot Gaz* 63:110-23 F '17
- Influence of hybridization and cross-pollination on the water requirement of plants. L. J. Briggs and H. L. Shantz. *il J Ag Research* 4:391-402 Ag '15
- Inheritance in wheat, barley and oat hybrids. E. F. Gaines. *biolog il Wash Ag Exp B* 135:1-61 '17
- Inheritance of certain characters of grapes. U. P. Hedrick and R. D. Anthony. *biolog J Ag Research* 4:315-30 J1 '15
- Inheritance of length of pod in certain crosses. J. Belling. *biolog il J Ag Research* 5:405-20 D 6 '15
- Linked quantitative characters in wheat crosses. G. F. Freeman. *Int R Sci & Prac Ag* 9, no 2:166-9 F '18
- More accurate method of comparing first-generation maize hybrids with their parents. G. N. Collins. *J Ag Research* 3:85-91 O '14
- Mutations of oenothera stenomeres. H. H. Bartlett. *il Am J Bot* 2:100-9 F '15
- Nature of the F<sub>1</sub> species hybrids between nicotiana sylvestris and varieties of nicotiana tabacum; with special reference to the conception of reaction system contrasts in heredity. T. H. Goodspeed and R. E. Clausen. *biolog il Cal Univ Pub Botany v* 5, no 11 301-46p, 37-48 pl '17 (45c)
- New hybrid columbine. T. D. A. Cockerell. *Bot Gaz* 62:413-14 N '16
- New-place effect in maize. G. N. Collins. *J Ag Research* 12:231-43 F 4 '18
- On the partial sterility of nicotiana hybrids made with n. sylvestris as a parent. T. H. Goodspeed and A. H. Ayres. *biolog il Cal Univ Pub Botany v* 5, no 9 273-92p '16 (20c)
- On the partial sterility of nicotiana hybrids made with n. sylvestris as a parent; an account of the mode of floral abscission in the F<sub>1</sub> species hybrids. T. H. Goodspeed and J. N. Kendall. *biolog Cal Univ Pub Botany v* 5, no 10 293-9p '16 (5c)
- Patrogenesis. H. H. Bartlett. *Bot Gaz* 62:331-2 O '16
- Patrogenesis; a cross between two genera of grasses, tripsacum and euchlaena. G. N. Collins and J. H. Kempton. *il J Heredity* 7: 106-18 Mr '16
- Plant hybridising. A. K. Bulley. *Gard Chron* (Lond) 62:40 J1 28 '17
- Plant industry based upon mutation; varieties of Egyptian cotton have arisen largely through mutation. T. H. Kearney. *il J Heredity* 9:51-61 F '18
- Pollen sterility in relation to the geographical distribution of some onagraceae. C. C. Forsaith. *biolog il Bot Gaz* 62:466-87 D '16
- Pollination and cross-fertilization in the juar plant (andropogon sorghum, Brot.). G. R. J. Douglas. *Int R Sci & Prac Ag* 8, no 7:986-8 J1 '17
- Pubescent-fruited species of prunus of the southwestern states. S. C. Mason. *il maps J Ag Research* 1:147-78 N '13
- Reduplication series in sweet peas. R. C. Punnet. *Int R Sci & Prac Ag* 8, no 7:993-4 J1 '17
- \* Relation between color and other characters in certain avena crosses. H. H. Love and W. T. Craig. *Am Naturalist* (Science Press, Garrison, N. Y. 40c) 52:369-83 Ag '18
- Selection and hybridisation of American vines in Italy. G. Patané. *Int R Sci & Prac Ag* 7, no 10:1393-1404 O '16
- Sterility as the result of hybridization and the condition of pollen in rubus. C. S. Hoar. *biolog il Bot Gaz* 62:370-88 N '16
- Studying fruits in Illinois. J. Heredity 7:38 Ja '16
- What is happening to the hawthorns? L. M. Standish. *biolog il map J Heredity* 7:266-79 Je '16
- Wheat-rye hybrids. E. A. McFadden. *il J Heredity* 8:335-6 J1 '17; Same abridged. *Ag Digest* 2:567 Ag '17
- See also Mendelism; Plant breeding
- Hydatids of liver.** See Liver, Hydatids of
- Hydrangeas**
- Hydrangeas. *Am Flor* 49:53 J1 28 '17
- Hydrangeas as flowering shrubs. J. F. Ross. *Gard Chron* Am 22:192 J1 '18
- Hydrangeas for Easter. *il Am Flor* 50:245 F 23 '18
- Hydrants**
- Gage hydrant used by the Gage canal company of Riverside, California. *Irr Age* 31:39 Ja '16
- Hydrated lime sulfur**
- Hydrated lime and sulphur spray. *il Rural N Y* 75:741 My 13 '16
- New peach spray. *Fruit-Grower* 27:301 My 15 '16
- Hydraulic power.** See Water power
- Hydraulic rams**
- Handling hydraulic ram. *Rural N Y* 77:1182 O 19 '18
- Hydraulic ram control. J. C. Umstott. *Ohio F* 137:834 Je 24 '16
- Hydraulics.** See Culverts; Hydrometers; Irrigation; Stream measurement; Water flow
- Hydrocyanic acid**
- Cyanogenesis in plants, studies on tridens flavus (tall red top). A. Viehoveer and others. *Int R Sci & Prac Ag* 9, no 5:548-9 My '18
- Organic plant poisons; hydrocyanic acid. W. E. Brechley. *Ann Bot* 31:447-56 J1 '17
- Prussic acid in Burma beans. F. J. Warth and Ko Ko Gyi. *Ag J of India* 13:741-2 O '18
- See also Sorghum—Hydrocyanic acid content
- Hydrocyanic acid gas**
- Cyanide fumigation. H. J. Quayle. *il J Econ Entom* 11:294-9 Je '18
- Directions for building fumigating boxes and for fumigating with hydrocyanic acid gas. E. W. Berger. *il Fla State Plant Bd Quar B v* 1:15-24 Ja '17
- Effect of hydrocyanic acid gas under vacuum conditions on subterranean larvæ. E. R. Sasser and H. L. Sanford. *J Ag Research* 15:133-6 O 21 '18
- Fumigating baled cotton by the hydrocyanic acid process. *il Metallurgical and Chemical Eng* (239 W. 39th st, N.Y. 25c) 16:346 Mr 15 '17



**Hydrocyanic acid gas—Continued**

- Fumigating foreign cotton to kill our imported pests. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:255 Mr 10 '17
- Fumigation experiments—the time factor; control of the insect pests of citrus trees in California. A. F. Swain. *J Econ Entom* 11: 320-4 Je '18
- Fumigation of citrus trees. R. S. Woglum. *il Farmers' B* 923:1-30 '18
- Fumigation of greenhouses. E. N. Cory. *Md Ag Exp B* 205:263-82 '17; Same. *Md Ag Exp Rep* 1916-1917 '17
- Fumigation of imported baled cotton. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:628+ Ja 13 '17
- Fumigation of ornamental greenhouse plants with hydrocyanic-acid gas. E. R. Sasscer and A. D. Borden. *U S Ag B* 513:1-20 '17; Same cond. *il Farmers' B* 880:1-19 '17
- Fumigation with hydrocyanic acid gas. *Gard Chron (Lond)* 61:184 My 5 '17
- Greenhouse fumigation with hydrocyanic acid. W. Moore. (*In* Report State entomologist, 1915-1916, p. 93-108) *il '16 Minn. ag. exp. station, St Paul*
- Household and camp insects; fumigation with hydrocyanic acid gas. E. P. Felt. *N Y State Museum (Albany) B* 194:74-7 F '17
- Hydrocyanic-acid gas as a soil fumigant. E. R. de Ong. *il J Ag Research* 11:421-36 N 26 '17
- \* Hydrocyanic acid gas treatment for the flour moth. F. L. Washburn. (C. 46) 13p *il '18 Minn. State entomologist, St Paul*
- Manufacturing tests of cotton fumigated with hydrocyanic-acid gas. W. S. Dean. *U S Ag B* 366:1-12 '16
- Sodium and potassium cyanide for greenhouse fumigation. H. D. Brown. *Market Growers J* 21:8 Jl 1 '17
- \* Sodium cyanide as a fumigant. G. M. Bentley. (B. 18) 12p *il '16 Tenn. State bd. of entomology, Knoxville*
- Studies concerning the application of hydrocyanic acid as an insecticide. G. E. Stone. *Int R Sci & Prac Ag* 7, no 12:1358-9 D '16
- Studies in greenhouse fumigation with hydrocyanic acid: physiological effects on the plant. W. Moore and J. J. Willaman. *bibliog il J Ag Research* 11:319-38 N 12 '17
- Hydrofluoric acid**
- Note on the loss of phosphoric acid during fusion with ammonium fluoride. W. A. Davis and J. A. Prescott. *J Ag Sci* 8:136-8 S '16
- Hydrogen**
- Use of hydrogen for driving engines; tests in Holland. *Int R Sci & Prac Ag* 9, no 5:605-6 My '18
- Hydrogen ion concentration**
- Acidity and adsorption in soils as measured by the hydrogen electrode. L. T. Sharp and D. R. Hoagland. *bibliog J Ag Research* 7: 123-45 O 16 '16
- Colorimetric determination of hydrogen ion concentration and its applications in bacteriology. W. M. Clark and H. A. Lubs. *J Bact* 2:1-34, 109-36, 191-236 Ja-My '17
- \* Correlation of the hydrogen-ion exponent and occurrence of bacteria in soil. L. J. Gillespie. *Science (Science Press, Garrison, N.Y. 15c) n s* 48:393-4 O 18 '18
- Effect of hydrogen and hydroxyl ion concentration on the growth of barley seedlings. D. R. Hoagland. *bibliog Soil Sci* 3:547-60 Je '17
- Effect of hydrogen ion concentration on the production of precipitates in a solution of peptone and its relation to the nutritive value of media. I. J. Kligler. *J Bact* 2:351-3 Jl '17
- Growth of the potato scab organism at various hydrogen ion concentrations as related to the comparative freedom of acid soils from the potato scab. L. J. Gillespie. *bibliog Phyt* 8:257-69 Je '18
- Hydrogen-ion concentration measurements of soils of two types: Caribou loam and Washburn loam. L. J. Gillespie and L. A. Hurst. *bibliog Soil Sci* 4:313-19 O '17
- Hydrogen-ion concentration—soil type—common potato scab. L. J. Gillespie and L. A. Hurst. *bibliog Soil Sci* 6:219-36 S '18
- Influence of hydrogen-ion concentration of medium on the reproduction of alfalfa bacteria. E. B. Fred and N. E. Loomis. *bibliog J Bact* 2:629-33 N '17
- \* Note upon the hydrogen ion concentration necessary to inhibit the growth of four wood-destroying fungi. M. R. Meacham. *Science (Science Press, Garrison, N.Y. 15c) n s* 48:499-500 N 15 '18
- Proteolysis of streptococcus erysipclatis and streptococcus lacticus compared under different hydrogen ion concentration. A. Itano. *Mass Ag Exp B* 167:178-85 '16
- Relation of carbon dioxide to soil reaction as measured by the hydrogen electrode. D. R. Hoagland and L. T. Sharp. *bibliog J Ag Research* 12:139-48 Ja 21 '18
- Relation of hydrogen ion concentration of media to the proteolytic activity of bacillus subtilis. A. Itano. *Mass Ag Exp B* 167:139-77 '16
- Studies in soil reaction as indicated by the hydrogen electrode. J. K. Plummer. *bibliog J Ag Research* 12:19-31 Ja 7 '18
- Substitute for litmus for use in milk cultures. W. M. Clark and H. A. Lubs. *J Ag Research* 10:105-11 Jl 16 '17
- Hydrogen peroxide**
- Influence of hydrogen peroxide on germination. E. Demoussy. *Int R Sci & Prac Ag* 7, no 6:811-12 Je '16
- Hydrometers**
- What it is and how to use it. *il Fruit-Grower* 27:56 Ja 15 '16
- See also Saccharometers
- Hydrophobia**
- Décret fixant les mesures à prendre contre la rage à Tunis. *Int Yearbook Ag Leg* 1916: 682-3 '17
- Rabies. (*In* 6th annual report, 1917, p. 28-34) (Pub. Doc. no. 98) '18 Mass. Dept. of animal industry, Boston
- Rabies among coyotes. W. C. Barnes. *Breeder's Gaz* 69:493-4 Mr 2 '16
- Rabies and its control in New York state. J. G. Wills. *N Y Farms & Markets Dept Ag B* 107:1-26 My '18
- Rabies and the coyote. C. C. Housh. *Breeder's Gaz* 69:178 Ja 27 '16
- Rabies in guinea pigs. *Am Vet M Assn J* 53: 152-4 My '18
- Rabies or hydrophobia. J. R. Mohler. *il Farmers' B* 449:1-20 '18 (rev.)
- Reliability of cell proliferative changes in the diagnosis of rabies. J. B. Hardenbergh and B. M. Underhill. *bibliog il Am Vet M Assn J* 49:663-8 Ag '16
- Susceptibility of the prairie dog to rabies. G. Walters. *Am Vet M Assn J* 51:702-4 Ag '17
- West stirred by rabies scourge. *Am Sheep B & W* 36:323 Je '16
- Hydrostatics.** See Hydrometers
- Hygiene**
- Care of the complexion, the hands, the hair and feet. Mrs W. N. Hutt. *Prog F* 31:1012 Ag 19 '16
- Enlisted in home service. *Wallaces' F* 43:1168 Ag 16 '18
- Hot weather health hints. C. A. Harper. *Hoard's D* 56:11 Jl 26 '18
- How to keep well. F. Brooks. *Ill Farmers Inst Household Sci* 1917:29-35 '18
- National menace of rural bad health; a remedy. G. MacAdam. *Outlook* (381 4th av, N.Y. 10c) 115:321-2+ F 21 '17
- National welfare and rural schools. T. D. Wood. (*In* Pro., Nat. educ. assn., 1916, p. 232-40) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Personal hygiene. N. S. Knowles and others. *la Ag Ext Home Econ B* 3:1-23 '17-18
- Physical care of rural school children. T. Clark. *Pub Health Repts (U.S. Public Health Service, Washington, D.C.; 5c Supt. of doc.)* 31:2759-64 O 6 '16

**Hygiene—Continued**

- Physical care of the child in rural schools: discussion. W: A. Ocker. Nat Conf Charities and Correction Pro (Win. T. Cross, 315 Plymouth Court, Chicago 82) 1916:605-8
- Roller-towel danger. M. H. Talbott. Country Gent 81:1493 Ag 5 '16
- \* Rural health administration under the co-operative or local health district plan. G. F. Ruediger. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:406-11 Je '18
- \* Rural health administration under the state health district plan. F: W. Sears. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:412-16 Je '18
- Rural health and national well-being. I. Fisher. 4p n.d. Irving Fisher, Yale univ., New Haven, Conn.
- Score card on your health habits. A. V. Willson. Prog F 33:430 Mr 30 '18
- Surveying the health of Hoosier farmers. Survey (112 E. 19th st., N.Y. 10c) 7:436 Ja 13 '17
- See also* Beauty, Personal; Children—Care and hygiene; Clothing; Diet; Disinfection and disinfectants; Food; Infants—Care and hygiene; Longevity; Mental hygiene; Nurses and nursing; Public health; Ventilation

**Study and teaching**

- \* Health lessons for rural schools. (B. v. 5, no. 1) 16p '17 Georgia State normal school, Athens

**Hygiene, Public.** See Public health

**Hylemyia antiqua.** See Onion maggots

**Hylobius pales.** See Pales weevils

**Hymenomyces.** See Mushrooms

**Hymenoptera**

Habit of leaf-oviposition among the parasitic hymenoptera. H. S. Smith. Science (Science Press, Garrison, N. Y. 15c) n s 44:925-6 D 29 '16

*See also* Ants; Bees; Pine sawflies; Wasps

**Hyoscyamus**

Indian hyoscyamus. J. H. Barnes. Ag J of India 11:85-8 Ja '16

**Hyperaspis binotata.** See Ladybirds

**Hypoderma bovis.** See Warble flies

**Hypozone**

Story of hypozone. T. Webster. Creamery 5: 42 Ag '17

**I****Ice**

- Amount of ice necessary for refrigerating purposes in the creamery. N Y Prod R 47:74+ N 20 '18
- Cutting and storing ice. I. D. Wood. plans Hoard's D 54:654 N 30 '17
- Getting ready for hot weather. J. R. Stone. Power F 26:26 Ja '17
- Ice. N Y Prod R 46:984 O 23 '18
- Ice and ice houses. Wallaces' F 43:291 F 15 '18
- Ice harvest. 4p '18 U.S. Food administration, Washington, D.C.
- Ice house on the farm. J Ag (Quebec) 22:101 D '18
- Ice in the country. R. W. Covalt. il Purdue Ag 10:21-2+ F '16
- Ice on the dairy farm. E. Kelly. il Kimball's D F 16:494+ S 15 '18
- Ice supply at small cost. O Judd Farmer 61:9 D 30 '16
- Ice supply for small families. R. H. Smith. Rural N Y 75:4 Ja 1 '16
- It pays well to store ice. J. S. Underwood. Green's Fruit Grower 36:4 Ja '16
- Making ice. Kimball's D F 14:325 Ja 1 '17
- Natural ice for the farm. D. V. Vandiver. Hoard's D 55:149 F 15 '18
- Prepare now for summer's heat. E. G. Zorn. il Hoard's D 52:657 D 1 '16
- Putting up ice. N Y Prod R 42:866 S 27 '16
- Putting up ice. Wallaces' F 41:162 F 4 '16
- Storing the ice crop. J. L. Justice. Hoard's D 52:696 D 8 '16

Surplus ice; how to protect it when house is not large enough. N Y Prod R 47:138 D 4 '18

*See also* Refrigeration and refrigerating machinery

**Ice blankets.** See Refrigerators

**Ice boxes.** See Refrigerators

**Ice cream**

- Army ice cream. N Y Prod R 42:1014 O 11 '16
- Cash value of accurately testing and standardizing butter fat, total solids and overrun in ice cream. J. J. Mojonnier. Creamery 6:44+ D '17; Same. N Y Prod R 45:208-9 D 12 '17
- Chemically cool ice cream. Creamery 7:38 F '18
- Complaint of low overrun. N Y Prod R 41:1002 Ap 5 '16
- Conserving sugar in ice cream manufacture. H. A. Ruehe. Ill Ag Exp C 219:1-2 '18; Same. Creamery 7:50 My '18; Same. N Y Prod R 46:54 My 8 '18
- Corn sugars to replace half of cane sugar. Creamery 7:40+ Ja '18
- Determination of ice cream as a factor in the spread of typhoid fever infection. L. L. Lumsden. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 7:1005-9 D '17
- Easiest dessert. F. Spring. il Country Gent 81:1528 Ag 12 '16
- Effect of binders upon the melting and hardness of ice cream. C. W. Holdaway and R. R. Reynolds. il Va Ag Exp B 211:1-19 '16; Same cond. N Y Prod R 42:1750+ O 25 '16
- Enough sugar for ice-cream. Creamery 7:52 My '18
- Factors which influence the yield and consistency of ice cream. M. Mortensen. il Ia Ag Exp B 180:259-83 '18; Same cond. Creamery 7:37-9 S: 65-6+ O '18; Same cond. N Y Prod R 46:676, 710, 742, 772, 830, 892 S 4-O 9 '18
- Flavor in ice cream. O. E. Williams. N Y Prod R 42:402-3 Je 28 '16
- Flavoring after freezing. N Y Prod R 42:732 Ag 30 '16
- For lower fat content in ice cream. R. M. Washburne. Creamery 7:40+ Mr '18
- Formulas for varieties of ice cream mix. Creamery 7:63-4 O '18
- French ice cream. N Y Prod R 42:840 S 20 '16
- Frozen gold from Jerseys. D. V. Vandiver. il Jersey B 36:665 My 2 '17
- Gelatin: use in ice cream. O. E. Williams. N Y Prod R 41:550-1, 586 Ja 26-F 2 '16
- Getting a profit out of ice cream. J: F. Ruff. Creamery 5:37+ Ap '17
- Hardening ice cream. J. G. Peck. N Y Prod R 46:646 Ag 28 '18
- Ice cream and condensed milk queries answered. O. F. Hunziker. Hoard's D 51:280 Mr 10 '16
- Ice cream and frozen desserts. Prac F 114: 248 Jl 15 '18
- Ice cream department for the butter factory. N Y Prod R 46:330 Je 26 '18
- Ice cream fat standards and food values. R. M. Washburn. Creamery 5:40-1 Mr '17; Same. N Y Prod R 43:762+ Mr 7 '17
- Ice cream food value. T. D. Cutler. N Y Prod R 42:588 Ag 2 '16
- Ice cream food value. R. M. Washburn. N Y Prod R 41:438-9 Ja 5 '16
- Ice cream formula. N Y Prod R 41:960 Mr 29 '16
- Ice cream formulas. N Y Prod R 46:614-15 Ag 21 '18
- Ice cream making. A. C. Baer. il Wis Ag Exp B 262:1-36 '16; Same. N Y Prod R 41:1092: 42:22, 70, 114, 160, 200, 240, 326 Ap 19-May 31, Je 14 '16; Same cond. Creamery 4:17 Ap '16; Same cond. Hoard's D 51:490 Ap 7 '16
- Ice cream making in the home. H. F. Judkins. Hoard's D 51:928 Jl 7 '16
- Ice-cream making on the farm. L. A. Sutermeister. Rural N Y 77:800 Je 15 '18
- Ice cream novelties. W. S. Adkins. N Y Prod R 42:474 Jl 12 '16
- Ice cream overrun. G. H. Benkendorf. N Y Prod R 43:166+ N 22 '16
- Ice cream quality. H. S. Baird. N Y Prod R 42:364 Je 21 '16



**Ice cream—Continued**

- Ice cream questionnaire issued by Dairy division to manufacturers. N Y Prod R 46:142 My 22 '18
- Ice cream solids: proper relation to fat in a 14% butterfat mix. D. F. Mattson. N Y Prod R 45:560+ F 20 '18
- Invert sugar; its nature and mode of manufacture, and its use in ice cream making. W. B. Brownell. N Y Prod R 44:1062 O 24 '17
- Invert sugar; its use in ice cream making recommended. N Y Prod R 44:516 JI 25 '17
- Making ice-cream. O. C. Cunningham. Ohio F 139:580 Ap 21 '17
- Manufacture of ice creams and ices, by J. H. Frandsen. Review. N Y Prod R 41:430 Ja 5 '16
- Manufactured cream. J. H. Seba. N Y Prod R 41:704-5 F 23 '16
- Manufacturer liable for ice cream poisoning. Creamery 7:38+ Ag '18
- Mould ice cream. N Y Prod R 42:732 Ag 30 '16
- Pasteurization; treating cream for ice cream making. B. D. White. N Y Prod R 42:516 JI 19 '16
- Preliminary study of the fat and bacterial content of ice cream. P. G. Heinemann and J. E. Gordon. Creamery 5:444+ Ag '17
- Substitutes for a part of the cane sugar in ice cream. S. H. Ayres and others. Creamery 7:48-9 My '18; Same. N Y Prod R 45:910 Ap 17 '18
- Successful ice cream business on a dairy farm. D. V. Vandiver. il Hoard's D 53:273 Mr 9 '17
- Sugar in ice cream. L. O. Thayer. N Y Prod R 44:156 My 23 '17
- Sugar-saving substitutes in ice cream. J. H. Frandsen and others. Neb Ag Exp B 168:1-8 '18; Same. N Y Prod R 46:1026-7 O 30 '18; Same. Creamery 7:40-2 S '18
- Why gelatine is required and its effect on ice cream quality. O. E. Williams. Creamery 4:36+ Mr; 43 Ag '16

**Analysis**

- Ice cream. Maine Ag Exp Office Inspec 76:9-20 '16

**Bacteriology**

- Bacteria in ice cream. B. W. Hammer and E. F. Goss. Ia Ag Exp B 174:1-21 '17; Excerpts. Creamery 7:40+ Ag '18; Summary. N Y Prod R 45:784 Mr 27 '18
- Bacteriological study of retail ice cream. S. H. Ayers and W. T. Johnson, jr. bibliog U S Ag B 303:1-24 '15; Summary. N Y Prod R 41:514 Ja 19 '16
- Determination of bacteria in ice cream. S. H. Ayers and W. T. Johnson, jr. U S Ag B 563:1-16 '17; Excerpt. Creamery 6:44+ S '17; Excerpts. N Y Prod R 44:631, 902-3 Ag 15, O 3 '17

**Marketing**

- Means of reducing losses in ice cream containers. N Y Prod R 42:552+ JI 26 '16
- Selling ice cream. H. J. Shurtleff. N Y Prod R 44:156 My 23 '17
- Shipping business. W. S. Weed. N Y Prod R 43:246 D 6 '16

**Standards**

- Ice cream defined; text of measure devised by National association as a guide to law and ordinance makers. N Y Prod R 46:142 My 22 '18
- Ice cream definition and proposed regulation and standards. N Y Prod R 43:848 Mr 21 '17
- Ice cream standards legal. N Y Prod R 43:286 D 13 '16
- What is ice cream? Creamery 5:50 Je '17

**Testing**

- Method for determining solids in ice cream. G. H. Benkendorf. Creamery 7:412+ D '18
- Standardization of the ice cream mix. W. O. Frohring. Creamery 6:82+ O '17
- Testing ice cream. G. H. Benkendorf. N Y Prod R 43:982 Ap 11 '17; Same abr. Creamery 5:48 JI '17

**Ice cream cones**

- History of ice cream cones. C. M. Egbert. N Y Prod R 42:769 S 6 '16

**Ice cream factories**

- Architect's place in the construction or remodeling. W. D. McCormick. N Y Prod R 42:480 JI 12 '16
- Building a plant; one manufacturer firmly believes in getting an architect experienced in ice cream plant construction. B. H. Walker. N Y Prod R 46:484 JI 24 '18
- Cleanliness in ice cream factories. D. Klein. Creamery 7:46 Mr '18
- Ice cream refrigeration. N Y Prod R 43:616 F 14 '17
- Ice cream refrigeration and cooling systems. W. F. Luick. N Y Prod R 41:1008 Ap 5 '16
- Improving the mix. T. P. Mensch. N Y Prod R 45:442 Ja 30 '18
- Saving of materials in an ice cream factory. C. Schallinger. Creamery 7:40+ F '18
- Still air or blast; interesting experiences in hardening ice cream. M. Neilson. N Y Prod R 43:658 F 21 '17
- What I have learned about designing a plant. B. H. Walker. Creamery 7:44 F '18

**Accounting**

- Cost accounting. I. P. Mensch. N Y Prod R 43:358 D 27 '16
- Cost accounting; items to consider in operating an ice cream factory. P. B. Warner. N Y Prod R 43:322 D 20 '16
- Ice cream cost accounting. I. P. Mensch. Creamery 5:42+ My '17

**Management**

- Cost of delivery; some Pittsburgh figures and suggestions on effecting economies. W. J. Burnap. N Y Prod R 45:130 N 28 '17
- Cost of production. I. P. Mensch. N Y Prod R 41:764 Mr 1 '16; Same. N Y Prod R 41:1052 Ap 12 '16
- Costs and profits in the ice cream business. J. W. Fiske. N Y Prod R 41:920 Mr 22 '16
- Electric truck for ice cream delivery. A. L. Parkhurst. N Y Prod R 43:434+ Ja 10 '17
- Granting of credit. S. T. Nivling. N Y Prod R 44:480-1 JI 18 '17
- Hardening and delivering. B. H. Walker. N Y Prod R 44:238 Je 6 '17; Same. Creamery 5:50+ JI '17
- Ice cream delivery. H. B. Graham. N Y Prod R 43:116 N 15 '16
- Iceing up for customers. N Y Prod R 44:806 S 19 '17
- Lazy dollars; creating a demand for ice cream. W. H. Duff. Creamery 5:40 Ap '17
- Packing ice cream cabinets. J. L. Nelson. Creamery 5:45 F '17; Same. N Y Prod R 43:580 F 7 '17
- Quality, cost and trade for ice cream maker. A. G. Hoefler. N Y Prod R 41:878 Mr 15 '16
- Refrigeration efficiency. K. W. Schantz. N Y Prod R 41:816 Mr 8 '16
- Returning empties. A. M. Thornton. N Y Prod R 43:396 Ja 3 '17
- Shipping business; conditions under which it can be made a success. W. S. Weed. N Y Prod R 44:100 My 16 '17

**Sanitation**

- Sanitation in the ice cream plant. W. B. Barney. Creamery 5:43-4 F '17

**Ice cream trade**

- Brick vs. bulk ice cream. H. F. Ousley. N Y Prod R 41:766 Mr 1 '16
- Co-operation vs. competition. S. A. W. Carver. N Y Prod R 42:442-3 JI 5 '16
- Ice cream and milk business. C. G. Morris. N Y Prod R 44:594 Ag 8 '17
- Ice cream cabinets; does it pay the manufacturer to furnish them to his customers? C. W. Smith. N Y Prod R 45:870 Ap 10 '18
- Ice cream costs. R. Crane. N Y Prod R 43:22 N 1 '16
- Ice cream supply. E. S. Thompson. N Y Prod R 43:72 N 8 '16
- Iowa output for 1915. W. B. Barney. N Y Prod R 41:668 F 16 '16
- Michigan ice cream makers at Kalamazoo. N Y Prod R 41:668 F 16 '16

**Ice cream trade—Continued**

Ohio farmer's ice-cream trade. Rural N Y 75:1093 Ag 19 '16

War problems; and how they should be met by the manufacturer of ice cream. F. B. Tabor. N Y Prod R 45:172 D 5 '17

Winter ice cream business. E. C. Sutton. N Y Prod R 42:768 S 6 '16

See also Michigan association of ice cream manufacturers

**Laws and regulation**

\* Ice cream epidemics and model regulations for control. H. W. Hamilton. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:651-5 S '18

Ice cream—manufacture and sale. (*In* Municipal ordinances, 1916, p. 180-2) '17 U.S. Pub. health service, Washington, D.C.

Ice cream regulations. Creamery 4:40 Je '16; Same. N Y Prod R 42:354 Je 21 '16

Ice cream sugar restriction. W. C. Hughes. N Y Prod R 45:714 Mr 13 '18

Law as laid down in the Iowa and Pennsylvania department of ice cream cases; with discussion. G. L. Flanders. Assn Am Dairy Food & Drug Off Pro 1917:63-76

Mississippi ice cream law. Creamery 7:50 N '18

Sugar regulations as now imposed on ice cream manufacturers. N Y Prod R 46:454 Jl 17 '18

See also Ice cream—Standards

**Statistics**

Commercial stocks of ice cream. U S Food Surveys 1:4 Je 22 '18

**Ice harvesting**

Gasoline engine cuts ice. E. P. Adams. Rural N Y 76:405 Mr 17 '17

Harvest ice. Weekly N L 5:3 F 20 '18

Harvesting ice with an automobile. il Scientific Am (233 Broadway, N.Y. 10c) 118:169 F 23 '18

Harvesting the ice crop. il Scientific Am (233 Broadway, N.Y. 10c) 116:85 Ja 20 '17

Harvesting the ice crop. F. F. Rockwell. il Field II 26:9-10 Ja '16

Ice harvest. C. H. Sapp. il Ohio F 139:35 Ja 13 '17

Putting up ice; some general advice on cutting and storing for creamery use. N Y Prod R 45:230+ D 19 '17

Rules for the harvesting of ice. H. A. Whitaker. Eng Record (10th av. at 36th st., N.Y. 15c) 75:382 Mr 10 '17

**Ice houses**

Build an ice house now. W. L. Nelson. il Kimball's D F 15:551 Ag 15 '17

Building a farm icehouse. Rural N Y 76:1256 N 3 '17

Building an ice house with cold storage. Rural N Y 77:298 F 23 '18

Cheap ice house. F. W. Ives. Country Gent 81:16 Ja 1 '16

Clay block ice house. L. L. Rhodes. Farm Eng 5:7 Ja '17

Co-operative ice houses. W. H. Cooper. Am Coop J 11:520 Ja '16

Country home ice-house. W. H. Butterfield. Country Life 29:44 F '16

Farm and dairy ice houses. J Ag (Quebec) 20:167 F '17

Farm ice house. Country Gent 81:631 Mr 18 '16

Farm ice house. R. P. Clarkson. Kimball's D F 14:795 D 15 '16

Farm ice-house. F. W. Ives. plan Nat Stock & F 40:1144 F 3 '17

Farm ice house. J. L. Justice. il Hoard's D 52:576 N 17 '16

Farm ice house. J. A. Starrak. il plan J Ag (Quebec) 21:118 F '18

Have an ice house ready for harvest when ponds freeze; help relieve demand. Weekly N L 6:10 O 2 '18

House for ice and milk. R. C. Miller. plan Country Gent 82:1853 N 24 '17

How to make an ice-house. W. M. Kishpaugh. Rural N Y 75:1363 O 23 '16

Ice and milk house. W. E. Frudden. il Kimball's D F 14:108 F 15 '16

Ice-houses. H. E. Murdock. plans Mont Ag Exp C 59:1-8 '16

Ice houses. F. M. White. Hoard's D 53:229 Mr 2 '17

Ice supply for the farm. J Ag (Quebec) 19:167 F '16

Keeps cream sweet a week. il Wallaces' F 41:934 Je 30 '16

Making ice house from an old barn. O. B. Maginnis. plan Building Age (243 W. 39th st., N.Y. 20c) 39:363-6 Jl '17

Model ice house. E. R. Gauhn. il Kimball's D F 15:118 F 15 '17

Practical ice house. P. O. Drury. il Wallaces' F 41:242 F 11 '16

Prepare now for summer's heat. E. G. Zorn. il Hoard's D 52:657 D 1 '16

Small cold storages and dairy buildings. J. A. Ruddick and J. Burgess. 21p plans '17 Canada Ag

Thirty-ton ice house. F. W. Ives and W. E. Pettit. plans Country Gent 83:26 S 14 '18

This year's ice. Country Gent 81:326 F 12 '16

Types of ice houses for dairy farms. F. M. White. plans Hoard's D 54:651 N 30 '17

Underground ice-house. C. A. Fowler. Penn State F 9:351 Mr '16

Underground ice house. F. Lillienthal. il Wallaces' F 41:1089 Ag 18 '16

**Ice houses, Concrete**

Concrete ice houses. F. E. Palmer. Wallaces' F 41:286 F 18 '16

Use of concrete work on the farm. il plans Building Age (243 W. 39th st., N.Y. 20c) 39:102-4 F '17

Ice machinery. See Refrigeration and refrigerating machinery

**Iceland**

See also Horses—Iceland

**Industries and resources**

Pastoral on the island of Iceland. P. A. Ingvason. Am Sheep B & W 36:156 Mr '16

Iceless refrigerators. See Refrigerators

Ichang lemon. See Citrus fruits

**Ichneumon flies**

Introduction into Canada of the ichneumon fly, mesoleius tenthrinidis, parasitic enemy of the larch sawfly, nematus erichsonii. C. G. Hewitt. il Ag Gaz of Canada 4:355-7 My '17

**Idaho**

See also subhead Idaho under special subjects. e.g. Agriculture—Idaho, Dairying—Idaho

**Farm markets, Department of**

Laws governing Farm markets department as amended and passed by the 14th session of the Idaho legislature 1917. 16p postage 2c '17 Idaho Dept. of farm markets, Boise 2d annual report, Dec. 15, 1916. 27p '16 Idaho Dept. of farm markets, Boise

**Irrigation and drainage commission**

Report. il Irr Age 31:55+ F '16

**Idaho agricultural experiment station**

Annual report for year ending June 30, 1916. il Idaho Ag Exp B 92:1-71 '16

Annual report, 1917. Idaho Ag Exp B 104:1-51 '18

**Idaho irrigation congress**

Idaho irrigation congress seeks to inject more improved methods into that science in state. il Irr Age 32:61 F '17

**Idaho-Oregon honey producers' association**

Co-operation brought higher prices. C. Gano. Am Bee J 58:337-3 O '18

Idaho peas. See Chick peas

**Idaho state dairy association**

Convention, Boise, March 4-5. F. F. Bruins. Hoard's D 55:448 Mr 29 '18

**Idaho state fair**

State fair of Idaho. Breeder's Gaz 72:621 O 11 '17

**Idaho state horticultural society**

Meeting at Boise, Jan. 30-Feb. 1, 1917. E. F. Stephens. Fruit-Grower 28:174 Mr 1 '17



**Idaho state horticultural society—Continued**

Meeting, Twin Falls, Feb. 3, 1916. Fruit-Grower 27:132 F 15 '16

**Idaho wool growers' association**

Meeting, Boise, Dec. 28-29, 1917. Am Sheep B & W 38:29 Ja '18

**Ignition**

About dual and duplex ignition. C. V. Hull. il Power F 26:42 O '17

Jump spark ignition. J. B. Kelley. Kimball's D F 15:16 Ja 15 '17

Sources of current for ignition. P. T. Hines. Prog F 33:142 F 2 '18

**Ignorance. See Illiteracy**

**Illinois**

See also subhead Illinois under special subjects. e.g. Agriculture—Illinois, Dairying—Illinois

**Agricultural war board**

Farmers' war board formed. il O Judd Farmer 65:341 O 19 '18

First action by Farmers' war board. O Judd Farmer 65:371 O 26 '18

**Agriculture, Department of**

Details of Lowden plan. O Judd Farmer 62:6 F 10 '17

General information and laws effective July 1, 1917. E. J. Brundage. 121p '17 Ill. dept. of ag., Springfield

Statistical report for December 1, 1917, containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 260:1-90 '18

Statistical report of the Illinois Department of agriculture, Springfield, for August 1, 1917; containing summary of the reports of correspondents as to the condition and yield of crops, live stock, fruit, etc. Ill Ag Dept C 258:1-41 '17

**Education**

Illinois schoolboys and the farms. School and Soc (Science Press, Garrison, N.Y. 10c) 7: 73-4 Ja 19 '18

**Highway department, State**

5th report for the years 1913-1916. 314p il maps Ill. State highway dept., Springfield

Includes reports of Bureau of roads; Bureau of bridges; Bureau of maintenance; Bureau of tests; Bureau of audits

**History**

Looking back a hundred years; some thoughts about the history of Illinois. A. C. Page. O Judd Farmer 65:105 Ag 10 '18

**Industries and resources**

See also Soil fertility—Illinois

**Illinois agricultural association**

Illinois association progressing. map O Judd Farmer 64:1+ Ja 5 '18

Launch agricultural association. O Judd Farmer 69:16 F 12 '16

New association meets at Urbana. O Judd Farmer 61:11 Jl 1 '16

What state association may do. il O Judd Farmer 64:1 Mr 30 '18

**Illinois agricultural experiment station**

Agriculture at the University of Illinois. E. Davenport and others. il Univ of Ill (Urbana) B v 14:1-34 Mr 19 '17

29th annual report 1915-1916. Ill Ag Exp Rep 18p '16

30th annual report for the year ended June 30, 1917. E. Davenport. Ill Ag Exp Rep 1917:1-20 '17

**Illinois association of county agriculturists**

County advisers hold council. O Judd Farmer 62:5 F 3 '17

Illinois advisers meet. O Judd Farmer 62:6 Je 30 '17

**Illinois canker. See Apple canker**

**Illinois Central railroad**

Dairying along the Illinois Central. il Creamery 5:15-18 Mr '17

**Illinois dairymen's association. See Illinois state dairymen's association**

**Illinois farmers' grain dealers' association**

Convention, Decatur, Oct. 11-12, 1916. Am Coop J 12:236-47 N '16

13th annual meeting, Bloomington, Ill. O Judd Farmer 60:8 F 26 '16; Am Coop J 11:687-96 Mr '16

15th annual convention at Galesburg, Oct. 16-18. Coop Manager & F 7:38-43 N '17

Too much money. Am Coop J 12:758 Ag '17

What the Illinois convention did for Illinois folks. Am Coop J 13:100-12 N '17

**Illinois farmers' institute**

Illinois farmers' institute; department of household science: year book 1917. il Ill Farmers Inst Household Sci 1917:1-255 '18

Organization, objects, and activities, 1917. Ill Farmers Inst Rep 1917:211-21 '17; Same. Ill Farmers Inst 13p il '18

22d annual report, proceedings of meeting held in Streator, Feb. 21-23, 1917; together with reports of institute work for the year ending June 30, 1917. il map Ill Farmers Inst Rep 1917:1-268 '17 Illinois farmers' institute, H. E. Young, sec., Springfield

**Illinois grain dealers' association**

23d annual meeting, Decatur, Ill., May 9-10, 1916. Am Coop J 11:1014-15 Je '16

24th annual convention at Springfield, May 11-12. Coop Manager & F 6:36-46 Je '17

25th annual meeting, Chicago, May 21-22. Coop Manager & F 7:46-50 Jl '18

**Illinois Holstein breeders' association**

Pure-bred dairy interests unite. O Judd Farmer 64:1 Mr 16 '18

Will push Illinois Holstein interests. A. C. Page. il O Judd Farmer 64:461 Ap 27 '18

**Illinois horticultural society**

Illinois apple growers at Flora. il O Judd Farmer 63:3 Ag 25 '17

**Illinois live stock breeders' association**

21st annual meeting, Springfield, Jan. 17-19, 1916. Breeder's Gaz 69:244 F 3 '16

22d annual meeting, Urbana. O Judd Farmer 62:8 Ja 20 '17

**Illinois nurserymen's association**

Meeting, Chicago, Feb. 14-15. Am Flor 50:246 F 23 '18

**Illinois poultry and egg shippers' association**

Convention, Peoria, Feb. 28-March 1, 1918. N Y Prod R 45:660-1+ Mr 6 '18

4th annual convention, Decatur, March 8-9, 1917. N Y Prod R 43:785+ Mr 14 '17

**Illinois river**

Flood control. H. M. Hyde. il Country Gent 81:442-3 F 26 '16

**Illinois state beekeepers' association**

Echoes of the Illinois beekeepers' convention. Nov. 15-16, 1916. E. R. Root. Gleanings 44:1129-30 D 1 '16

Proceedings of the 27th annual session, Springfield, Illinois, Nov. 14-15, 1917. (In Report, 1917, p. 24-71) '18 The Association, J. A. Stone, sec., Springfield

**\* 17th annual report, 1917. 124p '18 The Association, J. A. Stone, sec., Springfield**

**Illinois state dairymen's association**

43d annual meeting, Danville, Jan. 30-Feb. 1, 1917. Jersey B 36:236 F 14 '17; Hoard's D 53:184 F 23 '17

44th annual convention, Galesburg, Jan. 15-17. Kimball's D F 16:68 F 1 '18; Hoard's D 55:102 F 8 '18

**Illinois state fair**

Few hogs but fine quality at Illinois state fair. il O Judd Farmer 61:5 O 7 '16

49th annual Illinois state fair. Breeder's Gaz 72:430-2+ S 20 '17; Wallaces' F 42:1276-8+ S 21 '17; O Judd Farmer 63:1 S 22 '17; Hoard's D 54:290-1 S 28 '17

50th annual fair, Springfield, Aug. 9-26. Breeder's Gaz 74:305-10 Ag 29 '18; Wallaces' F 43:1220-3 Ag 30 '18; Hoard's D 56:184-5+ S 6 '18; Kimball's D F 16:498+ S 15 '18

Illinois state fair. Breeder's Gaz 70:541-2+ S 28 '16; Wallaces' F 41:1271-3 S 29 '16

Jerseys at the Illinois state fair: with list of awards. il Jersey B 35:1504 S 27 '16

Ramble around the fair grounds. O Judd Farmer 65:156 Ag 31 '18

**Illinois state florists' association**

11th annual meeting and exhibition, Moline, March 7-8, 1916. *Am Flor* 46:368-71 Mr 11 '16  
 12th annual meeting and exhibition, Champaign, March 6-7, 1917. *Am Flor* 48:381-3 Mr 10 '17  
 13th annual meeting and exhibition, Urbana, March 5-6, 1918. *Am Flor* 50:345-8 Mr 9 '18

**Illinois state horticultural society**

Illinois summer meeting. *il Fruit-Grower* 27: 406 S 1 '16  
 60th annual convention. *O Judd Farmer* 60:10 Ja 1 '16  
 62 annual convention, Champaign, Dec., 1917. *O Judd Farmer* 64:7 Ja 5 '18

Transactions, 1916 including proceedings of the 61st annual convention, Champaign, Dec. 13-15, 1916; also proceedings of the Northern, central and southern district societies for the year 1916. *il map Ill State Hort Soc Trans* 1916:1-574 '17 *The Society*, A. M. Augustine, sec., Normal, Ill.

Transactions, 1917 including proceedings of the 62d annual convention, Champaign, Dec. 18-19-20, 1917. *il map Ill State Hort Soc Trans* 1917:1-431 '18 *The Society*, A. M. Augustine, sec., Normal, Ill.

**Illinois university**

College residence halls. E. J. James. *J Home Econ* 9:101-8 Mr '17  
 Living expenses of women students at the University of Illinois. C. E. Gray. *J Home Econ* 8:85-7 F '16

**College of agriculture**

Agriculture at the University of Illinois. E. Davenport and others. *il Univ of Ill (Urbana)* B v 14:1-34 Mr 19 '17  
 College in Illinois; views. *Country Gent* 81: 447 F 26 '16

**Illiteracy**

Increase of ignorance. *J Heredity* 8:178-S3 Ap '17  
 On the road of progress. H. Quick. *Country Gent* 81:505 Mr 4 '16

**Illumination.** See Lighting**Illustration of books and periodicals**

Illustrating botanical papers. *Phyt* 8:186-90 Ap '18  
 Reprinted from *Bot Gaz* 43:59-63 Ja '07

**Illustration stations.** See Demonstration work in agriculture**Immigrants**

Improvement of conditions among immigrants into California. *Int R Ag Econ* 84:66-73 D '17  
 Intelligence of immigrants. *J Heredity* 8:554-6 D '17  
 Remedial action for farmer immigrants. L. Steiner. (*In Nat. conf. on marketing and farm credits*, 1916, p. 172-6) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Thirty years experience as an immigrant. W. W. Hunter. *Nat Stock & F* 40:492 Ag 12 '16  
 Untouched opportunity; percentage of foreign population in the states. P. Roberts. *Rural Manhood* 7:43-7 Ap '16

**Immigration**

Décret portant réglementation de l'art. 32 de la loi sur l'immigration à l'Argentine. *Int Yearbook Ag Leg* 1916:1233 '17

Immigration after the war. R. De C. Ward. *il J Heredity* 8:147-52 Ap '17

Immigration policy. S. L. Gulick. *J Heredity* 7:546-52 D '16

Land settlement and immigration. (*In Nat. conf. on marketing and farm credits*, 1916, p. 99-187) \$2 '17 C. W. Holman, sec., Madison, Wis.

Includes: Land settlement a public question, by E. Mead; Land settlement in the northern states, by E. D. Durand; Land settlement for the Pacific Northwest, by H. MacPherson; Supervising commercial colonization, by M. Loeb; Immigration and the land question, by F. C. Howe; Remedial action for farmer immigrants, by L. Steiner; Financing the insolvent farmer, by L. G. Robinson

Tide of immigration. *J Heredity* 7:541-5 D '16

War, immigration, eugenics; third report of the committee on immigration, American genetic association. *il J Heredity* 7:243-8 Je '16

**Immorality.** See Sexual ethics**Immunity**

Aphis immunity of teosinte-corn hybrids. W. B. Gernert. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:390-2 O 19 '17  
 Items in recent history of veterinary medicine. J. Law. *Am Vet M Assn J* 51:666-74 Ag '17  
 Work of Pasteur and its influence. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 28:8-12 Ja '17

**Impatiens**

Contribution to the life history of *impatiens sultani*. A. M. Ottley. *bibliog il Bot Gaz* 66: 289-317 O '18

On axial abscission in *impatiens sultani* as the result of traumatic stimuli. R. A. Gortner and J. A. Harris. *Am J Bot* 1:48-50 Ja '14

**Imperial valley, California**

Agriculture in the Imperial valley; a manual for settlers. W. E. Packard. *il Cal Ag Exp C* 159:1-70 '17

**Imperial Valley beekeepers' association**

Co-operation in selling honey; California association. J. E. Ross. *Gleanings* 44:655-6 Ag 1 '16

**Imperial Valley long-staple cotton growers' association**

Community production of Durango cotton in the Imperial valley. A. McLachlan. *U S Ag B* 324:9-14 '15

**Implement sheds.** See Farm machinery sheds**Imported cabbage worm.** See Cabbage butterflies**Imported onion maggots.** See Onion maggots**Income**

Cold facts about farm incomes. *Power F* 25: 31 O '16

Crop-cost surveys. *Country Gent* 81:1764 S 30 '16

Farm incomes. Wallaces' *F* 42:685 Ap 20 '17

Farm management demonstrations in the United States. E. A. Brown. *Ag Gaz of Canada* 3:1008-12 N '16

Farm management studies in eastern Nebraska. H. C. Filley. *il map Neb Ag Exp B* 157:1-32 '16

Farm organization; balance between crops and stock, crop rotation, and labor distribution. K. C. Livermore. *maps N Y Ag Dept B* 86: 2432-48 Ag '16

Farm profits and factors influencing farm profits on 284 general farms and 75 dairy farms in Monmouth county, New Jersey. F. App. *il map N J Ag Exp B* 312:1-89 '17

Farm profits and factors influencing farm profits on 370 potato farms in Monmouth county, New Jersey. F. App. *il map N J Ag Exp B* 294:1-103 '16

Farmer's income. *Country Gent* 82:1023 Je 16 '17

Farmer's income. E. A. Goldenweiser. *Farmers' B* 746:1-7 '16

Farmer's income; what an advertising manager learned about it. A. W. Wilson. *Rural Manhood* 8:299-302 S '17

Farmer's labor income. P. L. Vogt. *Am Economic Review (Am. Economic Assn., Ithaca, N. Y. \$1.25)* 6:898-22 D '16

Farmers net income. *O Judd Farmer* 64:16 Mr 2 '18

Five lessons failure taught me. L. G. Berry. *System on the Farm* 2:132-3 Ap '18

How to turn spare time to cash. W. Jack. *Prac F* 114:10 Ja 1 '18

Influence of the size of the farm upon the wages of labour in the irrigated sections of the United States. *Int R Sci & Prac Ag* 7, no 2:276-7 F '16

Labor income of dairymen. *Rural N Y* 75: 1067 Ag 12 '16

Labor income of the farm. *Prac F* 112:460 D 15 '16

Marketing as affecting profits in farming. E. O. Anderson. *Penn State F* 10:29-30 F '17



**Income—Continued**

- Method of analyzing the farm business. E. H. Thomson and H. M. Dixon. *Farmers' B* 661:1-28 '18
- More capital and farm profits. W. L. Cavert. (*In Minnesota farmers' institute annual, 1916, p 29-31*) '16 Extension division, University Farm, St Paul
- Net output from agriculture and its distribution. C. S. Orwin. *J Bd Ag* 24:158-61 My '17
- Organization of the farm business for profit. G. N. Dagger and J. I. Falconer. *il Ohio Ag Ext B v 13:1-29* '17-'18
- Profits in farming on irrigated areas in the Gallatin valley, Montana. E. L. Currier. *Mont Ag Exp B* 111:1-52 '16
- Raising my income a third by selling direct to retailers. H. G. Darwin. *il System on the Farm* 2:170-2 My '18
- Size of farm business. O. R. Johnson and W. E. Foard. *il Mo Ag Exp B* 140:1-40 '16
- Statistical researches on the chief factors which influence farm profit in Denmark. L. Nannesson. *Int R Sci & Prac Ag* 7, no 11: 1668-76 N '16
- Successful farm organization. O. R. Johnson. *Mo Ag Exp B* 142:1-25 '16
- Utilisation of the profits made by Swiss peasants. E. Laur. *Int R Sci & Prac Ag* 8, no 9:1285-91 S '17
- Value to farm families of food, fuel, and use of house. W. C. Funk. *U S Ag B* 410:1-36 '16
- Volume of business. D. H. Otis. *Country Gent* 81:1656 S 9 '16
- See also Capital; Farm management; Wages

**Income tax**

- Computing profits from land sales. Wallaces' *F* 43:347 F 22 '18
- Co-operative creameries and the income tax. Hoard's *D* 52:424 O 20 '16
- Dairyman and the income tax. Hoard's *D* 54: 878 Ja 11 '18
- Farm records and the income tax. L. S. Robertson. *Purdue Ag* 12:426 Ap '18
- \* Farmers and others; 1916 income tax returns. *New Republic* (421 W. 21st st, N.Y. 10c) 16: 155-6 S 7 '18
- Farmers and the income tax. *Nat Stock & F* 41:910 D 22 '17
- Farmers and the income tax. A. Secor. *Jersey B* 37:44 Ja 9 '18; Same. *Prog F* 33:65 Ja 19 '18
- Farmers' bookkeeping for income tax. *Ag Digest* 2:891 Mr '18
- Farmer's income tax. Wallaces' *F* 42:941 Je 22 '17
- Filling out your income tax blank. J. I. Falconer. *Ohio F* 141:70 Ja 19 '18
- How to figure your farm income tax. J. C. Marquis. *Country Gent* 83:15 F 9 '18
- Income tax and the farmers. *Am Coop J* 13: 192 Ja '18; *O Judd Farmer* 64:21 Ja 12 '18; *Rural N Y* 77:210 F 9 '18
- Income tax statements. Wallaces' *F* 42:1654 D 7 '17
- Income tax, war income tax, excess profit tax affecting farmers' elevator companies. *Coop Manager & F* 7:88-9 F '18
- Will new income tax hit you? *O Judd Farmer* 65:231 S 21 '18

**Incubation**

- Advantages of artificial incubation. M. K. Boyer. *Am P Advocate* 25:744; 26:12, 78 N '17-Ja '18
- Advantages of artificial incubation and brooding. H. W. Jackson. *il Reliable P J* 25:58+ Mr '18
- Factors in incubation. *il Conn Storrs Ag Exp B* 95:311-50 '18
- Includes information relative to care of hatching eggs, breeding, care of incubators, etc.
- Farm poultry; incubation. W. R. Graham and F. N. Marcellus. *il Ontario Ag Dept B* 247: 42-55 '17
- Hatching chicks. W: H. Lapp. *Ia Ag Ext B* 61 4p '18
- Hatching of chicks. M. A. Jull. *il J Ag (Quebec)* 19: 199-200 Mr '16
- Helping out with moisture. Wallaces' *F* 42:404 Mr 2 '17

- Incubation. F. W. Kazmeier. *Tex Ag Ext B* 10:85-95 '16
- Incubation. C: Weeks. *il Am P J* 49:222 F '18
- Incubation and brooding. (B. 15) 12p *il n.d.* Mo. State poultry exp. station, Mountain Grove
- Incubation and brooding. P. F. Schowengerdt. *il Colo Ag Ext B* 137:1-12 '18
- Incubation and brooding. S. P. Smyth. *il Purdue Ag* 12:290-2 F '18
- Incubation, brooding and feeding of chicks. R. V. Mitchell. *il Del Ag Ext B* 3:1-15 '18
- Incubation of hen eggs. H. Atwood. bibliog *W Va Ag Exp C* 25:1-24 '17
- Incubation problems. map *N J Ag Exp Rep* 1916:153-9 '17
- Natural and artificial incubation. M. C. Kilpatrick. *il Ohio Ag Ext B v 11, no 14* 16p '15-16
- Natural and artificial incubation of hens' eggs. H. M. Lamon. *il Farmers' B* 585:1-18 '17
- Natural incubation. F. W. Kazmeier. *Nat Stock & F* 40:82 Ap 15 '16
- Natural incubation and brooding. W. S. Schoppe. *il Mont Ag Exp C* 74:79-86 '18
- Natural incubation and rearing of poultry. C: E. Allen. *il Mass Ag Bd B* 1:47-54 '17
- Poultry-keeping. F. C. Brown. *J Ag New Zealand* 15:103-6 Ag 20 '17
- Principles and conditions of successful incubation. J. B. Morman. *Reliable P J* 23:59-60+ Mr '16
- Regarding incubation. W. C. Smith. *Fruit-Grower* 23:93 F 1 '17
- Successful incubation. *il Ag Gaz of Canada* 4: 288-99 Ap '17
- Successful incubation. M. A. Jull. *J Ag (Quebec)* 20:190-1 Mr '17
- Successful incubation practices in New Jersey, embryo mortality. R. R. Hannas. *N J Ag Exp Hints to Poultrymen v 6* 4p F '18
- Temperature experiments in incubation. A. G. Philips. *il Ind Ag Exp B* 195:1-31 '16; Summarized. *B* 195 Popular ed 8p
- Why chicks die in the shell. H. W. Jackson. *Nat Stock & F* 40:1444 Mr 24 '17

**Incubator cellars**

- Concrete incubator cellar. *il Country Gent* 83: 33 Ja 19 '18

**Incubators**

- Adopting mammoth incubators. J. R. Kessler. *il Country Gent* 82:393 F 24 '17
- Advantages of artificial incubation. M. K. Boyer. *Am P Advocate* 25:744; 26:12, 78 N '17-Ja '18
- Art and science of artificial hatching. H. Lewis. *il Field* 11 26:221-2 Mr '16
- Artificial incubation. F. L. Morrison. *il Farm Eng* 6:17+ F '18
- Artificial incubation. Mr and Mrs G: R. Shoup. *Western Wash Ag Exp B v 5* 168-70 F '18
- Artificial incubation on large and small scale. F. V. L. Turner. *Prac F* 114:8 Ja 1 '18
- Baby chick trade for women on farms. B. Barker. *il Prac F* 112:73 F 15 '16
- Before starting the incubator. H. A. Roberts. *Country Gent* 83:23 F 2 '18
- Blue hen mammoth incubator. *il Reliable P J* 24:1025-6 Ja '18
- Bringing forth healthy chicks. Mrs H. L. Miller. *O Judd Farmer* 62:1+ F 3 '17
- Candee mammoth incubator. *il Reliable P J* 24:1020-1 Ja '18
- Care of early hatches and early broods. M. H. Decker. *Am P J* 49:145-7 F '18
- Care of the incubator. J. R. Kessler. *il Country Gent* 81:461 F 26 '16
- Chick's diary for June. *Country Gent* 82:1007 Je 9 '17
- Chinese incubator; its origin and use. H. Lum Chung. *il Am P J* 48:632-3 My '17
- Concerning incubators. E. Warren. *Am P Advocate* 24:432 Ap '16
- Delayed hatch. J. R. Kessler. *il Country Gent* 82:556 Mr 17 '17
- Development of the modern mammoth incubator. *il Reliable P J* 24:1017-19 Ja '18
- Economical incubator. M. Purvis. *Breeder's Gaz* 69:963 My 4 '16
- Egyptian methods of incubation. H. S. Paine. *il Am P J* 48:778-9 Jl '17

**Incubators—Continued**

Electric incubator alarm. H. A. Roberts. Country Gent 81:803 Ap 8 '16  
 Electric incubators. Ag Digest 1:77 Je '16  
 Eliminate drones at hatching time. T. E. Quisenberry. Am P Advocate 25:184 F '17  
 Factors in incubation. L. E. Card. Am P Advocate 24:443 Ap '16  
 Gas incubators. Country Gent 81:700 Mr 25 '16  
 Goose eggs in incubators. Nat Stock & F 41: 92 Ap 14 '17  
 Goose eggs in incubators. F. H. Valentine. Country Life 33:86 F '18  
 Handling the incubator. Mrs C. E. Hill. Kimball's D F 14:120 F 15 '16  
 Harry Simpson goes into business. il Hoard's D 55:346 Mr 15 '18  
 Hastings mechanical draft chick hatchery. M. Hastings. Reliable P J 25:265 Ap '18  
 Hatching chicks with incubators. M. A. Jull. J Ag (Quebec) 21:142 Mr '18  
 Hatching with electricity. B. W. Mendenhall. il Am P J 48:417+ Mr '17  
 Hatching with incubators. F. F. Hunstock. il Kimball's D F 15:108 F 15 '17  
 Hens—or incubators. F. J. Rothpletz. Prog F 31:146 Ja 29 '16  
 Hints on incubators. Kimball's D F 16:132 F 15 '18; Same. Am P Advocate 26:282-3 Mr '18; Same abr. Wallace's F 43:243 F 8 '18  
 How an incubator should be run. Prac F 112: 14 Ja 1 '16  
 How to operate an incubator. J. E. Dougherty. il Cal Ag Exp C 156:1-8 '16  
 Incubation. A. W. Richardson. N H Ag Ext C 29:1-7 '18  
 Incubation on the farm. C. S. Brewster. il Purdue Ag 11:14-17 F '17  
 Incubator directions. H. L. Kempster. Prog F 31:575 Ap 22 '16; Same. N Y Prod R 42: 246 My 31 '16  
 Incubator guide. Country Gent 81:336 F 12 '16  
 Incubator instructions. Am P J 49:104 Ja '18  
 Incubators and baby chicks. F. V. L. Turner. Prac F 114:50 F 1 '18  
 Incubators and brooders. C. C. Connally. Prog F 32:10 Ja 6 '17  
 Incubators are farm machinery. Am P J 49: 306 Mr '18  
 Incubators for robust chicks. il O Judd Farmer 64:1+ F 2 '18  
 Incubators to hatch and brooders to brood chicks. Am P Advocate 26:266 Mr '18  
 Installing the incubator. M. N. Edgerton. O Judd Farmer 60:5 F 19 '16  
 Latest type of mammoth incubator. il Reliable P J 25:743+ N '18  
 Mammoth incubators. il Country Gent 81:121 Ja 15 '16  
 Management of incubator eggs. I. J. Mathews. Ohio F 139:294 F 24 '17  
 Modern advance in incubation. F. H. Valentine. il Country Life 29:50 F '16  
 New type of Mammoth incubator. G. M. Curtis. il Reliable P J 24:840C+ D '17  
 Newtown giant mammoth incubator. il Reliable P J 24:1022-3 Ja '18  
 Next year's poultry machinery. Prac F 112: 422 N 15 '16  
 Ohio and the day-old chick business. F. S. Jacoby. il Ohio F 137:157 F 5 '16  
 Operating an artificial hatcher. J. M. Seelander. Am P J 49:80 Ja '18  
 Operating the incubator. C. E. Morrison. Nat Stock & F 40:1243 F 17 '17  
 Operating the incubator. L. F. Strickler. Ohio F 141:368 Mr 9 '18  
 Operating the incubator. O. F. Taylor. il Fruit-Grower 27:77+ F 1 '16  
 Poultry game. A. James. il Ohio F 137:186 F 5 '16  
 Practical instructions on operation of incubators. H. W. Jackson. il Reliable P J 25:195+ Ap '18  
 Profitable mistakes with an incubator. A. E. Vandervoort. Am P Advocate 25:384 Ap '17  
 Profits of the incubator. I. Shepler. Am P Advocate 24:458 Ap '16  
 Puts dependence in incubators. W. C. Smith. O Judd Farmer 64:4 F 2 '18

Quincy's big new incubator factory. il Reliable P J 25:798 N '18  
 Recent inventions for poultrymen. L. L. Sargent. Am P J 49:742 Ag '18  
 Regulating incubators electrically. il Farm Eng 4:96 D '16  
 Safety first with incubator. E. I. Farrington. il Kimball's D F 16:23 Ja 1 '18  
 Selecting the incubator. Country Gent 81:68 Ja 8 '16  
 Selecting the incubator. F. F. Hunstock. Ohio F 139:250 F 17 '17  
 Sprouting oats in the incubator. H. M. Beals. il Country Gent 83:40 O 26 '18  
 Starts incubator early. T. H. Mosher. O Judd Farmer 61:8 D 30 '16  
 Stumbling blocks in artificial incubation. Nat Stock & F 41:1362 Mr 23 '18  
 Successful hatching with incubators. P. T. Woods. Am P J 47:420-1 Mr '16  
 Successful operation with incubators. F. F. Hunstock. Ohio F 139:339 Mr 3 '17  
 Supplying gas for hatching and brooding. G. C. Shadwell. il Am Gas Eng J (42 Pine st, N.Y. 10c) 108:289-91 Mr 30 '18  
 Tells why incubators and brooders should be used. H. H. Johnson. Reliable P J 25: 859-60+ D '18  
 Types of incubators. H. D. White. Am P Advocate 26:193 F '18; Same. Am P J 49:186 F '18  
 Using the incubator. Weekly N L 5:6 Mr 6 '18

**Incumbrances.** See Agricultural liens

**Index numbers (economics)**

Method of obtaining index number of prices. Monthly Crop Rep 4:96 Ag '18

**Indexes**

Contents and index of volume V of Journal of agricultural research. J Ag Research 5: iii-xxvii, 1193-1207 Mr 27 '16  
 Contents and index of volume VI of Journal of agricultural research. J Ag Research 6: iii-xxvi, 1047-60 S 25 '16  
 Contents and index of volume VII of Journal of agricultural research. J Ag Research 7: iii-xv, 549-56 D 26 '16  
 Contents and index of volume VIII of Journal of Agricultural research. J Ag Research 8:i-xv, 477-82 Mr 26 '17  
 Contents and index of volume IX of Journal of agricultural research. J Ag Research 9: ix, 427-31 Je 25 '17  
 Department bulletins, with contents and indexes, prepared by the Division of publications. nos. 1-25, 26-50, 51-75, 76-100, 101-25, 126-50, 151-75, 176-200, 201-25, 226-50, 251-75, 276-300, 301-25, 13pts '14-'17 U S Ag  
 Farmers' bulletins, with contents and index, prepared under the supervision of editor and chief (Division of publications). nos. 501-525, 526-550, 551-575, 576-600, 601-625, 701-725, 726-750, 751-775 8 pts '13, '15, '17-'18  
 Index to general bulletins 1-25. H. B. Clees. Wash Ag Exp 12p '17  
 Index to service and regulatory announcements 1 to 22. (Service and regulatory announcements—Chem. index, 1918) 34p '18 U S Ag  
 Index to volume III; Weekly news letter. 16p '16 U S Ag  
 Indexes to Popular bulletins numbers 1 to 100. H. B. Clees. 30p '16 Washington ag. experiment station, Pullman  
 Monthly bulletin of agricultural intelligence and plant diseases; index 1915 (Int R Sci & Prac Ag). 100p '16 Int. inst. of agriculture, Rome  
 Quarterly bulletin; contents and index to volume I & II; 1916-'17, 1917-'18. Fla State Plant Bd B v. 1:iii-iv, 179-210 '17; v 2:199-240 '18

See also Card indexes

**Indexing**

How I index agricultural bulletins. F. Hart. il System on the Farm 1:298 O '17  
 Indexing and filing publications. Ag Gaz of Canada 5:6-11, 24-33 Ja '18  
 Key to subject index experiment station literature. (Doc. 37) 5p '17 U.S. States relations service, Washington, D.C.



- India**  
 Present day changes in rural India. O. O. Stanchfield. Rural Manhood 8:431-3 D '17  
*See also* subhead India under special subjects, e.g. Agriculture—India, Dairying—India
- Agriculture, Department of**  
 His excellency the viceroy on agricultural progress. Ag J of India 12:supl-3 Ja '17  
 9th meeting of the Board of agriculture of India. Ag J of India 11:93-107 Ap '16  
 10th meeting of the Board of agriculture in India. Ag J of India 13:231-41 Ap '18  
 Publications of the Imperial department of agriculture in India. *See* quarterly issues of Agricultural journal of India
- Forest department**  
 Work of the forest department in India: a review. J. Mackenna. Ag J of India 12:569-72 O '17
- Industries and resources**  
 Indian sugar industry. Wynne Sayer. Ag J of India 11:42-64 Ja '16  
 Jand forests and the olive of the Punjab. For Quar 14:110-12 Mr '16  
*See also* Forests and forestry—India
- Religion**  
 Village religion of India. O. O. Stanchfield. Rural Manhood 8:248-51 Je '17
- India rubber**  
**Statistics**  
 International trade. *See* United States Department of agriculture Yearbooks
- Indian blankets**  
 Historic Chilkat Indian blanket. C. L. Pancoast. il Country Life 32:88 S '17
- Indian corn.** *See* Corn
- Indian game.** *See* Cornish Indian fowl
- Indian pipe**  
 Queen of plant parasites. R. W. Shufeldt. il Country Life 32:60 S '17
- Indian runner ducks.** *See* Ducks
- Indiana**  
*See also* subhead Indiana under special subjects, e.g. Agriculture—Indiana, Dairying—Indiana
- Forestry, State board of**  
 \* Report of the State board of forestry and of the State park committee of the state of Indiana for the year 1917. 13p '18 Ind. State bd. of forestry, Indianapolis  
 16th annual report of the State board of forestry 1916. 217p il '16 Ind. State bd. of forestry, Indianapolis
- Industries and resources**  
*See also* Soil fertility—Indiana
- Indiana agricultural experiment station**  
 Purdue experiment station work. A. G. Philips. Reliable P J 24:693 O '17  
 30th annual report for the year ending June 30, 1917. Ind Ag Exp Rep 1917:1-84 '18  
 Veterinary work in Indiana. C. H. Clink. Breeder's Gaz 71:1117 My 31 '17
- Creamery license division**  
 3d annual report for the year ending March 31, 1917. il maps Ind Ag Exp C 63:1-44 '17  
 4th annual report for the year ending March 31, 1918. R. E. Caldwell and T. H. Broughton. il map Ind Ag Exp C 81:1-44 '18
- Indiana apple show.** *See* Apples—Exhibits
- Indiana cattle feeders' association.** *See* Indiana state cattle feeders' association
- Indiana draft horse breeders' association**  
 Annual meeting, Indianapolis, Jan. 25-26, 1917. H. E. McCartney. Ohio F 139:188 F 10 '17  
 Meeting, Indianapolis, Jan. 30-31. Ohio F 141:259 F 23 '18
- Indiana egg and poultry association**  
 Convention, Indianapolis, Feb. 26-27. N Y Prod R 45:656+ Mr 6 '18  
 3d annual convention, Indianapolis, March 6-7, 1917. N Y Prod R 43:808+ Mr 14 '17
- Indiana farmers' grain dealers' association**  
 First year's work in Indiana and the trials of the secretary. E. G. McCollum. Am Coop J 12:570-1+ Ap '17  
 Organization meeting, Lafayette, Mar. 14-15, 1916. Am Coop J 11:816-21 Ap '16
- Indiana grain dealers' association.** *See* Indiana state grain dealers' association
- Indiana Guernsey breeders' association**  
 Summer district meeting at Plymouth, June 29, 1917. Hoard's D 54:41 Ag 3 '17
- Indiana home economics association**  
 Fifth annual convention. M. L. Matthews. Purdue Ag 12:300-1 F '18
- Indiana horticultural society**  
 Sixth annual apple show, West Baden, Nov. 14-20, 1916. Fruit-Grower 28:25 Ja 1 '17
- Indiana Jersey cattle club**  
 Indiana Jersey cattle club meeting. Jersey B 36:345 Mr 7 '17; Kimball's D F 15:205 Mr 15 '17  
 Interesting meeting at Indianapolis, Feb. 2. Jersey B 37:311 F 27 '18  
 Meeting, Indianapolis, Feb. 1916. il Jersey B 35:198-9 F 9 '16  
 Meeting, Purdue university, Jan. 17. Jersey B 37:119 Ja 23 '18
- Indiana manufacturers of dairy products**  
 Northeast meeting, Ft. Wayne, Ind., Oct. 19, 1916. Creamery 5:48 O '16  
 Southeast district convention, Connersville, Ind., Aug. 10, 1916. Creamery 4:43 Ag '16; N Y Prod R 42:730 Ag 30 '16
- Indiana melon growers' association**  
 Marketing melons at a profit. T. W. Harvey. il Country Gent 82:1073 Je 30 '17  
 Melon production in southern Indiana. T. W. Harvey. il Purdue Ag 13:115-16 D '18
- Indiana sheep breeders' association**  
 Meeting, Purdue university, Jan. 15. Am Sheep B & W 38:131 F '18
- Indiana state cattle feeders' association**  
 Annual spring meeting, Lafayette, April 13. Nat Stock & F 42:100 Ap 20 '18  
 Annual spring session, Lafayette, Ind., May 6. Breeder's Gaz 69:1026 My 11 '16  
 Fall meeting, Purdue university, Dec. 15, 1917. Purdue Ag 12:210-11 Ja '18; Nat Stock & F 41:967 Ja 5 '18  
 Indiana cattle feeders heartened by Purdue tests. Breeder's Gaz 71:976 My 10 '17  
 Indiana cattle feeders meet. W. B. Kreuck. Purdue Ag 11:28 Je '17  
 May still feed corn to cattle. O Judd Farmer 62:1 My 19 '17  
 Meeting, December 14. Nat Stock & F 42:872 D 21 '18  
 Meeting, Lafayette, May 4, 1917. H. E. McCartney. Ohio F 139:690 My 19 '17
- Indiana state dairy association**  
 Indiana dairy association activities. C. R. George. Jersey B 36:813 My 23 '17  
 Recent convention, Lafayette, Jan. 11-12, 1917. C. R. George. Hoard's D 53:139 F 16 '17  
 24th annual meeting. C. R. George. il Hoard's D 51:92 F 11 '16  
 24th annual meeting, Lafayette, Jan. 13-14, 1916. Jersey B 35:92+ Ja 19 '16  
 28th annual meeting, Purdue university. C. R. George. Hoard's D 55:103 F 8 '18
- Indiana state fair**  
 Hoosier farming at its height. W. S. Greenough. O Judd Farmer 63:7 S 22 '17  
 Indiana Poland China show. M. S. McFadden. il Swine World 6:40 O '18  
 Indiana state fair. C. R. George. il Hoard's D 56:319+ O 4 '18  
 Indiana state fair. T. Hewes. Am P J 49:858-9 O '18  
 Indiana state fair brings out great exhibition of Jerseys; list of awards. Jersey B 35:1419 S 13 '16  
 Indiana state fair, Sept. 4-8. il Breeder's Gaz 70:420-5 S 14 '16; Ohio F 138:247 S 16 '16

**Indiana state fair—Continued**

- Indiana state fair sheep show. *il* Am Sheep B & W 38:657-8 O '18  
 Indiana's state fair. C. R. George. *il* Hoard's D 54:260+ S 21 '17  
 Poultry department at the recent Indiana state fair. L. J. Brosemer. *il* Reliable P J 23:871+ N '16  
 Sheep at the Hoosier state fair. Am Sheep B & W 36:522-3 S '16  
 64th Indiana state fair, Sept. 3-7. Breeder's Gaz 72:378+ S 13 '17; Ohio F 140:232 S 15 '17

**Indiana state grain dealers' association**

- Annual convention, Indianapolis, Jan. 9-10, 1917. Coop Manager & F 6:44-6+ F '17  
 Annual convention, Indianapolis, Jan. 15-16, 1918. Coop Manager & F 7:62-3 F '18  
 Midsummer convention, Indianapolis, June 21-22. Coop Manager & F 6:62-3 Ag '17

**Indiana state veterinary medical association**

- 22d annual meeting, Indianapolis, Jan. 10, 1918. Am Vet M Assn J 52:765-8 F '18

**Indiana swine breeders' association**

- 42d annual meeting, Indianapolis, Jan. 9. Breeder's Gaz 73:161 Ja 24 '18; Ohio F 141:106 Ja 26 '18

**Indians**

- Agriculture of the Hidatsa Indians. A. E. Jenks. Science (Science Press, Garrison, N.Y. 15c) n s 44:864-6 D 15 '16  
 Agriculture of the Hidatsa Indians; an Indian interpretation. G. L. Wilson. (Studies in the social sciences no. 9) 129p *il* 75c '17  
 Univ. of Minn., Minneapolis  
 Alaskan Indians' bill of fare. F. S. Morton. Rural N Y 76:234 F 17 '17  
 Indians as gardeners. E. P. Powell. Country Life 29:130 Ap '16  
 It's Lo, the rich Indian. R. H. Moulton. *il* Hoard's D 54:869 Ja 11 '18  
 Land tenure and the organization of agriculture on Indian reservations in the United States. *Int R Ag Econ* 77:63-76 My '17  
 Mon-dah-min, and the red man's world old uses of Indian corn as food. Hen-Toh. J Home Econ 10:444-51 O '18  
 Paintings of Indians. O. E. Berninghaus. *il* Country Life 33:57-9 Ap '18  
 Study of Canadian moccasins. Mrs J. H. Peck. J Ag (Quebec) 21:160 Ap '18 (to be cont)

**Indian's memory; story.** C. P. Brown. Nat Stock & F 40:559-60, 584 Ag 26-S 2 '16**Indicators and test papers**

- Colorimetric determination of hydrogen ion concentration and its applications in bacteriology. W. M. Clark and H. A. Lubs. *il* J Bact 2:1-34, 109-36, 191-236 Ja-MY '17  
 Substitute for litmus for use in milk cultures. W. M. Clark and H. A. Lubs. J Ag Research 10:105-11 J1 '16 '17

*See also* Chemical reagents; Litmus paper

**Indigo**

- Experiments on the physiology of indigo-yielding glucosides. *Int R Sci & Prac* Ag 7,no 1:70 Ja '16  
 Historical review of the once important indigo industry of the Philippine islands. E. D. Doryland. Philippine Ag R 10, no 1:24-6 '17  
 Importance of bacterial action in indigo manufacture. C. M. Hutchinson. *Int R Sci & Prac* Ag 9,no 5:615 My '18  
 Present position and future prospects of the natural indigo industry. W. A. Davis. Ag J of India 13:32-46, 206-21, 441-59 Ja-J1 '18 (to be cont)  
 Ten years' practical experience of Java indigo in Bihar. D. J. Reid. *il* Ag J of India 12:1-26 Ja '17

**Indigo buntings**

- Our bird friends. E. S. Jones. Ohio F 137:237 F 12 '16

**Indigoferas**

- Indigoferas for late flower. W. H. Judd. Gard M 25:254 My '17

**Individuality (physiological)**

- Individuality in organisms, by C. M. Child. Review. Bot Gaz 62:320-3 O '16

**Indo-China.** *See* Agricultural credit—Indo-China; Agriculture—Indo-China**Indol**

- Observations sur l'influence chimique des milieux de culture sur le développement et la production de l'indol par les colibacilles et par les bacilles typhiques. E. Zunz and P. György. bibliog J Bact 1:627-61 N '16  
 Rapid and simple indol test. F. R. Cannon. J Bact 1:535-6 S '16

**Indoor plants.** *See* House plants**Industrial betterment**

- Establishment, organization and finances of the Central bureau of social intelligence in Holland. *Int R Ag Econ* 64:10-17 Ap '16

**Industrial drawing.** *See* Mechanical drawing**Industrial education**

- Suggestion as to vitalizing the country schools thru our present teachers. J. D. Eggleston. (*In* Pro., Nat. educ. assn., 1916, p. 58-63) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.

- Wage worth of school training, by Anna Charlotte Hedges. Review by M. S. Woolman. J Home Econ 8:438-40 Ag '16

*See also* Vocational education; also Lux school of industrial training; National society for the promotion of industrial education

**Industrial painting.** *See* Painting, Industrial**Industrial research**

- Scientific and industrial research. G. Fletcher. J Dept Ag Ireland 17,no 4:606-10 '17

**Industries.** *See* Arts and crafts**Industry**

- Chemistry in industry. G. T. Morgan. J Dept Ag Ireland 17,no 4:639-47 '17  
 Irish industries after the war. G. Fletcher. J Dept Ag Ireland 18,no 2:189-203 '18  
 Where farm machines come from. G. F. Whittsett. *il* Wallaces' F 42:1751 D 28 '17

**Infant feeding.** *See* Infants—Care and hygiene**Infant mortality**

- Can this association help to reduce the death rate among children? Mrs M. West. J Home Econ 9:489-92 N '17  
 Deaths of children under five in Ohio during April, 1918. Ohio F 142:18 J1 6 '18  
 Decrease in milk supply; its effect on infant mortality. J. S. Neff. bibliog *Int Assn Dairy & Milk Inspect Rep* 1917:140-5; Same. Creamery 7:23-4 F '18  
 Increased cost of milk and its influence on infant mortality. (Monthly Report) p 575-81 O '17 Dept. of public health, Toronto  
 Save the seventh baby. *il* Delineator (Spring and Macdougall sts., N.Y. 15c) 90:5-7 My; 8-9 Je; 91:13-14 N '17  
 Ten years of work, 1907-1916: report of the New York milk committee. 38p *il* '16 New York milk com., 105 E. 22d st., N.Y.  
 Why the babies die. J Heredity 9:62-6 F '18  
 Young mother. J Heredity 8:394-6 S '17

*See also* Infants—Care and hygiene

**Infantile paralysis**

- Facts concerning infantile paralysis. Rural N Y 75:1114 Ag 19 '16  
 How to prevent infantile paralysis. Wallaces' F 41:1050 Ag 4 '16  
 Infantile paralysis. C. H. Lerrigo. Country Gent 81:1490 Ag 5 '16  
 Infantile paralysis. E. Mellen. O Judd Farmer 62:14 Je 23 '17  
 Infantile paralysis facts. J. B. Huber. O Judd Farmer 61:21 Ag 12 '16  
 Milk does not carry infantile paralysis. Creamery 9:24 Ag '17  
 Scourge of infantile paralysis. Rural N Y 75:1013 J1 22 '16

**Infants**

- Mental tests for babies. Wallaces' F 41:1214 S 15 '16

*See also* Children

**Care and hygiene**

- Babies on the farm. Rural N Y 75:786 My 20 '16



**Infants—Care and hygiene—Continued**

- Babies—their needs are many. G. V. Gray. Farm Eng 5:10 O '17
- Baby: food, care, clothing. Prog F 33:410, 417 Mr 30 '18
- Baby's exercise. Prog F 31:336 Mr 4 '16
- Baby's needs. M. P. Connolly. Country Gent 81:85 Ja 8 '16
- Baby's sleep. Prog F 31:154 Ja 29 '16
- Better baby information. M. E. Sweeny. il plans Ky Univ B v 9, no 1:1-12 '17
- Better care of country babies. Survey (112 E. 19th st, N.Y. 10c) 39:448 Ja 19 '18
- Bottles for baby. Wallaces' F 41:1000 Ji 21 '16
- Care of babies and children. Prog F 32:407 Mr 31 '17
- Care of baby in summer. Ohio F 137:637 Ap 29 '16
- Care of infants. il N D Ag Exp Spec B v 4, no 5:97-132 '16
- Care of the baby. il Minn Ag Ext B 62:1-8 '16
- Celebrate baby week. G. V. Gray. Farm Eng 5:14 My '17
- Child conservation: bathing and clothing. F. M. Hollingshead. Ohio F 140:610 D 29 '17
- Child welfare and children. Wallaces' F 41:772 My 19 '16
- Child welfare—preparing for children. F. J. Doudican. Ohio F 142:598 D 14 '18
- Diet of children from babyhood to ten years old. Mrs W. N. Hutt. Prog F 31:232 F 12 '16
- Doctoring the baby. Rural N Y 75:1333 O 21 '16
- Fat sick baby. Prog F 33:76 Ja 19 '18
- Feeding a nursing baby. F. M. Hollingshead. Ohio F 140:438 N 10 '17
- Feeding of older infants. Wallaces' F 41:1050 Ag 4 '16
- \* Food for infants and growing children. A. E. Richardson and J. P. Rich. Texas Univ (Austin) B 1804:1-30 Ja 15 '18
- Food for mother and baby. C. N. South. (Ser. 3, no. 3) 16p '18 Winthrop normal and industrial college, Rock Hill, S.C.
- Fresh air for the baby. M. P. Connolly. Country Gent 81:367 F 12 '16
- Goat's milk for infant feeding. W. H. Jordan and G. A. Smith. il N Y State Ag Exp B 429:1-20 '17; Summarized by F. H. Hall. (Goat milk good for babies). B 429 Popular ed 7p; Excerpts. N Y Ag Dept B 96:140-5 Je '17
- Hot weather hints. M. P. Connolly. Country Gent 81:1567 Ag 19 '16
- Infant feeding. N C Ag Ext C 7:44-7 '16
- Infant welfare work in war time. J Heredity 9:111 Mr '18
- Maternity and infant care in a rural county in Kansas. E. Moore. (Pub. no. 26; Rural child welfare ser. no. 1) 50p il '17 U.S. Children's bureau, Washington, D. C.
- Milk for babies. Ohio F 137:668 My 6 '16
- Milk for the baby. Mrs E. E. Stanford. Prog F 31:520 Ap 8 '16
- My child. L. A. DeVilbiss. Country Gent 82:951 My 26 '17
- Nellie's scientific baby: story. H. C. Bennett. il Country Gent 83:18-19 Mr 9 '18
- New-born baby. Prog F 31:53 Ja 8 '16
- Ohio's baby saving record. F. M. Hollingshead. Ohio F 142:18 Ji 6 '18
- Pasteurized milk for babies. A. D. Burke. Nat Stock & F 40:1052 Ja 13 '17
- Planning your baby week. B. R. Murphy. il Country Gent 82:517 Mr 10 '17
- Problems of the rural mother in infant feeding. L. A. DeVilbiss. (In Trans. Am. assn. for study and prevention of infant mortality, 1916, p. 235-41) \$3+postage '17 G. E. Knipp, sec., 1211 Cathedral st., Baltimore
- Rules for feeding infants and young children. Prog F 32:1102 O 20 '17
- Studies of the values of different grades of milk in infant feeding. R. M. Washburn and C. H. Jones. bibliog il Vt Ag Exp B 195:1-134 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16; Same cond. (Popular ed with title: Value of different grades of milk in infant feeding). B 201:1-32 '16
- Teething, walking and talking. M. P. Connolly. Country Gent 81:669 Mr 18 '16
- Temperature facts. M. P. Connolly. Country Gent 82:228 F 3 '17

- Ten years of work, 1907-1916: report of the New York milk committee. 38p il '16 N.Y. milk comm., 105 E. 22d st, N.Y.
- Training young babies. Mrs H. S. Mallory. il Ohio F 137:666 My 6 '16
- Treasure or trouble. M. Westcott. O Judd Farmer 60:26-7 Ap 15 '16
- Weaning the baby. Country Gent 81:2059 N 25 '16
- Weaning the baby now. M. R. Morris. Ohio F 140:334 O 13 '17
- When to get the doctor. L. A. DeVilbiss. Country Gent 82:573 Mr 17 '17
- Why the young doctor is to be trusted. Mrs W. R. Hollowell. Prog F 31:1154 S 30 '16
- Wide-awake girls learn how to feed a baby. Mrs W. N. Hutt. Prog F 31:626 My 6 '16
- See also Children—Care and hygiene; Infant mortality

**Clothing**

- First clothes. M. P. Connolly. Country Gent 81:1138 My 27 '16

**Infectious diseases**

- Bacteria of infectious diseases of man and animals. D. H. Jones, il Ontario Ag Dept B 265:38-68 '18
- Bearing of dairy inspection on the better control of milk-borne diseases of man. J. W. Kerr. Int Assn Dairy & Milk Inspec Rep 1915:87-95
- Five filthy fingers. J Home Econ 10:468 O '18
- Food-borne infections. E. O. Jordan. Science (Science Press, Garrison, N.Y. 15c) n s 47:80-6 Ja 25 '18
- Milk-borne infections. Creamery 5:37 Je '17
- Report of committee on human diseases—their relation to the milk supply and to the public health; with discussion. W. H. Price and others. Int Assn Dairy & Milk Inspec Rep 1915:44-53
- Your state board of health. C. H. Lerrigo. Country Gent 81:407 F 19 '16

See also Animals as carriers of contagion; Anthrax; Diphtheria; Disinfection and disinfectants; Flies; Gonorrhea; Immunity; Infantile paralysis; Insects as carriers of contagion; Milk as carrier of infection; Mosquitoes; Typhoid fever

**Infectious diseases in animals**

- Conclusions from disease campaigns. W. J. Butler. Breeder's Gaz 69:178 Ja 27 '16
- Cow and her health. L. R. Himmelberger. Hoard's D 52:735 D 15 '16
- Ideal state law for eradicating contagious animal diseases. C. J. Marshall. Am Vet M Assn J 48:429-41 Ja '16
- Illinois prepares. Country Gent 81:569 Mr 11 '16
- Nonspecific treatment of infectious diseases in animals. K. F. Meyer. Am Vet M Assn J 51:114-22 Ap '17
- Report of the veterinary activities of the state of Nevada in the recognition and control of infectious diseases in animals, 1915-1916. W. B. Mack. (In Biennial report, 1915-1916, p. 7-23) Nevada State bd. of stock comrs., Carson City
- Resumé of the work of the veterinary division for the year 1916. S. Youngberg. Philippine Ag R 10,no 3:175-88 '17
- Safety first. P. K. Nichols. Country Gent 81:1507 Ag 12 '16
- Veterinary practitioner in the control of infectious diseases. V. A. Moore. Am Vet M Assn J 54:211-16 D '18

See also names of diseases, e.g. Abortion. Infectious; Anthrax; Anthrax, Symptomatic; Botryomycosis. Foot-and-mouth disease. Hemorrhagic septicemia. Hog cholera. Hydrophobia. Rinderpest. Tuberculosis in animals; also subhead Diseases and pests under names of animals

**Inflammation**

- Significance of the several kinds of inflammation. S. H. Burnett. Am Vet M Assn J 53:368-72 Je '18

**Inflorescence**

- Effect of environmental conditions upon the number of leaves and the character of the inflorescence of tobacco plants. H. A. Allard. il Am J Bot 3:493-501 N '16

**Inflorescence—Continued**

- Nature of the inflorescence and fruit of *pyrus malus*. C. A. Black. bibliog il N H Ag Exp Tech B 10:519-47 '16  
On the distribution of abnormalities in the inflorescence of spiraea. Vanhouttei. J. A. Harris. il Am J Bot 4:624-36 D '17

**Influenza**

- Cure for Spanish influenza. E. Mellen. O Judd Farmer 65:383 O 26 '18  
Influenza with special reference to some important complications. G. W. Dunphy. Am Vet M Assn J 52:423-7 Ja '18  
Spanish influenza. Prog F 33:1170, 1173 O 26 '18  
Spanish influenza and pneumonia: prevention and treatment. R. S. Copeland. Prog F 33:1135 O 19 '18  
Ten rules for avoiding Spanish influenza. Prog F 33:1235 N 9 '18

**Inheritance (biology).** See Heredity**Inheritance tax**

- Need for better inheritance tax laws. C. Poe. Prog F 31:477 Ap 1 '16

**Injectors**

- Some pointers about the injector. J. R. Stone. Power F 26:20 My '17

**Injees.** See Cornish Indian fowl**Injurious and beneficial birds.** See Birds, Injurious and beneficial**Injurious insects.** See Insects, Injurious and beneficial**Inns**

- Transfiguration of a wayside inn. il Country Life 33:70-1 D '17

**Inoculation of soils.** See Soil inoculation**Inocybes**

- Some new species of inocybe. G. F. Atkinson. Am J Bot 5:210-18 Ap '18

**Inometer**

- New form of food-chart: the inometer. T. Johnson. J Dept Ag Ireland 17,no 3:433-50 '17

**Inosite**

- Concerning the effect of inosite upon the respiratory exchange in the dog. R. J. Anderson. N Y State Ag Exp Tech B 54:1-9 '16  
Effect of inosite upon the metabolism of man. R. J. Anderson and A. W. Bosworth. N Y State Ag Exp Tech B 54:10-16 '16

**Inosite phosphoric acids**

- Inosite-phosphoric acids of cottonseed meal. J. B. Rather. Ark Ag Exp B 131:1-20 Mr '17  
Nature of the inosite phosphoric acids of some feeding materials. J. B. Rather. Ark Ag Exp B 138:1-16 '17

See also Phytic acid

**Insecticides**

- Arsenic as an insecticide. A. L. Lovett and R. H. Robinson. J Econ Entom 10:345-9 Je '17  
Arsenical injury through the bark of fruit trees. D. B. Swingle and H. E. Morris. bibliog il J Ag Research 8:283-318 F 19 '17  
Bugs and how to fight them. il Country Gent 82:874 My 12 '17  
Cactus solution as an adhesive in arsenical sprays for insects. M. M. High. U S Ag B 160:1-20 '15  
Cherry leaf-beetle, a periodically important enemy of cherries. R. A. Cushman and D. Isely. bibliog il U S Ag B 352:19-26 '16  
Combination spraying for insect pests and fungus. P. R. Jones. Better Fruit 10:7-9 Mr '16  
Common spray materials and other insecticides. J. G. Sanders. il Wis Ag Dept B 3:1-22 '16  
Compatibility table—insecticides, fungicides. G. P. Gray. Better Fruit 12:10 Ja '18  
Conduction of potassium cyanide in plants. J. A. Elliott. il Phyt 7:443-8 D '17  
Consumption and cost of economic poisons in California in 1916. G. P. Gray. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:301-2 Ap '18  
Contact insecticides. Prac F 112:130 Mr 15 '16  
Dormant spray for the San Jose scale. G. G. Becker. Ark Ag Exp B 141:1-11 '18

- Efficacy of various arsenical preparations in control of insect pests. J. Battail. Int R Sci & Prac Ag 7,no 7:1056-7 Jl '16  
For biting insects and for sucking insects. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 39-41) '17  
Fungicides and insecticides. H. M. Nicholls. (B. 59) 19p '16 Tasmania ag. and stock dept., Tasmania, Australia  
Further experiments in the destruction of fly larvae in horse manure. F. C. Cook and others. bibliog il U S Ag B 245:1-22 '15  
Greenhouse red spider attacking cucumbers and methods for its control. S. C. Vinal. bibliog Mass Ag Exp B 179:153-82 '17  
How contact insecticides kill. il Mich Ag Bd Rep 1916:435-98  
How to kill the bugs. Fruit-Grower 28:203 Mr 15 '17  
How to know and control San Jose, oyster shell and scurfy scale. J. S. Houser. il Green's Fruit Grower 36:3 F '16  
Imported cabbage worm in Wisconsin. H. F. Wilson and L. G. Gentner. il J Econ Entom 11:79-81 F '18  
Information for fruit growers about insecticides, spraying apparatus, and important insect pests. A. L. Quaintance and E. H. Siegler. il Farmers' B 908:1-99 '18  
Insect enemies of shade trees and shrubs: sprays and spraying apparatus. M. W. Flackman and W. O. Ellis. N Y State Coll For B v 16,no 26:113-18 '16  
Insect pests of vegetables. J. S. Houser. il Ohio Ag Exp B v 2:232-40 Jl '17  
Insecticide tests with diabrotica vittata. N. F. Howard. J Econ Entom 11:75-9 F '18  
Insecticides. H. M. Lefroy. Gard Chron (Lond) 61:139 Ap 7 '17  
Insecticides and fungicides. L. Caesar. il (In Report, Ontario vegetable growers' assn., 1917, p. 29-32) '18 Ontario ag. dept., Toronto  
Insecticides for chewing insects. Prac F 112:106 Mr 1 '16  
Insecticides, fungicides and directions for their use. H. T. Fernald. Mass Ag Bd B 2 (5th ed):155-65 '16  
Insecticides purer. Am Flor 48:743 Ap 21 '17  
Insects affecting vegetables. C. J. S. Bethune. Ontario Ag Dept B 251:31-2 '17  
Lime as an insecticide. Z. P. Metcalf. il J Econ Entom 10:74-8 F '17  
Methods of destroying scale insects. Cornell Ag Exp B 372:434-9 '16  
Miscellaneous insecticide investigations. E. W. Scott and E. H. Siegler. U S Ag B 278:1-47 '15  
More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. Ontario Ag Dept B 257:42-3 '17  
Notes on lime-washes. J. C. F. Fryer and G. P. Berry. J Bd Ag 22:1125-7 F '16  
Occurrence of manganese in insect flowers and insect flower stems. C. C. McDonnell and R. C. Roark. bibliog J Ag Research 11:77-82 O 15 '17  
Opinions of general interest regarding questions arising under the insecticide act of 1910. (Service and Regulatory Announcements.—Insecticide 22) 451-90p '18 U S Ag Paradi-chlorobenzene as an insect fumigant. A. B. Duckett. U S Ag B 167:1-7 '15  
Paris green substitutes. G. W. Herrick. O Judd Farmer 60:11 My 20 '16  
Phenolic insecticides and fungicides; with report of examination and analyses of proprietary preparations. G. P. Gray. il Cal Ag Exp B 269:329-81 '16  
Physical properties governing the efficacy of contact insecticides. W. Moore and S. A. Graham. bibliog J Ag Research 13:523-38 Je 10 '18  
Poisoned bait for the onion maggot; with discussion. N. F. Howard. il J Econ Entom 11:82-7 F '18  
Preliminary notes on the use of repellents for horn flies and stable flies on cattle. A. W. Baker. (In Report, Entomological soc. of Ontario, 1916, p. 52-6) '17 Ontario ag. dept., Toronto  
Promising new contact insecticide. W. Moore. J Econ Entom 11:341 Je '18



**Insecticides—Continued**

- Quassia extract as a contact insecticide. N. E. McIndoo and A. F. Sievers. bibliog J Ag Research 10:497-531 S 3 '17
- Quassin as a contact insecticide. W. B. Parker. il U S Ag B 165:1-8 '14
- Repellents for protecting animals from the attacks of flies. H. W. Graybill. bibliog U S Ag B 131:1-26 '14
- Report on insecticides. R. C. Roark. Assn Offic Ag Chem J 3:157-86 My '17
- Selection of petroleum insecticides. R. K. Vickery. Cal State Comm Hort B v 6:384-7 O '17
- Solubility of the scale of the mussel scale-insect (Lepidosaphes ulmi, Linn.). S. Maulik. Int R Sci & Prac Ag 8:4:665-6 Ap '17
- Some spraying experiments. Fruit-Grower 27: 204 Mr 15 '16
- Spray formulas for home gardens. D. B. Whelan. il Mich Ag Ext B 14:1-6 '18
- Spraying for potato beetles. C. W. Waid. Market Growers J 19:63 Ag 1 '16
- Sprays for the control of San Jose scale. W. C. Edmundson. il Idaho Ag Exp B 108:1-15 '18
- Studies concerning the application of hydrocyanic acid as an insecticide. G. E. Stone. Int R Sci & Prac Ag 7:12:1858-9 D '16
- Terrapin scale; remedial measures. F. L. Simanton. U S Ag B 351:67-89 '16
- Toxicity of various benzene derivatives to insects. W. Moore. bibliog J Ag Research 9: 371-81 Je 11 '17
- Toxicity of volatile organic compounds to insect eggs. W. Moore and S. A. Graham. bibliog J Ag Research 12:579-87 Mr 4 '18
- Wormless apple. D. Plank. Rural N Y 75:776 My 20 '16
- See also* Insects, Injurious and beneficial; Spraying and dusting; also names of insecticides, e.g. Calcium arsenate, Carbon disulfid, Kerosene spray, Lead arsenate, Naphthaline, Nitrobenzene, Petroleum as insecticide, Potassium cyanide; also United States—Insecticide and fungicide board

**Analysis**

- Analyses of materials sold as insecticides and fungicides for 1916. C. S. Cathcart and R. L. Willis. N J Ag Exp B 301:1-16 '16
- Analyses of materials sold as insecticides and fungicides for 1917. C. S. Cathcart and R. L. Willis. N J Ag Exp B 315:1-16 '17
- Determination of arsenic in insecticides by potassium iodate. G. S. Jamieson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:290-2 Ap '18
- Determination of copper in insecticides. G. S. Jamieson. Chemical & Metallurgical Eng (10th av, at 36th st, N.Y. 25c) 19:185 Ag 15 '18
- Fungicide and insecticide inspection. Maine Ag Exp Offic Inspec 75:1-8 '16
- Insecticides and fungicides. (In Experimental farms, 1916. v. 1, p. 169-74) 45c '17 Canada Ag
- Insecticides and fungicides; methods of analysis. bibliog Assn Offic Ag Chem J 2:no 2, pt 1:63-77 Ag '16

**Laws**

- Insecticide and fungicide law, effective July 4, 1917. 8p '17 Iowa dairy and food comm., Des Moines
- Instruction pour la vente et l'emploi en agriculture des composés arsénicaux. Int Yearbook Ag Leg 1916:867-9 '17

**Insectivorous plants**

- Flower that catches insects; little-known characteristic of the common milkweed. A. J. Eldredge. il Sci Am (233 Broadway, N.Y. 10c) 119:64 Jl 27 '18
- Irritability of the bladders in utricularia. T. Ekambaram. il Ag J of India Sci Congress No 1916:72-9 '16

- \* What became of the tadpoles? W. E. Ringle. il Nature Study R (Ithaca, N. Y. 15c) 14:212-15 My '18

*See also* Dionaea

**Insects**

- Animal census of two city lots. G. N. Wolcott. Science (Science Press, Garrison, N.Y. 15c) n s 47:371-4 Ap 12 '18
- Beginnings in insect physiology and their economic significance. S. K. Sen. Ag J of India 13:620-7 O '18
- Comedy of errors. F. J. A. Morris. (In Report, Entom. Soc. of Ontario, 1917, p. 68-75) '18 Ontario ag. dept., Toronto
- Facts relative to the influence of atmospheric humidity on insect metabolism. T. J. Headlee. J Econ Entom 10:31-8 F '17
- Few notes on the ecology of insects. W. Lochhead. (In Report, Entom. Soc. of Ontario, 1917, p. 85-91) '18 Ontario ag. dept., Toronto
- Historical notes on entomology in the province of Quebec. C. V. A. Huard. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 54-9) '17
- Influence of atmospheric moisture on insect metabolism. N J Ag Exp Rep 1916:486-90 '17
- Insect behaviour as a factor in applied entomology; with discussion. C. G. Hewitt. bibliog J Econ Entom 10:81-94 F '17
- Insects as material for studies in heredity. W. Lochhead. (In Report, Entomological soc. of Ontario, 1916, p. 66-72) bibliog '17 Ontario ag. dept., Toronto
- List of Egyptian insects in the collection of the Ministry of agriculture. G. Storey. Egypt Ag Tech & Sci B 5:1-50 '16 (50c)
- Method for the study of underground insects. J. W. McColloch. J Econ Entom 10:182-8 F '17
- Notes of captures. (In Report, Entom. Soc. of Ontario, 1917, p. 102-27) '18 Ontario ag. dept., Toronto
- Volatility of organic compounds as an index of the toxicity of their vapors to insects. W. Moore. J Ag Research 10:365-71 Ag 13 '17
- Who's who among the tiny monsters; with photographs. Country Gent 82:225 F 3 '17
- \* Why we hate insects. New Statesman (10 Great Queen st, Kingsway, London, W. C. 6d) 11:347-8 Ag 3 '18
- See also* Entomology; Fertilization of plants; also names of insects, e. g. Bees, Bumblebees, Butterflies, Crickets, Fireflies, Flies, Hemiptera, Hornets, Lepidoptera, Miridae, Orthoptera, Piophilidae, Sepsidae, Wasps; also Entomological society of Ontario

**Bibliography**

- Entomological record, 1917. A. Gibson. (In Report, Entom. Soc. of Ontario, 1917, p. 99-102) '18 Ontario ag. dept., Toronto
- Insects; list of publications relating to bees, honey, and insects injurious to man, animals, plants, and crops, for sale by the Superintendent of documents, Washington, D. C. (Price list 41-8th ed) 27p '18 Supt. of doc., Washington, D. C.

**Classification**

- Pupae of some Maine species of notodontoidea. E. Mosher. il Maine Ag Exp B 259:29-84 '17; Same. Maine Ag Exp Rep 1917:29-84

**Collection and preservation**

- Collection and preservation of insects and other material for use in the study of agriculture. C. H. Lane and N. Banks. il Farmers' B 606:1-22 '17 (rev.)

**Diseases and pests**

- See also* Gipsy moths—Diseases; Parasites—Insects

**Experiments**

- Female lepidoptera at light traps. W. B. Turner. bibliog J Ag Research 14:135-49 Jl 15 '18

**Photographs and photography**

- Insects through a microscope; photographs. Country Life 31:68 F '17
- Mimic insects among the leaves; photographs. Country Gent 81:2180a D 16 '16
- Phases of insect life; photographs. P. G. Howes. Country Life 29:60-1 Mr '16

**Insects—Photographs and photography—Cont.**

Photography of insects. G: Grace. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:91 Ag 10 '18

Simple apparatus for insect photography. B. H. Walden. *il J Econ Entom* 10:25-30 F '17

**Insects, Injurious and beneficial**

Advice to gardeners; clean farming methods. *Weekly N L* 5:8 Ja 16 '18

Animal pests of fruit trees in New South Wales. W. W. Froggatt and W. B. Gurney. *Int R Sci & Prac Ag* 7, no 5:769-70 My '16

Aphidoletes meridionalis, an important dipterous enemy of aphids. J: J. Davis. *il J Ag Research* 6:883-8 S 4 '16

Beneficial insects. J: H. Weghorst. *il Purdue Ag* 12:79-80 N '17

\* Benefits to be derived from observing, collecting and studying insects. G. M. Bentley. (B. 20) 32p bibliog *il* '17 Tenn. State bd. of entomology, Knoxville

Blood-sucking insects as transmitters of anthrax or charbon. H. Morris. *il La Ag Exp B* 163:1-15 '18

California timber badly infested by insects. T: Friant. *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2245:67 My 25 '18

Cane borer beetle in Hawaii and its control by natural enemies. F. Muir and O. H. Swezey. (*Entom. Ser. B*, 13) 102p *il* '16 Experiment station of the Hawaiian sugar planters' assn., Honolulu

Chuck-wagon scientist again; heel flies and flies. W. C. Barnes. *il Breeder's Gaz* 70:408 S 14 '16

Chuck-wagon scientist again; heel flies and warble flies. C. M. O'Donel. *Breeder's Gaz* 70:354 N 16 '16

Common garden insects. R. L. Webster. *il Ia Ag Exp C* 44:1-8 '18

Common garden insects and their control. A. Gibson. 20p '17 Canada Ag

Common insects and plant diseases of the farm, garden and orchard. W. E. Rumsey. *il W Va Ag Dept B* 17:1-37 '16

Control of common garden pests. W. Loch-head. *J Ag (Quebec)* 21:148 Ap '18

Control of insect pests of field and orchard. E. E. Scholl. *Tex Ag Dept B* 52:87-94 '16

Control of insects affecting stored seed and food products. G: G. Becker. *il Ark Ag Exp C* 33:1-8 n.d.

Controlling American insects—helpful and harmful. L. O. Howard. *il Cornell Countryman* 14:279-82 Ja '17; Same. *Penn State F* 10:1-3 Ja '17

Coöperation in the establishment of state quarantines in crop pest laws. J. E. Taylor. *J Econ Entom* 9:299-303 Ap '16

Defertilisation of flowers by insects. N. E. Brown. *Gard Chron (Lond)* 63:4 Ja 5 '18

Destroy the hibernating insects now. G: G. Becker. *Prog F* 31:300 F 26 '16

Distribution of California insects. E. O. Essig. *maps Cal State Comm Hort B v* 5:113-20 Mr '16

Division of insect suppression; plan and progress of work, 1915-1916. W. C. O'Kane. *il N H Ag Dept Rep v* 34:123-44 '16

Effects of nicotine as an insecticide. N. E. McIndoo. *bibliog il J Ag Research* 7:89-122 O 16 '16

Entomological research and utility. E. P. Felt. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 5:551-3 D '17

Entomophagous insects and their practical employment in agriculture. A. Berlese. *Int R Sci & Prac Ag* 7, no 3:321-32 Mr '16

Farm bureau as an agency for demonstrating the control of injurious insects. C. R. Crosby and M. D. Leonard. *J Econ Entom* 10:20-5 F '17

Few notes from Kentucky. H. Garman. *J Econ Entom* 10:413-15 Ag '17

Fifty billion German allies already in the American field; pests intrenched to destroy \$1,000,000 in grain this summer. *il Sci Am* (233 Broadway, N.Y. 10c) 119:47 Jl 20 '18

Fighting insect pests. A. F. Conradi. *Prog F* 32:133, 281, 561, 655, 770, 1151 F 3, Mr 3 My 5, Je 2, Jl 7, N 3 '17

Florida, truck and garden insects. J. R. Watson. *il Fla Ag Exp B* 134:35-127 '17

Foes that hide in the ground. W. C. O'Kane. *il Country Gent* 83:12 Mr 2 '18

Food bill of destructive insects of the United States. C. L. Marlatt. *il Reclamation Record* (Reclamation Service, Dept. of interior, Washington, D.C.) 9:429 S '17

Foreign pests recently established in New Jersey. H. B. Weiss. *J Econ Entom* 9:212-15 F '16

48th annual report of the Entomological society of Ontario, 1917. 127p *il* maps '18 Ontario ag. dept., Toronto

Fungous diseases and insects in the garden. W. F. Massey. *Prog F* 31:755 Je 10 '16

Garden and small-fruit insects; with notes on spraying in general. A. G. Ruggles and S. A. Graham. *il Minn Ag Ext Spec B* 29:1-32 '18

Garden and truck crop insect pests. C. E. Sanborn. *il Okla Ag Ext C* 41:1-76 '16

Great need for the establishment of competent bureaus for the study of injurious insects in all American countries. L. O. Howard. (*in* Pan American scientific congress Pro., 1915, v. 3, p. 874-6) '17

Green muscardine fungus in Porto Rico. J: A. Stevenson. *bibliog il J Dept Ag Porto Rico* 2:19-32 Ja '18

Hawaiian work in introducing beneficial insects. L. O. Howard. *J Econ Entom* 9:172-8 F '16

Household and camp insects. E. P. Felt. *N Y State Museum (Albany)* B 194:1-84 F '17

How can the entomologist assist in increasing food production; discussion. *J Econ Entom* 11:106-18 F '18

Important foreign insect pests collected on imported nursery stock in 1915. E. R. Sasser. *J Econ Entom* 9:216-19 F '16

Important foreign insect pests collected on imported nursery stock in 1916. E. R. Sasser. *J Econ Entom* 10:219-23 F '17

Important foreign insect pests collected on imported nursery stock in 1917. E. R. Sasser. *J Econ Entom* 11:125-9 F '18

Imported insect pests; more than half our crop destroyers have come by accident from other countries. C. Vrooman. *il Country Gent* 82:1636-7 O 27 '17

In the south—watch out for bugs. J. M. Patterson. *Gard M* 23:306 Je '16

In winter war can be made on many insects injurious to agriculture. *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2226:41 Ja 12 '18

Information for fruit growers about insecticides, spraying apparatus, and important insect pests. A. L. Quaintance and E. H. Siegler. *il Farmers' B* 908:1-99 '18

Injurious insects. E. P. Felt. *N Y Ag Dept B* 86:2417-20 Ag '16

Injurious shade tree insects of the Canadian prairies. J. M. Swaine. *il Ag Gaz of Canada* 3:215-20 Mr '16

Insect enemies and friends. R. W. Harned. *Prog F* 31:1120 S 23 '16

Insect enemies of trees. *Gard Chron Am* 21:90 Mr '17

Insect enemies of trees and how to combat them. E. P. Felt. *Country Life* 29:70+ Mr '16

Insect injury to cotton seedlings. B. R. Coad and R. W. Howe. *il J Ag Research* 6:129-40 Ap '16

Insect life. *Purdue Ag* 11:32 O '16

Insect pests. *Market Growers J* 18:401-3 Je 15 '16

Insect pests of plants cultivated in European Russia. In 1914. K. Kulagin. *Int R Sci & Prac Ag* 7, no 7:1047-54 Jl '16

Insect pests of the fruit, flower, and vegetable garden, and how to treat them. C. French, Jr. *il J Dept Ag Victoria* 14:213-18, 314-17, 433-8, 495-8, 604-11 Ap-May, Jl-Aug, O '16

Insect pests of the orchards and gardens of Idaho and their control. W. C. Edmundson. *il Idaho Ag Exp B* 87:1-30 '16

Insect study. E: M. Tuttle. *Cornell Rural School Leaflet v* 11, no 1:116-17 '17

Insects. *Wallaces' F* 42:1222 S 7 '17



**Insects, Injurious and beneficial—Continued**

- Insects attacking weeds in Minnesota. S. Marcovitch. (*In* Report State entomologist, 1915-1916, p. 135-52) '16 Minn. ag. exp. station, St Paul
- Insects helpful to man. Sci Am Sup (233 Broadway, N.Y. 10c) 86:59 Jl 27 '18
- Insects injuring stored food products in Connecticut. W. E. Britton. il Conn State Ag Exp B 195:1-21 '17; Same. Conn State Ag Exp B 203:330-44 '18
- Insects injurious to cultivated plants in the Nyassaland Protectorate. C. Mason. Int R Sci & Prac Ag 7,no 5:763-4 My '16
- Insects injurious to timber in Sweden. N. A. Kemnar. Int R Sci & Prac Ag 7,no 3:465 Mr '16
- Insects of 1916. E. N. Cory. il Md Ag Soc Rep 1916, v 1:200-8 '17
- Insects of solanum carolinense and their economic relations. M. P. Somes. J Econ Entom 9:39-44 F '16
- \* Key to American insect galls. E. P. Felt. il N Y State Museum (Albany) B 200:310 Ag '18
- Limitation of injurious insects by beneficial species. D. Miller. J Ag New Zealand 17:12-18 Jl '18
- Losses caused by imported tree and plant pests. C. L. Marlatt. il Am For 23:75-80 F '17
- Maine fly and the Australian apple crop. E. M. Patch. il Country Life 33:100 Ap '18
- Manual of dangerous insects likely to be introduced in the United States through importations. W. D. Pierce. 256p il '18 U S Ag
- Meadow and pasture insects. H. Osborn. Ohio Ag Exp B v 2:268-73 Ag '17
- Method of graphically illustrating the distribution of injury by an insect pest; with discussion. F. Z. Hartzell. J Econ Entom 11:32-41 F '18
- Methods of combating insect enemies. R. W. Harned. Prog F 31:1145 S 30 '16
- Million invaders. W. H. Dean. il Country Gent 82:1086 Je 30 '17
- Miscellaneous notes on economic work; orchard and shade tree insects, spraying, truck and field crops. A. G. Ruggles. (*In* Report State entomologist, 1915-1916, p. 59-64) '16 Minn. ag. exp. station, St Paul
- Natural immunity or resistance of plants to insect attack. R. C. Treherne. Ag Gaz of Canada 4:855-9 O '17
- New interpretation of the relationships of temperature and humidity to insect development. W. D. Pierce. J Ag Research 5:1183-91 Mr 20 '16
- Night lamps to trap insects. E. H. Van Deman. Green's Fruit Grower 36:9 Jl '16
- Notes on parasitic and household insects. C. W. Howard. (*In* Report State entomologist, 1915-1916, p. 65-7) '16 Minn. ag. exp. station, St Paul
- Notes on the relation of insect control to cultural practices in western Ontario. H. F. Hudson. Ag Gaz of Canada 5:1136-8 D '18
- Ounce of prevention is better than cure in the care of crops. W. C. O'Kane. il Country Gent 83:24 Ap 20 '18
- Outline of work of entomological branch projected for 1916. C. G. Hewitt. Ag Gaz of Canada 3:400-2 My '16
- Practical use of the insect enemies of injurious insects. L. O. Howard. il U S Ag Yearbook 1916:273-88; Same. Separate 704
- Principal insect enemies of the truck crop. il Purdue Ag 10:37 Mr '16
- Progress in insect control; with discussion. H. F. Wilson. Wis Hort Soc Rep 48:192-200 '18
- Pupae of some Maine species of notodontidae. E. Mosher. il Maine Ag Exp B 259:29-84 '17; Same. Maine Ag Exp Rep 1917:29-84
- \* Rats and insects as public enemies. W. T. Sedgwick. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:34-5 Ja '18
- Regulations under the destructive insect and pest act. C. G. Hewitt. 12p '17 Canada Ag
- Relation to insects injurious to stored grain, and suggestions for their control. H. S. Elliot. Fla Ag Dept Quar B v 26:1-19 Jl '16

- Relation of soil insects to climatic conditions. A. E. Cameron. Ag Gaz of Canada 4:663-8 Ag '17
- Report of committee on injurious insects. P. J. Parrott. N Y Farms & Markets Dept Ag B 97:29-34 Jl '17
- Results of scientific research on insect pests in Canada. C. G. Hewitt. Ag Gaz of Canada 5:128-31 F '18
- Role of insects in the dissemination of fire blight bacteria. V. B. Stewart and M. D. Leonard. Phyt 6:152-8 Ap '16
- Some common garden insects. J. Troop and P. W. Mason. il Ind Ag Exp C 64:1-15 Jl '17
- Some horticultural insects and their control. Purdue Ag 11:30-1 Ap '17
- Some injurious insects. P. J. Parrott. N Y Ag Dept B 86:242-4 Ag '16
- Some problems in insect control about abattoirs and packing houses. F. C. Bishopp. il J Econ Entom 10:269-77 Ap '17
- Some problems in the control of insects in stored foods in California. R. W. Doane. J Econ Entom 11:313-19 Je '18
- Some stoneflies injurious to vegetation. E. J. Newcomer. il J Ag Research 13:37-42 Ap 1 '18
- Species of insects recently recorded as present in the state. N J Ag Exp Rep 1916:477-86 '17
- Spraying formulas for garden insects. A. L. Melander. il Wash Ag Ext Ser 1,no 35:1-16 '18
- Stopping some leaks in food production. W. A. Price. Purdue Ag 12:223-4 Ja '18
- Stored grain insects. il Purdue Ag 11:36-7 Ja '17
- Superheating as a control method for insects which infest stored products. A. Gibson. (*In* Pro., Entom Soc. of British Columbia, 1916, p. 83-4) '16
- Truck crop and garden insects; with discussion. W. Moore. Minn Hort 44:455-60 D '16
- \* Uses of insect galls. M. M. Fagan. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:155-76 F '18
- Weeds harbor insects. Green's Fruit Grower 36:4 Ap '16
- Work of the extension entomologist in Kansas and Missouri. T. J. Talbert. J Econ Entom 9:287-90 Ap '16
- Year's records in insect control. S. B. Fracker. Wis Hort Soc Rep 1917:94-102

*See also* Agricultural pests; Fruit—Diseases and pests; Greenhouse pests; Household pests; Insecticides; Insects as carriers of contagion; Nuts—Diseases and pests; Parasites; Plants—Diseases and pests; Spraying and dusting; Trees—Diseases and pests; Vegetables—Diseases and pests; also Colorado—Entomologist, State; Minnesota—Entomologist, State; Montana—Entomologist, State; Quebec society for the protection of plants; also names of insects, e. g. Antler moths, Ants, Bees, Beetles, Borers (insects), Brown-tail moths, Bud moths, Cambium miners, Capsid bugs, Chagas, Chinch bugs, Cicadas, Cleridae, Codling moths, Corn billbugs, Crickets, Cyclamen mites, Diabroticas, Earwigs, Eight-spotted foresters (insects), False chinch bugs, Flies, Froghoppers, Gipsy moths, June bugs, Katyids, Lac insects, Ladybirds, Leaf hoppers, Leaf miners, Leaf rollers, Locusts, Mealy bugs, Millepedes, Mites, Moths, Plant lice, Red spiders, Rose chafers, Rutherglen bugs, San Jose scale, Scale insects, Seed corn maggots, Soldier bugs, Southern green plant bugs, Sowbugs, Spiders, Stem maggots, Syrphidae, Tabanidae, Tent caterpillars, Termites, Triphleps insidiosus, Weevils, White marked tussock moths, Wood ticks, Zebra caterpillars

**Bibliography**

- Insects: list of publications relating to injurious insects and to bees and honey, for sale by the superintendent of documents, Washington, D. C. (Price list 41—7th ed) 29p '16 Supt. of doc., Washington, D.C.
- Masterpieces of American economic entomology. W. Lochhead. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 12-18) '17

**Insects, Injurious and beneficial—Continued****Eggs**

Toxicity of volatile organic compounds to insect eggs. W. Moore and S. A. Graham. *bibliog J Ag Research* 12:579-87 Mr 4 '18

**Insects as carriers of contagion**

Insectivorous diseases. Wallaces' F 41:208 F 11 '16

Insects and camp sanitation; with discussion. E. P. Felt. *J Econ Entom* 11:93-106 F '18

Insects and the national health. C. T. Brues. *il maps Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 6:193-209 Mr '18

Relation of insects to disease in man and animals. L. O. Howard. (*In Report, Entomological soc. of Ontario, 1916, p. 57-62*) '17 Ontario ag. dept., Toronto

Tree crickets as carriers of lepto-sphaeria coniothyrium (Fckl.) Sacc. and other fungi. W. O. Gloyer and B. E. Fulton. *bibliog il N Y State Ag Exp Tech B* 50:1-22 '16

*See also* Animals as carriers of contagion; Flies; Mosquitoes

**Insects as feeding stuff.** *See* Feeding and feeding stuffs—Insects

**Inspection of apiaries.** *See* Bee inspection

**Inspection of cheese factories.** *See* Cheese factory inspection

**Inspection of dairies.** *See* Dairy inspection

**Inspection of freight.** *See* Freight inspection

**Inspection of fruit.** *See* Fruit inspection

**Inspection of grain.** *See* Grain inspection

**Inspection of live stock.** *See* Live stock inspection

**Inspection of meat.** *See* Meat inspection

**Inspection of milk.** *See* Dairy inspection

**Inspection of nurseries.** *See* Horticultural inspection

**Inspection service on food products.** *See* Food-products inspection service

**Instinct**

Homing instinct. I: Motes. *il Country Life* 30:84 My '16

**Institutes, Community.** *See* Community institutes

**Institutes, Farmers'.** *See* Farmers' institutes

**Institutes, Women's.** *See* Women's institutes

**Institutional management**

Summer course at Hampton. C. A. Lyford. *J Home Econ* 9:496-7 N '17

**Insurance**

Assurance agricole. *Int Yearbook Ag Leg* 1916:920-54 '17

Cooperative insurance of the millers' trade in 1914 in Germany. *Int R Ag Econ* 72:41-53 D '16

Creamery insurance. *N Y Prod R* 44:138 My 23 '17

Farm insurance. *Prac F* 112:387 O 15 '16

Insurance and thrift in 1914 in Italy. *Int R Ag Econ* 62:73-6 F '16

Insurance conditions in reference to the transport of cereals. G. Rocca. *Int R Ag Econ* 67:45-55 J1 '16

Miscellaneous information relating to insurance and thrift in various countries. *See* monthly numbers of *International review of agricultural economics*

Mutual insurance. H. M. Giles. *Coop Manager & F* 6:40-1 Ag '17

Mutual insurance. E. H. Moreland. *Am Coop J* 11:710-11 Mr '16

Mutual insurance societies in Finland in 1913. *Int R Ag Econ* 63:58-66 Mr '16

*See also* headings beginning Insurance

**Insurance, Accident**

Compulsory insurance against the accidents of agricultural labour. *Int R Ag Econ* 83:18-26 N '17

Mutual funds for insurance against the accidents of agriculture in Italy. *Int R Ag Econ* 73:43-55 Ja '17

Poitou society for mutual insurance against the risks of agricultural labour. *Int R Ag Econ* 69:63-70 S '16

Swiss society of agriculture and insurance against accidents of agriculture in 1915. *Int R Ag Econ* 70:54-6 O '16

*See also* Insurance, Employers' liability; Workmen's compensation

**Insurance, Agricultural**

Agricultural insurance. J. S. Chakravarti. *Ag J of India* 12:436-41 J1 '17

Agricultural insurance in 1915. *Int R Ag Econ* 84:25-34 D '17

Agricultural insurance in Saskatchewan in 1916. *Int R Ag Econ* 80:24-6 Ag '17

Avoiding mistakes in buying farm insurance. H. V. Stanley. *il System on the Farm* 2:163-6 My '18

Cooperative agricultural insurance. J. G. Lay. (*Commerce Reports no 5*) p 71-9 (Ja 6) '17 U. S. Bureau of foreign and domestic commerce. Washington, D. C.

Crop insurance for farmers—an interesting experiment in Massachusetts. *Banker-F* 4:14-15 J1 '17

Influence of the war on agricultural insurance. *Int R Ag Econ* 9,no 1:40-3 Ja '18

Insurance against bad weather. W. G. Reed. *il maps County Gent* 82:479-80 Mr 10 '17; Same cond. *Int R Ag Econ* 80:28-31 Ag '17

Legislation and regulations concerning agricultural insurance in Italy. G. Rocca. *Int R Ag Econ* 62:49-68; 64:37-42 F, Ap '16

Miscellaneous information relating to insurance and thrift in various countries. *Int R Ag Econ* 75:43-56 Mr '17

Mutual rural insurance companies; laws of Montana. (*In Laws of Montana relating to insurance and surety companies, p. 119-25*) '17 Montana state auditor's office, Insurance dept., Helena

Particular forms of agricultural insurance. G. Rocca. *Int R Ag Econ* 71:47-64 N '16

*See also* Insurance, Forest; Insurance, Hail; Insurance, Live stock; Insurance, Windstorm

**Bibliography**

List of references on government insurance of farm buildings, crops, etc. (does not include livestock insurance). U. S. Lib. of Congress. 4p '17

Obtained only thru Public affairs information service, 958-964 University av., N.Y. (Typew 20c)

**Insurance, Employers' liability**

New bill before the chamber of deputies for compulsory insurance against accidents in agricultural labor in Italy. *Int R Ag Econ* 66:61-7 Je '16

Proposal for a bill to extend compulsory insurance to accidents in agricultural labor in Italy. *Int R Ag Econ* 61:57-71 Ja '16

**Insurance, Fire**

Agriculture and fire insurance in war time in France. *Int R Ag Econ* 65:61-3 My '16

Data concerning mutual fire insurance associations in Piedmont, Italy. *Int R Ag Econ* 66:78 Je '16

Farmer's fire insurance. *Nat Stock & F* 41:500 Ag 25 '17

Farmers' mutual fire insurance. J. E. Long. *Prog F* 32:483 Ap 14 '17

Farmers' mutual fire insurance. V. N. Valgren. *map U S Ag Yearbook* 1916:421-33; Same. Separate 697

Farmers' mutual insurance. H. E. Erdman. *il Country Gent* 83:11+ Mr 9 '18

Fire hazard of Canadian grain elevators. *Int R Ag Econ* 70:51-2 O '16

Fire prevention and the high cost of living. *Coop Manager & F* 6:80 My '17

General conditions of insurance against fire and the development of mutual insurance. *Int R Ag Econ* 78:34-47 Je '17

Grange and mutual insurance against fire. *Int R Ag Econ* 72:61-3 D '16

Mutual fire insurance. C. Poe. *Prog F* 31:445 Mr 25 '16

Mutual insurance against fire in Massachusetts. *Int R Ag Econ* 83:32-6 N '17



**Insurance, Fire—Continued**

Organization and management of a farmers' mutual fire insurance company. V: N. Valgren. U S Ag B 530:1-34 '17; Abstract. Int R Ag Econ 82:19-28 O '17

See also Grain dealers' fire insurance company of Indianapolis

**Insurance, Forest**

Forest insurance in Finland. E. F. Wrede. bibliog Int R Ag Econ 65:53-60 My '16

Insuring standing forests. Am For 23:499 Ag '17

Standing timber insurance. W. R. Brown. Am For 22:556-8 S '16

**Insurance, Hail**

Alberta hail crop insurance. Int R Ag Econ 72:54-6 D '16

Amendment of the law on municipal insurance against hail in Canada. Int R Ag Econ 9:no 1:37-9 Ja '18

Development of insurance against hail in Germany. Int R Ag Econ 9:no 1:22-36; 2: 134-49; 3:215-26 Ja-Mr '18 (to be cont)

German insurance societies against hail in 1915. Int R Ag Econ 69:66-7 S '16

Hail insurance. Wallaces' F 41:80 Ja 21 '16

Hail insurance in 1914 in Austria-Hungary. Int R Ag Econ 67:56-9 JI '16

Hail insurance in Saskatchewan. Int R Ag Econ 62:69; 67:59 F, JI '16

Hail insurance in the state of Massachusetts. Int R Ag Econ 66:75 Je '16

Hail insurance situation in the West and in Canada. Econ World (128 Water st, N. Y. 25c) 13:94 Ja 20 '17

Insurance against hail in 1915. Int R Ag Econ 70:52-4 O '16

Insurance against hail in 1916. Int R Ag Econ 84:35-6 D '17

Insurance of tobacco plantations against hail in Bosnia and Herzegovina. Int R Ag Econ 73:56-8 Ja '17

Legislation and regulations concerning agricultural insurance; hail insurance companies in Switzerland. G. Rocca. Int R Ag Econ 64:37-42 Ap '16

Municipal insurance against hail in Saskatchewan. Int R Ag Econ 77:37-48 My '17

State hail insurance. (In Laws of Montana relating to insurance and surety companies, p. 125-30) '17 Montana state auditor's office, Insurance dept., Helena

State hail insurance in North Dakota. Int R Ag Econ 62:72-3 F '16

State hail insurance in North Dakota. Int R Ag Econ 74:41-9 F '17; Same abridged. Ag Gaz of Canada 4:530-2 Je '17

Taking the gamble out of hail storms. A. B. Gilbert. il Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 6:9-10 Ap 22 '18

Unfavourable results of insurance against hail in 1916. Int R Ag Econ 81:36-7 S '17

Uruguay; the state bank of insurance and insurance against hail. Int R Ag Econ 75: 35-42 Mr '17

See also Florists' hail association

**Insurance, Industrial.** See Insurance, Employers' liability

**Insurance, Life**

Life insurance as a means of paying off mortgages; Prussian plan. J. P. Jensen. (In Minnesota farmers' institute annual, 1916, p 125-8) '16 Extension division, University Farm, St Paul

Life insurance investments with special reference to farm mortgages. Int R Ag Econ 68:47-56 Ag '16

Life insurance money and farming. Wallaces' F 41:733 My 12 '16

Life insurance of the institute of the province of eastern Prussia at Koenigsberg in 1915-1916. Int R Ag Econ 72:56-8 D '16

**Insurance, Live stock**

Baden association for insurance against mortality among live stock in 1915. Int R Ag Econ 73:58-61 Ja '17

Business done by Finnish mutual societies for insurance against fire and mortality among live stock. Int R Ag Econ 79:33-40 JI '17

Cattle insurance in Burma. A. E. English. Int R Ag Econ 74:50-4 F '17; Same. Ag J of India 12:614-20 O '17

Cattle insurance societies. A. C. Chatterjee. Ag J of India 11:108-11 Ap '16; Abstract. Int R Ag Econ 70:49-50 O '16

Co-operative horse insurance societies in Great Britain. Int R Ag Econ 69:49-65; 70: 37-48 S-O '16; Same (pt 2). J Bd Ag 23:279-86 Je '16

Finnish societies for insurance against mortality among live stock in 1913. Int R Ag Econ 75:54-6 Mr '17

Insuring against shipping losses. J. M. Carroll. il O Judd Farmer 65:308 O 12 '18

Livestock insurance. H. T. Morgan. Country Gent 81:1218 Je 17 '16

Need for reliable livestock insurance to finance the farmer. F. M. Kenney. il Banker-F 3:10 Ja '16

Principal federation of societies for the insurance of cattle in East Prussia. Int R Ag Econ 73:33-42 Ja '17

Results obtained by the most important mutual societies for insuring live stock in 1916. Int R Ag Econ 83:27-32 N '17

Tuscan federation for the mutual insurance of live stock and its first results. Int R Ag Econ 81:26-30 S '17

See also names of societies, e.g. Casa de ganaderos de Zaragoza; Mutuelle chevaline suisse

**Statistics**

Livestock insurance in Germany in 1916. Econ World (128 Water st, N.Y. 25c) n s 15:169 F 2 '18

**Insurance, Marine**

Insurance conditions in reference to the transport of cereals. G. Rocca. Int R Ag Econ 67:46-53 JI '16

**Insurance, Maternity**

National maternity fund. Int R Ag Econ 66: 67-72 Je '16

**Insurance, Mortgage**

Uruguay; mortgage insurance. Int R Ag Econ 76:50-3 Ap '17

**Insurance, Sickness**

Authoritative interpretation of articles 37 and 22 of the federal law of 13 June 1911 on sickness and accident insurance in Switzerland. Int R Ag Econ 69:71-2 S '16

**Insurance, Soldiers' and sailors'**

Insurance and allowances for soldiers. Prog F 33:286 Mr 2 '18

**Insurance, State and compulsory**

Compulsory insurance against the accidents of agricultural labour. Int R Ag Econ 83:18-26 N '17

See also Insurance, Employers' liability

**Insurance, Unemployment**

**Laws**

Décret royal portant des dispositions pour les secours à accorder aux personnes sans travail et sans ressources et pour la contribution de l'Etat à cet égard en Suède. Int Yearbook Ag Leg 1916:1227-9 '17

**Insurance, Weather**

Insuring against weather. Review of Reviews (30 Irving Place, N.Y. 25c) 55:322-3 Mr '17

**Insurance, Windstorm**

Windstorm insurance committee report. A. Rasmussen. Am Flor 49:332-3 S 1 '17

**Insurance companies**

Farmers' mutual insurance companies. B. H. Hibbard and A. Hobson. map Wis Ag Exp B 232:32-5 '17

See also names of societies, e. g. Casa de ganaderos de Zaragoza; Mutuelle chevaline suisse

**Insurance law**

Federal law on the supervision of private insurance companies in Switzerland. Int R Ag Econ 64:43-9 Ap '16

**Intellect**

Brains and social status. il J Heredity 8:261-7 Je '17

**Intellect—Continued**

Signs of intelligence. J Heredity 8:249-51 Je '17

Test for supermen. J Heredity 9:42-4 Ja '18

**Intelligence.** See **Intellect**

**Inter-allied scientific food commission**

International scientific committee. J Home Econ 10:462 O '18

Science and the world's food. G. Lusk. Scribner's M (597 5th av, N.Y. 35c) 64:710-17 D '18

**Intercropping.** See **Companion crops**

**Interior decoration.** See **House decoration**

**Intermountain association of sugar beet growers**

Salvation for the sugar beet grower; organization and charter of the Intermountain association. (Pamph. no. 4) 20p 50c n.d. C. G. Patterson, Box 136, Salt Lake City, Utah

**Intermountain farmers' equity association**

Buying for ten thousand farmers. G. F. Stratton. il Country Gent 83:18 S 14 '18

**Intermountain live stock association**

Fat stock show, Salt Lake City, April 4-6. il Am Sheep B & W 38:254 Ap '18

2d annual inter-mountain stock show to be held at Salt Lake City. il Am Sheep B & W 38:121 F '18

**International association of dairy and milk inspectors**

4th annual report; including papers read at the annual convention in Washington, D.C., October 27-29, 1915. map Int Assn Dairy & Milk Inspec Rep 1915:1-207

5th annual convention. Springfield, Mass., Oct. 17-19, 1916. Creamery 5:26-7 O '18; N Y Prod R 42:1145 O 25 '16

5th annual report; including papers read at the annual convention in Springfield, Mass., October 17-19, 1916. il Int Assn Dairy & Milk Inspec Rep 1916:1-319

Program includes the following papers: A plan for grading milk as used by the New York city health department, by L. P. Brown; Some financial factors involved in the production of market milk, by Fred Rasmussen; The prevention and control of infectious disease among cattle, by E. C. Schroeder; Methods of appointment of dairy and milk inspectors and their compensation, by Ernest Kelly; Methods of bacterial analyses of milk and milk products and the interpretation of results, by H. C. Lythgoe; The United States public health service and its interest in a better milk supply, by A. F. Stevenson; The sterilizing of dairy utensils on the farm, and a demonstration of a new steam sterilizer, by G. B. Taylor; Some aspects of milk inspection, by C. E. Marshall; The reliability and significance of bacteriological analysis of milk, by H. W. Conn; The system of recording and tabulating the analyses of samples of milk collected by the Massachusetts state department of health, by H. C. Lythgoe; Refrigeration as a factor in controlling quality in milk, by J. A. Gamble; Safeguarding the milk supply of our smaller cities, by G. S. Hine; Experiences and observations in the work, by O. P. Thompson; The milk supply of Topeka, Kansas, by L. W. Rowles; A method used in detecting milk-borne typhoid epidemics, by W. H. Rothery

6th annual convention, Washington, D. C., Oct. 15-17. Hoard's D 54:584 N 16 '17. N Y Prod R 44:1124 O 31 '17

6th annual report, including papers read at the annual convention in Washington, D.C., Oct. 15-17, 1917. Int Assn Dairy & Milk Inspec Rep 1917:1-232 (\$1)

Papers include: Influence of war time conditions on dairy inspection, by E. Kelly; Observations on the washing of milk cans, by R. O. Webster; Serious aspects of the milk situation in Massachusetts, by H. C. Lythgoe; Agriculture, inspection and the war, by R. A. Pearson; Effect of war on milk, by W. A. Evans; Decrease in milk supply; its effect on infant mortality, by J. S. Neff; Address of Mr Herbert C. Hoover; Present day supervision of the milk supply,

by J. J. Coughlin; Exceptional opportunity for municipal health officers and dairy inspectors to secure the cordial cooperation of producers and distributors of milk, by B. L. Purcell; Importance of clean utensils in clean milk production, by G. B. Taylor; Necessity for the pasteurization of all milk, by H. Lloyd; Value of human milk analysis, by H. Lloyd; Need of some identification mark for cows reacting to the tuberculin test, by S. G. Sharwell; Calculation of the nutritive value of milk from routine tests, by R. S. Smith; Public health studies concerning cheese, by E. C. Schroeder and G. W. Brett; Eradication of tuberculosis from cattle and swine, by J. A. Kiernan; Conservation of livestock by controlling animal diseases, by J. R. Mohler; Committee reports: Diseases of man—their relation to milk supply and to public health; Methods of bacterial analyses of milk and milk products; Bovine diseases—their relation to the milk supply and public health; Rules and regulations necessary for securing a clean and safe milk supply; Care of milk in transportation

7th annual convention, Chicago, Dec. 9-11. N Y Prod R 47:216 D 18 '18

**International baby chick association**

Meeting at Palace show, New York, Dec. 5-9, 1916. Am P Advocate 25:92 Ja '17; Same. Am P J 48:108 Ja '17

Meeting, New York, Dec. 31, 1917. Am P J 49:192 F '18

Organization to foster, promote, improve and protect the baby chick industry and all allied branches of poultry industry. P. T. Woods. Am P J 47:1097 S '16

2d annual meeting, Milwaukee, Wis., Sept. 26-27, 1917. S. Strong and G. M. Curtis. Reliable P J 24:834+ D '17

**International congress for teaching home economics**

International office of home economics. J Home Econ 8:8-9 Ja '16

**International farm congress**

Meeting at El Paso, Texas, Oct. 19, 1916. Breeder's Gaz 70:982 N 23 '16

**International harvester company**

Agricultural extension department of the International harvester company. P. G. Holden. (In Agricultural extension, p 92-3) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

**International institute of agriculture**

Documentary Leaflets is the title of a new publication of the Bureau of statistics. It is inaugurated to include various items which are outside the scope of information hitherto furnished in the Monthly Bulletin. The data published will deal especially with yield, trade, stocks, prices, rates of freight, etc. All information will be from official sources. The important articles in these documents will be indexed

First decade of the International institute of agriculture. Exp Sta Record 38:701-7 Je '18

International institute of agriculture and the war. T. K. Doherty. Ag Gaz of Canada 3: 27-8 Ja '16

Monthly bulletin of agricultural intelligence and plant diseases; index 1915 (Int R Sci & Prac Ag). 100p '16 Int. inst. of agriculture, Rome

**International irrigation congress**

Irrigation congress may skip 1917. Irr Age 32: 84-5 Ap '17

Resolutions at twenty-third congress held at El Paso, Texas. Irr Age 32:200-1+ N '16

**International live stock exposition**

California's conquest at the International in the grand champion and reserve champion steers. R. P. Royce. Field II 27:101 F '17

Educational events at International. il O Judd Farmer 61:1+ D 16 '16

Fourteenth International show, Chicago, Dec. 4-9, 1916. il Am Sheep B & W 36:705-16 D '16; Breeder's Gaz 70:1071, 1108-26a D 7-14 '16; Field II 26:1030-1 D '16; Nat Stock & F 40:934-5+ D 16 '16; Wallaces' F 41:1626-31+ D 15 '16; Prac F 113:19-20 Ja 1 '17



**International live stock exposition—Continued**

- 15th International, Chicago, Dec. 1-9. Am Sheep B & W 37:711-20 D '17; Breeder's Gaz 72:1039, 1080-97+ D 6-13 '17; Wallaces' F 42:1685-90 D 14 '17; Nat Stock & F 41:84 D 15 '17; Ohio F 140:551 D 15 '17; Prog F 32:1311 D 15 '17; Ag Digest 2:785-6 Ja '18; Field II 28:12-18+ Ja '18; Purdue Ag 12:209-10 Ja '18
- 15th annual International live stock exposition, Chicago, Dec. 1-8, 1917. W. H. Tomhave. Prac F 114:17-18 Ja 1 '18
- 16th International livestock exposition, Chicago, Nov. 30-Dec. 6. il Nat Stock & F 42:824-5+ D 14 '18; O Judd Farmer 65:547 D 14 '18; Ohio F 142:584 D 14 '18; Prog F 33:1363 D 14 '18; Wallaces' F 43:1831-9 D 13 '18
- Influence of the International on heavy horse breeding. J. H. S. Johnstone. il Field II 26:1013+ D '16
- Inspiration of the International. C. S. Plumb. il Field II 27:921-2 D '17
- International exhibit a national inspiration. F. C. Minkler. il Field II 27:13-15+ Ja '17
- International sheep program. il Am Sheep B & W 38:709-10 N '18
- List of awards and exhibitors. Field II 27:144-5+ F '17
- Ohio livestock at International. il Ohio F 140:581 D 22 '17
- Our own show; the International doesn't have to be international any longer. C. E. Gapen. il Country Gent 82:49-50 Ja 13 '17
- Purdue shorthorns at the 1917 International. C. F. Gobbie. il Purdue Ag 12:199-200 Ja '18
- Sires at the International. il Am Sheep B & W 37:724 D '17
- War spirit at International. map O Judd Farmer 63:1+ D 15 '17
- What the International means to the stockman. D. D. Casement. Field II 26:1012 D '16
- International live stock exposition association**  
Spring meeting, Chicago, May 23, 1916. Breeder's Gaz 69:1164 Je 1 '16
- International milk dealers' association**  
9th annual convention, Springfield, Mass., Oct. 16-17, 1916. Creamery 5:25-6 O '16; N Y Prod R 42:1144 O 25 '16
- International Nubian breeders' association**  
Purposes of association. Am Sheep B & W 36:371 Je '16
- International poultry federation**  
Co-operate or quit business; poultry organizations. R. Searle. Am P J 49:82 Ja '18
- New co-operative poultry organization. Am P J 48:1151 D '17
- International soil-products exposition**  
20th annual congress, Peoria, Ill., Sept. 18-29. Ag Gaz of Canada 4:994-5 N '17
- International yearbook of agricultural legislation**  
Annuaire international de législation agricole, 1915. Int R Ag Econ 82:82-5 O '17
- Annuaire international de législation agricole, 1916: (text in French, analytical introduction and index in English); with Table chronologique des pays. Int Yearbook Ag Leg 1916: suppl-81, 1-1458 '17
- International yearbook of agricultural legislation. Int R Sci & Prac Ag 8,no 1:8-10 Ja '17
- Interstate commerce**  
State nur. stock and interstate commerce. C. N. Smith. Am Flor 46:321-3 Mr 4 '16
- Interstate commerce commission**  
Building up a state; Iowa. C. Thorne. maps Wallaces' F 41:796-7 My 26 '16
- Loi modifiant la loi intitulée: Loi réglementant le commerce, votée le 4 février 1887 et toutes les lois ultérieures la modifiant, et étendant les pouvoirs de la commission inter-fédérale de commerce aux États-Unis d'Amérique. Int Yearbook Ag Leg 1916:432-3 '17
- Interstate fair, Trenton.** See Trenton interstate fair
- Interstate live stock fair**  
Interstate fair at Sioux City. il Wallaces' F 41:1268-9 S 29 '16

Interstate fair at Sioux City, Ia. il Wallaces' F 42:1308-9 S 28 '17; Breeder's Gaz 72:557 O 4 '17

Interstate live stock show at Sioux City. il Wallaces' F 43:1372+ S 27 '18

**Interstate milk producers' association**

Philadelphia milk situation. F. P. Willits. Prac F 113:108 Mr 1 '17

Prospectus of milk producers supplying Philadelphia. R. W. Balderson. Hoard's D 53:706 My 11 '17

Well managed milk producers' association. Hoard's D 55:860 Je 7 '18

**Intestinal worms.** See Ascaris**Intestines****Bacteriology**

Bacteria in the intestinal tract. J. Vanderleck. J Ag (Quebec) 20:179 F '17

Blastocystis hominis: its characteristics and its prevalence in intestinal content and feces in South Carolina. K. M. Lynch. bibliog il J Bact 2:369-77 Jl '17

Influence of the ration upon the intestinal flora of swine. L. D. Bushnell and J. J. Frey. bibliog il Kan Ag Exp Tech B 3:1-54 '17

**Intoxicants.** See Liquors**Intussusception**

Intestinal intussusception in cattle. J. K. Bosshart. Am Vet M Assn J 51:704-6 Ag '17

Volvulus, intussusception and hernia through the omentum in the horse and new born foal. J. F. DeVine. Am Vet M Assn J 52:160-7 N '17

**Inulin**

Studies on inulin in plants: its formation; the changes it undergoes in the resting tuber of the Jerusalem artichoke. H. Colin. Int R Sci & Prac Ag 9,no 4:428-9 Ap '18

**Invalid cookery.** See Cookery for the sick**Inventories**

Farm inventory. H. F. Williams. Neb Ag Ext B 41:1-10 '17

Value of inventories on rented farms. W. M. Peacock. Rural N Y 76:1462 D 29 '17

What have you got? F. M. Lutts. Ohio F 142:239 S 14 '18

**Invertase**

Diastase activity and invertase activity of bacteria. G. P. Koch. bibliog Soil Sci 1:179-96 F '16

**Investments**

Distinction between bonds and stocks. J. R. Milligan. Ohio F 138:23 Jl 8 '16

Farmer's investments. Wallaces' F 42:1153 Ag 24 '17

Short term notes. J. R. Milligan. Ohio F 138:119 Ag 12 '16

See also Banks and banking; Bonds; Building and loan associations; Drainage bonds; Insurance; Loans; Mortgages; Municipal bonds; Railroads—Securities; Real estate; Speculation; Stocks; Thrift

**Iodine**

Iodine content of foods. E. B. Forbes and others. Ohio Ag Exp B 299:487-546 '16; Same summarized by E. B. Forbes. Ohio Ag Exp B v 1:219-20 Jl '16

See also Feeding and feeding stuffs—Iodine

**Ions**

Absorption of ions by living and dead roots. H. V. Johnson. Am J Bot 2:250-4 My '15

Exchange of ions between the roots of lupinus albus and culture solutions containing one nutrient salt. R. H. True and H. H. Bartlett. Am J Bot 2:255-78 Je '15

Exchange of ions between the roots of lupinus albus and culture solutions containing two nutrient salts. R. H. True and H. H. Bartlett. Am J Bot 2:311-23 Jl '15

Exchange of ions between the roots of lupinus albus and culture solutions containing three nutrient salts. R. H. True and H. H. Bartlett. Am J Bot 3:47-57 F '16

**Iowa**

See also subhead Iowa under special subjects, e.g. Agriculture—Iowa, Dairying—Iowa

## Iowa—Continued

## Agriculture, Department of

17th annual Iowa yearbook of agriculture, 1916. Ia Ag Bd Yearbook 1916:1-670

Includes: Synopsis of proceedings of meetings from Dec. 20, 1915 to Dec. 14, 1916, inclusive; Proceedings of 9th annual meeting of Iowa county and district fair managers' association, Dec. 12, 1916; Iowa state fair and exposition, 1916; Extracts from state dairy and food commissioner's report; Proceedings of the 40th annual convention of the Iowa state dairy association; Proceedings of the annual meeting of the Corn belt meat producers' association; Report of the State veterinary department; Annual report of the Iowa weather and crop service bureau; Crop and other farm statistics; Statistical tables of Iowa's principal farm crops; Directory of organizations and associations representing agricultural interests in Iowa

## Dairy and food commission

How Iowa's food commission works. W. B. Barney. Breeder's Gaz 69:1018 My 11 '16  
Report for the year ended Oct. 31, 1917. 65p il maps '17 Ia. Dairy and food comm., Des Moines

## Description and travel

Iowa seen by a New Englander. D. F. Judkins. Rural N Y 77:1176 O 12 '18  
Why is Io-way. E: Howe. il Country Gent 83:3-4 N 9; 11-12 N 16; 5+ N 23; 9 N 30 '18

## Education

Our educational institutions. Wallaces' F 41: 1593 D 8 '16

## Highway commission, State

Report for the year ended December 1, 1916. 321p il '17 Iowa State highway comm., Ames

## Industries and resources

Iowa at the exposition. V. Felter. il Wallaces' F 41:1666 D 22 '16  
Iowa's billion-dollar nap. B. W. Currie. Country Gent 81:555-6, 680-1+ Mr 11, 25 '16  
Studies on the market milk of Iowa; with tabulated results. B. W. Hammer and A. J. Hauser. Ia Ag Exp B 164:311-80 '16

## Law

Work of the Iowa legislature. Wallaces' F 42: 692 Ap 20 '17

## Stallion registration division

5th annual report. 235p il '17 Ia. ag. dept., Des Moines

## Iowa Aberdeen Angus breeders' association

Annual meeting, Ames. Wallaces' F 43:231 F 8 '18  
Annual meeting at Ames. Wallaces' F 42:270 F 9 '17

## Iowa agricultural experiment association

Annual meeting, Ames. Wallaces' F 43:230 F 8 '18  
Meeting at Ames, February 7-8, 1917. Wallaces' F 42:244 F 9 '17

## Iowa agricultural experiment station

Annual report for fiscal year ending June 30, 1916. 36p n.d. Ia. ag. experiment station, Ames  
Experiments outlined for the season of 1918. Wallaces' F 43:492-4 Mr 15 '18

## Iowa association of country and district fair managers

Proceedings of 9th annual meeting, Des Moines, Dec. 12, 1916. Ia Ag Bd Yearbook 1916:119-51

## Iowa buttermakers' association

Comments on the Iowa buttermakers exhibit. H. D. Reynolds. Creamery 5:38 Je '17  
Convention, Cedar Rapids, Nov. 20-21. N Y Prod R 47:129+ D 4 '18  
7th annual meetings, Des Moines, Feb. 19-21, 1917 N Y Prod R 43:677+ F 28 '17  
8th annual convention, Mason city, Iowa, Nov. 14-15. N Y Prod R 45:73+ N 21 '17

## Iowa draft horse breeders' association

Fifth annual convention, Des Moines. Wallaces' F 41:1679 D 22 '16  
Iowa draft horse breeders meet. Wallaces' F 43:288 F 15 '18

## Iowa farmers' grain dealers' association

Annual convention, Sioux City. Wallaces' F 42:215 F 2 '17  
Iowa co-operators to form closer union. Am Coop J 12:447-52 F '17  
Pro rata elevator co-operation. Wallaces' F 43:639 Ap 12 '18

12th annual convention, Des Moines, Feb. 15-17, 1916. Wallaces' F 41:334 F 25 '16; Am Coop J 11:697-706 Mr '16

13th annual meeting, Sioux City, Jan. 23, 1917. Coop Manager & F 6:70-1+ F '17

14th annual convention, Fort Dodge, Jan. 22-24. Coop Manager & F 7:34+ F '18; Wallaces' F 43:179 F 1 '18; Am Coop J 13:247-51 F '18

## Iowa farmers' mutual telephone protective association

Farm telephone companies organize. Wallaces' F 41:730 My 12 '16

## Iowa meat producers' association

Convention, Ames, Mar. 26-27. H. B. Winchester. il Ohio F 141:530 Ap 13 '18; O Judd Farmer 64:6 Ap 6 '18

## Iowa railroad commission

Iowa railroad commission. C. Thorne. Wallaces' F 42:54 Ja 12 '17

## Iowa sheep breeders' and wool growers' association

36th annual meeting, Ottumwa, Nov. 27. T. C. Stone. Wallaces' F 43:1797 D 6 '18

## Iowa shorthorn breeders' association

Iowa short-horn breeders' show and sale. il Wallaces' F 43:557 Mr 22 '18

Meeting, show and sale, Des Moines, March 13-14, 1917. il Wallaces' F 42:506 Mr 16 '17

## Iowa state college of agriculture and mechanic arts

Attention, Iowa boys and girls. F. W. Beckman. Hoard's D 54:386 O 12 '17

Biennial report; agricultural extension work in Iowa, July 1, 1914-June 30, 1916. 47p il n.d. Ag. extension dept., Ia. college of ag., Ames

Training of high school teachers in an agricultural college. G. M. Wilson. J Home Econ 8:181-6 Ap '16

Why is Io-way. E: Howe. il Country Gent 83:9 N 30 '18

## Iowa state dairy association

Proceedings of the 40th annual convention, Waterloo, Oct. 4-5, 1916. Ia Ag Bd Yearbook 1916:368-88

## Iowa state fair

Editor Page at the Iowa state fair. O Judd Farmer 61:6 S 9 '16

Farm prepares for war. il Breeder's Gaz 72:320+ S 6 '17

Iowa true to form. R. V. Hoffman. Field Il 27:758-60+ O '17

Jerseys at the Iowa state fair; list of awards. Jersey B 35:1418 S 13 '16

Live stock awards of 1916 Iowa state fair. Ia Ag Bd Yearbook 1916:152-321

Overflow in Iowa. il Breeder's Gaz 70:354-65 S 7 '16

Sheep show at Iowa. il Am Sheep B & W 38: 604-6 S '18

62d annual state fair. il Kimball's D F 14: 570+ S 15 '16; Wallaces' F 41:1148-51, 1170-1+ S 1-8 '16

63d exposition, Aug. 23-31. il Wallaces' F 42: 1180-3+, 1205-10 Ag 31-S 7 '17; Breeder's Gaz 72:320 S 6 '17; Hoard's D 54:184-5 S 7 '17; Kimball's D F 15:640 S 15 '17; O Judd Farmer 63:1 S 8 '17

64th annual fair and exposition August 21-30. Wallaces' F 43:1225-9, 1258-61 Ag 30-S 6 '18; Hoard's D 56:220-3 S 13 '18; Kimball's D F 16:499+ S 15 '18; Greater Iowa (Iowa ag. dept., Des Moines) 10:4-15 O '18

## Iowa state grange

Iowa state grange. Wallaces' F 41:1677 D 22 '16



**Iowa swine day**

3d annual swine day, Iowa state college, Ames, Oct. 9. Breeder's Gaz 72:680 O 18 '17

**Iowa vegetable growers' association**

4th annual convention of the Iowa potato and truck growers' association, Davenport, Nov. 26-28. C. E. Durst. Market Growers J 21: 269-70 D 15 '17

**Iowa wholesale egg, butter and poultry dealers' association**

Annual meeting, Des Moines, March 6-7. N Y Prod R 45:679+ Mr 13 '18

**Iowa women farmers' association**

First conference, Ames, Feb. 3d, 1916. Wal-laces' F 41:274 F 18 '16

**Ipomoea batatas.** See Sweet potatoes

**Ipomoea purpurea.** See Morning-glories

**Ireland**

See also subhead Ireland under special subjects

**Agriculture, Council of**

30th meeting, Dublin, Nov. 14, 1916. J Dept Ag Ireland 17,no 2:197-207 '17

31st meeting, Dublin, May 16, 1917. J Dept Ag Ireland 17,no 4:579-94 '17

32d meeting, Dublin, Nov. 14, 1917. J Dept Ag Ireland 18,no 2:131-41 '18

**Education**

Agricultural and rural extension schools in Ireland. A. C. Monahan. (B. 41) 38p il '16 U.S. Bureau of educ., Washington, D.C.

**Industries and resources**

Production and distribution of power and its influence on the development of Irish industry. J. F. Crowley. il J Dept Ag Ireland 18,no 1:7-20 '18

**Iris worms**

Iris worm; description. P. Snow. Gard Chron Am 20:365 Ag '16

**Irises**

Cultural notes on the pogon-iris. G. Sturtevant. Minn Hort 46:77, 125 F-Mr '18

Early bearded irises. Gard Chron Am 22:200 J 18 '18

\* Flags for the garden. F. A. Waugh. il Independent (119 W. 40th st, N.Y. 10c) 95:320 S 7 '18

Friendly iris. Wallaces' F 41:274 F 18 '16

Germination of iris pseudacorus, Linn., in normal and abnormal conditions. J. H. T. Walsh. Gard Chron (Lond) 62:201 N 17 '17

Glorious Japanese iris. B. B. Hammond. Rural N Y 76:965 Ag 11 '17

The iris. Am Flor 50:368 My 18 '18

Iris arizonica. W. R. Dykes. Gard Chron (Lond) 61:45 F 3 '17

Iris at Kew. Gard Chron Am 22:220 Ag '18

Iris breeding. J Heredity 7:502 N '16

Iris tingitana. il Am Flor 50:625 Ap 13 '18

Irises and disease. W. R. Dykes. Gard Chron (Lond) 63:248 Je 15 '18

Irises for a succession of bloom. L. Melish. il Gard M 24:54-6 S '16

Irises for southwestern gardens. J. J. Thornber. Am Flor 46:3-4 Ja 22 '16

Japanese iris, messengers of the gods. E. Roorbach. il Touchstone (118 E. 30th st, N.Y. 35c) 1:36-44 My '17

My hobby in raising new irises. G. Sturtevant. Gard M 25:290 Je '17

New irises for the American garden. B. Y. Morrison. il Gard M 23:13 Ag '18

New or noteworthy plants; iris Hoogiana. W. R. Dykes. il Gard Chron (Lond) 60:216 N 4 '16

Notes on irises; an autumn-flowering iris and iris Rosenbachiana. W. R. Dykes. il Gard Chron (Lond) 64:166 O 26 '18

Notes on irises; i. menticulata xi. Bakeriana. W. R. Dykes. il Gard Chron (Lond) 59:155 Mr 18 '16

Notes on irises; iris spuria. W. R. Dykes. Gard Chron (Lond) 64:98 S 7 '18

Notes on irises; regelia irises. W. R. Dykes. Gard Chron (Lond) 61:249 Je 23 '17

Notes on irises; some white pogoniris. W. R. Dykes. Gard Chron (Lond) 64:204 N 23 '18

Planting of bearded irises. G. Sturtevant. Gard Chron (Lond) 61:54 F 3 '17

Planting of flag irises. W. R. Dykes. Gard Chron (Lond) 60:282 D 9 '16

Planting of flag irises. E. H. Jenkins. Gard Chron (Lond) 60:264 D 2 '16

Planting of irises. A. J. Bliss. Gard Chron (Lond) 61:10 Ja 6 '17

Pollen tube and spermatogenesis in iris. M. L. Sawyer. il Bot Gaz 64:159-64 Ag '17

Poor man's orchid. B. Berbert-Hammond. il Rural N Y 76:515 Ap 7 '17

Some hybrids of iris chrysographes. W. R. Dykes. Gard Chron (Lond) 60:131 S 16 '16

Some Tibetan irises. W. R. Dykes. il Gard Chron (Lond) 59:194 Ap 8 '16

Spanish iris and other sorts. L. Paterson. Prog F 33:1164 O 26 '18

Tall bearded iris (fleur-de-lis). W. Stager. il Gard Chron Am 22:71-3 Mr '18

Teratology in iris flowers. E. Armitage. Gard Chron (Lond) 60:203 O 28 '16

Variation of form in iris. A. J. Bliss. Gard Chron (Lond) 62:1 J 17 '17

**Diseases and pests**

Iris borer. W. N. Clute. Gard Chron Am 21: 440 D '17

More about the iris borer. G. M. Gilbert. Gard Chron Am 22:27 Ja '18

Storming the foe's trenches. G. Gilbert. Gard Chron Am 21:404-5 N '17

See also Iris worms

**Irish agricultural organisation society**

Irish agricultural organization society in 1917. Int R Ag Econ 9,no 3:205-8 Mr '18

Report from July 1914 to 31st March 1915. Int R Ag Econ 67:6-13 J 16 '16

**Irish farmers' union**

Irish farmers' union. Int R Ag Econ 9,no 3: 208-10 Mr '18

**Iris terriers**

My Irish terrier. W. A. Dyer. il Country Life 33:53-5 F '18

**Irish wolfhounds.** See Wolfhounds

**Iron**

Assimilation of colloidal iron by rice. P. L. Gile and J. O. Carrero. J Ag Research 3: 205-10 D '14

Assimilation of iron by rice from certain nutrient solutions. P. L. Gile and J. O. Carrero. bibliog J Ag Research 7:503-28 D 18 '16

Iron and apple color. U. P. Hedrick. Rural N Y 75:584 Ap 8 '16

Occurrence of haematoid compounds of iron in plants. Int R Sci & Prac Ag 7,no 1:52 Ja '16

Rusting of iron; with suggestions for applying protective coatings. Power F 25:25 Ag '16

See also Ferric chloride; Ferrous sulfate; Iron sulfate spray; Plants—Iron content

**Iron in feed**

Iron as an antidote to cottonseed meal injury. W. A. Withers and F. E. Carruth (J. Biol. Chem., 32, no. 2 245-57p. '17). Exp Sta Record 38, no 3:282-3 '18

**Iron in foods**

Foods which supply iron. Ia Ag Ext Home Econ C 13 1p '17-'18

Losses in iron in cooking vegetables. K. Blunt and F. A. Otis. J Home Econ 9:213-18 My '17

Practicable ways of increasing the iron-content of the diet. C. L. Hunt. J Home Econ 8:584-7 N '16

Practical suggestions on foods rich in iron. E. M. Kerr. Overland Monthly (259 Minna st, San Francisco 10c) n s 69:533-4 Je '17

Recipes for iron-rich dishes. C. L. Hunt. J Home Econ 8:603-5 N '16

**Iron in soils.** See Ferrification**Iron sulfate spray**

Chlorosis of sugar cane. Porto Rico Ag Exp Rep 1917:10-19 '18

Spraying of yellow pineapple plants on manganese soils with iron sulphate solutions. M. O. Johnson. il Hawaii Ag Exp Press B 51:1-11 '16

**Iron sulfide spray**

Powdery mildew of the apple; experiments with iron sulphide and other sprays for its control. W. J. Allen and W. le Gay Brereton. *Ag Gaz of New South Wales* 29:408-12 Je '18

**Ironing. See Laundry****Ironing boards**

Disappearing ironing board. Mrs E. Ervin. *il Ohio F* 137:146 Ja 29 '16

**Ironwood. See Ohia lehua****Iroquois county fair**

Farmers own the Iroquois county fair. *il O Judd Farmer* 65:89 Ag 3 '18

**Irrigation**

Air lift irrigation system in Florida. *il Irr Age* 33:43-4 Ap '18

Alkali content of irrigation water. R. Stewart and C. T. Hirst. *il Utah Ag Exp B* 147:1-18 '16

Artificial rain from artificial clouds. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 46:512 D 13 '16

Border method of irrigation for porous soils. R. W. Allen. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:170-1 Ag 14 '18

Central station supplies energy for irrigation in land development. *il Electrical Review* (515 Monadnock blk., Chicago 15c) 71:603-4 O 6 '17

Certain effects under irrigation of copper compounds upon crops. R. H. Forbes. bibliog *il Cal Univ Pub Ag Sci v* 1.no 12 395-494p '17 (\$1); Same. *Ariz Ag Exp B* 80:145-238 '16

Comparative cost of operating automobiles and teams on irrigation project. C: P. Williams. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:291-2 O 10 '17

Cost of pumping for irrigation. O. L. Waller. *Wash Ag Exp Pop B* 104:1-11 '16

Damming cloudbursts for irrigation. V. W. Killick. *il Illustrated World* (Drexel av. and 58th st., Chicago 15c) 26:404-5 N '16

Does overhead irrigation pay? F. E. Beatty. *il Green's Fruit Grower* 37:3 Ap '17

Drainage for irrigated lands. E. M. Chandler. *Am Soc Ag Eng Trans* 10.no 1:82-4 '17

Drainage for irrigated lands; with discussion. H. E. Murdock. *Am Soc Ag Eng Trans* 10.no 2:72-82 '17

Drainage of irrigated land. R. A. Hart. *il map plans U S Ag B* 190:1-34 '15

Drainage of irrigated shale land. D. G. Miller and L. T. Jessup. *il U S Ag B* 502:1-40 '17; Summary. *Irr Age* 32:119 Je '17

Duty of irrigation water. *Country Gent* 81:1024 My 13 '16

Duty of water in irrigation. *Irr Age* 31:132 Ji '16

Effect of irrigation water and manure on the nitrates and total soluble salts of the soil. F. S. Harris and N. I. Butt. bibliog *J Ag Research* 8:333-59 F 26 '17

Effect of pumping from a shallow well on the ground-water table. W. W. Weir. *J Ag Research* 11:339-57 N 12 '17

Efficient application of irrigation water. R. B. Sleight. *Farm Eng* 3:192 Mr '16

Electricity in irrigation pumping. N. G. Meade. *il Electrical Review and Western Elec* (608 S. Dearborn st., Chicago 10c) 70:270-3 F 17 '17

Electricity raises rice to save wheat. *Electrical World* (10th av at 36th st, N.Y. 10c) 72:449-50 S 7 '18

Evaporation from the surfaces of water and river-bed materials. R. E. Sleight. bibliog *il diags maps J Ag Research* 10:209-62 Ji 30 '17

Every man his own truck farmer and the selling of city water for irrigation. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:245 Mr 14 '17

Factors affecting economical use of water in irrigation. W. L. Powers. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:493-4 D 12 '17

Flow through submerged rectangular orifices with modified contractions. V. M. Cone. *J Ag Research* 9:97-114 Ap 23 '17

Frost protection by irrigation. C. W. Skinner. *Market Growers J* 20:152 F 15 '17

Garden irrigation. *Weekly N L* 5:4 Ap 10 '18

Garden irrigation; with discussion. L. Herziger. *Wis Hort Soc Rep* 48:172-9 '18

Handy watering system. R. W. DeBaun. *il Rural N Y* 75:975 Ji 15 '16

History of ancient irrigation in various countries. C. S. Kinney. *Irr Age* 33:86-9 My '18

Hot-weather gardening—irrigation, cultivation, mulching. *il Country Gent* 81:1304 Ji 1 '16

How can greater efficiency in irrigation management be secured? W. O. Cotton. *il Irr Age* 32:24-5 D '16

How I took much of the uncertainty out of farming. I: Adrian. *System on the Farm* 2:134-5 Ap '18

How reclamation projects may be financed and constructed. W. R. King. *il Irr Age* 32:101-5 My '17

How the farmer can avert the danger of floods. *Current Opinion* (63 W. 36th st., N.Y. 25c) 62:61 Ja '17

How to irrigate a garden. F. F. Rockwell. *Gard M* 24:244 Ja '17

Inexpensive cypress lath sub-irrigation plan. *il Okla Ag Ext C* 72 4p '18 (2c)

Investigations of irrigation pumping plants. H. E. Murdock. *il Mont Ag Exp B* 115:127-48 '17

Irrigating with an automobile. H. W. Doyle. *il Country Gent* 81:1765 S 30 '16

Irrigation and drainage. F. H. Newell. *il (In Pan American scientific congress Pro*, 1915, v. 3, p. 260-83) '17

Irrigation and soil fertility. E. O. Larson. *Irr Age* 33:110 Je '18

Irrigation as a means of preparedness for defense. J: M. Hess. *il Irr Age* 31:183-4 O '16

Irrigation by means of underground porous pipe. E. B. House. *il Colo Ag Exp B* 240:1-15 '18

Irrigation experiments on apple-spot diseases. C: Brooks and D. F. Fisher. bibliog *il J Ag Research* 12:109-38 Ja 21 '18

Irrigation for blackberries. *Fruit-Grower* 28:236 Ap 15 '17

Irrigation in the market garden; with discussion. C. E. Warner. *il Minn Hort* 46:70-5 F '18

Irrigation in various states and colonies. G. A. R. Borghesani. *Int R Sci & Prac Ag* 8.no 9:1220-2 S '17

Irrigation of orchards. S: Fortier. *il Farmers' B* 882:1-40 '17

Irrigation on the poultry ranch. C: Weeks. *Am P J* 49:488 Ap '18

Irrigation, watering, sprinkling. F. Steele. *il Gard M* 23:297-9 Je '16

Making the garden safe for the summer. F. F. Rockwell. *il Gard M* 25:280-1 Je '17

Methods and costs of land leveling with tractors. F. N. Cronholm. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:590-1 Je 12 '18

Methods of applying irrigation water. C. J. Halton. *il Purdue Ag* 11:9-11+ D '16

\* Methods of measuring irrigation water deliveries to farms. J. S. Longwell. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:463-4 N 13 '18

Mistakes of farmers in irrigation work. *Irr Age* 31:41 Ja '16

Mulched-basin system of irrigated citrus culture and its bearing on the control of mottle leaf. L. J. Briggs and others. *il U S Ag B* 499:1-31 '17

New uses for an irrigation system. R. W. De Baun. *Rural N Y* 76:787 Je 16 '17

Orchard irrigation. F. R. Arndt. *J Dept Ag S Australia* 21:959-67 Ji '18

Orchard irrigation. J. H. Darwent. *J Dept Ag S Australia* 21:920-3 Je '18

Overhead irrigation. F. M. Loomis. *il Farm Eng* 4:75 N '16

Overhead irrigation. T. M. Mulligan. *il (In Report, Ontario vegetable growers' assn., 1916, p. 55-9) '17 Ontario ag. dept., Toronto, Canada*

Overhead irrigation for the garden. D. Day. *Fruit-Grower* 27:237 Ap 1 '16



**Irrigation —Continued**

Overhead irrigation system of the R. M. Kellogg co., Three Rivers, Mich. il plan Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:160-1 F 14 '17

Overhead systems of irrigation. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:253-5 Mr 14 '17

Pan-American congress for irrigation aid. Irr Age 31:59 F '16

Points in orchard irrigation. il O Judd Farmer 60:15 Mr 4 '16

Practical suggestions on irrigation and drainage. D. H. Anderson. Irr Age 33:17-20, 45-9, 82-5, 113-16, 149-52, 192-3, 210-11 Mr-Jl, S-N '18 (to be cont)

Pumping for irrigation. H. E. Murdock. il Mont Ag Exp C 60:1-37 '17

Pumping for irrigation on the farm. P. E. Fuller. il U S Ag Yearbook 1916:507-20; Same. Separate 703

Pumping water efficiently. il Irr Age 31:138 Jl '16

Pumps water for berries. E. H. Favor. Fruit-Grower 27:363 Jl 15 '16

Rates for irrigation water and quantity used for various crops. H. L. Miller. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:451-2 My 8 '18

Relation of the transformation and distribution of soil nitrogen to the nutrition of citrus plants. I. G. McBeth. bibliog J Ag Research 9:183-252 My 14 '17

Seepage and return waters. 3 pts L. G. Carpenter. Colo Ag Exp B 180:1-70, 1-48, 1-146 '11 (Reprint '16)

Small irrigation ditches. A. R. Williams. Farm Eng 3:270 Je '16

Soil moisture studies under irrigation. F. S. Harris and A. F. Bracken. Utah Ag Exp B 159:1-26 '17

Solving water waste problems. R. B. Sleight. il Farm Eng 5:5 Jl '17

Spray irrigation. G. Beverley. J Dept Ag S Australia 20:885-6 Je '17

Spray irrigation. M. B. Williams. il U S Ag B 495:1-40 '17

State aid to irrigation and swampland reclamation projects. C. E. Grunsky. (In Pan American scientific congress Proc., 1915, v. 3, p. 835-40) '17

Steps toward project control. F. D. Pyle. il Irr Age 32:166-8 S '17

Studies on capacities of soils for irrigation water, and on a new method of determining volume weight. O. W. Israelsen. bibliog il J Ag Research 13:1-36 Ap 1 '18

Subirrigation. A. P. Spencer and C. M. Berry. il map Fla Ag Ext B 5:1-12 '16

Subirrigation is profitable. W. Covey. Country Gent 82:1117 Jl 7 '17

Suggestions on care and irrigation of gardens and lawns. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:464 My 8 '18

Summary of researches by Messrs. Müntz and Lainé on the control of irrigation according to the physical properties of soils. H. Hitier. Int R Sci & Prac Ag 8,no 7:974-8 Jl '17

Suspension method and automatic oscillating device for overhead irrigation systems. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 47:35-6 Ja 10 '17

Treatment of land soured and rendered unproductive by seepage. A. J. Perkins. J Dept Ag S Australia 21:845-50 Je '18

Unproductive soils, their cause and management. A. E. Vinson. Ariz Ag Exp Timely Hints 134:1-8 '18

Vegetative succession under irrigation. J. F. Macbride. il J Ag Research 6:741-60 Ag 7 '16

Water; its application to fruit trees and vines. G. Quinn. J Dept Ag S Australia 20:707-11 Ap '17

Water table variations; causes and effects. A. B. Ballantyne. Utah Ag Exp B 144:1-22 '16

Water that runs uphill. G. F. Stratton. il Country Gent 83:5 F 9 '18

Water to increase garden efficiency. G. W. Hood. il Gard M 26:13-14 Ag '17

Watering the orchard. F. M. Allen. il Fruit-Grower 28:251 My 1 '17

Where oil and water mix. L. J. Cuniff. il Irr Age 31:106 My '16

Windmill's better half; methods for building small storage reservoirs. P. A. Ewing. il Farm Eng 3:168-4 F '16

Wood pipe for conveying water for irrigation. S. O. Jayne. il U S Ag B 155:1-40 '14

See also Agricultural engineering; Dams; Drainage; Dry farming; Irrigation bonds; Irrigation canals; Irrigation districts; Irrigation farming; Irrigation laws; Reclamation of land; Soil percolation; Soils, Alkali; Water requirements of crops; Water rights

**Bibliography**

\* Irrigation, drainage, and water power (exclusive of Pacific states); list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 42—9th ed.) 21p '18 U.S. Supt. of doc., Washington, D.C.

**Experiments**

Irrigation field laboratory at Denver, Colorado. R. B. Sleight. il plan Eng News (10th av. at 36th st., N.Y. 15c) 76:1080-2 D 7 '16

**Arizona**

Analysis of irrigating water and the examinations of soils for alkali; Irrigation investigations. Ariz Ag Exp Rep 1916:296-310 '16

Irrigating with sewage at Tucson, Arizona. W. C. Lefebvre. Municipal J (243 W. 39th st, N.Y. 10c) 44:395 My 11 '18

**Australia**

Apple culture in Victoria; irrigation. J. Farrell. il J Dept Ag Victoria 16:355-63, 454-62 Je, Ag '18

Irrigation scheme of the River Murray, South Australia. il Engineer (33 Norfolk st, Strand, London, W. C. 2) 125:15-16 Ja 4 '18

Our future dependence on irrigation. J Dept Ag S Australia 21:130-3 S '17

Practical irrigation-farming in Australia; relation of drainage to irrigation. A. M. Makinson. il Ag Gaz of New South Wales 27: 489-504 Jl '16

**California**

Description of irrigation enterprises. Cal Ag Bd Rep 1917:214-33 '18

Emergency irrigation rate for garden farming at Alhambra, Cal. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:459 My 8 '18

Future water conservation in southern California. Irr Age 32:203 N '16

Intake gate designed to skim Colorado river water. C. E. Grunsky and G. B. Anderson. Eng Record (10th av. at 36th st., N.Y. 15c) 75:432-3 Mr 17 '17

Irrigation. (In Statistical report, 1916, p. 192-210) '17 Cal. State bd. of ag., Sacramento

Irrigation in arid San Fernando valley. A. Marple. il Farm Eng 4:45 S '16

Irrigation of rice in California. R. D. Robertson. il Cal Ag Exp B 279:254-70 '17

Irrigation practice in growing small fruits in California. W. A. Hutchins. il Cal Ag Exp C 154:1-25 '16

Irrigation project in the Victor valley, Cal., is based on economic use of water. Eng News-Record (10th av at 36th st., N.Y. 15c) 80:178-80 Ja 24 '18

Keeping down cost and head loss on siphon outlets. plan Eng News-Record (10th av at 36th st., N.Y. 15c) 80:1169 Je 20 '18

\$1,500,000 California irrigation project has well supply and 98 miles of steel pipe line. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 50:41-3 Jl 10 '18

Terra Bella irrigation project obtains supply from wells and delivers water under pressure through steel pipe lines. S. E. Kieffer. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:360-2 Ap 10 '18

Using Los Angeles aqueduct water for irrigation purposes. C. W. Geiger. il Municipal & County Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 55:24-6 Jl '18

**Irrigation—California—Continued**

What irrigation does in the great San Joaquin valley. *il Irr Age* 31:73 Mr '16  
Where water and cows win. L. L. De Bra. *il Hoard's D* 56:68 Ag 9 '18

**Canada**

Canadian irrigationists will discuss all phases of agriculture. R. J. Stead. *Irr Age* 33:154 J1 '18  
Irrigation results in 1916. *il Ag Gaz of Canada* 4:124-7 F '17  
Western Canada irrigation congress calls for more surveys. *Irr Age* 31:40 Ja '16

**Colorado**

Amount of water used to irrigate mountain hay land; a study in valuing water rights. Denver. M. E. Bunker. *il Eng News-Record* (10th av. at 36th st., N.Y. 15c) 78:488-9 Je 7 '17  
Black alkali in the San Luis valley. W. P. Headden. *Colo Ag Exp B* 231:1-15 '17  
Grand Valley irrigation project. 16p *il map n.d. U.S. Reclamation service, Washington, D.C.*  
Grand Valley project. S. O. Harper. *Irr Age* 33:76-7 My '18  
Uncompahgre project wins concessions. *Irr Age* 32:117-18 Je '17  
Uncompahgre Valley irrigation project. 23p *il map n.d. U.S. Reclamation service, Washington, D.C.*  
Uncompahgre Valley project. F. D. Pyle. *Irr Age* 33:89 My '18  
Waters of the Rio Grande. W. P. Headden. *Colo Ag Exp B* 230:1-62 '17  
West basin of the Colorado river. J. M. Hess. *map Irr Age* 33:8-11 Mr '18

**Eastern states**

East practicing supplemental irrigation. *Irr Age* 33:135 J1 '18

**Egypt**

\* Life of Sir Colin C. Scott-Moncrieff, ed. by M. A. Hollings. Review. *il Nature* (St Martin's st, London, W. C. 6d) 100:505-6 F 28 '18

**Florida**

Irrigation in Florida. F. W. Stanley. *il U S Ag B* 462:1-62 '17

**Idaho**

Beneficial use to stop big water waste. *Irr Age* 31:58-9 F '16  
Big Lost river irrigation project. *Irr Age* 31:131 J1 '16  
Experiments on the economical use of irrigation water in Idaho. D. H. Bark. *il U S Ag B* 339:1-57 '16; Excerpts. *Better Fruit* 11:9 J1 '16; Excerpts. *Irr Age* 31:151-2 Ag '16  
Idaho irrigation congress seeks to inject more improved methods into that science in state. *il Irr Age* 32:61 F '17  
Perrine's big work in Idaho. *Irr Age* 33:14-15 Mr '18  
Seepage water, formerly wasted, now pumped for irrigation. J. Hornbein. *il Eng News-Record* (10th av. at 36th st., N.Y. 15c) 78:192-3 Ap 26 '17  
Southern Idaho—the north side project. G. H. Nichols. *Hoard's D* 51:865 Je 23 '16

**India**

Indigenous irrigation works in Bihar and their improvement. G. C. Sherrard. *Ag J of India* 11:156-67 Ap '16  
Irrigation of alluvial soils. A. Howard and G. L. C. Howard. *Ag J of India* 12:185-99 Ap '17  
Irrigation in Sind. T. F. Main. *Ag J of India* 13:653-9 O '18  
Irrigation works in India. C. M. Haywood. (Commerce Reports no. 244) p 232-3 (O 17) '18  
U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
\* Punjab irrigation system. F. H. Newell. *Geographical R* (Broadway & 156th st, N. Y. 50c) 5:149-50 F '18  
Punjab triple canal system. *Int R Sci & Prac Ag* 7,no 1:47-8 Ja '16

Rainfall, irrigation and the subsoil water level of the Gangetic plain in the United Provinces of Agra and Oudh. C. H. Hutton. *Ag J of India* 13:197-205, 460-70 Ap-J1 '18  
Rainfall, irrigation, and the subsoil water reservoirs of the Gangetic plain in the United Provinces of Agra and Oudh. E. A. Molony. *Ag J of India* 12:84-9 Ja '17  
Saving of irrigation water in wheat growing. A. Howard and G. L. C. Howard. *Ag J of India* 11:14-30 Ja '16  
Tube-well and its irrigation possibilities. F. H. Vick. *Ag J of India* 11:296-300 J1 '16

**Kansas**

Garden City expert gives pumping results. *Irr Age* 31:39 Ja '16  
General status of irrigation in Kansas. H. B. Walker. *Irr Age* 31:185-6 O '16  
Intensive farming in Kansas. E. E. Frizell. *Irr Age* 31:182 O '16  
Kansas encourages land drainage and irrigation. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 80:88-9 Ja '18  
Kansas results of pump irrigation. *il Irr Age* 31:71 Mr '16  
Making a farm pay in the shallow water section of Kansas. *il Irr Age* 31:74 Mr '16  
Pumping for irrigation, with special reference to the Arkansas River valley. J. B. Marcellus. *map Kan Ag Ext B* 17:1-16 '18  
Pumping irrigation in Kansas. F. B. Nichols. *Irr Age* 31:42 Ja '16  
*See also Kansas—Irrigation commissioner, State*

**Mesopotamia**

Irrigation in Mesopotamia. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:21 J1 13 '18

**Mexico**

Irrigation projects under way. *il Mexican Review* (613 Riggs bldg., Washington, D.C. 10c) 2:10 N '17

**Montana**

Artesian water for irrigation in Little Bitter-root valley, Montana. O. E. Meinzer. (Water-supply paper 400—B) 37p *il maps* '16  
U. S. Geological survey, Washington, D.C.; Excerpt. *Irr Age* 32:45 Ja '17  
Flathead project. *Irr Age* 31:89 Ap '16

**Nebraska**

Pump irrigation in Nebraska. E. E. Brackett and O. W. Sjogren. *bibliog il Neb Ag Exp C* 2:1-28 '17

**Nevada**

Lake Tahoe on the Truckee-Carson irrigation project. *il Irr Age* 31:70 Mr '16

**New Jersey**

Overhead irrigation at the Seabrook farms, New Jersey. C. F. Seabrook. *plan Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 48:112-15 Ag 8 '17

**New Mexico**

Conserving flood waters in New Mexico. A. S. Tipton. *il Irr Age* 32:22-3 D '16  
Irrigating seventeen thousand acres of municipal land. C. C. Cragin. *Eng News* (10th av. at 36th st., N.Y. 15c) 77:428-9 Mr 15 '17

**New Zealand**

Irrigation for New Zealand. F. W. Furkert. *J Ag New Zealand* 14:449-63 Je '17

**Oregon**

Harney and Silver Creek projects; irrigation and drainage. J. T. Whistler and J. H. Lewis. 91p *il maps* '16  
Oregon State engineer, Salem  
Irrigation's future. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 8:16-26 Ja 6 '17  
Land settlement—irrigation—drainage. Oregon's neglected opportunity. R. Howard. *map Oregon Voter* (Worcester bldg., Portland, Ore. 10c) 8:120-2+ Ja 27 '17  
Malheur and Owyhee projects; irrigation and drainage. J. T. Whistler and J. H. Lewis. 201p *il maps* '16  
Oregon State engineer, Salem



**Irrigation—Oregon—Continued**

Oregon enacts new irrigation-district code. P. A. Cupper. Eng News-Record (10th av. at 36th st., N.Y. 15c) 78:254 My 3 '17  
Oregon will limit use of water for irrigation. P. A. Cupper. Eng News-Record (10th av. at 36th st., N.Y. 15c) 79:441 S 6 '17

**Peru**

Irrigation and public policy in Peru; with discussion. C. W. Sutton. (*In* Pan American scientific congress Pro., 1915, v. 3, 840-54) '17

**Philippine Islands**

Masterpieces of primitive engineering. il Scientific Am (233 Broadway, N.Y. 10c) 118: 225 Mr 16 '18

**South Africa**

Loi n. 26 portant amendement à la loi n. 8 de 1912 sur l'irrigation et la conservation des eaux. Int Yearbook Ag Leg 1916:585-6 '17

**South Dakota**

Effect of fall irrigation on crop yields at Belle Fourche, S. Dak. F. D. Farrell and B. Aune. U S Ag B 546:1-13 '17

**Sudan**

Irrigation works on the Blue Nile. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:74 Ag 4 '17

**Texas**

San Benito, Texas, irrigation district. Irr Age 31:171 S '16

**United States**

Bill to promote reclamation of arid and swamp lands. Irr Age 32:59-60 F '17  
Colorado river drainage basin. J. M. Hess. Irr Age 33:41-2, 73-5, 106-9, 142-4, 170-3, 188-91, 204-7 Ap-N '18

Concerning Elephant Butte dam. Irr Age 31: 132 Jl '16  
Cotton growing under irrigation in the Southwest. P. L. Edwards. Overland Monthly (259 Minna st., San Francisco 10c) n s 69: 501-4 Je '17

Debate: resolved, That arid- and swamp-land reclamation can be undertaken more advantageously by government activity than by private enterprise. W. R. King; C. R. Graves. Irr Age 32:54-8, 70-6 F-Mr '17

Elwood Mead outlines his rural credit experiment. Irr Age 31:102 My '16  
Farm loans on irrigation projects. Congressional Record (Washington, D.C.) 56:1273-87 Ja 23 '18

Giving the settler on irrigation projects a square deal. Irr Age 31:69 Mr '16  
\* Importance of irrigation to New Mexico and Arizona. W. S. Long. Am Catholic Quar R (610 S. Washington sq., Philadelphia \$4 per yr.) 43:330-9 Ap '18

Interesting letter concerning recent hearings before the House committee on irrigated lands. F. D. Catlin. Irr Ag 32:136-8 Jl '17  
Investigation on irrigation and drainage in the West. O. W. Israelson and H. E. Murdock. Am Soc Ag Eng Trans 11:181-91 '18

Irrigation and our national food supply. P. A. Cupper. Irr Age 32:186 O '17  
Irrigation in the United States, by S. Fortier; Engineering work of the United States reclamation service, by A. P. Davis; Irrigation work of the United States Indian service, by W. M. Reed; Combination of water resources for irrigation and power development, by G. G. Anderson. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 81-95, 283-92, 292-7, 297-308) '17

Irrigation in West to solve food problem. D. Lubin. Irr Age 33:50 Ap '18  
Irrigation on Muscatine island. A. W. Beatty. il Wallaces' F 42:183 F 2 '17

Making the desert bloom. C. C. Henry. il Farm Eng 4:5 Jl '16  
Mobilization of our resources. Reclamation Record (Washington, D.C. 50c per yr.) 8:210-12 My '17

News notes from irrigation projects of the country. See monthly numbers of Irrigation age

North Platte irrigation project and associated units. il Irr Age 31:166-70 S '16

Orchard irrigation question in the Pacific Northwest. R. W. Allen. il Better Fruit 13: 5-6 Jl '18

Preliminary work on great federal irrigation program needed now. Eng News-Record (10th av at 36th st, N.Y. 15c) 80:392 F 28 '18  
Progress in reclamation of arid lands in the western United States. J. B. Beadle. il map (*In* Smithsonian Inst. Report 1915, p 467-88) '16 Smithsonian inst., Washington, D. C.

Progress of irrigation. il Literary Digest (354 4th av., N.Y. 10c) 53:1653-4 D 23 '16  
Proposed irrigation projects; hearings before the Committee on irrigation of arid lands (April 15, 1916). 34p '16 Apply to congressmen

Public control of irrigation in the United States. R. P. Teele. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 855-60) '17

Reclamation from the viewpoint of the settler. E. Gillette. Irr Age 31:119-21 Je '16  
Report of the committee on irrigation of the American society of agricultural engineers for the year 1917. O. W. Israelson and E. H. Murdock. Irr Age 33:23-5 Mr '18

Resolutions at 23d International irrigation congress held at El Paso, Texas. Irr Age 32:200-1+ N '16  
Results of the irrigation work of the U.S. Reclamation service, Municipal and County Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 55:75 Ag '18

Return to the reclamation fund of the cost of construction. E. E. Roddis. Irr Age 33:51-2 Ap '18  
Review of the work on the Rio Grande irrigation project. Irr Age 31:72 Mr '16

Settlers with small farms most successful on United States reclamation projects. F. K. Lane. Eng Record (10th av. at 36th st., N.Y. 15c) 74:705-6 D 9 '16  
Status and needs of irrigation in the United States. O. W. Israelson. Am Soc Ag Eng Trans 10,no 1:84-90 '17

Surface irrigation for eastern farms. F. W. Stanley. il Farmers' B 899:1-35 '17  
Taking over the project. Irr Age 32:149-50 Ag '17

Uncle Sam's irrigation school. Irr Age 31:107 My '16  
Use of windmills in irrigation in the semiarid West. P. E. Fuller. il Farmers' B 866:1-37 '17

Water penetration in the gumbo soils of the Belle Fourche reclamation project. O. R. Mathews. U S Ag B 447:1-12 '16  
Winning the West by irrigation. il map Stone & Webster J (Boston \$1 per yr) 21:184-98 S '17

See also Reclamation service (United States); Water users' association

**Utah**

Composition of the irrigation waters of Utah. J. E. Greaves and C. T. Hirst. Utah Ag Exp B 163:1-43 '18; Abstract. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:1001-4 D '18

**Washington**

Irrigation in Quincy valley. J Fr Inst (Franklin Inst., Philadelphia 50c) 185:507-8 Ap '18  
Land owners' association Horse Heaven project pass resolutions regarding proposed bond issues. Irr Age 31:136 Jl '16

System of leasing irrigated land on trial benefits both settlers and company. R. A. Foster. Eng News-Record (10th av. at 36th st., N.Y. 15c) 78:25-7 Ap 5 '17

**Wyoming**

Irrigation settlers require aid in Wyoming. J. B. True. Eng Record (10th av. at 36th st., N.Y. 15c) 75:394 Mr 10 '17  
Kendrick launches plans for Wyoming irrigation amendments. Irr Age 33:148 Jl '18

- Irrigation, agricultural, live stock, and engineering societies of Idaho, Conference of. See Conference of agricultural, live stock, irrigation and engineering societies of Idaho
- Irrigation bonds**  
Irrigation bonds will have state and nation back of them. Irr Age 31:53-4 F '16  
Irrigation district bonds. E: N. Pearson, jr. Sunset (San Francisco 15c) 37:97 D '16
- Irrigation canals**  
Concrete lining as applied to irrigation canals. S: Fortier. il U S Ag B 126:1-86 '14  
Concrete linings for irrigation canals. 15p il '16 Portland cement assn., Chicago  
Concrete siphons for irrigation ditches. Concrete (Telegraph bldg., Detroit, Mich. 20c) 9:209 D '16  
Divisors for the measurement of irrigation water. V. M. Cone. Colo Ag Exp B 228:1-52 '17  
Earth lining prevents seepage in porous shale. J. H. Miner. Eng Record (10th av. at 36th st., N.Y. 15c) 75:108-9 Ja 20 '17  
Experiments in the use of current meters in irrigation canals. S: T. Harding. J Ag Research 5:217-32 N 8 '15  
Flow of water in irrigation channels. F. C. Scobey. il U S Ag B 194:1-63 '15  
Gate structures for irrigation canals. F. C. Scobey. U S Ag B 115:1-61 '14  
Instructions to water-masters. Irr Age 32:25 D '16  
Irrigation. H. C. Campbell. il Farm Eng 4:27 Ag '16  
Method of reducing seepage losses in an irrigation canal through porous shale. Eng and Contracting (608 S. Dearborn st., Chicago \$3 per yr) 46:522-3 D 13 '16  
Methods for removing aquatic vegetation from irrigation canals. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47: 349-50 Ap 11 '17  
Methods of stopping leaks in irrigation canals. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:169 F 13 '18  
New ditch excavated in bank of old one. C. D. Conway. il Eng Record (10th av. at 36th st., N.Y. 15c) 74:806 D 30 '16  
Small irrigation canals lined with concrete to prevent seepage water loss. C. E. Edwards. Int R Sci & Prac Ag 7,no 7:1016-17 Jl '16  
Use your irrigation canals and ditches for drainage during the wet season. il Irr Age 33:187-8 S '18  
Why some irrigation canals and reservoirs leak. A. P. Davis. il Eng News-Record (10th av at 36th st, N.Y. 15c) 80:663-5 Ap 4 '18  
See also Flumes
- Irrigation companies, Private**  
Securing settlers for private irrigation projects. H. G. Shedd. (In Pan American scientific congress Pro., 1915, v. 3, p. 518-24) '17
- Irrigation districts**  
History of the irrigation district idea in the West. il Irr Age 31:86-8 Ap '16  
\* Irrigation district plan favored. Eng News-Record (10th av at 36th st, N.Y. 15c) 81: 850-1 N 7 '18  
Irrigation districts in the United States. F. Adams. (In Pan American scientific congress Pro., 1915, v. 3, p. 162-8) '17  
What effect does an irrigation district have on landowners? W. O. Cotton. Irr Age 32:87-90 Ap '17
- Irrigation farming**  
Abuse of water on fruit trees. D. F. Fisher. Better Fruit 12:5+ Ap '18  
Agricultural development of north-west India. A. Howard and G. L. C. Howard. Ag J of India Sci Congress No 1917:67-76; Summary. Int R Sci & Prac Ag 8, no 9:1214-15 S '17  
Agriculture in the Imperial valley; a manual for settlers. W. E. Packard. il Cal Ag Exp C 159:1-70 '17  
Agriculture on government reclamation projects. C. S. Scofield and F. D. Farrell, il U S Ag Yearbook 1916:177-98  
Buying irrigated lands. J. F. Bruins. Hoard's D 55:1044 Jl 19 '18  
Canadian irrigationists will discuss all phases of agriculture. R. J. Stead. Irr Age 33:154 Jl '18  
Cotton growing under irrigation in the Southwest. P. L. Edwards. Overland Monthly (259 Minna st, San Francisco 10c) n s 69:501-4 Je '17  
Culture of small fruits on irrigated sandy land. R. W. Allen. il Ore Ag Exp B 142:1-14 '17  
\* Cutting power bills on the irrigated farm. il Sci Am (233 Broadway, N.Y. 10c) 119:471 D 14 '18  
Dairy farming on the Yanco irrigation area. M. A. O'Callaghan. Ag Gaz of New South Wales 28:359-62 My '17  
Date and rate-of-seeding tests with spring grains under irrigation. A. Atkinson. Mont Ag Exp B 120:107-17 '17  
Drainage of irrigated farms. R. A. Hart. il Farmers' B 805:1-31 '17  
Dry-farmed and irrigated wheat. J. S. Jones and C. W. Colver. Idaho Ag Exp B 88:1-18 '16  
Duty of water and how to determine it. E. C. McClellan. Irr Age 32:184-6 O '17  
Economiical irrigation of alfalfa in Sacramento valley. S. H. Beckett and R. D. Robertson. il Cal Ag Exp B 280:273-94 '17  
Economiical use of irrigation water. W. L. Powers. il map Ore Ag Exp B 140:1-79 '17  
Experiments in the disposal of irrigated crops through the use of hogs. J. A. Holden. il U S Ag B 488:1-25 '17  
Experiments in the irrigation of apple orchards. E. P. Taylor and G. J. Downing. il Idaho Ag Exp B 99:1-48 '17  
Experiments in the production of crops on alkali land on the Huntley reclamation project. Montana. D. Hansen. il U S Ag B 135:1-19 '14  
Experiments with crops under fall irrigation at the Scottsbluff reclamation project experiment farm. F. Knorr. U S Ag B 133:1-17 '14  
Experiments with legume crops under irrigation. J. S. Welch. il Idaho Ag Exp B 94:1-14 '17  
Experiments with small grains under irrigation. J. S. Welch. il Idaho Ag Exp B 93:1-24 '17  
15th annual report of the Reclamation service 1915-1916. 805p map cl 75c pa 60c '16 U. S. Reclamation service, Washington, D. C.  
Forage and root crops. C. S. Knight. il Nev Ag Exp B 86:1-20 '17  
From desert to dairy by a magician's wand. E. E. Rockwood. Hoard's D 52:39 Ag 4 '16  
Giving the settler on irrigation projects a square deal. Irr Age 31:69 Mr '16  
Grand Valley irrigation project. 16p il map n. d. U.S. Reclamation service, Washington, D.C.  
Grand Valley project. S. O. Harper. Irr Age 33:76-7 My '18  
Growing maize under irrigation. H. C. Churches. J Dept Ag Victoria 15:635 O '17  
Hairy Peruvian alfalfa. W. E. Bryan. Ariz Ag Exp Timely Hints 132:1-6 '17  
Important factors in the operation of irrigated Utah farms. E. B. Brossard. maps Utah Ag Exp B 160:1-48 '17  
Important questions for irrigators. G. Lowther. Irr Age 31:149-50 Ag '16  
Individual pumping systems for farm irrigation. Irr Age 32:107 My '17  
Intensive cultivation of alfalfa. R. H. Forbes. Ariz Ag Exp Timely Hints 93:1-8 '12 (rev. '17)  
Interesting letter concerning recent hearings before the House committee on irrigated lands. F. D. Catlin. Irr Age 32:136-8 Jl '17  
Irrigated farming in Colorado. A. Kezer. 19p n.d. Colorado state board of immigration, Capitol bldg., Denver  
Irrigated pastures. G. F. Stratton. il Country Gent 83:12 D 14 '18  
Irrigated pastures for northern reclamation projects. F. D. Farrell. (Demonstrations on reclamation projects. 2) 16p il '16 U S Bureau of plant industry, Washington, D.C.  
Irrigation experiment with alfalfa, potatoes, and wheat. Nev Ag Exp Rep 1917:27-39 '18  
Irrigation in Sind. T. F. Main. Ag J of India 13:653-9 O '18



**Irrigation farming—Continued**

- Irrigation of alfalfa. S. Fortier. *il Farmers' B* 865:1-40 '17 (B. 373 rev.)
- Irrigation of alfalfa in Imperial valley. W. E. Packard. *il Cal Ag Exp B* 284:67-84 '17
- Irrigation of alfalfa in Nevada. C. S. Knight. *il Nev Ag Exp B* 93:1-18 '18
- Irrigation of grain. W. W. McLaughlin. *il Farmers' B* 863:1-22 '17
- Irrigation of peaches. L. D. Batchelor. *il Utah Ag Exp B* 142:1-23 Ja '16
- Irrigation of plantains. R. J. D. Graham. *Ag J of India* 12:492-4 Jl '17
- Irrigation of potatoes. F. S. Harris. *il Utah Ag Exp B* 157:1-20 '17
- Irrigation of sugar beets. F. S. Harris. *il Utah Ag Exp B* 156:1-24 '17
- Irrigation of wheat. F. S. Harris. *il Utah Ag Exp B* 146:1-31 '16
- Irrigation of wheat in Nevada. C. S. Knight. *il Nev Ag Exp B* 92:1-23 n. d.
- Little farm well-tilled. R. H. Forbes. *Ariz Ag Exp Timely Hints* 133:1-8 '18
- Lure of the Southwest; advantages and disadvantages the settler will find. S. F. Morse. *il Country Gent* 81:1444 Jl 29 '16
- Maize-growing on the Murrumbidgee irrigation area. H. Wenzholz. *Ag Gaz of New South Wales* 27:533-41 Ag '16
- Management of irrigated grass pastures. J. S. Welch. *il Idaho Ag Exp B* 95:1-17 '17
- Mark Bennett writes about Chowchilla. *Irr Age* 33:208-9 N '18
- Nitrous nitrogen in irrigated soils. J. E. Greaves and others. *il Soil Sci* 3:149-54 F '17
- Optimum moisture conditions for young lemon trees on a loam soil. L. W. Fowler and C. B. Lipman. *Cal Univ Pub Ag Sci v* 3, no 2 25-36p, pl 9-11 '17 (15c)
- Overproduction in the desert. D. H. Williams. *il Country Gent* 82:1312 Ag 25 '17
- Pork production on irrigated lands in western Nebraska. J. A. Holden. *il Neb Ag Exp B* 159:1-31 '17
- Potato culture under irrigation. W. Stuart and others. *il Farmers' B* 953:1-23 '18
- Practical information for beginners in irrigation. S. Fortier. *il Farmers' B* 864:1-38 '17
- Practical irrigation-farming in Australia, with special reference to fruit and fodder crops. A. M. Makinson. *il Ag Gaz of New South Wales* 27:43-54, 489-504 Ja, Jl '16
- Practical suggestions on irrigation and drainage. D. H. Anderson. *Irr Age* 33:113-16 Je '18
- Problems of an irrigation farmer. A. R. Williams. *Farm Eng* 3:193 Mr '16
- Problems of irrigation farming. C. W. Skinner. *Rural N Y* 76:871 Jl 14 '17
- Production of alfalfa in southern Idaho. L. C. Aicher. *il Idaho Ag Exp B* 101:1-20 '17
- Profits in farming on irrigated areas in Utah Lake valley. E. H. Thomson and H. M. Dixon. *il map U S Ag B* 117:1-21 '14
- Progress report of cooperative irrigation experiments at California university farm. Davis, Cal., 1909-1912. S. H. Beckett. *U S Ag B* 10:1-21 '13
- Reclamation from the viewpoint of the settler. E. Gillette. *Irr Age* 31:119-21 Je '16
- Relation between quantity of irrigation water used and quantity of crop produced, by J. A. Widsøe; Adaptation of methods of applying water to soils, by S. T. Harding; Uniformity of distribution of moisture in soils, by P. E. Fuller. (*In Pan American scientific congress* Pro., 1915, v. 3, p. 107-21, 121-30, 169-87) '17
- Relation of weather to crops and varieties adapted to Arizona conditions. A. J. McClatchie and others. *il Ariz Ag Exp B* 78:45-118 '16
- Report of the State irrigation commissioner for the period of July 1, 1915, to Jan. 1, 1917. 16p *il '17 Kan. State irrigation comr., Scott City*
- Rural credit system needed in western development. E. Mead. (*In Minnesota farmers' institute annual*, 1916, p 159-67) '16 Extension division, University Farm, St Paul
- Sheep industry on the Minidoka reclamation project. E. F. Rinehart. *il U S Ag B* 573:1-28 '17
- Status of farming in the lower Rio Grande irrigated district of Texas. R. E. Willard. *il map U S Ag B* 665:1-24 '18
- Stimulation of food production under reclamation projects; hearings before the House Committee on irrigation of arid lands on H. R. 2913 (reintroduced H. R. 4431). 6pts '17 Apply to congressmen
- Study of land settlement in Wyoming. Cal Commonwealth Club Transac (San Francisco 19c) 11:461-5 D '16
- Sub-irrigation farming. J. C. Pridmore. *il Field* 11:28:86 F '18
- Successful irrigation. 8p n.d. Kan. State irrigation comr., Scott City
- Contains special reference to alfalfa
- Sugar-beet growing under irrigation. C. O. Townsend. *il Farmers' B* 567:1-28 '18 (rev)
- Sunshine valleys of the western slope. C. J. Blanchard. *il Irr Age* 33:21-2 Mr '18
- 27th annual report of the Arizona agricultural experiment station for the year ending June 30, 1916. *il Ariz Ag Exp Rep* 1916:239-320 '16
- 28th annual report of the agricultural experiment station of the New Mexico college of agriculture, 1916-1917. *il N M Ag Exp Rep* 1916-1917:1-92 '17
- Uncompahgre Valley irrigation project. 23p *il map n. d. U.S. Reclamation service, Washington, D.C.*
- Water penetration in the gumbo soils of the Belle Fourche reclamation project. *Irr Age* 32:26 D '16
- Wheat. R. L. Stewart. *il N M Ag Exp B* 109:1-29 '18
- Wheats for hay under irrigation at Yanco experiment farm. J. M. Pitt. *Ag Gaz of New South Wales* 27:95-6 F '16
- Wheats for hay under irrigation at Yanco experiment farm. J. M. Pitt. *il Ag Gaz of New South Wales* 28:311-16 My '17
- Whole vs. cut potato tubers for planting on irrigated land. L. C. Aicher. *il Am Soc Agron J* 9:217-23 My '17
- Whole vs. cut potato tubers for planting on irrigated land. J. S. Welch. *Am Soc Agron J* 9:224-30 My '17
- Winter grains. T. S. Parsons. *il Wyo Ag Exp B* 116:39-52 '17
- Work of the Belle Fourche reclamation project experiment farm in 1916. B. Aune. (W. I. A.—14) 28p *il '17 U.S. Bur. of plant industry, Washington, D.C.*
- Work of the Huntley reclamation project experiment farm in 1916. D. Hansen. (W. I. A.—15) 25p *il '17 U.S. Bur. of plant industry, Washington, D.C.*
- Work of the Huntley reclamation project experiment farm in 1917. D. Hansen. (W. I. A. C. 22) 29p '18 U S Ag
- Work of the Scottsbluff reclamation project experiment farm in 1916. F. Knorr. (W. I. A.—18) 18p '18 U S Ag
- Work of the Truckee-Carson reclamation project experiment farm in 1916. F. B. Headley. (W. I. A.—19) 18p *il '18 U S Ag*
- Work of the Unatilla reclamation project experiment farm in 1915 and 1916. R. W. Allen. (W. I. A.—17) 37p *il '17 U S Ag*
- Work of the Yuma reclamation project experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) 40p *il '18 U S Ag*
- Irrigation laws**
- Arizona adopts statute which will remedy many irrigation evils. E. B. House. *Irr Age* 31:116 Je '16
- California's irrigation law analyzed. *Irr Age* 31:71 Mr '16
- Engineering and construction for irrigation district. L. M. Rice. *Irr Age* 31:152-4 Ag '16
- Federal farm loan act helps district plan. *Irr Age* 32:33 Ap '17
- History of the irrigation district idea in the West. *il Irr Age* 31:86-8 Ap '16
- Idaho advances in irrigation legislation. *il Irr Age* 31:55 F '16
- Irrigation district law for Oregon. *Irr Age* 32:67 Mr '17
- Irrigation laws. 2d ed 173p '16 Secretary of state, Olympia, Wash.

**Irrigation laws—Continued**

- Loi n. 26 portant amendement à la loi n. 8 de 1912 sur l'irrigation et la conservation des eaux en Afrique du Sud. *Int Yearbook Ag Leg* 1916:585-6 '17
- Proposed water code. G. E. P. Smith. *Ariz Ag Ext C* 11:1-8 '16
- Vigorous protest to recent ruling of reclamation service. *Irr Age* 31:43 Ja '16
- \* Western irrigation law a devolution of the law of appropriation. A. B. Preuss. *Am Law R* (211 N. 7th st, St Louis, Mo. \$1) 52: 41-62 Ja '18
- What effect does an irrigation district have on landowners? W. O. Cotton. *Irr Age* 32:87-90 Ap '17

**Isellema**

- Indian species of isellema. R. S. Hole. *Ag J of India Sci Congress* No 1917:125-31

**Isle of Wight disease.** See Bees—Diseases and pests**Isomerism**

- Specificity of proteins and carbohydrates in relation to genera, species and varieties. E: T. Reichert. *Am J Bot* 3:91-8 Mr '16

**Isosoma.** See Wheat isosoma**Isotoma petrea**

- Isotoma petrea—a suspected poison plant. T. G. B. Osborn. *il J Dept Ag S Australia* 22:50-2 Ag '18

**Italian beekeepers' federation**

- Development of the federation from 1904-1914. *Int R Ag Econ* 64:33 Ap '16

**Italian cookery.** See Cookery, Italian**Italian farmers' society**

- Agricultural week of Rome. *Int R Ag Econ* 64:26-8 Ap '16

**Italy.** See subhead Italy under special subjects, e.g. Agriculture—Italy, Food supply—Italy**Ivory, Vegetable.** See Vegetable ivory**Ivy**

- Growing ivy. *Gard Chron Am* 20:395; 22:172 S '16, Je '18

## J

**Jack-in-the-pulpit**

- Early saxifrage, bloodroot, and jack-in-the-pulpit. R. W. Shufeldt. *il Am For* 23:83-7 F '17

**Jackson, Richard E.**

- Sketch. *por Am Sheep B & W* 36:65 F '16

**Jam**

- Filling the jam closet. D. Blake. *Country Gent* 81:1208 Je 10 '16

- Jams, butters, etc. *Weekly N L* 5:3 Ag 8 '17
- Marmalade and jam; less sugar and some salt. I. E. Lord. *J Home Econ* 9:375 Ag '17

**Jamaica**

- Birds and business: what happened in Jamaica. L. Hasbrouck. *il Nat Stock & F* 40:406 Jl 15 '16

See also Botany—Jamaica

**Jamaica sorrell.** See Roselle**James, Thomas P., 1848-**

- Pioneer recounts old days of great Southwest: autobiography. *por Am Sheep B & W* 36: 266-7 My '16

**Jane Washburn's shopping; story.** *il O Judd Farmer* 63:17 D 22; 15 D 29 '17**Japan.** See Bicicultural trade associations, Central institute of; also subhead Japan under special subjects, e.g. Agriculture—Japan, Plants—Japan**Japan clover.** See Lespedeza**Japanese beetles**

- Eradication work against the Japanese beetle. *N J Ag Dept B* 17:145-7 '18
- Quarantine on account of Japanese beetle. D. F. Houston. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 91-2 '18 U S Ag

**Japanese cherry trees.** See Cherries**Japanese dwarf trees.** See Trees, Dwarf**Japanese gardens.** See Gardens, Japanese**Japanese maple.** See Maple**Japanese quince**

- Japanese quince. *il Gard Chron Am* 22:196 Jl '18

**Japanese rose.** See *Kerria japonica***Japanese sugar cane**

- Fertilizers for Japanese cane. J: M. Scott. *il Fla Ag Exp B* 144:91-8 '18; Same cond. *Fla Ag Exp Rep* 1917:28R-32R '18
- Japanese cane. J: M. Scott. *il Fla Ag Exp B* 129:25-44 '16; Same cond. *Hoards D* 51:855 Je 16 '16
- Japanese sugar cane. S. M. Tracy. (F. C. I.—49) 4p '18 U.S. Bur. of plant industry, Washington, D.C.
- Japanese sugar cane as a forage crop. J. F. Duggar. *Prog F* 32:1094 O 20 '17
- Japanese sugar cane as a forage crop. A. H. Leidigh and others. *il map Tex Ag Exp B* 195:1-28 '16

**Jassidae.** See Apple leaf hoppers**Jays**

- Crows and jays. *il Am For* 22:610-11 O '16

**Jefferson county wool growers' association**

- Constitution and by-laws. *Wallaces F* 42:1464 O 26 '17

**Jefferson valley Holstein dairymen's association**

- Organization. G. L. Martin. *Kimball's D F* 14:460 Jl 15 '16

**Jelly**

- Canning and jelly-making. E. L. Ragsdale. *Fruit-Grower* 27:416 S 1 '16
- Canning and preserving of fruits; jelly making. B. R. Murphy. (*Home Econ. B.* 8) 2p '17 Woman's dept., Bur. farm development, Chamber of commerce, Memphis, Tenn.
- \* Cider apple jelly. B. T. P. Barker. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:282-3 N 2 '18
- Currant jelly. B. Swallowell. *O Judd Farmer* 63:16 Ag 4 '17
- Easy jelly making. *Nat Stock & F* 41:446 Ag 4 '17
- Facts about jelly making. C. O. Warford. *Rural N Y* 75:1000 Jl 22 '16
- Fall jellies. A. M. Johnson. *Country Gent* 81: 1638 S 2 '16
- Fruit jelly stock. W. V. Cruess. *Better Fruit* 13:14-15 O '18
- Fruit juices for jelly making kept without sugar. *Rural N Y* 76:841 Je 30 '17
- Getting all the jelly. Mrs E. H. Favor. *Fruit-Grower* 28:324 Jl 15 '17
- If your jelly won't jell, there is always a reason. *Green's Fruit Grower* 37:15 Ag '17
- Jellies and marmalades from citrus fruits. W. V. Cruess. *il Cal Ag Exp C* 146:1-8 '16
- Jellies from pectin. *Weekly N L* 5:7 Ag 8 '17
- Jellies, preserves and marmalades. A. E. Harris and S. W. Partridge. *Florida State College for Women B* 18:1-29 '18
- Jelly making. *Weekly N L* 5:5 Ag 8 '17
- Jelly making. A. L. Garvin. *il Purdue Ag Ext Leaflet* 86:1-4 '17
- Jelly making. A. M. Johnson. *Country Gent* 81:1564 Ag 19 '16
- Jelly making, preserving and pickling. G. Erickson, comp. S D Ag Ext 12p mim n.d.
- Jelly-making secrets. H. Mason. *il Ohio F* 140: 122 Ag 18 '17
- Keeping juice for jelly. A. Mills. *Country Gent* 81:1742 S 23 '16
- Making fruit jellies. O. Powell. *il Country Gent* 82:1213-4 Jl 28 '17
- Making jelly. *Prac F* 113:248 Jl 1 '17
- Marmalades, jams and jellies to carry you through till summer. M. H. Talbott. *il Country Gent* 81:86 Ja 8 '16
- New and delicious jelly. L. Leonard. *Rural N Y* 76:946 Ag 4 '17
- Orange pectin for jelly. M. M. Conklin. *Country Gent* 81:1278 Je 24 '16
- Principles of jelly-making. N. E. Goldthwaite. *il Ill Univ (Urbana) B v* 11:1-18 Mr 30 '14 (5th ed '17)
- Supplying pectin for jellies. *Ohio F* 142:107 Ag 3 '18



**Jelly**—Continued

- Why and how of good jelly. Mrs E. H. Ervin. Ohio F 142:38 J1 13 '18  
Winter jelly; an orange-lemon combination. A. M. Johnson. Country Gent 82:303 F 10 '17  
Your jelly difficulties. Country Gent 81:1742 S 23 '16

**Jenaquen.** See Sisal hemp

**Jensen, Jens Ludwig,** 1836-1904

- Sketch. F. K. Ravn. por Phyt 7:1-4 F '17

**Jersey, Island of**

- Jersey and its cattle. C. S. Plumb. il Field II 27:349-51 My '17  
Some impressions of the island. R. E. Hutchison. il Jersey B 36:1029-30 J1 4 '17; Same. Prac F 113:293-4 Ag 15 '17  
What a sailor knows about Jerseys. R. M. Gow. Jersey B 36:1393 S 12 '17

**Jerseys**

- Accredited and once tested Jersey herds. Jersey B 37:1721 O 16 '18  
All aboard the dairy special! il Hoard's D 52:314 S 29 '16  
American Jersey cattle club meeting. Jersey B 35:721-2+ My 10 '16  
Answer to why breed Jerseys. C. R. Brackett. Jersey B 37:757-8 My 15 '18  
Attractive Jersey show at Memphis, Tenn. Jersey B 36:1559 O 10 '17  
Authenticated test work of Jerseys in Texas. R. H. Eckhardt. Jersey B 35:235-36 F 16 '16  
Banking on the Jersey in North Carolina. A. L. Tichane. il Jersey B 37:434-5 Mr 20 '18  
Barn full of Jersey history; Hood farm. J. E. Dodge. il Jersey B 36:1287-8 Ag 22 '17  
Best five Jersey year's record in each of eight classes. Jersey B 37:84, 1092, 1462, 1738, 1912 Ja 16, J1 10, S 11, O 16, N 13 '18  
Big Arizona show. Jersey B 36:1942 D 12 '17  
Big National on at Columbus. il Jersey B 36:1664-5 O 24 '17  
Breed Jerseys for milk production. H. F. Probert. Jersey B 37:385-6 Mr 13 '18  
Breeding for production and type. C. F. Reid. il Kimball's D F 14:430 J1 1 '16  
Breeding for quality. W. E. Rinehart. Jersey B 35:1914 D 6 '16  
Breeding of the Purdue Jersey herd. R. L. Caldwell. il Purdue Ag 10:29-31 My '16  
Breeding principles at Rockwood. H. Jenkins. Jersey B 35:524 Ap 5 '16  
Breeds of dairy cattle. il Farmers' B 893:29-34 '17  
Building on a solid foundation. F. B. Keeney. Jersey B 36:623 Ap 25 '17  
Building up a pure bred Jersey herd. R. Wylie. Jersey B 36:1324 Ag 29 '17  
Butler Jerseys lost at sea. E. Butler. il Field II 27:752 O '17  
California's champion Jersey; Rowena's Interested Fern. J. C. Hertel. il Jersey B 37:676 My 1 '18  
Canadian national exhibition, Toronto. Jersey B 37:1493 S 18 '18  
Can't beat those Oregon Jerseys. Jersey B 37:1322 Ag 21 '18  
City man makes good in dairying. E. H. Barton. Hoard's D 52:473 O 27 '16  
Claims of the Jersey. R. M. Gow. Jersey B 35:233 F 16 '16  
Class leaders by states. Jersey B 37:772, 811 My 15-22 '18  
Coaticook a Jersey centre. J Ag (Quebec) 22:23-4 Ag '18  
Colonel T. S. Cooper of Coopersburg. Field II 26:320 Ap '16  
Comments on the medal awards. E: A. Grombacher. Jersey B 36:876-7 Je 6 '17  
Consistent showing of r. of m. stock. Jersey B 36:1555 O 10 '17  
Co-operation by state clubs. A. C. Ragsdale. Jersey B 37:1048 J1 3 '18  
Co-operation our greatest need. R. L. Burkhardt. Jersey B 36:464 Mr 23 '17  
Cooper's Decoration day climax. Jersey B 35:890-1+ Je 7 '16  
Dayton to the fore in the Jersey business. R. F. Whitehouse. Jersey B 37:600 Ap 17 '18  
Death of Sultana's Golden Jolly. T. S. Cooper. Breeder's Gaz 69:869 Ap 20 '16  
Developing Ohio state dairy champions. L. L. Rummell. il Ohio F 141:525+ Ap 13 '18

- Do Jersey meetings pay? Jersey B 35:193 F 9 '16  
Droop of rump in Jersey cattle. Jersey B 35:1097 J1 12 '16  
Early history of the Oregon Jerseys. T: Withycombe. Jersey B 36:166 Ja 31 '17  
Early maturity of the Jersey breed. E. A. Grombacher. il Field II 26:29-30 Ja '16  
Earns championship against odds; Sophie's Dolly Dimple. il Jersey B 36:1618 O 17 '17; Same. Hoard's D 54:546 N 9 '17  
Economy of production by dairy cows. R. I. Grady. Ohio Ag Exp B v 2:334-3 O '17  
Ed Cary's cows. W. W. Bushnell. il Country Gent 82:1050 Je 23 '17  
Effects of testing on Jerseys. il Field II 26:518 Je '16  
Eighteen years a producer; Miss Lorna's Daisy 146324. J. A. Bateson. il Jersey B 36:789 My 23 '17  
Essay on line breeding. H. G. Van Pelt. Jersey B 37:389 Mr 13 '18  
Establishing a great herd in Canada. il Jersey B 37:469 Mr 27 '18  
Facts as I see them. J. A. Driscoll. Jersey B 35:130 Ja 26 '16  
Fair deal for Jersey breeders. W. Macmonnies. Jersey B 36:633 Ap 25 '17  
Favors Jerseys of the larger size. C. W. Pfistner. Jersey B 36:553 Ap 11 '17  
Fifty-pound list. R. M. Gow. Jersey B 37:1658 O 9 '18  
Fifty-pound list reflects Jersey progress. E: A. Grombacher. Jersey B 36:1249 Ag 15 '17  
Financial Sensation a business investment. D. E. Andrews. Kimball's D F 16:492 S 15 '18  
First 1,000-lb. daughter of an imported bull. R. E. Hutchison. il Jersey B 37:151 Ja 30 '18  
Flying Jerseys have a most successful trip. Jersey B 35:1630-1 O 18 '16  
Form and function. W. Macmonnies. Jersey B 36:291 F 21 '17  
Four generations of remarkable Jerseys. il Jersey B 37:149-50 Ja 30 '18  
From a losing game to success. Jersey B 36:501 Ap 4 '17  
Frozen gold from Jerseys. D. V. Vandiver. il Jersey B 36:665 My 2 '17  
Golden Fern's Noble leaves island. P. L. Mourant. Jersey B 35:1463 S 20 '16  
Goldie Beechfield's record. Jersey B 35:270 F 23 '16  
Goldie's Nehalem Beauty comes back. il Jersey B 37:345 Mr 6 '18  
Goldie's Nehalem Beauty is champion three-year-old. R. B. White. Jersey B 36:114 Ja 24 '17  
Good example of Jersey longevity. Jersey B 36:548 Ap 11 '17  
Good Jersey show at Spokane interstate. il Jersey B 36:1517 O 3 '17  
Great bull sent to the shambles. F. Yoder. Jersey B 37:1776 O 23 '18  
Great California report. Jersey B 37:1541 S 25 '18  
Great herd started. W. R. Spann. Jersey B 37:552 Ap 10 '18  
Great Jersey work in Langlade co., Wis. Jersey B 36:1067 J1 11 '17  
Great producer and a great dam; St Mawes Susy. E: A. Grombacher. il Jersey B 36:381 Mr 14 '17  
Great records and persistency; Spermfild Owl's Eva. A. L. Tichane. Hoard's D 56:251 S 20 '18  
Great show at Kansas City. il Jersey B 37:1537-8+ S 25 '18  
Great work in Utah. G: C. Smith. Jersey B 37:241 F 13 '18  
Great year of activity for the Jersey. Jersey B 35:2017-24 D 27 '16  
Greatest bull in the world. A. O. Smoot. Jersey B 37:1982 N 27 '18  
Hearts and Jerseys; story of new A. J. C. C. film. Jersey B 37:1237-8 Ag 7 '18  
Herd book examination on the island. P. L. Mourant. Jersey B 35:1201 Ag 2 '16  
High level dairy production of Jersey breed. R. M. Gow. Jersey B 35:50 Ja 12 '16  
High testing Jersey milk. Jersey B 36:1174 Ag 1 '17

## Jerseys--Continued

- Highest cows in each state, in eight classes, to April 24, 1917. Jersey B 36:790+ 836+, 879-80, 919+, 956 My 23-Je 20 '17
- Highest priced Jerseys usually cheapest. W. R. Proctor. Jersey B 37:1641 O 9 '18
- Highest record cows in various classes on June 15, 1916, as compiled by the A. J. C. club. Jersey B 35:1196, 1232, 1268 Ag 2-16 '16
- Highest record Jerseys. R. M. Gow. il Hoard's D 52:762-3 D 22 '16
- Highest yields of Jerseys. Hoard's D 56:628 N 29 '18
- History and results of scale of points of the Jersey breed of cattle. W. N. Clark. Jersey B 35:23, 59, 92, 132, 167 Ja 5-F 2 '16
- Holsteins and Jerseys. H. McAlister. Breeder's Gaz 69:960 My 4 '16
- Hood Farm Toronto's record. J. E. Dodge. Jersey B 35:169 F 2 '16
- How a \$5.00 Jersey heifer investment returned \$2,920. E. D. Page. Jersey B 36:198 F 7 '17
- How I bought Blue Belle. T. S. Cooper. il Kimball's D F 14:190 Mr 15 '16
- How Jerseys thrill the heart; Hood farm. C. I. Hood. Jersey B 36:1597 O 17 '17
- How Raleigh came to America. J. V. Cotta. Jersey B 36:44 Ja 10 '17
- How to photograph Jerseys. A. L. Tichane. Jersey B 37:122 Ja 23 '18
- I came, I saw, was conquered. J. B. Early. Jersey B 37:866 My 29 '18
- Illinois state fair Jersey show. Jersey B 36:1440 S 19 '17
- Illinois state fair; with list of awards. il Jersey B 35:1504 S 27 '16
- Importance of the Jersey grade to the breed. E. A. Grombacher. Jersey B 35:650 Ap 26 '16
- Improving type and ability at the pail. W. Macmonnies. il Field II 27:355 My '17
- Incomparable Jersey cow. G. Blanchard. Jersey B 35:1593 O 11 '16
- Indiana state fair brings out great exhibition of Jerseys; list of awards. Jersey B 35:1419 S 13 '16
- Influence of the seven-day test on American Jerseys. P. Brown. Jersey B 35:1794 N 15 '16
- Inheritance of Jersey colors. J. J. Hooper. Jersey B 37:1009 Je 26 '18; Same. Breeder's Gaz 74:264 Ag 22 '18
- Intensifying Jersey producing blood. il Breeder's Gaz 69:914 Ap 27 '16; Same. Kimball's D F 14:337 My 15 '16
- Iowa dairy show Jersey prizes. Jersey B 35:1306 Ag 23 '16
- Is register of merit testing worth while? R. E. Hutchison. il Jersey B 37:465-6 Mr 27 '18
- Island Jerseys. W. T. Crandall. il Hoard's D 53:229 Mr 2 '17
- Island spring show. P. L. Mourant. Jersey B 36:961 Je 20 '17
- Jersey, The. G. L. Ogle. Fruit-Grower 27:24 Ja 1 '16
- Jersey and its cattle. C. S. Plumb. il Field II 27:349-51 My '17
- Jersey as a butter cow. W. R. Gilbert. Jersey B 35:1209 Ag 2 '16
- Jersey at the Iowa state fair. Jersey B 36:1370A S 5 '17
- Jersey blood as a national asset. D. F. Lee. Jersey B 36:1323, 1396, 1436 Ag 29, S 12-19 '17
- Jersey conditions in the South. R. G. Miller. Jersey B 36:1107 Jl 18 '17
- Jersey cow again comes to the front; Sophie 19th of Hood Farm. R. M. Gow. il Breeder's Gaz 72:1035 D 6 '17
- Jersey cow in New Zealand. W. M. Singleton. Kimball's D F 14:240 Ap 1 '16
- Jersey cow is defended. D. O. Bull. Jersey B 35:691 My 3 '16
- Jersey cows with records of 700 lbs. fat and over. J. R. Sibley. il Jersey B 37:387 Mr 13 '18
- Jersey field day in old Virginia. R. M. Gow. il Jersey B 37:1449-50 S 11 '18
- Jersey history. il Hoard's D 52:328 S 29 '16
- Jersey milk proven most valuable as food for infants and young animals in several years' tests. W. Macmonnies. il Jersey B 36:421-2 Mr 21 '17
- Jersey notes from New Zealand. Jersey B 37:347 Mr 6 '18
- Jersey performances in 1915. Kimball's D F 14:98 F 15 '16
- Jersey prizes at the National. Jersey B 35:1304 Ag 23 '16
- Jersey progress. Kimball's D F 14:312 My 1 '16
- Jersey progress in southern Indiana. C. B. Jenkins. Jersey B 36:1211 Ag 8 '17
- Jersey records showing estimated production and feed consumed; tabulation. N J Ag Exp Rep 1916:220-3 '17
- Jersey show at the state fair of Texas. C. Thomas. Jersey B 36:1871 N 28 '17
- Jersey special. Kimball's D F 14:696 N 1 '16
- Jersey special goes east. Hoard's D 52:477 O 27 '16
- Jersey special starts with flying colors. Jersey B 35:1584-7 O 11 '16
- Jersey the profitable cow for the South. C. H. Staples. Jersey B 37:1667 O 9 '18
- Jersey, the small farmer's best friend. Mrs. M. A. Covode. il Jersey B 36:1513 O 3 '17
- Jersey walk-away in Oregon. Jersey B 36:791 My 23 '17
- Jersey well established at Kentucky college. J. J. Hooper. il Jersey B 36:1065 Jl 11 '17
- Jerseys and Holsteins. H. W. Lane. Breeder's Gaz 73:257 F 7 '18
- Jerseys and the official test. R. M. Gow. il Kimball's D F 15:627 S 15 '17
- Jerseys at Britain's war-time royal show. Jersey B 35:1154 Jl 26 '16
- Jerseys at Cowra experiment station. M. H. Reynolds. il Ag Gaz of New South Wales 28:467-74 Jl '17
- Jerseys at Indianapolis. Jersey B 36:1397 S 12 '17
- Jerseys at the California state fair; with list of awards. Jersey B 35:1540 O 4 '16
- Jerseys at the Iowa agricultural college. L. S. Gillette. il Jersey B 36:993-4 Je 27 '17
- Jerseys at the Iowa state fair; list of awards. Jersey B 35:1418 S 13 '16
- Jerseys at the Kansas agricultural college. il Jersey B 36:953 Je 20 '17
- Jerseys at the Minnesota state fair. il Jersey B 36:1437 S 19 '17
- Jerseys at the National. A. G. Morrell. il Prac F 112:450 D 1 '16
- Jerseys at the National dairy show. il Hoard's D 56:473 N 1 '18
- Jerseys at the National dairy show. il Jersey B 35:1673-5+ O 25 '16
- Jerseys at the Nebraska state fair, 1916. Jersey B 35:1464 S 20 '16
- Jerseys at the Nebraska state fair, 1917. Jersey B 36:1439 S 19 '17
- Jerseys at the Tennessee state fair. Jersey B 37:1541 S 25 '18
- Jerseys at the University of Nebraska. E. E. Woodward. il Jersey B 36:1173 Ag 1 '17
- Jerseys at Topeka, Kansas, fair; with list of awards. Jersey B 35:1503 S 27 '16
- Jerseys at Vancouver fair. il Jersey B 37:1540 S 25 '18
- Jerseys at Vermont state fair; with list of awards. Jersey B 35:1506 S 27 '16
- Jerseys at Wildwood. Jersey B 35:1644 O 18 '16
- Jerseys defeat Holsteins by good margin. Jersey B 36:621 Ap 25 '17
- Jerseys dominate Syracuse show. A. L. Tichane. il Jersey B 37:1539 S 25 '18
- Jerseys easily adapted to conditions. L. L. Doolittle. Jersey B 36:627 Ap 25 '17
- Jerseys foot bills—each generation better. J. W. Chapman, Jr. Jersey B 36:354 Mr 7 '17
- Jerseys in Iowa. Jersey B 35:777 My 17 '16
- Jerseys in northern Minnesota. R. Brackett. Breeder's Gaz 73:427 F 28 '18
- Jerseys in Oregon. Jersey B 37:156 Ja 30 '18
- Jerseys in Tennessee. H. A. Morgan. Jersey B 36:1252 Ag 15 '17
- Jerseys in the lead among 5313 cows. il Jersey B 36:1322 Ag 29 '17
- Jerseys in the Southland. W. G. Davis. Jersey B 36:1175 Ag 1 '17



**Jerseys—Continued**

Jerseys lead in Langlade co. (Wis.) cow test work. F. G. Swoboda. Jersey B 36:7 Ja 3 '17

Jerseys prominent at three state fairs. il Jersey B 37:1496+ S 18 '18

Jerseys put up corking show at Memphis. Jersey B 37:1598 O 2 '18

Jerseys strong in the South. J. J. Hooper. il Jersey B 36:541 Ap 11 '17

Jerseys supply profitable retail trade. H. E. Beecher. Jersey B 35:736 My 10 '16

Jerseys to be slaughtered? R. M. Gow. Jersey B 36:1979 D 19 '17

Jerseys triumph at Trenton. A. L. Tichane. Jersey B 37:1719 O 16 '18

Jerseys with records of 50 lbs. of butter-fat in the month. Jersey B 35:680+, 812-13, 980+, 1314+, 1540+, 1758-9, 1868; 36:6, 200, 384+, 714, 926+, 1104+, 1252+, 1480+, 1667-8, 1872+; 37:8+, 116, 228, 428+, 592+, 763-4+, 1012+, 1120+, 1280+, 1408+, 1581, 1773-4, 1984 My 3, 24, Je 21, Ag 23, O 4, N 8, 29 '16, Ja 3, F 7, Mr 14, Ap 18, My 9, Je 13, Jl 18, Ag 15, S 26, O 24, N 28 '17, Ja 2, 23, F 13, Mr 20, Ap 17, My 15, Je 26, Jl 17, Ag 14, S 4, O 2, 23, N 27 '18

Join hands once more—for 1918. A. L. Tichane. Jersey B 36:2017-19+ D 26 '17

Jottings from British Columbia. H. Dorling. Jersey B 37:1200 Jl 31 '18

Judging Jerseys. H. G. Van Pelt. Jersey B 37:1653-4+ O 9 '18

Kansas City presented a great dairy exhibition; list of awards. Jersey B 35:1495 S 27 '16

Kentucky experiment station herd of Jersey cows. J. J. Hooper. il Ky Ag Dept Rep 1916-1917: 357-9 '18

Kentucky state fair. Jersey B 36:1439 S 19 '17

Kentucky state fair display of Jerseys. Jersey B 35:1454-5 S 20 '16

Lad's Lady Riotress Irene—champion senior two-year-old. Jersey B 35:13-14 Ja 5 '16

Leading imported sires. J. R. Sibley. il Jersey B 37:467 Mr 27 '18

Leading Jersey of the South. T. Dempsey. il Jersey B 37:155 Ja 30 '18

Look out, Jerseys are flying. il Jersey B 35:1416 S 13 '16

Mabel's Poet and progeny in Maine. C. F. Mabery. Jersey B 35:564 Ap 12 '16

Maiden of Jersey—Miss Vermont. Jersey B 35:228 F 16 '16

Maiden of Jersey 2736. Jersey B 35:192 F 9 '16

Make the most of the breed. W. Macmonnies. Jersey B 36:1146 Jl 25 '17

Medal winning Jerseys for 1916. Breeder's Gaz 72:149 Ag 2 '17

Meetings in Ohio. Jersey B 35:194 F 9 '16

Meridale and its Jerseys. J. Andrews. il Kimball's D F 15:483+ Jl 15 '17

Meridale breeds new champion; Jap Sayda Baroness. H. G. Van Pelt. il Kimball's D F 16:174 Mr 1 '18

Mescalero ranch Jersey champion of New Mexico. M. Gray. il Jersey B 35:1344 Ag 30 '16

Milk trade on small capital. O Judd Farmer 62: 20 F 3 '17

Minnesota state fair Jersey show; with list of awards. Jersey B 35:1456 S 20 '16

Mississippi-Alabama fair. H. Jenkins. Jersey B 35:1714 N 1 '16

Mississippi glories in Jerseys. J. R. Moore. il Jersey B 37:1819 O 30 '18

Missouri Jersey wins honors for breed; Mermaid's Lily May. T. C. Reed. il Jersey B 35: 466 Mr 29 '16

Mixing steel and butter. W. E. Brown. Jersey B 36:1869-70 N 28 '17

Moose Hill farm and its pure bred Jerseys. H. F. Holcomb. Jersey B 36:1827 N 21 '17

Moose Hill Jerseys—pioneers. il Hoard's D 53: 511 Ap 13 '17

More daughters for Golden Glow's Chief. L. W. Wing. Jr. Jersey B 37:1049 Jl 3 '18

Mother of great producers. H. Jenkins. il Field II 28:313-15+ My '18

National and the Jersey. il Jersey B 37:1717-18 O 16 '18

National dairy show; the Jerseys. Breeder's Gaz 72:788 N 1 '17

New champion Jersey; Sophie's Bertha 313233. il Jersey B 36:583 Ap 18 '17

New Illinois champion Jersey. J. V. Cotta. il Jersey B 37:635 Ap 24 '18

New Jersey breeders organize Jersey association. Jersey B 35:229 F 16 '16

New light on the profits of Jerseys. W. F. McSparran. Jersey B 36:1605 O 7 '17

New Oklahoma champion Jersey. W. L. Fowler. il Jersey B 36:1515 O 3 '17

New record fifty-pound list. E. A. Grombacher. Jersey B 35:1156 Jl 26 '16

New state champion of Nebraska. Jersey B 37:1981 N 27 '18

New York state fair attracts many Jerseys. il Jersey B 36:1477 S 26 '17

News from the Island. P. Le S. Mourant. Jersey B 37:659 Ap 24 '18

Nomenclature of Jerseys. W. W. Magruder. Jersey B 35:1425 S 13 '16

Notes from Estelbrook farm. il Jersey B 37: 272 F 20 '18

Notes from the Island. P. L. Mourant. Jersey B 35:1430 S 13 '16

Ohio Jersey picnic. Kimball's D F 14:466 Jl 15 '16

Ohio state fair has best Jersey show in several years; list of awards. Jersey B 35:1378 S 6 '16

Oklahoma Jersey breaks states' records. W. L. Fowler. il Jersey B 36:461 Mr 28 '17

Oldest gold medal Jersey; Interested Cretesia. il Jersey B 35:1204 Ag 2 '16

112 lbs. 85% butter in thirty days; Meridale Oxford Lily. R. E. Hutchison. il Jersey B 37:225 F 13 '18

Oregon Jersey cattle club meeting. Jersey B 35:121-2 Ja 26 '16

Our new milk champion; Passport. E. A. Grombacher. il Jersey B 35:158 F 2 '16

Outcrossing for high production. O. Erf. Jersey B 37:505-6 Ap 3 '18

Over a ton of butter in four years. F. B. Keeney. il Jersey B 36:474 Mr 28 '17

Over the top with the Jersey. J. C. Sherer. Jersey B 37:189 F 6 '18

Pedigree of Oxford's Briar Flower. Jersey B 37:760 My 15 '18

Pedro 3187, a ten-thousand-dollar bull. T. S. Cooper. Jersey B 37:432 Mr 20 '18

Persistent Oxford blood. W. B. Dayton. il Jersey B 35:807 My 24 '16

Pleasure with Jerseys. H. McGuire. Jersey B 35:1908 D 6 '16

Pogis Irene 2d 146435. Kimball's D F 13:805 Ja 1 '16

Possible developments in ideals. J. M. W. Kitchen. Jersey B 37:976 Je 19 '18

Post graduate work. D. H. Jenkins. Jersey B 36:1746 N 7 '17

President Munn judges at Indiana state fair. Jersey B 37:1451 S 11 '18

Prizes on the Island of Jersey 1917. Jersey B 37:1240+ Ag 7 '18

Professor Hunziker's tribute to the Jersey cow. Hoard's D 52:476 O 27 '16

Profit in purebreds; how one Ohio breeder succeeds with registered Jerseys. L. L. Rummell. il Ohio F 142:397+ O 26 '18

Profits possible in dairying. il Kimball's D F 14:422 Jl 1 '16

Progress of the Jersey in the Hermiston country. Jersey B 35:202 F 9 '16

Progressive methods and the Jerseys. W. Macmonnies. il Breeder's Gaz 72:1160 D 20 '17

Prosperity at Homestead farm. A. M. Hellings. Jersey B 37:512 Ap 3 '18

Prosperous year for Jerseys. R. M. Gow. O Judd Farmer 60:9 Ja 1 '16

Proved her value through sons; Lady Letty Lambert. V. Hawkins. Jersey B 37:1166 Jl 24 '18

Purchase of Golden Swan. W. M. Singleton. il J Ag New Zealand 14:354-6 My '17

Raleigh cow makes great test. il Jersey B 37: 635 Ap 24 '18

Reason well expressed; Jersey milk. Jersey B 35:1680 O 25 '16

Record cows and what they were fed. il Field II 26:414 My '16

## Jerseys.—Continued

- Record of Jacoba's Mona. 251191. F. B. Keeney. Jersey B 35:310 Mr 1 '16
- Record price for Jersey bull; Golden Fern's Noble. il Jersey B 35:1342 Ag 30 '16; Kimball's D F 14:528 S 1 '16
- Records that reflect credit to the breed. Jersey B 35:1278 Ag 16 '16
- Redeeming Sheomet farm. J. A. McLean. il Kimball's D F 15:192 Mr 15 '17
- Regarding size of Jerseys. D. B. Hogan. il Jersey B 36:282 F 21 '17
- Regarding the fee; registration of foreign and domestic animals. F. R. Clark. Jersey B 35:765 My 17 '16
- Regarding the ton Jersey bull. E. L. Brewer. Jersey B 36:358 Mr 7 '17
- Register of merit. Hoard's D 52:328 S 29 '16
- Register of merit; leading dams. J. R. Sibley. Jersey B 37:511 Ap 3 '18
- Register of merit progress; leading breeders. J. R. Sibley. Jersey B 37:547 Ap 10 '18
- Register of merit progress; leading native sires. J. R. Sibley. il Jersey B 37:425 Mr 20 '18
- Register of merit progress; progress of r. of m. testing. J. R. Sibley. Jersey B 37:595 Ap 17 '18
- Relative dairy merits of Island and American bred Jersey. F. B. Keeney. Jersey B 35:770 My 17 '16
- Report of Jersey sires' futurity test of the Aroostook Jersey breeders' association. R. Pearl. Maine Ag Exp B 247:37-52 '16
- Resumé of Jersey work in Canada. B. A. Bull. Jersey B 37:675 My 1 '18
- Reviews Jersey situation. R. M. Gow. Jersey B 37:1085 Jl 10 '18
- Reward of \$60,000 for line breeding. H. G. Van Pelt. Jersey B 37:1494-5+ S 18 '18; Same. Kimball's D F 16:490-1+ S 15 '18
- Richest milk and its maker. E. L. D. Seymour. Country Life 31:86 N '16
- Richness of the Landseer's Fancy family. Jersey B 35:342 Mr 8 '16
- Road to success via the Jersey. J. A. Comp. Jersey B 35:387 Mr 15 '16
- Rower in his new home. E. Butler. Jersey B 37:483 Mr 27 '18
- Roycroft Jerseys. il Hoard's D 51:5-6 Ja 28 '16
- Scale of points adopted by the American Jersey cattle club. Int R Sci & Prac Ag 7,no 8:1143-5 Ag '16
- Seeing the Jerseys at quarantine. A. L. Tichane. il Jersey B 37:185-6 F 6 '18
- Selection of a Jersey bull. T. S. Cooper. Jersey B 37:1639 O 9 '18
- Selection of the Jersey sire. M. A. Wortman. Jersey B 36:622 Ap 25 '17
- Short history of the Jersey. R. M. Gow. Hoard's D 51:538 Ap 21 '16
- Silos and Jerseys in Imperial valley. C. Van Vuren. il Hoard's D 53:821 Je 8 '17
- Size of Jerseys in Oregon. D. B. Hogan. Jersey B 36:1032 Jl 4 '17
- Size, type and production. H. Dorling. Jersey B 36:424-5 Mr 21 '17
- Small Jersey bulls and cows. W. Gettys. Jersey B 35:386 Mr 15 '16
- Some conditions that affect type. C. S. Middleton. il Jersey B 36:467 Mr 28 '17
- Some good reasons for breeding Jerseys. E. W. Richter. Jersey B 36:465 Mr 28 '17
- Some high producing Oregon Jerseys. F. A. Doerfler. il Hoard's D 56:664 D 6 '18
- Some Jersey history. J. V. Cotta. Jersey B 35:200 F 9 '16
- Some practical ideas on type and judging. E. D. Page. Jersey B 36:427 Mr 21 '17
- Some recollections of Financial Countess. H. G. Van Pelt. Jersey B 36:318 F 28 '17
- Some Shefford county Jersey breeders. il J Ag (Quebec) 22:41 S '18
- Sophie 19th—world's most wonderful Jersey cow. il Hoard's D 54:799 D 28 '17
- Sophie 19th's long-distance record. Wallaces' F 43:18 Ja 4 '18
- Sophie's Tormentors. J. E. Dodge. Jersey B 35:89-90 Ja 19 '16
- State fairs and dairy shows, and sales Jersey B 36:2021-2 D 26 '17
- Story of Brookwood. H. G. Gulliver. il Field 11 28:748-60 O '18
- Story of Ganameda. E. Brown. Hoard's D 52:503 N 3 '16
- Striking performance of a New Zealand Jersey. W. M. Singleton. il J Ag New Zealand 12:45-6 Ja '16
- Study in dairy production. D. B. Hogan. il Jersey B 36:1608 O 17 '17
- Success under practical conditions. Jersey B 35:737 My 10 '16
- Success with Jerseys in New Mexico. J. V. Miller. il Jersey B 37:188 F 6 '18
- Summarizing talks on type. W. Macmonnies. Jersey B 36:922 Je 13 '17
- Sunnyside not a Mississippi bubble. H. Jenkins. il Jersey B 37:507 An 3 '18
- Supplementary 50-lb. list. Jersey B 37:1736 O 16 '18
- Take off your silk socks and wade in. F. Yoder. Jersey B 37:41-2 Ja 9 '18
- Talk on type. W. M. Macmonnies. Jersey B 35:1954-5 D 13 '16
- Ten days in Alabama. W. Macmonnies. il Hoard's D 54:149+ Ag 31 '17
- 10th National dairy show. Breeder's Gaz 70:781 O 26 '16
- Test for economic production at National. R. M. Gow. Jersey B 37:14 Ja 2 '18
- Tests accepted for publication by A. J. C. C.; list. See weekly numbers of Jersey bulletin
- That vexed question of type. H. E. Sharp. Jersey B 36:305 F 28 '17
- Their island connections. H. Jenkins. Jersey B 36:1662 O 24 '17
- There's but one type—Jersey type. D. F. Lee. Jersey B 36:582 Ap 18 '17
- They eliminated other breeds for Jerseys. Jersey B 36:383 Mr 14 '17
- They show 'em in Tennessee. Jersey B 36:1479 S 26 '17
- Thousand miles with the Jerseys. C. E. Gapen. il Country Gent 81:2037 N 25 '16
- Tick fever immune Jerseys. W. Macmonnies. Jersey B 36:159 Ja 31 '17
- Toronto exposition Jersey show. H. Jenkins. Jersey B 35:1417 S 13 '16
- Transfers of Jersey cattle. See weekly numbers of Jersey bulletin
- Trio of high producers; several Jerseys are making a strong bid for Sophie 19th's crown. il Jersey B 37:1201 Jl 31 '18; Same. Hoard's D 56:105 Ag 16 '18
- Two notable Jersey families united. R. A. Sibley. Jersey B 37:1369 Ag 28 '18
- Two thousand Jerseys as a side line. J. W. Wright. il Jersey B 36:913-14+ Je 13 '17
- Type and production go together. W. R. Span. Jersey B 36:581 Ap 18 '17
- Unexpected peep-in at Linden Grove. T. Dempsey. Jersey B 35:160 F 2 '16
- U.S. needs all the good Jerseys that can be bred or imported. J. E. Dodge. Jersey B 35:642 Ap 26 '16
- University herds well selected. J. A. McLean. Jersey B 37:937 Je 12 '18
- Utah state fair. il Jersey B 36:1748 N 7 '17
- Value of a good sire in breeding Jerseys. J. K. Wright. il Mo Ag Bd B v 14:60-6 S '16
- Visit to a few Walworth county Jersey herds. il Hoard's D 52:131+ Ag 25 '16
- Vive La France—a dream realized. il Jersey B 36:1941 D 12 '17
- We greet the show season. W. Macmonnies. Jersey B 36:1137-8 Jl 25 '17
- What constitutes a Jersey family. R. Wylie. Jersey B 37:79 Ja 16 '18
- What one delicate Jersey did. J. B. Watson. Jersey B 35:1092 Jl 12 '16
- What the Jacoba Irene family is doing. F. B. Keeney. Jersey B 35:54 Ja 12 '16
- Why I am selling an entire herd of good Jerseys. Jersey B 35:1950 D 13 '16
- Why I prefer Jerseys. R. E. Hutchison. il Prac F 112:suppl-2 F 15 '16
- Why I selected the Jersey. A. W. Murphy. il Jersey B 37:1720 O 16 '18
- Why Jerseys for the South? W. Macmonnies. Jersey B 36:347+ Mr 7 '17
- Why official testing pays. D. B. Hogan. Jersey B 36:86 Ja 17 '17
- Why the Jersey? J. M. Overton. Jersey B 35:1723 N 1 '16



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Why the Jersey is the cow for the North. R: H. Daniels. il Jersey B 37:1689 O 9 '18  
Wisconsin puts on classy Jersey show. il Jersey B 36:1475 S 26 '17  
Work of the eastern Ohio Jersey breeders association. Jersey B 35:210 F 16 '16  
Work of the New Zealand Jersey breeders' association. C. G. C. Dermer. Jersey B 35:1766 N 8 '16  
Year 1917 in review. Jersey B 36:2013-15 D 26 '17

See also names of breeders' associations, e.g. American Jersey cattle club, Carterville (Ill.) Jersey breeders' association, Michigan Jersey cattle club, Minnesota Jersey cattle club, New Zealand Jersey cattle breeders' association, Southwest Jersey cattle breeders' association, Wisconsin Jersey breeders' association

**Pedigree records**

Breeding on. J. E. Dodge. Jersey B 37:1775 O 23 '18  
Brunette Lass and her descent. il Jersey B 35:1386 S 6 '16  
Butter era of American Jerseys. Jersey B 35:1682, 1724, 1763, 1801, 1837, 1875, 1913, 1949, 1985, 2028; 36:13 O 25 '16-Ja 3 '17  
Butter test cow of 1878; Lady Oxford 4860. il Jersey B 35:720 My 10 '16  
Butter tests of 1879; Maud Lee 2416. Jersey B 35:1313 Ag 23 '16  
Connected through Lenape Chief 2d. il Jersey B 35:804 My 24 '16  
Connected with Little Sister. Jersey B 35:1088 JI 12 '16  
Daisy Grant 1445, Imp. il Jersey B 35:304 Mr 1 '16  
Daughter of Brunette Lass. Jersey B 35:1640 O 18 '16  
Daughters of Katydidn't. il Jersey B 35:932 Je 14 '16  
Descended from Brunette Lass. Jersey B 35:1547 O 4 '16  
Details about the leading sires. J. E. Dodge. Jersey B 36:154 Ja 31 '17  
Duke of Belmont jr. and Nebraska Maid. Jersey B 35:764 My 17 '16  
Eminent branch—Chapter III. J. V. Cotta. Jersey B 35:313 Mr 1 '16  
Euphorbia and Gardiner's Ripple; daughter and granddaughter of Nettle. Jersey B 35:1012 Je 28 '16  
Females to males, two to one. Jersey B 36:669 My 2 '17  
Footstep 5163, son of Wanderer, and descendants. il Jersey B 35:420, 464, 508 Mr 22-Apr 5 '16  
For the line-breeding of Raleighs. H. Jenkins. Jersey B 36:1984 D 19 '17  
Gamboge's Vellum's Majesty. il Kimball's D F 15:421 Je 15 '17  
Golden Glow's Chief family. D. B. Hogan. Jersey B 37:1780 O 23 '18  
Granddaughter of Brunette Lass. Jersey B 35:1594 O 11 '16  
Grandson of Daisy Grant; Wanderer 3014 and his progeny. il Jersey B 35:340 Mr 8 '16  
Guy Mannering's progeny. Jersey B 35:1426 S 13 '16  
Imported cow, Katydidn't. il Jersey B 35:888 Je 7 '16  
Imported Hannibal. il Jersey B 35:848 My 31 '16  
Inbred St Heliers. il Jersey B 35:552 Ap 12 '16  
Jerseys at the Oregon agricultural college. R. R. Graves. il Jersey B 36:1357-S 8 5 '17  
Kitty Clover and Chrissy. il Jersey B 35:264 F 23 '16  
Last of the butter tests of 1878; Little Sister. il Jersey B 35:1048 JI 5 '16  
Linked with the Pierrot 2d family. Jersey B 35:1238 Ag 9 '16  
Little Sister's half sister. Jersey B 35:1202 Ag 2 '16  
Male line of Khedive. G. A. Jameson. Jersey B 36:200 F 7 '17  
Mrs Knickerbocker and family. Jersey B 35:1352 Ag 30 '16  
More links from Pierrot 2d. Jersey B 35:1276 Ag 16 '16

Old herd books. R. E. Hutchinson. Jersey B 35:521 Ap 5 '16  
Progeny of Brunette Lass. il Jersey B 35:1463, 1508-9 S 20-27 '16  
Progeny of Ianthé. il Jersey B 35:596 Ap 19 '16  
Regarding birth reports to A. J. C. C. R. M. Gow. Jersey B 35:1049 JI 5 '16  
Regarding the register of merit. G. E. Nichols. Jersey B 35:268 F 23 '16  
Signalda and progeny. il Jersey B 35:12, 48, 84, 120, 156 Ja 5-F 2 '16  
Sire of Little Sister. il Jersey B 35:1126 JI 19 '16  
Some unfinished lines in the butter tests introduced by connections of Katydidn't 2734. il Jersey B 35:972 Je 21 '16  
Their American connections. H. Jenkins. Jersey B 36:1708+ O 31 '17  
Two daughters of Wanderer. il Jersey B 35:380 Mr 15 '16  
Two sons of Oxoli 1922. Jersey B 35:676 My 3 '16  
Zithey, daughter of Ianthé. il Jersey B 35:636 Ap 26 '16

**Price lists**

Autumn sale prices in the West. Jersey B 37:1863 N 6 '18  
Black & Adams sale. Jersey B 35:601 Ap 19 '16  
Bright sale. Jersey B 35:859 My 31 '16  
Burr Oak auction most successful. Jersey B 35:1832-3 N 22 '16  
Burr Oak Jersey sale. Jersey B 35:1050-1 JI 5 '16; Kimball's D F 14:464 JI 15 '16  
Burr Oak Jerseys widely distributed. Jersey B 36:875+ Je 6 '17; Kimball's D F 15:425 Je 15 '17  
Butler holds record sale. il Field II 28:412 Je '18  
Butler sale covers the continent. Jersey B 36:719+ My 9 '17; Field II 27:460 Je '17  
Cooper's Decoration day climax. Jersey B 35:890-1+ Je 7 '16; Breeder's Gaz 69:129 Je 8 '16; Kimball's D F 14:398 Je 15 '16; Field II 26:608 JI '16  
Cooper's Decoration day sale. H. G. Van Pelt. il Kimball's D F 15:432 Je 15 '17  
Cooper's last importations top the market. il Jersey B 36:873-4+ Je 6 '17; Breeder's Gaz 71:1169 Je 7 '17; Field II 27:551-2 JI '17  
Curtis sale prices. Jersey B 37:653 Ap 24 '18  
Demand for Jerseys strong at Linscott sale. Jersey B 36:916 Je 13 '17  
Dering sale. Jersey B 35:938 Je 14 '16  
Edmond Butler's Jersey sale. il Kimball's D F 16:393 My 15 '18; Jersey B 37:713-14+ My 8 '18; Field II 28:412, 502 Je-JI '18  
Elmendorf Jersey dispersal sale. Jersey B 35:850-1+ My 31 '16; Kimball's D F 14:405 Je 15 '16  
First Burr Oak sale in new home. Jersey B 37:719 My 8 '18; Kimball's D F 16:406 My 15 '18  
\$525 Jersey average. Hoard's D 53:763 My 25 '17  
Glenwell's herd dispersed. Jersey B 37:856 My 29 '18  
Good cattle will sell well anywhere. il Jersey B 36:1516 O 3 '17  
Guard Hill Jersey sale. Breeder's Gaz 71:1021 My 17 '17  
Hood farm Jersey sale. Jersey B 35:727+ My 10 '16; Breeder's Gaz 69:1027 My 11 '16; Kimball's D F 14:353 My 15 '16; Field II 26:515 Je '16; Hoard's D 51:883 Je 23 '16  
La Cima's Jerseys sell at good prices. il Jersey B 35:1756-7 N 8 '16  
Leave-taking at Burr Oak. Jersey B 36:1747 N 7 '17  
Lee sale. Jersey B 35:680 My 3 '16  
Malcolm sale. Jersey B 35:309 Mr 1 '16  
Peebly sale. Jersey B 35:684 My 3 '16  
Pulaski and Whinn farm sales. Jersey B 37:1983 N 27 '18  
Rain handicaps Linden Grove auction. Jersey B 37:893-4+ Je 5 '18; Breeder's Gaz 73:1206 Je 6 '18; Kimball's D F 16:504 Je 15 '18; Field II 28:516 JI '18

**Jerseys—Price lists—Continued**

Records broken at Hood farm. Jersey B 37: 895-6 Je 5 '18; Breeder's Gaz 73:1207 Je 6 '18; Kimball's D F 16:499 Je 15 '18; Hoard's D 55:922 Je 21 '18; Field 11 28:516 Jl '18.

Sales from Knollwood farm. C. I. Hudson. Jersey B 36:1951 D 12 '17.

Some recent sales. Jersey B 37:979-80 Je 19 '18.

Washington Jersey farm sale. Jersey B 35: 860 My 31 '16.

Wildwood farm herd dispersed. il Jersey B 37:897 Je 5 '18.

**Jerusalem artichokes. See Artichokes****Jewish agricultural and industrial aid society**

Annual report for the year 1916. 60p Jewish agricultural and industrial aid society, 174 2d av., N.Y.

Annual report for the year 1917. 46p n.d. The society, Gabriel Davidson, gen. mgr., 174 2d av., N.Y.

Work of the Jewish agricultural and industrial aid society. Int R Ag Econ 69:1-14 S '16.

**Jewish citron. See Etrogs****Jews**

Eugenics in Jewish life. M. Fishberg. J Heredity 8:543-9 D '17.

Jewish eugenics. J Heredity 8:72-4 F '17.

**Jiggers. See Chigoes****Jimson weed**

Adzuki beans and jimson weeds; favorable class material for illustrating the ratios of Mendel's law. A. F. Blakeslee and B. T. Avery. il J Heredity 8:125-31 Mr '17.

Common medicinal plants. A. Retlas. Ohio F 137:798 Je 10 '16.

Weeds of New South Wales. J. H. Maiden. il Ag Gaz of New South Wales 29:31-7 Ja '18.

**Diseases and pests**

Alternaria on datura and potato. R. D. Rands. bibliog il Phyt 7:327-38 O '17.

**Johne's disease**

Detection of Johne's disease by the use of Johnin. E. G. Hastings and others. Am Vet M Assn J 52:462-6 Ja '18.

Johne's disease. A. L. Sheather. il Ag J of India 13:21-31 Ja '18.

**Johnson grass**

Controlling Johnson grass. Hoard's D 51:840 Je 16 '16.

Johnson grass. W. R. Perkins. La Ag Ext C 10:1-7 '16.

Johnson grass control. H. C. Heard. il Ariz Ag Exp B 82:339-55 '17.

Johnson grass for hay. T. Butler. Prog F 31:1303 N 11 '16.

Johnson grass for hay. C: A. Whittle. Hoard's D 52:47 Ag 4 '16.

Note on the poisoning effect of the Johnson grass sorghum halepense. J Dept Ag Victoria 14:653 N '16.

Putting a pest to work. B. Howard. il Country Gent 83:7-8 Je 29 '18.

**Seed**

Distinguishing characters of the seeds of Sudan grass and Johnson grass. F. H. Hillman. il U S Ag B 406:1-5 '16.

Germination and viability tests of Johnson grass seed. G. T. Harrington. Assn Official Seed Analysts Pro 1916-1917:24-8, 71-6 '17.

**Joint worms. See Wheat isosoma****Jones, William James, jr.**

Sketch. M. L. Fisher. por Purdue Ag 10:15 Ap '16.

**Jordan, Sam**

Knocking out the knocker. J: E. Pickett. por Country Gent 82:1775+ N 17 '17.

**Journal of agricultural research**

Contents and index of volume V. J Ag Research 5:iii-xxvii, 1193-1207 Mr 27 '16.

Contents and index of volume VI. J Ag Research 6:iii-xxvi, 1047-60 S 25 '16.

Contents and index of volume VII. J Ag Research 7:iii-xv, 549-56 D 26 '16.

Contents and index of volume VIII. J Ag Research 8:i-xv, 477-82 Mr 26 '17.

Contents and index of volume IX. J Ag Research 9:i-x, 427-31 Je 25 '17.

Contents and index of volume XI. J Ag Research 11:i-xvii, 717-27 D 31 '17.

Publication of the results of investigations made in experiment stations in technical scientific journals, including the Journal of agricultural research; with discussion. R. Pearl. Assn Am Ag Coll & Exp Pro 1915: 186-98.

**Journal of association of official agricultural chemists**

Report. C. L. Alsberg. Assn Offic Ag Chem J 3:55-9 My '17.

**Journal of dairy science**

Review of articles in July issue. N Y Prod R 44:938 O 10 '17.

**Journalism**

Editing the agricultural bulletin; stylebook of the American association of agricultural college editors. F. C. Dean and others. 39p '18 American assn. of ag. college editors, Manhattan, Kansas.

Farm bureau news. G: A. Starring. (Sup. to B. vol. 10, no. 3) 12p '18 S. D. state college, Brookings.

General principles governing editorial work given briefly and simply as a help in editing farm bureau publications and in submitting copy for publication.

Forty-five years in farm journalism. M. J. Lawrence. Ohio F 141:6 Ja 5 '18.

Preparation for editorial work on farm papers. N. A. Crawford. Kan Ag Coll B (Manhattan) v 1, no 5 35p Mr 15 '17.

See also Agricultural periodicals; Manuscripts, Preparation of

**Juan Fernandez (island)**

Crusoe's island: Juan Fernandez. J. Hutchinson. il Gard Chron (Lond) 61:200, 209, 220-1, 230, 240 My 19-Je 16 '17.

**Judas flower; story. R. L. Apsey. il Country Gent 83:6-7+ Mr 25 '18****Judy, James W., 1822-1916**

Passing of a historic figure. Breeder's Gaz 70:534 S 28 '16.

Portrait. Breeder's Gaz 70:531 S 28 '16.

**Jujubes**

Grafted jujube of China. D: Fairchild. il J Heredity 9:3-7 Ja '18.

**Jumble sales**

Jumble sales in England. Breeder's Gaz 72: 189 Ag 9 '17.

**Juncos**

Junco. C. J. Stanwood. il Country Life 29: 148 Mr '16.

**June bugs**

General survey of the May-beetles of Illinois. S. A. Forbes. map III Ag Exp B 186:215-57 '16.

Method of cockchafer control used in Germany. K. Escherich. Int R Sci & Prac Ag 7, no 6:910-12 Je '16.

See also White grubs

**Juniper**

Cypress and juniper trees of the Rocky Mountain region. G: B. Sudworth. il maps U S Ag B 207:1-36 '15.

Genus juniperus and its commercial importance. W. Dellimore. Int R Sci & Prac Ag 7, no 6:842-4 Je '16.

**Junket**

Rennet custard—the dish that makes itself. E. D. Bache. J Home Econ 8:195-6 Ap '16.

Ways of using junket. E. P. Swallow. J Home Econ 8:258-9 My '16.

**Jute**

British India—exports of jute. Doc Leaflets 1, no 1:2-3 Jl '17.

Every bag valuable. Coop Manager & F 7:55 My '18.

Improvement of the jute crop by pure line selection. R. S. Finlow. Ag J of India 12:283-90 Ap '17.

**Juvenile delinquency**

Boy culture and agriculture. A. D. Chandler. Outlook (381 4th av, N.Y. 10c) 117:645-6, 682-3; 118:28-9 D 19 '17-Ja 2 '18.



**Juvenile delinquency—Continued**

Keep the home fires burning. W: A. McKeever. Wallaces' F 43:1524 O 18 '18

**K**

**Kafir corn**

Kafir wins its way. H. W. Doyle. *il Country Gent* 83:5 My 4 '18  
Making food from fodder. O. R. Geyer. *il Scientific Am* (233 Broadway, N.Y. 10c) 117: 117+ S 8 '17  
Milo maize and kafir corn club lessons and instructions for 1918. O. Beatty and W. T. Conway. *N M Ag Ext C* 29:1-11 F '18  
Physical and chemical study of the kafir kernel. G. L. Bidwell. *U S Ag B* 634:1-5 '18  
Pollination and cross-fertilization in the juar plant (andropogon sorghum, Brot). G. E. J. Douglas. *Int R Sci & Prac Ag* 8,no 7:986-8 J1 '17

**Kafirin**

Kafirin, an alcohol-soluble protein from kafir (andropogon sorghum); abstract. C. O. Johns and J. F. Brewster. *J Franklin Inst* (Franklin Institute, Philadelphia 50c) 184: 122 J1 '17  
Nutritive properties of kafirin. A. G. Hogan. *Int R Sci & Prac Ag* 9,no 4:477 Ap '18

**Kale**

Finger-and-toe on seakale. D. M. Cayley. *il Gard Chron* (Lond) 59:31 Ja 15 '16  
Sea kale. G. W. Kerr. *il Country Gent* 81: 936 Ap 29 '16  
Thousand-headed kale. C. J. Menze. *il Hoard's D* 53:540 Ap 13 '17

**Kalmia latifolia**. See Mountain laurel

**Kankakee, Lake**

Solving the million acre mystery. F. H. Demaree. *il map O Judd Farmer* 61:5 N 25 '16

**Kankakee county (Ill.) home improvement association**

County organization. *O Judd Farmer* 64:17 Mr 30 '18

**Kankakee county (Ill.) soil and crop improvement association**

Kankakee's big celebration. J. Temple. *O Judd Farmer* 60:21 Ap 1 '16

**Kankakee county (Ill.) young women's country club**

What clubs and a women's adviser are doing for Kankakee county. R. S. Hesler. *Banker-F* 3:10 Ap '16

**Kansas**

See also subhead Kansas under special subjects, e.g. Agriculture—Kansas, Dairy—ing—Kansas

**Industries and resources**

Kansas crops and cattle. D. Casement. *Breeder's Gaz* 69:126 Ja 20 '16  
Kansas. U. S. A. B. W. Currie. *Country Gent* 81:311-12+, 438-9 F 12, 26 '16

**Irrigation commissioner, State**

Report for the period July 1, 1915, to Jan. 1, 1917. 16p *il '17 Kan. State irrigation comr., Scott City*

**Kansas agricultural college**

Homemakers' course at Kansas agricultural college. M. P. Van Zile. *J Home Econ* 9: 174-6 Ap '17

**Kansas agricultural experiment station**

Director's report, 1915-1916. *Kan Ag Exp Rep* 1915-1916:1-49 '17

**Kansas City board of trade**

Kansas City board of trade amends its rules, future trading re-established. *Coop Manager & F* 7:37 My '18

**Kansas farmers' grain dealers' association**

4th annual convention, Salina, Kan., March 7-8, 1916. *Am Coop J* 11:804-9 Ap '16

5th annual convention, Hutchinson, Jan. 3-5, 1917. *Am Coop J* 12:444-6 F '17; *Coop Manager & F* 6:30-3 F '17

Joint convention, Wichita, March 14-16. *Coop Manager & F* 7:48-9 Ap '18; *Am Coop J* 13: 347-51 Ap '18

**Kansas food production conference**

Conference, Topeka, Kansas, March 15, 1917. *Am Fert* 46:32 Mr 31 '17

**Kansas free fair**

Free fair at Topeka. *Breeder's Gaz* 72:451 S 20 '17

Jerseys at Topeka, Kansas, fair; with list of awards. *Jersey B* 35:1503 S 27 '16

Kansas free fair at Topeka a great success. *Swine World* 6:24 O '18

Topeka's second free fair. *Breeder's Gaz* 70: 486h-9 S 21 '16

**Kansas grain dealers' association**

Convention at Kansas City, Mo., May 28-30. *Coop Manager & F* 6:40-8 J1 '17

21st annual convention, Topeka. *Coop Manager & F* 7:36-42 J1 '18

**Kansas national live stock show**

Show held in conjunction with the annual meeting of the Kansas live stock association. *Breeder's Gaz* 73:489+ Mr 7 '18

**Kansas state agricultural college**

**Division of college extension**

Extension schools in agriculture and home economics. *il Kan Ag Ext C* 7:1-12 '16

Extension service of the Kansas state agricultural college. E: C. Johnson. *il maps Kan Ag Ext B* 14:1-28 '17

**Courses of study**

Home-study service: announcement of courses and general information; extension courses. *Kan Ag Ext B v* 6:1-30 Ja '16

**Kansas state dairy association**

Annual meeting, Manhattan, Jan. 23. J. B. Fitch. *Hoard's D* 55:145 F 15 '18

**Kansas state fair**

Hutchinson show. *Breeder's Gaz* 72:502 S 27 '17

Kansas fair at Hutchinson. *Breeder's Gaz* 70:598 O 5 '16

More awards at Hutchinson, Kans. *Breeder's Gaz* 72:560 O 4 '17

**Kapok**

Kapok carding machine. *Int R Sci & Prac Ag* 7, no 1:116-17 Ja '16

**Karakul sheep**

Breeding karakul sheep. *il Pan Am Union B* (17th & B sts, N.W. Washington, D.C. 25c) 46:352-8 Mr '18

Hereditary transmission of the curly wool character of karakul sheep in crosses between the karakul and Rambouillet breeds; research carried out in Austria. L. Adametz. *Int R Sci & Prac Ag* 8,no 6:906-8 Je '17

\* Home of the Persian lamb. A. Heinecke. *il Travel* (31 Union sq., N. N.Y. 35c) 30:35-7 Ja '18

Karakul sheep. R. H. Byrd. *Wallaces' F* 41: 1274 S 29 '16

Karakul sheep. F. R. Marshall and others. *il U S Ag Yearbook* 1915:249-62

Karakul sheep and Persian lamb fur production. G. E. O'Brien. (L. S. B. Pamph. 15) 8p *il '18 Canada Ag*

Karakul sheep and Persian lamb skins. G: H. Dacy. *il Nat Wool Grower* 7:11-12 My '17

Karakul sheep breeding in South Africa. A. Holm. *Int R Sci & Prac Ag* 8, no 1:113-16 Ja '17

Karakul sheep in New York state. *il Am Sheep B & W* 37:475-6 Ag '17

Karakul sheep in the United States. C. C. Young. *il Am Sheep B & W* 37:400-1 J1 '17

Karakuls: a new western sheep with very fine wool said to have been brought to this country by Theodore Roosevelt. *il Am Coop J* 14:2+ S '18

Producing Persian fur sheep in America. H: Hoffman. *il Am Sheep B & W* 37:108-9 F '17

**Karyokinesis**

Cell division by furrowing in magnolia. C. H. Farr. *bibliog il Am J Bot* 5:379-95 J1 '18

Nuclear division of spirogyra. M. L. Merri-man. *bibliog il Bot Gaz* 61:311-24 Ap '16

**Karyokinesis—Continued**

Reduction divisions in the pollen mother cells of allium tricoccum. M. Nothnagel. bibliog il Bot Gaz 61:453-76 Je '16

**Kasting, William F.**

Sketch. por Am Flor 46:1182 Je 24 '16

**Katabolism. See Metabolism****Katydids**

Katydids injurious to oranges in California. J. R. Horton and C. E. Pemberton. il U S Ag B 256:1-24 '15

**Kearney vineyard, Fresno county, California**

Preliminary report on Kearney vineyard experimental drain. W. W. Weir. il Cal Ag Exp B 273:103-26 '16; Same. Irr Age 32:151-8 Ag '17

**Keeping a pet cook. T: L. Masson. Country Life 32:59 Je '17****Kefir**

Fermented milks. L. A. Rogers. bibliog U S Ag B 319:14-18 '16

**Keithia thujina**

Keithia thujina, the cause of a serious leaf disease of the western red cedar. J. R. Weir. il Phyt 6:360-3 Ag '16

**Kelp**

American potash once more. Rural N Y 75: 775 My 20 '16

Availability of the nitrogen in Pacific Coast kelps. G. R. Stewart. bibliog J Ag Research 4:21-38 Ap '15

California kelp operations of the Hercules powder company. il Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18: 576-80 Je 1 '18

Canadian kelp companies. Am Fert 48:33 F 16 '18

Carbon monoxide, occurrence free in kelp. S. C. Langdon. Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39:149-56 Ja '17

Carbonization of kelp for the recovery of potash. J. W. Turrentine. plan Metallurgical and Chemical Eng (239 W. 39th st., N.Y. 25c) 16:196-9 F 15 '17

Collection of kelp in the United States for potash production. Int R Sci & Prac Ag 9, no 1:43 Ja '18

Composition and use of certain seaweeds. J. Hendrick. J Bd Ag 22:1095-1107 F '16

Concerning potash from kelp. Country Gent 81:1192 Je 10 '16

Extraction of potash from kelp. C. A. Higgins. Chem & Metallurgical Eng (10th av at 36th st, N.Y. 25c) 19:432-3 S 26 '18; Same. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:832-3 O '18

Getting potash kelp with a submarine lawn mower is a war industry. il Am Machinist (10th av at 36th st, N.Y. 15c) 47:599-600 O 4 '17

Government to build potash factory. Market Growers J 20:60 Ja 15 '17

Growth of kelp. E: Porteous. Am Fert 49: 82-3 N 23 '18

Importance of developing our natural resources of potash; kelp. F: W. Brown. U S Ag Yearbook 1916:308-10; Same. Separate 717:8-10

Kelp and seaweed as manure. J. A. Macdonald. Rural N Y 76:404 Mr 17 '17

Kelp and seaweed for potatoes. J. A. Macdonald. Rural N Y 75:1046 Ag 5 '16

Kelp industry in British Columbia. R. E. Mansfield. Am Fert 45:38 Jl 8 '16

Kelp industry of the Pacific coast. A. H. Wright. Am Fert 45:31-3 N 25 '16

Organic constituents of Pacific Coast kelp. D. R. Hoagland. bibliog J Ag Research 4: 39-58 Ap '15

Potash from kelp. Am Fert 46:48 F 3 '17

Potash from kelp. il O Judd Farmer 64:20 F 9 '18

Potash from kelp. F. K. Cameron. Int R Sci & Prac Ag 7, no 1:50-1 Ja '16

Potash salts—1915. W. C. Phalen. Am Fert 45:27-8 S 16 '16

Scottish kelps. Am Fert 44:44 Je 10 '16

Seaweeds; some of their economic uses and possibilities. M. A. Howe. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:134-5 Mr 3 '17

**Kemptville school of agriculture**

\* Agricultural school at Kemptville. W. J. Bell. (In Report, Dairymen's assns., 1917. p. 67-9) '18 Ontario ag. depl., Toronto  
Kemptville school of agriculture. W. J. Bell. il Ag Gaz of Canada 5:987-90 O '18

**Kennels**

Kennel management. A. H: Higginson. il plans Country Life 32:76-9 My '17

**Kenny, Seth H., 1836-1917**

In memoriam. por Minn Hort 45:273-5 Jl '17

**Kentias**

Heacock's wartime kentias. Am Flor 50:1202 Jl 6 '18

**Kentucky**

See also subhead Kentucky under special subjects, e.g. Agriculture—Kentucky, Dairying—Kentucky

**Agriculture, labor and statistics, Bureau of**

22nd biennial report, 1916-1917. il map Ky Ag Dept Rep 1916-1917:1-480 '18

**Forester, State**

3d biennial report, 1917. 39p il '17 Ky. State forester, Frankfort

The department also publishes the following circulars: Forestry for Kentucky, by M. Maury; Forestry and the farm woodlot, by J. E. Barton; Forests of Kentucky, by J. E. Barton; Use of treated timber, by J. E. Barton

**Kentucky agricultural experiment station**

29th annual report, 1916. il Ky Ag Exp Rep 1916, pt 1:1-106 '17

30th annual report, 1917. il Ky Ag Exp Rep 1917, pt 1:1-97 '18

**Kentucky blue grass. See Blue grass****Kentucky dairy cattle club**

Annual session at the State university, Jan. 30. Jersey B 37:227 F 13 '18; Hoard's D 55:148 F 15 '18

Kentucky dairy meeting. Jersey B 35:125-6 Ja 26 '16

Kentucky state dairy meeting. Jersey B 36: 90 Ja 17 '17

**Kentucky state fair**

Kentucky state fair. Breeder's Gaz 70:480-2+ S 21 '16

Kentucky state fair display of Jerseys. Jersey B 35:1454-5 S 20 '16

Kentucky's big annual exposition. Breeder's Gaz 72:442-4 S 20 '17

Sheep at the Blue Grass state fair. F. Kleinheinz. Am Sheep B & W 36:526 S '16

**Kentucky state horticultural society**

63d annual meeting, Lexington, Ky., Jan. 4, 1917. Ky Ag Dept Rep 1916-1917:443-73 '18

**Keratitis, Infectious**

Infectious keratitis and conjunctivitis in cattle. C. A. Cary. Jersey B 36:1497 S 26 '17

Keratitis infectiosa in cattle (keratitis pyobacillosa). J. Poels. Am Vet M Assn J 51: 526-31 Jl '17

**Kermes**

Spruce cones with queer seeds. E. M. Patch. il Country Life 34:78 S '18

**Kerosene**

About lighting fires with kerosene. D. R. A. Drummond. Power F 26:30 Je '17

Appeal for saving kerosene. Power F 27:53 D '18

Burning kerosene in farm tractor. E. R. Wiggins. Power F 26:14 O '17

Burning kerosene in the tractor. G. P. Pearce. Country Gent 82:1540 O 6 '17

Buying kerosene at wholesale. O Judd Farmer 60:11 Ap 29 '16

Kerosene and its uses. C: F. Hatmaker. Country Gent 82:295 F 10 '17

Kerosene for fuel. B. J. Ruetenik. Country Gent 81:1469 Ag 5 '16

Kerosene hazards. Ohio F 138:111 Ag 5 '16



**Kerosene—Continued**

Utilizing kerosene as engine fuel. G. W. Iverson. O Judd Farmer 62:2 Ja 13 '17

**Kerosene spray**

Study of the toxicity of kerosene. W. Moore and S. A. Graham. J Econ Entom 11:70-5 F '18

**Kerria japonica**

**Diseases and pests**

Twig and leaf disease of kerria japonica. V. B. Stewart. il Phyt 7:399-407 D '17

**Keteleeria**

Morphology of keteleeria Fortunei. A. H. Hutchinson. bibliog il Bot Gaz 63:124-34 F '17

**Key botanical garden**

Notes from Kew. Gard Chron (Lond) 63:21-2, 51-2, 97-8, 143-4, 233-4; 64:1-2, 55, 115-16, 175 Ja 19, F 9, Mr 9, Ap 6, My 18, Je 8, Jl 6, Ag 10, S 21, N 2 '18

**Kidney beans**

Forcing snap beans. J. T. Rosa, jr. Market Growers J 22:417 Je 15 '18

Genetic study of plant height in phaseolus vulgaris. R. A. Emerson. bibliog il Neb Ag Exp Research B 7:1-73 '16

**Diseases and pests**

Sclerotinia blight; a serious disease of snap beans. J. A. McClintock. il Va Truck Exp B 20:419-28 Jl '16

Sclerotinia libertiana on snap beans. J. A. McClintock. il Phyt 6:436-41 D '16

**Kidney wood.** See Lignum nephriticum

**Kidneys**

Elimination—kidneys. E. Mellen. O Judd Farmer 62:30 F 24 '17

**Killer;** story. A. P. Terhune. il Country Gent 83:10-11 O 19; 10-11 O 26 '18

**Killifishes**

Biological study of the more important of the fish enemies of the salt-marsh mosquitoes. F. E. Chidester. bibliog il N J Ag Exp B 300:9-15 '16

**Kindergartens**

Going to school at home. E. F. Lynch. Country Gent 81:305 F 5 '16

Rural kindergartens. F. B. Sampson. Rural Manhood 8:156-8 Ap '17

**Kingbirds**

Kings of appletreeville. H. Wilbur. Country Life 32:106+ O '17

Shall we destroy the bee-martins? E. G. Baldwin. Gleanings 44:716 Ag 15 '16

**Kingfishers**

Kingfishers. A. A. Allen. il Am For 24:91-4 F '18

**Kinne, Helen**

Professional services of Helen Kinne. J Home Econ 10:174-6 Ap '18

**Kinship.** See Consanguinity

**Kinzer, Roland J., 1875-**

Man behind the Herefords. por Field 11 26:676 Ag '16

Portrait. Breeder's Gaz 70:305 Ag 31 '16

**Kitchen cabinets**

Convenient cabinet the home carpenter can cobble up. Mrs A. G. Vestal. il Power F 27:26 S '18

Kitchen cabinet a step saver. il Power F 25:44 D '16

Kitchen labor-savers. Mrs A. K. Cripps. il Ohio F 141:90 Ja 19 '18

Last word in a kitchen cabinet. A. G. Vestal. il Power F 26:26 D '17

**Kitchen utensils**

About cooking utensils. H. Mason. il Ohio F 140:68 Jl 28 '17

All kinds of canners. H. Mason. il Ohio F 139:752 Je 2 '17

Canning conveniences for canny housekeepers. E. M. Robinson. il Gard M 27:262-3 Jl '18

Christmas gifts for the farm home. G. V. Gray. Farm Eng 4:102 D '16

Conserving household furniture. M. Corbett. Rural N Y 77:48 Ja 12 '18

Cooking utensils. il Power F 26:25+ Ag '17

Cooking utensils of pure nickel. Sci Am (233 Broadway, N. Y. 10c) 118:435 My 11 '18

Gift of time. Wallaces' F 42:205 F 2 '17

Home conveniences. Va Ag Dept B 115:149-51 '17

It pays to save strength. A. C. Wortman. Fruit-Grower 28:177 Mr 1 '17

Kitchen helps. F. Spring. Country Gent 81:1212 Je 10 '16

Little handy things. M. Greenleaf. il Country Gent 81:1006 My 6 '16

Little things that lighten labor. il Power F 26:24 F '17

Model kitchen. il Ag Gaz of Canada 3:748-62 Ag '16

My tin steamers. Country Gent 81:36 Ja 1 '16

Strengthening kitchen and dining room relations. il Country Life 34:120 My '18

Suggestions as to domestic science equipment. E. L. Murphy. il J Home Econ 8:353-5 Jl '16

Utilitarian decorations. il Country Life 29:94 F '16

What I saw at the household show. G. V. Gray. il Farm Eng 5:18 Ja '17

What utensils to buy for the kitchen. G. V. Gray. il Farm Eng 3:232-3 Ap '16

Wide-awake girls learn about labor-saving cooking utensils. Mrs W. N. Hutt. Prog F 31:710 My 27 '16

See also Enameled ware; Glass cooking utensils

**Kitchens**

Arrangement of farm kitchen. M. R. McPheeters. plans Okla Ag Ext C 54 4p '17

Conservation kitchen for the farm home. H. B. Young. plan Cornell Countryman 15:535-7 Je '18

Convenient kitchen. L. Stanley. J Home Econ 8:493-4 S '16

Convenient kitchens. H. B. Young. N Y Farms & Markets Dept Ag B 97:112-14 Jl '17

Efficient kitchen. E. M. Jones. il plans Country Life 31:52-3 Ja '17

Evolution of our farm kitchen. il Ohio F 141:121 Ja 26 '18

Farm kitchen. C. L. Pancoast. il diags plans Mo Ag Ext C 12:1-36 '16

Handy kitchens. H. Mason. il Ohio F 137:508 Ap 1 '16

Improved farm kitchen. Rural N Y 76:591 Ap 21 '17

In and out my sideboard. F. A. Harris. il Country Gent 81:952 Ap 29 '16

Kitchen beautiful. M. L. Westcott. Kimball's D F 15:470 Jl 1 '17

Kitchen conveniences for cold January days. A. G. Vestal. il Power F 25:36 Ja '16

Kitchen equipment. Mrs V. Meredith. Ohio F 137:550 Ap 8 '16

Kitchen floors and walls. H. Mason. Ohio F 137:550 Ap 8 '16

Kitchen furniture. N. K. Jones. Country Gent 81:911 Ap 22 '16

Kitchen; its arrangement and equipment. S. L. Lewis and A. M. Turley. il plan Ore Ag Ext B 182:1-10 '17

Kitchen of an architect's wife. K. L. Sullivan. il Country Life 30:42 O '16

Let the head save the heels. H. Belda. Fruit-Grower 27:29 Ja 1 '16

Making a kitchen better. Ohio F 139:458 Mr 24 '17

Making the oil stove convenient. Mrs A. G. Vestal. il Power F 27:39 My '18

Materials for kitchen floors. Rural N Y 75:287 F 19 '16

Model kitchen. il Ag Gaz of Canada 3:748-62 Ag '16

My model kitchen. C. E. Baxter. Fruit-Grower 27:29 Ja 1 '16

My new farm kitchen. Mrs G. L. Russell. Country Gent 81:1174 Je 3 '16

Planning and equipping the kitchen. il plan Ia Ag Ext Home Econ B 8:1-24 '16

Save your steps. G. V. Gray. Farm Eng 3:210 Mr '16

Saving steps. Mrs C. S. Muth. il Hoard's D 54:760 D 21 '17

Some other women's kitchens. A. G. Vestal. il plans Power F 25:28 N '16

Starting the new home. N. K. Jones. Country Gent 81:815 Ap 8 '16

**Kitchens—Continued**

- We play a game with the members' kitchens. Country Gent 81:237 D 9 '16  
Well-planned kitchen. il Ohio F 141:120 Ja 26 '18  
Workshop of the farm home. A. L. Marlatt. il plans Hoard's D 54:757+ D 21 '17

See also Community kitchens; Cooperative housekeeping; Diet kitchens; Home economics; Kitchen cabinets; Kitchen utensils

**Kitchens, Community.** See Community kitchens**Knapp, Judson N.**

- Grand old man of Onondaga. H. Findlay. por Rural N Y 75:1587 D 30 '16

**Kniphofia.** See Torch-lilies**Knitting**

- Beginning of knitting. F. L. Garside. O Judd Farmer 65:219 S 14 '18  
Knitting for soldier boys; official Red Cross directions. O Judd Farmer 63:14 N 17 '17

**Knop's nutrient solution.** See Soil solution**Knots and splices**

- Handy farm mechanics. C. H. Willey. il Country Gent 83:20 Jl 13 '18  
Handy knots and hitches. il Hoard's D 51:539 Ap 21 '16  
Hints on rope splicing for the haying season. il Ohio F 137:811 Je 17 '16  
More ways to tie rope knots. il O Judd Farmer 65:554 D 14 '18  
Rope halter. Hoard's D 52:740 D 15 '16  
Splicing ropes. il Hoard's D 52:706 D 8 '16  
Use of rope on the farm. V. Overholt. il Ohio Ag Ext B v 12, no 5 48p '16-'17  
Useful knots and hitches that are easily tied. il Hoard's D 55:624 Ap 26 '18  
Uses of rope on the farm. R. H. Smith. il Country Gent 82:1169 Jl 21 '17  
Ways of tying rope knots. F. M. White. il O Judd Farmer 65:379 O 26 '18

**Knotting and splicing.** See Knots and splices**Kohl-rabi**

- Kohl-rabi. G. W. Kerr. il Country Gent 81:693 Mr 25 '16  
Kohl-rabi—a vegetable not fully appreciated. il Nat Stock & F 40:211 My 20 '16

**Kokio trees**

- Saving the kokio tree; wild relative of cultivated cottons. R. A. Young and P. Popenoe. il J Heredity 7:24-8 Ja '16

**Korea.** See Agriculture—Korea**Kraft paper**

- Kraft paper and its uses. W. R. Brown. il Am For 22:150-2 Mr '16

**Kudzu**

- Answer to kudzu inquiries. J. F. Duggar. Prog F 33:868 Ag 3 '18  
Be cautious with kudzu. G. H. Dacy. il Country Life 31:100 Mr '17  
Experiences with kudzu. Prog F 33:1162-3 O 26 '18  
Kudzu. R. S. Walker. il Country Life 29:64 Ja '16  
Kudzu, the noted Japanese forage plant. S. M. Tracy. Hoard's D 51:785 Je 2 '16

**Kumara.** See Sweet potatoes**Kumiss**

- Fermented milks. L. A. Rogers. bibliog U S Ag B 319:18-20 '16

**Kumquats**

- Eremocitrus, a new genus of hardy, drouth-resistant citrous fruits from Australia. W. T. Swingle. bibliog il J Ag Research 2: 85-100 My '14

**L****Labels**

- Labels speak truly. Weekly N L 5:5 Ja 9 '18  
Labels that increase prices. il System on the Farm 1:184 Jl '17

See also Misbranding

**Labor, Compulsory**

- Won't-works must work in Maryland. W. H. Dean. il Country Gent 82:1476-7 S 29 '17

**Labor, Farm.** See Farm labor**Labor and laboring classes**

- Can the farmer and wage earner unite? G. Pinchot. Am Coop J 13:139 D '17  
\* Causes and remedies of labor unrest in the lumber industry. W. F. Ogburn. (In Forest club annual, p. 11-14) '18 College of forestry, Univ. of Wash., Seattle  
Farmer and organized labor. M. G. Owens. Ag Digest 2:523 Jl '17  
Improvement of conditions among immigrants into California. Int R Ag Econ 84:66-73 D '17  
Labor problem. Am Flor 49:202 Ag 18 '17  
Labor's future in England. J Ag (Quebec) 21: xvii My '18  
Wool growing in Australia. R. H. Harrowell. Nat Wool Grower 7:9-10 N '17

See also Accidents, Industrial; Agricultural colonization; Cost of living; Efficiency, Agricultural; Farm labor; Greenhouses—Employees; Hours of labor; Labor, Compulsory; Labor camps; Labor law; Peasantry; Scientific management; Trade unions; Wages; Woman—Employment; Workmen's gardens; Workmen's compensation

**Labor camps**

- Convict labor for road work; with appendix: A digest of state laws. J. E. Pennybacker and others. bibliog il plans U S Ag B 414:1-218 '16  
Report on experimental convict road camp, Fulton county, Ga. H. S. Fairbank and others. il U S Ag B 583:1-64 '18

**Labor law**

- Compulsory labor laws of Maryland and West Virginia and their application to California conditions. R. Devlin. Cal State Comm Hort B v 7:95-100 Ja '18  
Législation visant les contrats de travail concernant l'agriculture. Int Yearbook Ag Leg 1916:1222-3 '17  
Legislative reforms in favour of labourers in the state of Jalisco, Mexico. Int R Ag Econ 9,no 2:170-2 F '18

**Labor saving devices**

- Bigger day's work. il System on the Farm 2: 26-7 Ja '18  
Equipment that resulted in releasing a dozen men. A. J. Piper. il System on the Farm 2: 130-1 Ap '18  
Equipment that simplifies the work. il System on the Farm 1:382-3 D '17  
Farm home conveniences. M. J. Reese. il Farmers' B 927:1-32 '18  
Farmers' experience meeting; home-made labor-saving conveniences. Prog F 33:1368 D 14 '18  
Inexpensive equipment that reduces labor; photographs. System on the Farm 1:144-5 Je '17  
Labor savers and the help problem. il O Judd Farmer 61:3 D 23 '16  
Labor-savers at work. M. L. Jamison. il Country Gent 82:1043 Je 16 '17  
Labor-saving devices. M. R. McPheeters. il Okla Ag Ext C 55:1-4 '17  
Labor-saving devices for the housewife. Prog F 31:55 Ja 8 '16

- Making housework lighten. Mrs M. E. Underwood. Kimball's D F 15:535 Ag 1 '17

- Practical labor saving devices. G. V. Gray. il Farm Eng 4:36 Ag '16

- Saving labor without spending money for equipment; photographs. System on the Farm 1:159 Je '17

- Series of time savers. E. E. Buck. il System on the Farm 1:262 S '17

- Stone drag; and the sled corn harvester. G. W. Lay; R. E. Lawrence. Prog F 31:56 Ja 8 '16

- Things a handy man can make. il Power F 26:30 Ja '17

- Time savers from nine states; photographs. System on the Farm 2:168-9 My '18

**Laboratories**

- Convenient heating and sterilizing outfit for a field laboratory. G. L. Peltier and D. C. Neal. il Phyt 8:436-8 Ag '18



**Laboratories—Continued**

- Merchandise control laboratories. E. Hendrick. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:1133-7 D '17  
*See also* Cookery laboratories; Dairy laboratories; Field crops laboratories; Food research laboratories; Medical laboratories; also United States forest products laboratory

**Lac insects**

- Gum lac and the breeding of tachardia. L. Duport. L. Hautefeuille. Int R Sci & Prac Ag 7,no 8:1153-5 Ag '16  
 Lac insects. il Cornell Ag Exp B 372:501-6 '16  
 Present condition of lac cultivation in the plains of India. C. S. Misra. il map Ag J of India 13:405-15 Jl '18

**Lace**

- Minnesota's lace makers. Country Gent 81:108 Ja 15 '16

**Lacewing flies**

- California green lacewing fly. V. L. Wildermuth. bibliog il J Ag Research 6:515-25 Jl 3 '16

**Lachnosterna.** *See* White grubs

**Lacquer and lacquering**

- Old lacquered furniture. W. A. Dyer. il Country Life 29:27-30 Ap '16

**Lactaria**

- Illustrations of fungi; lactaria. W: A. Murrill. il Mycol 8:191-4 Jl '16

**Lactation**

- Aspects of the physiology of milk secretion. R. L. Hill. bibliog Am Vet M Assn J 49:483-510 Jl '16  
 Change of milk flow with age, as determined from the seven day records of Jersey cows. Maine Ag Exp B 262:145-52 '17; Same. Maine Ag Exp Rep 1917:145-52  
 Comparative table of milk production in dairy herds in relation to age and duration of lactation, in the United States. R. Pearl. Int R Sci & Prac Ag 8,no 2:269-72 F '17  
 Cow's udder and milk secretion. G. H. Conn. il Kimball's D F 14:503 Ag 15 '16  
 Cow's udder and process of milk production. M. H. Reynolds. il Hoard's D 55:552-3 Ap 19 '18  
 Diuresis and milk flow. H. Steenbock. J Ag Research 5:561-8 D 27 '15  
 Influence of the state of gestation on the composition and properties of milk. L. S. Palmer and C. H. Eckles. bibliog J Dairy Sci 1:185-93 S '17  
 Relation of milk yield to age at first calf. R. C. Towles. Md Ag Exp B 217:227-38 '18  
 Stage of lactation affects milk yield. R. I. Grady. Ohio Ag Exp B v 2:401-6 D '17  
 Studies in milk secretion; the effect of nutrition on yield and composition. J. Hammond and J. C. Hawk. J Ag Sci 8:139-46 Mr '17  
 Studies in milk secretion; the relation of the glands of internal secretion to milk production. J. Hammond and J. C. Hawk. J Ag Sci 8:147-53 Mr '17  
 Study of the physiology of milk secretion in progress. Hoard's D 53:943 Jl 6 '17

**Lactic acid**

- Commercial use of saccharose-inverting bacteria for the manufacture of lactic acid. acetic acid and acetone. G. Mezzadrol. Int R Sci & Prac Ag 8,no 5:787-9 My '17  
 Lactic acid from vegetable ivory; patent. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:99 Ja 15 '18

**Lactic acid bacteria**

- Alcohol test in relation to milk. S. H: Ayers and W: T. Johnson, jr. bibliog U S Ag B 202:1-35 '15  
 Classification of the aciduric bacteria. A. H. Rahe. bibliog J Bact 3:407-21 Jl '18  
 Keeping qualities of butter. pt 5. Pasteurization and its influence. C: W. Brown and K. Peiser. bibliog Mich Ag Exp Tech B 30:1-18 '16; Same. Mich Ag Bd Rep 1917:546-57  
 Researches on the proteolytic action of lactic ferments. Int R Sci & Prac Ag 7,no 2:292-3 F '16

- Some characters which differentiate the lactic-acid streptococcus from streptococci of the pyogenes type occurring in milk. J. M. Sherman and W. R. Albus. bibliog J Bact 3:153-74 Mr '18

**Lactin.** *See* Lactose

**Lactose**

- Casein and milk sugar. N Y Prod R 41:946+ Mr 29 '16

**Ladd, Edwin Fremont**

- Prof. Ladd's wheat bulletins. B. W. Currie. Country Gent 82:716-17 Ap 14 '17

**Ladders**

- Ladders for fruit picking. E. I. Farrington. il Country Life 32:86 S '17

**Ladybirds**

- Hyperaspis binotata, a predatory enemy of the terrapin scale. F. L. Simanton. bibliog il map J Ag Research 6:197-204 My 1 '16  
 Life-history and feeding records of a series of California coccinellidae. C. P. Clausen. Cal Univ Pub Entomology v 1, no 6 251-99p '16 (50c)  
 On delphastus catalinae, a valuable ladybird enemy of the white flies. H. S. Smith and E. J. Branigan. il Cal State Comm Hort B v 5:448-50 D '16  
 Some ladybird beetles destructive to plant lice. W: A. Ross. il Ag Gaz of Canada 5:344-7 Ap '18  
*See also* Bean ladybirds

**Lady's slippers.** *See* Moccasin flowers

**Lady's thumb (herb)**

**Diseases and pests**

- New leaf-spot disease of polygonum persicaria. P. J. O'Gara. il Mycol 9:248 Jl '17

**Lakes**

- Bottomless lakes as irrigation reservoir. V: H. Schoffelmayer. il Irr Age 31:57 F '16

**Lakes, Artificial**

- Building the farm pond. E. V. Laughlin. Farm Eng 4:93 D '16  
 Fish pond; what an acre of water pasture is worth. H. T. Morgan. il Farm Eng 4:59 O '16  
 Fish ponds on farms. R. S. Johnson and M. F. Stapleton. (Doc. 826) 32p il plans 5c '17  
 U.S. Bur. of fisheries, Washington, D.C.

**Lambing sheds.** *See* Barns and stables—Sheep barns

**Lambs**

- Applying intensive methods to lamb raising. W. C. Coffey. Breeder's Gaz 69:1066 My 18 '16  
 Are lambs too high? Nat Wool Grower 7:33 Je '17  
 Care of lambs. Prac F 113:41 Ja 15 '17  
 Dock lambs before summer. H. Hackedorn. O Judd Farmer 60:10 Je 3 '16  
 Docking and castrating of lambs. il J Ag (Quebec) 20:227 My '17  
 Dorset and hothouse lambs. C. Harper. il Am Sheep B & W 38:304-5 My '18  
 Early care of the lamb. G: McKerrow. Am Sheep B & W 38:277 Ap '18  
 Fattening spring lambs. A. C. Todd. Am Sheep B & W 36:99 F '16  
 Faults of native lambs. T: J. Delohery. il Country Gent 81:993 My 6 '16  
 Favors knife docking. M. F. Greeley. Nat Wool Grower 8:45 My '18  
 Forcing the early lambs. J. W. Hammond. Ohio F 137:460 Mr 25 '16  
 Good lambs sometimes die. Ohio F 141:388 Mr 16 '18  
 Growing spring lambs. F. D. Fuller. Prog F 32: 1207 N 17 '17  
 Harvesting the lamb crop. J. C. Knollin. il plan Am Sheep B & W 37:585-8 O '17  
 History of hothouse lamb production. C. Harper. Breeder's Gaz 72:316 S 6 '17  
 Hot house lamb production. R. S. Nash. il Purdue Ag 10:29 Mr '16  
 Hot-house lambs. Nat Stock & F 40:73 Ap 15 '16  
 Hothouse lambs. W. E. Wiecking. Farm Eng 4:92 D '16  
 How Colorado feeders fatten lambs. R. M. Wood. il Breeder's Gaz 69:911 Ap 27 '16

**Lambs—Continued**

- How I get a premium on fat lambs. A. Maxwell. *il System on the Farm* 1:110-11 My '17
- Lamb feeding district. F. D. Wells. *Nat Stock & F* 40:999 D 30 '16
- Lamb prospect. W. R. Smith. *Nat Wool Grower* 8:26 J1 '18
- Lamb-raising on the Murray. *Ag Gaz of New South Wales* 27:771-2 N '16
- Lamb-raising with wheat-growing. R. W. Palmer. *Ag Gaz of New South Wales* 27:65-6 Ja '16
- Lambing season here and there. *Am Sheep B & W* 36:208-9 Ap '16
- Lambs and the fleece. *il Va Ag Dept B* 109:70-3 '16
- Lamb's business. W. C. Coffey. *Am Sheep B & W* 38:243 Ap '18
- Lambs marketed early. B. O. Severson. *Nat Stock & F* 42:351 J1 6 '18
- Lambs on a cattle farm. J. L. Ahart. *Country Gent* 82:719 Ap 14 '17
- Lambs should be eaten. F. A. Ellenwood. *Nat Wool Grower* 7:23-4 O '17
- Methods in lamb feeding. A. Warren. *O Judd Farmer* 64:463 Ap 27 '18
- Modern lamb production. H. Hackedorn. *Mo Ag Bd Yearbook* 1916:147-51
- Nature and rate of growth in lambs during the first year. E. G. Ritzman. *J Ag Research* 11:607-24 D 10 '17
- New-born lamb. D. Prowant. *Nat Stock & F* 40:17 Ap 1 '16
- New born lamb. E. P. Snyder. *Nat Stock & F* 40:1054 Ja 13 '17
- 1918 lamb trade prospects. C: A. Mallory. *il Nat Wool Grower* 8:15-16 Ap '18
- Novel form of lamb blanket. C: J. Belden. *il Am Sheep B & W* 37:457 Ag '17
- Orphan lambs. F: W. Wilson. *Nev Ag Ext Leaflet* 3p '16
- Producing hothouse lambs. *O Judd Farmer* 60:12 Je 17 '16
- Producing hothouse lambs on the farm. W. P. Miller. *Breeder's Gaz* 71:872 Ap 26 '17
- Production and feeding of early spring lambs. E. Stroeter. *il Mo Ag Bd Yearbook* 1916:141-6
- Production of hot house lambs. A. M. Bowman. *il Purdue Ag* 11:25-6 N '16
- Production of hothouse lambs. T. C. Stone. *il Am Sheep B & W* 38:306-7 My '18
- Profitable lamb feeding in Illinois. *il O Judd Farmer* 60:3 Mr 25 '16
- Question of lambs. G: F: Stratton. *il Ag Digest* 2:911-12 Ap '18
- Shearing lambs before marketing. H. J. Gramlich. *Breeder's Gaz* 69:1160 Je 1 '16
- Shepherd's busy time; when the lambs arrive. W. W. Reynolds. *il Rural N Y* 77:511 Ap 6 '18
- Success at lambing time. C. T. Bretell. *Field* 11 26:716 Ag '16
- Success in lambing. W. C. Coffey. *Am Sheep B & W* 38:15-16 Ja '18
- What about your 1916 lambs; symposium. *Am Sheep B & W* 36:90-3, 154-5 F-Mr '16
- Why not use your brains? A. H. MacMillan. *Am Sheep B & W* 37:199 Ap '17
- Winter lamb feeding. E. B. Archbald. *Am Sheep B & W* 38:245-6 Ap '18
- Woman and five lambs. W. H. Olin. *il Country Gent* 81:251 F 5 '16
- See also Sheep
- Diseases and pests**
- Lambs and worms. M. J. Smith. *il Country Gent* 83:20 Ap 27 '18
- Save the lambs. H. P. Miller. *Ohio F* 140:42 J1 21 '17
- To prevent worms in lambs. R. A. Hayne. *il Nat Stock & F* 41:245 My 26 '17
- Exhibits**
- Review of carlot exhibit of lambs at Salt Lake fat stock show. A. J. Knollin. *il Nat Wool Grower* 8:27 Ap '18
- Feeding**
- Annual round-up at Purdue—experimental lambs top Chicago market. *Am Sheep B & W* 36:83 F '16
- Baa, baa, black lamb, get a good start. *Am Sheep B & W* 37:216-1 Ap '17
- Bottle milk for orphan lambs. *Nat Wool Grower* 7:51 S '17
- Comparison of rations for lambs. *Breeder's Gaz* 71:772 Ap 12 '17
- Corn silage for lambs. J. W. Wilson. *il S D Ag Exp B* 165:377-90 '16; Same cond. *Int R Sci & Prac Ag* 8, no 1:116-18 Ja '17
- Ewes' milk: its fat content and relation to the growth of lambs. E. G. Ritzman. *bibliog J Ag Research* 8:29-36 Ja 8 '17; Same cond. *Int R Sci & Prac Ag* 8, no 4:622-4 Ap '17
- Experiment in fattening lambs. B. O. Severson. *Nat Stock & F* 42:388 J1 20 '18
- Experiments in Germany on feeding lambs with pine needles. *Int R Sci & Prac Ag* 7, no 1:106 Ja '16
- Farm accounts; wintering lambs on turnips. A. Loose. *J Bd Ag* 24:634-6 S '17
- Fattening lambs. J. M. Jones. *il Tex Ag Exp B* 186:1-15 '16
- Fattening lambs on forage. H. Hackedorn. *Breeder's Gaz* 72:279 Ag 30 '17
- Fattening western lambs. J. H. Skinner and F. G. King. *Ind Ag Exp B* 192:1-20 '16; Summarized. *B 192 Popular ed* 7p
- Feeding cattle and lambs in Colorado. *Breeder's Gaz* 73:107 Ja 17 '18
- Feeding lambs at the Lethbridge experimental station. W. H. Fairfield. *il Am Sheep B & W* 36:231 Ap '16
- Feeding lambs for market. A. E. Bullard. *Ohio F* 139:112 Ja 27 '17
- Feeding lambs for profit. J. E. Hall. *Am Sheep B & W* 37:172 Mr '17
- Feeding lambs in Nebraska. H. J. Gramlich. *Breeder's Gaz* 71:1271 Je 28 '17
- Feeding lambs in the fall. H. J. Gramlich. *il Neb Ag Exp B* 167:1-16 '18
- Feeding lambs in western New York. E. W. Gage. *il Breeder's Gaz* 69:719 Mr 30 '16
- Feeding of silage to lambs. F. McRoberts. *Mo Ag Bd Yearbook* 1916:151-2
- Finishing lambs for the block. *J Ag (Quebec)* 20:156-7 Ja '17
- Finishing lambs for the block. E. S. Archibald. (E. F. pamph. 16) 4p Canada Ag
- Finishing western lambs in Kansas. A. M. Paterson. *Am Sheep B & W* 36:364 Je '16
- Further experiences in feeding lambs in Iowa. *Breeder's Gaz* 69:363 F 17 '16
- Hand-feeding young lambs. W. C. Coffey. *Breeder's Gaz* 69:493 Mr 2 '16
- High-priced corn for lambs. J. W. Hammond. *il Nat Stock & F* 41:920 D 22 '17
- How shall we wean and feed the lamb. *Am Sheep B & W* 37:287 My '17
- Indiana experiments fattening western lambs. Wallaces' *F* 41:265 F 18 '16
- Indiana lamb feeding experiment. *Breeder's Gaz* 73:323 F 14 '18
- Indiana sheep feeders at Purdue. *Breeder's Gaz* 69:312 F 10 '16
- Interview on lamb feeding. *Nat Wool Grower* 7:43 Ag '17
- Lamb and sheep feeding experiments. E. J. Iddings. *il Idaho Ag Exp B* 89:1-14 '16
- Lamb feeding. J. W. Hammond. *Nat Stock & F* 40:675 S 30 '16
- Lamb feeding experiments at Purdue. H. E. McCartney. *Am Sheep B & W* 37:145 Mr '17
- Lamb feeding in Texas. J. M. Jones. *il Breeder's Gaz* 71:327-8 F 15 '17; Abstract. *Int R Sci & Prac Ag* 8, no 5:770-2 My '17
- Lamb feeding that pays. S: Sosland. *Country Gent* 81:714 Mr 25 '16
- Lamb feeding trial. J. D. Harper. *Ohio F* 137:254 F 19 '16
- Lambs in standing corn. R. A. Hayne. *Breeder's Gaz* 72:246 Ag 23 '17
- Method of feeding orphan lambs. W. E. Carroll. *il Utah Ag Exp C* 33:1-8 '18
- Money-making lambs. T. W. Harvey. *Country Gent* 81:233 D 9 '16
- Nebraska lamb-feeding test. H. J. Gramlich. *il Breeder's Gaz* 69:492-3 Mr 2 '16
- 95-day lamb feeding experiment, November 23, 1916 to February 25, 1917. University of Nebraska. *Neb Ag Bd B* 245:353-7 '18
- Outline of Canadian feeding experiments. E. S. Archibald. *Am Sheep B & W* 36:260 My '16



**Lambs—Feeding—Continued**

- Phosphorus metabolism of lambs fed a ration of alfalfa hay, corn, and linseed meal. E. L. Ross and others. *J Ag Research* 4:459-73 Ap '15
- Preparation of corn for fattening lambs. J. M. Eyvard. *Am Soc Animal Production Pro* 1915-1916:242-51 '17
- Producing baby mutton. C. Harper. *il Field* il 27:354+ My '17
- Raising winter lambs. C. C. Perry. *N Y Ag Dept B* 96:88-96 Je '17
- Recent lamb feeding investigations at the University of Nebraska. H. J. Gramlich. *Am Soc Animal Production Pro* 1915-1916:126-30 '17
- Roughages for fattening lambs. J. W. Hammond. *il Ohio Ag Exp B v* 1:326-30 N '16
- Self-feeding lambs. H. J. Gramlich. *il Wallaces' F* 41:395 Mr 10 '16
- Sheep feeders' day at Lincoln, Neb.; feeding experiments. *Breeder's Gaz* 69:872 Ap 20 '16
- Special features mark Nebraska experiments. H. J. Gramlich. *Am Sheep B & W* 36:257-60 My '16
- Western lambs as harvesters of corn. W. C. Coffey. *il Nat Wool Grower* 8:15-17 My '18
- Winter feeding of lambs. J. P. Sackville. *Ag Gaz of Canada* 4:1060-1 D '17

**Fitting for show**

- Fitting Dorset sheep for exhibition. A. Danks. *il Field* il 26:223+ Mr '16

**Marketing**

- Breed now in eastern farm flocks. A. Hill. *Am Sheep B & W* 37:590-1 O '17
- Marketing lambs, grading wool, purchasing supplies and dipping via co-operative route. *Am Sheep B & W* 36:162-3 Mr '16
- Spring lambs and wool. *Breeder's Gaz* 69:76+ Ja 13 '16
- Wastes in marketing lambs. W. M. Fisk. *Nat Wool Grower* 8:47 F '18
- When to sell lambs. E. P. Snyder. *Ohio F* 142:51 Jl 20 '18

**Prices**

- Collapsible lamb market. J. E. Poole. *Nat Wool Grower* 8:9-10 N '18
- Course of the market. J. E. Poole. *Nat Wool Grower* 8:41 My '18
- Expert review of the range sheep situation. J. A. Rickart. *Am Sheep B & W* 36:451-2 Ag '16
- Feeding lamb prospect. *Nat Wool Grower* 8:29-30 Ag '18
- June lamb market. J. E. Poole. *Nat Wool Grower* 8:40-1 Jl '18
- Lamb situation. *Nat Wool Grower* 8:16 N '18
- No cheap lambs likely. J. E. Poole. *Nat Wool Grower* 8:27-8 Jl '18
- Sheep and lamb prices. *Country Gent* 82:248 F 10 '17
- Will 1919 lamb feeders make money? J. M. Carroll. *O Judd Farmer* 65:453 N 16 '18

**Lamp shades**

- Some new lamp shades. *il Country Life* 30:92 S '16

**Lampblack**

- Study of the action of carbon black and similar absorbing materials in soils. J. J. Skinner and J. H. Beattie. *bibliog il Soil Sci* 2:93-101 Jl '16

**Lampreys**

- Forgotten food fish. W. H. Huse. *Rural N Y* 75:1052 Ag 5 '16

**Lamps**

- Importance of lighting in the home. *il Country Life* 34:92 S '18

- Lamp for you. H. Tachau. *il Country Gent* 81:1600 Ag 26 '16

- Some lamps. *il Country Life* 31:148 Ap '17

**Land**

- Community control of land. Public (122 E. 37th st. N.Y. 10c) 21:233-5 F 23 '18
- Experiences in buying land. *Prog F* 33:508 Ap 20 '18

- Hints to the land-seeker. M. J. Thompson. *Wallaces' F* 42:623 Ap 6 '17

*See also* Agricultural colonies; Agricultural colonization; Agriculture; Clearing of land; Farm tenancy; Farms; Land tenure; Land titles; Leases; Parks; Public lands; Real estate; Reclamation of land; Single tax; Surveying; Taxation; Waste land

**Statistics**

- Total area and agricultural land in various countries. *See* United States Department of agriculture Yearbooks

**Taxation**

- Act respecting the taxation of wild lands passed 11th April, 1918. 2p n.d. New Brunswick Crown land dept., Fredericton
- Graduated land tax idea growing. *Prog F* 32:101 Ja 27 '17
- Land revenues in Burma. L. P. Briggs. (*Commerce Reports* no. 221) p 1079-82 (S 20) '18
- U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Study of the incidence of an increment value land tax. C. C. Plehn. *Quarterly J Econ* (Randall Hall, Cambridge, Mass. \$3 per yr.) 32:487-506 My '18
- Uruguay; reform of the land tax from the point of view of agriculture and breeding. *Int R Ag Econ* 74:108-16 F '17
- See also* Single tax

**Burma**

- Land revenues in Burma. L. P. Briggs. *Commerce Reports* no. 221) p 1079-82 (S 20) '18
- U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**California**

- \* Farm allotments and farm laborers' allotments in the Durham State land settlement. 7p il plans '18 Cal. State land settlement bd., Sacramento

**Canada**

- \* Rural area assessed in Ontario. (*In Report*, Bur. of industries, 1917, p. 27) '18 Ontario ag. dept., Toronto

**Great Britain**

*See also* Allotment of land

**Louisiana**

- List of Louisiana lands for sale. *La Ag Dept* 44p '18

**Mexico**

- Vera Cruz, Mexico—By decree of the governor all rural properties with the exception of those devoted to the cultivation of coffee, rice, beans, corn, and tobacco are to pay after January 1, 1918 a special yearly tax of 15 centavos per hectare (3 cents American gold per acre), to be used in the pacification of the state of Vera Cruz and especially for the maintenance of rural guards, it being considered just that those who will profit most by the return of peace should bear their part of the expenses. N 26 '17

**United States**

- Utilization of land not in farms. B: H. Hibbard. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:sup55-64 Mr '18

- Land, Reclamation of. *See* Reclamation of land

- Land, Waste. *See* Waste land

- Land bank bonds, Federal. *See* Bonds

- Land banks. *See* Federal farm land banks; Mortgage banks

- Land clearing. *See* Clearing of land

- Land credit. *See* Agricultural credit

- Land credit associations

- Working of the Danish land credit associations in 1916. *Int R Ag Econ* 73:70-3 Ja '17

- Land drainage. *See* Drainage

- Land-grant college engineering association

- Proceedings of the fourth annual convention held at Berkeley, Cal., August 11-13, 1915. *Assn Am Ag Coll & Exp Pro* 1915:256-97

Land surveying. See Surveying

#### Land tenure

- Land credits and land settlements. T: F. Hunt. (*In* Am. farm management assn. Record of pro., 1915, p. 10-17) '16 G. A. Billings, sec., Washington, D.C.  
Land problem and rural welfare. P. L. Vogt; Discussion by W. O. Hedrick. (*In* Am. sociological soc., Pub. v. 11, p. 82-96)  
Land settlement and immigration. (*In* Nat. conf. on marketing and farm credits, 1916, p. 99-187) \$2 '17 C. W. Holman, sec., Madison, Wis.

Includes: Land settlement a public question, by E. Mead; Land settlement in the northern states, by E. D. Durand; Land settlement for the Pacific Northwest, by H. MacPherson; Supervising commercial colonization, by M. Loeb; Immigration and the land question, by F. C. Howe; Remedial action for farmer immigrants, by L. Steiner; Financing the insolvent farmer, by L. G. Robinson

Land tenure and the rural church. H: Wallace. Wallaces' F 41:82 Ja 21 '16

\* Settlements that do not settle. Public (122 E. 37th st, N. Y. 10c) 21:849-51 Jl 6 '18

Tenancy and land tenure reform. G: E. Putnam. Kansas Univ (Lawrence 75c) B 17: 73-91 D 1 '16

See also Farm tenancy; Land titles; Real estate; Riparian rights; Single tax; Taxation

#### Bibliography

List of references on land tenure in Mexico. U. S. Library of congress. 3p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)

#### Small holdings

Consolidation of agricultural holdings in the United Provinces. H. S. Jevons. Ag J of India 13:222-30 Ap '18 (to be cont)  
Distribution of landed property and home colonisation in Germany. Int R Ag Econ 63: 124-5 Mr '16

French protectorate of Morocco: the new measure favourable to colonization. Int R Ag Econ 71:100-5 N '16

Land settlement bill of 1917. Cal Commonwealth Club Transac (San Francisco 18c) 12:1-66 Mr '17

Land settlement in California. Cal Commonwealth Club Transac (San Francisco 19c) 11:369-465 D '16

Land settlement—irrigation—drainage. Oregon's neglected opportunity. R. Howard. map Oregon Voter (Worcester bldg., Portland, Ore. 10c) 8:120-2+ Ja 27 '17

New Zealand: settlement of discharged soldiers on the land. Int R Ag Econ 75:120-1 Mr '17

Proposed colonization law in Argentina. Wallaces' F 42:355 F 23 '17

Report of the Commission on land colonization and rural credits of the state of California. 87p '16 Co-operative land settlement investigations. Univ. of Cal.; Abstract. Int R Ag Econ 76:118-20 Ap '17

Results of interior colonization in Finland. Int R Ag Econ 71:106-22; 73:90-113 N '16, Ja '17

Results of the new agrarian reform in Russia. Int R Ag Econ 74:89-107 F '17

Scheme for the land settlement of ex-service men. J Bd Ag 24:326-8 Je '17

Scottish land court in 1915. Int R Ag Econ 78:64-74 Je '17

Small holdings in England with particular reference to Oxfordshire. Int R Ag Econ 9, no 3:241-9 Mr '18

Study of a small holding at Kirberg, district of Wiesbaden, Germany. E. Bender. Int R Sci & Prac Ag 7, no 10:1524-8 O '16

Subdivision of land in old Bavaria. Int R Ag Econ 76:77-83 Ap '17

Tenant farming in the United States. City Club B (City Club of Chicago, 315 Plymouth Court, Chicago, Ill.) 10:9-12 Ja 15 '17

Working of the small holdings and allotments act, 1908. Int R Ag Econ 67:107-15 Jl '16

See also Allotment of land

#### Africa

Erythrea; land tenure and colonization. bibliog Int R Ag Econ 74:67-88 F '17

French protectorate of Morocco: the new measure favourable to colonization. Int R Ag Econ 71:100-5 N '16

French protectorate of Morocco: the reform of Habours property. Int R Ag Econ 71: 94-100 N '16

Italian Somaliland: land tenure and colonization. bibliog Int R Ag Econ 75:94-115 Mr '17

Land question and the land policy in German East Africa. Int R Ag Econ 71:89-93 N '16

Land question in French West Africa. Int R Ag Econ 62:132-4 F '16

Libya (Tripoli and Cirenaica) land system and colonization. Int R Ag Econ 80:66-78 Ag '17

#### Argentina

Proposed colonization law in Argentina. Wallaces' F 42:355 F 23 '17

#### Australia

Land settlement and the provision of credit in western Australia. J. W. Paterson. Int R Ag Econ 72:93-103 D '16

Land settlement in Queensland. Int R Ag Econ 64:77-86 Ap '16

Land settlement in Victoria. Int R Ag Econ 61:85-96 Ja '16

Land settlement in Victoria. F. E. Jenkins. Int R Ag Econ 67:87-94 Jl '16

#### Austria-Hungary

Interior colonization and the future of small property. Int R Ag Econ 82:72-6 O '17

Some agricultural problems in Dalmatia. Int R Ag Econ 76:84-9 Ap '17

#### California

\* California's plan for land settlement. V. M. Cady.. Review of Reviews (30 Irving Place, N. Y. 25c) 55:182-4 Ag '18

Land settlement bill of 1917. Cal Commonwealth Club Transac (San Francisco 18c) 12:1-66 Mr '17

Land settlement in California. Cal Commonwealth Club Transac (San Francisco 19c) 11:369-465 D '16

Report of the Commission on land colonization and rural credits of the state of California. 87p '16 Co-operative land settlement investigations. Univ. of Cal., Berkeley; Abstracts. Int R Ag Econ 76:118-20; 81:59-66 Ap, S '17

\* Western experiment in land settlement in California. V. M. Cady. il plans Survey (112 E. 19th st, N. Y. 10c) 40:684-7 S 21 '18

#### Canada

Report of planning and development branch; with discussion. T: Adams. (*In* Report, 1917, p. 92-105) il maps '17 Canada Comm. of conservation, Ottawa

Rural problems that arise in connection with land development; Government policies and land development. (*In* T: Adams. Rural planning and development, p. 102-141, 177-206) il maps '17 Canada Comm. of conservation, Ottawa

#### Denmark

Loi sur l'administration du droit en justice. Int Yearbook Ag Leg 1916:1126-40 '17

#### Finland

Results of interior colonization in Finland. Int R Ag Econ 71:106-22; 73:90-113 N '16, Ja '17

#### France

Consolidation of farm-lands. Int R Ag Econ 65:116-29 My '16

Curious land tenure experiment. Int R Ag Econ 62:131-2 F '16

Rural prosperity of France. R. F. Spedding. Quarterly Review (249 W. 13th st, N.Y. \$2) 227:314-30 Ap '17

#### Germany

Activity of the royal commission of colonization for West Prussia and Posenania in 1916. Int R Ag Econ 81:81-4 S '17



**Land tenure—Germany—Continued**

- Consolidation of property in Prussia. A. Dietrich. *Int R Ag Econ* 81:52-5 S '17  
 Reconstruction after the destruction following on events of the war in East Prussia. *Int R Ag Econ* 80:56-65 Ag '17  
 Study of a small holding at Kirberg, district of Wiesbaden, Germany. E. Bender. *Int R Sci & Prac Ag* 7,no 10:1524-8 O '16  
 Subdivision of land in old Bavaria. *Int R Ag Econ* 76:77-83 Ap '17

**Great Britain**

- \* Allotment movement. F. E. Green. *Contemporary R* (249 W. 13th st, N. Y. 50c) 114:90-6 J1 '18  
 English land cataclysm. C. Mackenzie. *il Country Gent* 83:3-4+ Je 1; 10-11 Je 8 '18  
 \* Land of public right. *Spectator* (1 Wellington st, Strand, London, W. C. 6d) 121:63-4 J1 20 '18  
 Loi portant des dispositions concernant la possession et l'acquisition de terres occupées ou utilisées pour la défense du royaume, du fait de la présente guerre, et visant aussi d'autres fins s'y référant. *Int Yearbook Ag Leg* 1916:1192-9 '17  
 New land problems in England. *Rural N Y* 75:1200 S 16 '16  
 Our land laws after the war. W. S. Haldane. *Fortnightly Review* (249 W. 13th st, N.Y. 50c) 107:868-77 Mr '17  
 Scottish land court in 1915. *Int R Ag Econ* 78:64-74 Je '17  
 Small holdings in England with particular reference to Oxfordshire. *Int R Ag Econ* 9,no 3:241-9 Mr '18  
 \* Sokemen and the village waste. F. M. Stenton. *Eng Hist R* (39 Paternoster Row, London, E. C. 5s) 33:344-7 J1 '18  
 We must go. F. E. Warwick. *Bookman* (4th av & 30th st, N.Y. 25c) 46:143-6 O '17

**India**

- Land tenure in the Punjab in their original form and as affected by British role. J. M. Douie. *Int R Ag Econ* 79:51-60 J1 '17  
 Re-alignment of agricultural holdings. B. C. Burt. *Ag J of India Sci Congress* No 1916: 33-9 '16

**Ireland**

- Agrarian reform in Ireland. J. McGrath. *Fortnightly Review* (249 W. 13th st, N.Y. 50c) 107:1060-74 Je '17

**Mexico**

- List of references on land tenure in Mexico. U.S. Library of Congress. 3p '17  
 Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 15c)  
 Property rights under the new Mexican constitution. J. P. Chamberlain. *Political Sci Q* (Columbia univ., N.Y. \$1) 32:369-90 S '17

**New Zealand**

- Closer settlement in New Zealand. *Int R Ag Econ* 66:109-11 Je '16  
 New Zealand; settlement of discharged soldiers on the land. *Int R Ag Econ* 75:120-1 Mr '17  
 System of land registration in New Zealand. G. G. Bridges. *Int R Ag Econ* 64:92-112 Ap '16

**Northern states**

- Land settlement in the Northern states. E. D. Durand. (*In Nat. conf. on marketing and farm credits*, 1916, p 113-26) \$2 '17  
 C. W. Holman, sec., Madison, Wis.

**Oregon**

- Land settlement—irrigation—drainage, Oregon's neglected opportunity. R. Howard. *map Oregon Voter* (Worcester bldg., Portland, Ore. 10c) 8:120-2+ Ja 27 '17

**Russia**

- Clue to Russia. H. N. Brailsford. *New Republic* (421 W. 21st st, N.Y. 10c) 12:321-4 O 20 '17

- Land question in the Russian revolution. *Class Struggle* (119 Lafayette st, N. Y. 25c) 2:143-60 Mr '18

- Results of the new agrarian reform. *Int R Ag Econ* 72:116-31; 74:89-107 D '16, F '17  
 Russian land and Russian peasants; measures to relieve agricultural poverty. M. J. Olgin. *Asia* (627 Lexington av, N.Y. 25c) 18:106-9 F '18  
 Soil hunger in Russia. E. A. Ross. *Century* (353 4th av, N.Y. 35c) 95:874-80 Ap '18

**Servia**

- Distribution of landed property. *Int R Ag Econ* 68:110-17 Ag '16

**Spain**

- Distribution of rural property and land settlement in their relation to the agrarian problem. *Int R Ag Econ* 65:99-115; 67:95-106 My, J1 '16

**United States**

- Common sense and the I. W. W.; programme for the social and economic rehabilitation of our national and agricultural lands. *New Republic* (421 W. 21st st, N.Y. 10c) 14:375-6 Ap 27 '18  
 Concentration of land ownership. C. M. Harger. *Financial World* (29 Broadway, N.Y. 15c) 29:22 N 17 '17  
 Decay of agriculture. F. C. Howe. *Public* (122 E. 37th st., N.Y. 5c) 20:1035-6 O 26 '17  
 \* Economics of land settlement. A. Johnson. *New Republic* (421 W. 21st st, N. Y. 15c) 16:306-8 O 12 '18  
 Giving the new settler a lift; an analysis of the proposed state aid to model colonization in California. D. P. Barrows. *Sunset* (San Francisco 15c) 38:20-1 Mr '17  
 Government aid and direction in land settlement; with discussion. E. Mead. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:sup72-112 Mr '18  
 Hand-me-down farms; establishment by the state of a model colony on a tract of ten thousand acres. *Sunset* (San Francisco 15c) 38:16 Mr '17  
 Land tenure and the organization of agriculture on Indian reservations in the United States. *Int R Ag Econ* 77:63-76 My '17  
 Land tenure in the United States with special reference to Illinois. C. L. Stewart. (*Studies in the social sciences*, v 5 no 3) 135p bibliog maps 75c (S) '16 Univ. of Illinois, Urbana  
 Land utilization in Iowa. O. G. Lloyd. *Wallaces' F* 42:1725 D 21 '17  
 New policy of land settlements for the Pacific Northwest. H. MacPherson. (*In Nat. conf. on marketing and farm credits*, 1916, p. 126-46) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Problem of the American farmer. F. C. Howe. *il Century* (353 4th av, N.Y. 35c) 94:625-32 Ag '17  
 Tenant farming in the United States. City Club B (City Club of Chicago, 315 Plymouth Court, Chicago, Ill.) 10:9-12 Ja 15 '17  
 West faces the land question. A. J. Nock. *Century* (353 4th av, N.Y. 35c) 95:295-301 D '17  
 Will our farmers become tenant class? T. Roosevelt. *Ohio F* 140:314 O 13 '17  
 Work of the Office of farm management relating to land classification and land tenure. W. J. Spillman. *Am Econ Review* (Ithaca, N.Y. \$1.25) 8:sup65-71 Mr '18

See also Homestead law; Public lands—United States

**Land titles**

- Legal fixings for the suburban home. J. R. McMahon. *il Country Gent* 81:1153-4 Je 3 '16  
 Present land titles system. A. W. Beatty. *Wallaces' F* 41:322 F 25 '16  
 Title to your land. *Country Gent* 81:416 F 19 '16

**Registration and transfer**

- Arrêté portant organisation du service de la conservation foncière dans les colonies du groupe de l'Afrique équatoriale française. *Int Yearbook Ag Leg* 1916:1042-4 '17

**Land titles—Registration and transfer—Cont.**

Laws relating to rural credits and land registration; uniform state laws relating to same. S. R. Child. (U.S. 64th cong., 1st sess. Senate doc. 351) 43p '16 U.S. Congress, Washington, D.C.

Loi n. 35 donnant en un texte unifié la loi de 1908 sur le transfert des terres et ses divers amendements à la Nouvelle-Zélande. Int Yearbook Ag Leg 1916:1045-1101 '17

Rural credit and land registration. Hoard's D 51:581 Ap 28 '16

System of land registration in New Zealand. G. G. Bridges. Int R Ag Econ 64:92-112 Ap '16

See also Torrens system

**Land values**

Banking the fruit crop. J. J. Rouse. Better Fruit 12:5-7 F '18

Chinese coolies or free land? Public (122 E. 37th st. N.Y. 10c) 21:106-7 Ja 25 '18

Farm conditions at the close of the Civil war. Wallaces' F 42:1417 O 19 '17

Gambling on the unearned increment. E. Davenport. Country Gent 83:11+ Ag 3 '18

Grit wins in the cut-over country. C. A. Le-Claire. Int Country Gent 53:7 JI 27 '18

High price of farm land. Wallaces' F 43:933 Je 14 '18

Land utilization in Iowa. O. G. Lloyd. Wallaces' F 42:1725 D 21 '17

\* Prosperity and high prices; rising price of Iowa farm land. Public (122 E. 37th st. N. Y. 10c) 21:976-8 Ag 3 '18

Rise in the value of improved farm land. Int R Ag Econ 81:86-7 S '17

Unearned increment in Gary. R. M. Haig. Political Sci Q (Columbia univ., N.Y. \$1) 32: 80-94 Mr '17

Why three-hundred-dollar land? E. Davenport. Int Country Gent 83:15 Ap 6 '18

See also Farm values

**Taxation**

Western Canada's mistake. C. J. Yorath. Public (122 E. 37th st. N.Y. 10c) 21:107-8 Ja 25 '18

Landlord and tenant. See Farm tenancy

**Landscape**

Landscape lines and gardening. W. P. Eaton. Int Country Life 32:41-4 S '17

Landscape architecture. See Landscape gardening

**Landscape gardening**

Architectural garden. Int Country Life 33:44-7 N '17

Attractive surroundings for farm homes. E. W. Gage. Green's Fruit Grower 36:12 Ap '16

Beautification of home grounds. M. H. Ellis. Int Tex Univ (Austin) B 17:1-29 Mr 20 '16

Beautifying farm grounds. C. Lesure. Int O Judd Farmer 62:9 Mr 31 '17

Beautifying of home grounds. E. Hansen. Int plans Utah Ag Ext C v 5, no 28:1-19 '17

Beautifying the dairy farm. C. N. Keyser. Int Kimball's D F 16:202 Mr 15 '18

Beautifying the farm grounds. Int Purdue Ag 10:39-40 My '16

Beautifying the farm home. R. B. Cruickshank. Int Ohio Ag Ext B v 12, no 7 26p '16-17

Beautifying the home grounds. J. S. Kerr. Prog F 31:1319 N 11 '16

Beautifying the home grounds in the city; with discussion. R. Timler. (In Nebraska Horticulture v. 6, no. 12, p. 108-14) (F) '17 Neb. state hort. soc., Lincoln

Beautifying the home grounds in the country. T. W. Nicolett. Int (In Nebraska Horticulture v. 6, no. 12, p. 103-8) (F) '17 Neb. state hort. soc., Lincoln

Beautifying the rural home. C. N. Keyser and E. G. Welch. Int plans Ga Ag Coll (Ext) C 30 8p '16

Belt planting. W. Miller. Int Country Life 30: 28-9 Ag '16

Combining beauty and comfort with stern utility. S. F. Hamblin. plans Gard M 27:23-5 F '18

Creamery landscaping. Int Wallaces' F 42:683 Ap 20 '17

Doorways to the garden. A. Embury. Int Gard M 23:175-6 Ap '16

Expansible garden plan with rose arbor. E. L. Strang. Gard M 25:22-4 F '17

Fifty years of landscape modeling. N. F. Barrett. Int plan Art World (2 W. 45th st., N.Y. 35c) 1:180-5 D '16

Forestry upon the private estate and its landscape possibilities. A. Smith. Gard Chron Am 21:329-30, 375-6 S-O '17

Foundation planting. W. Miller. Int Gard M 24: 86-8 O '16

Foundation planting. F. A. Waugh. Country Gent 81:1693 S 16 '16

Furnishing the front yard. M. Evans. plan Fruit-Grower 28:205 Mr 15 '17

Garden that grows. G. Tabor. Int Delineator (Spring and MacDougal sts., N.Y. 15c) 90: 14 Ja '17

Home and garden vs. house and lot. H. G. Anderson. Int Gard M 24:215-17 Ja '17

Home floriculture and home-ground improvement; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 62) 12p '17 U. S. States relations service, Washington, D. C.

Home grounds. Prog F 32:316 Mr 10 '17

Home grounds. C. A. Norman. Int Purdue Ag 11:44-5 Ja '17

Home grounds; their planning and planting. L. H. Bailey. 48p Int 50c '18 J. H. McFarland co., Harrisburg, Pa.

Home planting of vines, shrubs and flowers. Int Green's Fruit Grower 37:16 Mr '17

Horticultural sports. W. H. Manning. Gard Chron Am 20:311 JI '16

How to beautify the home grounds. F. A. Aust. Hoard's D 53:373 Mr 23 '17

How to make school grounds attractive. R. W. Curtis. Int Cornell Rural School Leaflet v 11, no 1:244-300 '17

How we made Arcadia. Mrs L. L. Hobbs. Int Prog F 31:396 Mr 18 '16

Illinois countryside betterment; work of Wilhelm Miller. F. F. Rockwell. Int Field II 26: 105-7, 215-18 F-Mr '16

Imlagh, Tuxedo Park, N.Y. Int Gard Chron Am 22:53-4 F '18

Improve your premises by planting trees and shrubs. F. S. Place. Nat Stock & F 42:200 My 18 '18

Is landscape gardening a misnomer? A. Smith. Int Gard Chron Am 20:68-9 F '16

Landscape architecture. A. H. Helder. N J Municipalities (Bur. of Municipal information, Princeton, N.J. 20c) 2:50-1 F '18

Landscape crops for the farm. Int Wallaces' F 41:631 Ap 21 '16

Landscape designing of national highway. Am Flor 46:1237 JI 1 '16

Landscape engineering in the national forests. F. A. Waugh. 38p plans '18 U.S. Forest service, Washington, D.C.

Landscape gardener as the first aid to nature. Int Touchstone (118 E. 30th st., N.Y. 35c) 1: 66-73 My '17

Landscape gardening. M. Bryant. Ill State Hort Soc Trans 1917:283-96 '18

Landscape gardening. J. H. Doswell. Gard Chron Am 22:20 Ja '18

Landscape improvement of rural school grounds. J. W. Gregg. (B. 20) 52p Int plans '17 Cal. State bd. of educ., Sacramento

Landscape lines and gardening. W. P. Eaton. Int Country Life 32:41-4 S '17

Landscape-vegetable-gardening. R. Dean. Int Country Life 31:45-7 Mr '17

Landscape and forestry. S. Riley. Int Am For 23:727-30 D '17

Landscape home grounds. O. F. Wren. Int Breeder's Gaz 71:383 F 22 '17

Magic of flowers about the home. Mrs W. C. Linderman. Int Minn Hort 45:204-9 My '17

Making a brook from the city water supply. E. F. Coe. Int Country Life 29:54-5 Mr '16

Making home grounds attractive. Int Green's Fruit Grower 36:5 F '16

Making of our home. M. T. Richardson. Int Gard M 23:27-8 F '16

Marble work in the garden. D. C. Gale. Int Gard Chron Am 20:468-70 N '16

Meaning and place of the architectural garden. A. Edwards. Int Art World (2 W. 45th st., N.Y. 35c) 2:171-4 My '17



**Landscape gardening—Continued**

- Natural landscape spirit in planting. C. B. Waldron. *Gard Chron* Am 22:44 F '18
- New landscape plan for Woolley Hall, at Maidenhead, England. T. H. Mawson. *il Architectural Record* (115-119 W. 40th st., N.Y. 35c) 41:98-104 F '17
- North Dakota farmstead; ornamentation of the farmstead. H. O. Werner. *il N D Ag Exp* C 10:42-51 '16
- Noteworthy Massachusetts estate. W. N. Craig. *il Gard Chron* Am 21:361-4 O '17
- Ornamental gardening in India. W. Burns and E. Little. *il Ag J of India* 12:353-61 JI '17
- Ornamental planting. G. H. Chisholm. *il Gard Chron* Am 20:429-30 O '16
- Ornamentation of home grounds. C. H. Ramsdell. *il Minn Hort* 45:449-56 D '17
- Our garden in winter. R. Dean. *il Country Life* 33:69-71 Ja '18
- Planning a suburban lot. S. A. Hamilton. *Country Gent* 81:644 Mr 18 '16
- Planning the home grounds. E. R. Hurst. *Ohio F* 139:44 Ja 13 '17
- Planting about our homes. H. E. Van Deman. *il Green's Fruit Grower* 37:14 Ap '17
- Planting beauty around the home. A. G. Vestal. *il Power F* 26:30 My '17
- Planting for the best effect. R. B. Cruickshank. *Ohio F* 141:142 F 2 '18
- Planting of home grounds. R. Vincent. *Gard Chron* Am 21:95 Mr '17
- Planting of ornamentals. *Gard Chron* Am 21:22, 452 Ja, D '17
- Planting the home grounds. M. G. Burleigh. *il Green's Fruit Grower* 37:4 Ap '17
- Planting the home grounds. O. J. Howard. *Prog F* 31:398 Mr 18 '16
- Plants to use about the farm grounds in the South. *Prog F* 32:322 Mr 10 '17
- Practical plans for the home grounds. R. Dean. *il Gard M* 23:167, 243, 286, 331-2 Ap-JI '16
- Prairie style of landscape architecture. J. H. Small, jr. *Architectural Record* (115-119 W. 40th st., N.Y. 35c) 40:590 D '16
- Preserving the natural landscape spirit in artificial plantations. C. B. Waldron. *Minn Hort* 46:206-8 My '18
- Putting life into the garden. F. A. Waugh. *il Gard M* 24:12-13 Ag '16
- Relation of the house to the landscape. H. D. Smith. *il Am Architect* (243 W. 39th st., N.Y. 25c) 113:397-404, pl 116-24 Ap 3 '18
- Remaking home places. S. A. Hamilton. *Country Gent* 82:286 F 10 '17
- Rural school grounds. E. H. Barbour. *il (In Nebraska Horticulture v. 6, no. 12, p. 114-19) (F)* '17 Neb. state hort. soc., Lincoln
- Selecting trees for shelter, shade and show. H. R. Francis. *il Am For* 24:41-5 Ja '18
- Some ideas about planting the farmstead. *il Country Gent* 83:28 Ja 12 '18
- Some thoughts on naturalistic planting. *Gard Chron* Am 21:156 Ap '17
- Suggestions for the home-maker. C. J. Hayden. *Prog F* 31:393 Mr 18 '16
- Surroundings of a small country house. L. Irwell. *il Gard Chron* Am 21:277-8 JI '17
- Term defined. F. N. Evans. *Am Flor* 47:437 S 16 '16
- Treatment of the long narrow lot. R. Dean. *plan Gard M* 25:95 Mr '17
- Trees, shrubs and plants for farm and home planting. C. P. Halligan. *il Mich Ag Exp* B 281:1-52 '18
- Unwise locations for trees and shrubs. C. H. Sapp. *Ohio F* 141:51 Ja 12 '18
- Use of native plants for ornamental planting. L. P. Jensen. *Gard Chron* Am 20:17-18+ Ja '16
- Value of horticulture to the farm. Mrs. C. Wedge. *Minn Hort* 44:217-19 My '16
- War tax on beauty. R. Dean. *il plan Country Life* 33:48-9 Ap '18
- What I want and what I can afford. F. Steele. *il Gard M* 22:206-8 Ja '16
- Which is the better view? W. Miller. *il Country Life* 29:35 Ap '16

Windbreaks, trees, shrubs and flowers. M. L. C. Adams. *Am Fruit Grower* 38:12 N '18

See also Evergreens; Garden ornaments and furniture; Gardening; Gardens; Hedges; Lawns; Parks; Pergolas; Shrubs; Trees; Water gardens

**Bibliography**

Brief list of books suggested for reading and study. 2p '18 Harvard univ., School of landscape architecture lib., Cambridge, Mass.

**Study and teaching**

- Garden school. L. G. Smith. *il Delineator* (Spring and Macdougall sts, N.Y. 15c) 91:24 D '17
- Popular education in architecture and landscape gardening. C. F. Pilat. *Architectural Record* (115 W. 40th st., N.Y. 35c) 41:542-8 Je '17

Lanero. See Balsa tree

**Langshans (poultry)**

- Black langshan. W. H. Card. *il Country Gent* 81:404 F 19 '16
- Origin and history of langshan fowl. H. E. Sharp. *Am P J* 48:504-10 Ap '17
- Reasons why I keep black langshans. J. F. Robinson; F. D. Hackett. *il Am P J* 47:48-9 Ja '16

**Lanterns**

Old lanterns. *il Country Life* 31:60 N '16

**Larch**

- Bisporangiate cones of larch. J. E. Kirkwood. *il Bot Gaz* 61:256-7 Mr '16
- Larches of the world. map J For 15:1040-3 D '17
- Miscellaneous conifers of the Rocky Mountain region; generic characteristics of larches. G. B. Sudworth. *il U S Ag B* 680:2-11 '18
- Preliminary volume tables for larch. J Bd Ag 24:1430-5 Mr '18

**Diseases and pests**

Larch mistletoe; some economic considerations of its injurious effects. J. R. Weir. *il U S Ag B* 317:1-25 '16

**Larch sawflies**

Introduction into Canada of the ichneumon fly, mesoleius tenthradinis, a parasitic enemy of the larch sawfly, nematus erichsonii. C. G. Hewitt. *il Ag Gaz of Canada* 4: 355-7 My '17

**Lard**

- Be sure to make some lard this winter. *Swine World* 5:26 Ja '18
- Slow cooking for lard. M. L. Magruder. *Country Gent* 82:2039 D 22 '17
- Trying out lard on the farm. Wallaces' F 41: 120 Ja 28 '16
- Use other fats and sell the lard. Mrs. C. H. Thomas. *Prog F* 32:1130 O 27 '17

**Statistics**

- Commercial stocks of lard, Jan. 1. U S Food Surveys 1:1-6 My 31 '18
- Commercial stocks of lard, July 1. U S Food Surveys 2:2-4 S 16 '18
- Supply of lard in the United States; its extent and distribution on August 31, 1917. U S Ag C 97:1-32 '18

**Larks**

Horned larks. *il Am For* 22:540 S '16

Our skylark and its English cousin. S. Langstroth. *il Country Life* 29:24d F '16

**Larkspurs**

- Companions for larkspurs. E. Herrick. *Gard M* 25:262 My '17
- Eradicating tall larkspur on cattle ranges in the national forests. A. E. Aldous. *il maps Farmers' B* 826:1-23 '17
- Larkspur or poison weed. C. D. Marsh and others. *il Farmers' B* 988:1-15 '18 (rev. B. 531)
- Larkspur poisoning of live stock. C. D. Marsh and others. bibliog *il U S Ag B* 365:1-90 '16
- Notes on larkspur eradication on stock ranges. C. D. Marsh and A. B. Clawson. (A. I. 34) 5p '18 U S Ag
- Poisoning by larkspur. G. H. Glover. *il Colo Ag Ext* B 142 4p '18

**Larkspurs—Continued**

Turning poison into mutton. S. Riley. *il Nat Wool Grower* 7:19-21 Ap '17

**Lasioderma serricorne.** See Tobacco beetles

**Laspeyresia molesta.** See Oriental peach moths

**Last Jenkinson:** an idyl. J. Jenkinson. *Cornell Countryman* 15:400+ Ap '18

**Latch**

Lure of the latch. W. P. Eaton. *il Country Life* 33:41-5 Ap '18

**Latex**

Physiological observations on alkaloids, latex and oxidases in papaver somniferum. R. H. True and W. W. Stockberger. *Am J Bot* 3: 1-11 Ja '16

**Lath**

Production of lumber, lath, and shingles in 1915 and lumber in 1914. J. C. Nellis. *il map U S Ag B* 506:1-45 '17

**Lath houses.** See Summer houses

**Lathyrus sativus.** See Grass-peas

**Latin America****Industries and resources**

\* Tanning materials of Latin America. T. H. Norton. (Special agents ser.—no. 165) 32p *il map* 5c '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Latta, William Carroll**

Sketch. M. L. Fisher. *por Purdue Ag* 10:16 Ap '16

**Laughter**

Laughing and crying. *il J Heredity* 7:281-5 Je '16

**Laundries, Cooperative**

Community laundry. *il Rural N Y* 75:1009 Jl 22 '16

Cooperative laundries. B. H. Hubbard and A. Hobson. *il Wis Ag Exp B* 282:30-1 '17

Creamery laundry. *N Y Prod R* 43:150 N 22 '16

Creamery-laundry. E. H. Farrington. *il Kimball's D F* 14:755-6 D 1 '16

How farmers formed the world's first cooperative laundry. E. B. Forney. *Banker-F* 3:12 Ap '16

Successful rural cooperative laundry. C. H. Hanson. *il U S Ag Yearbook* 1915:189-94

**Laundries, Public**

Municipal laundry problem. D. B. Armstrong. *J Home Econ* 8:422-8 Ag '16

**Laundry**

Easier summer laundry work. *il Ohio F* 139: 728 My 26 '17

Hints for blue Monday. L. A. Yendes-Preston. *Rural N Y* 75:1317 O 14 '16

How to wash clothes. Mrs W. N. Hutt. *Prog F* 31:910 Jl 22 '16

Laundry helps. Mrs C. Johnston. *Rural N Y* 77:1120 S 28 '18

Learning to wash different fabrics. Mrs W. N. Hutt. *Prog F* 31:932 Jl 29 '16

Lesson in ironing. Mrs W. N. Hutt. *Prog F* 31:958 Ag 5 '16

My easy washing. A. Norman. *Country Gent* 81:242 Ja 29 '16

No more blue Mondays now. *il O Judd Farmer* 60:19 My 20 '16

Removing stains. M. Beall. *Purdue Ag* 11: 52-3 Mr '17

Smoothing Tuesday's troubles. A. G. Vestal. *il Power F* 25:34 Jl '16

Some ironing conveniences. *il Ohio F* 142:180 Ag 24 '18

Suggestions that will make laundry work easier. *il Prog F* 33:407 Mr 30 '18

Washday made easier. T. L. Sheppard. *il plans Hoard's D* 54:758 D 21 '17

Washing machines vs. washboards. E. Irving. *Nat Stock & F* 41:680 O 13 '17

Washing made easier. A. L. Marlatt. *il Hoard's D* 53:916 Je 29 '17

See also Cleaning; Ironing boards

**Lava**

Italian leucitic lavas as a source of potash. H. S. Washington. *Metallurgical & Chemical Eng* (10th av at 36th st, N.Y. 25c) 18: 65-71 Ja 15 '18

Vegetation of Hawaiian lava flow. V. MacCaughy. *il diag Bot Gaz* 64:386-420 N '17

**Lavender**

Culture of the true lavender. E. Zaccarewicz. *J Dept Ag Victoria* 16:489-93 Ag '18

Sweet smelling lavender. B. Farwell. *Gard M* 23:40 F '16

**Law**

Law and the milk producer. W. Drew. *Hoard's D* 54:912+ Ja 18 '18

Legislation affecting threshermen. *Power F* 26:35 Jl '17

My legal rights as a land owner. M. L. Hayward. *il System on the Farm* 1:67-8 Ap '17

See also Agricultural law and references under that subject; Agricultural liens; Apple industry—Laws and regulation; Dairy law; Drug laws; Educational law; Farm tenancy; Fish laws; Food law; Forestry law; Game laws; Highway law; Homestead law; Insurance law; Railroad law; Riparian rights; also subhead Law under special subjects, e. g. Poultry—Law, Marketing, Cooperative —Laws and legislation, Warehouses—Laws and regulation

Lawn-mower and the circus; story. L. A. Payne. *O Judd Farmer* 64:590 Je 1 '18

**Lawn mowers**

Keeping up the lawn mower. L. J. Doogue. *il Gard M* 23:270 My '16

**Lawn vases.** See Garden ornaments and furniture

**Lawns**

Autumn sowing and renovation. L. Macomber. *Gard Chron Am* 20:364 Ag '16

Fertilizing lawn and garden soils. P. E. Brown. *Ia Ag Exp C* 24:1-15 '16

Green grass in dry weather. F. F. Rockwell. *il Country Life* 30:24 Ag '16

Home garden; does your lawn need remaking or renovating? *Country Gent* 83:27 Ag 31 '18

How to have a beautiful lawn. W. C. Coker. *il Prog F* 31:394 Mr 18 '16

How to secure better lawns in North Carolina. C. B. Williams. *N C Ag Ext C* 28:1-8 '16

Lawn in its making and up-keep. L. Irwell. *Gard Chron Am* 22:124 Ap '18

Lawn making in California. J. W. Gregg. *il Cal Ag Exp C* 149:1-8 '16

Lawn repairs. *Am Flor* 48:794 Ap 28 '17

Lawns and lawn making. M. E. Montgomery. *Cornell Ag Ext B* 7:77-80 '16

Lawns or weeds. O. W. Newman. *il Cal State Comm Hort B v* 5:337-42 S '16

Making a new lawn. *Va Ag Dept B* 126:139-41 '18

Making of lawns and their upkeep. A. Smith. *Gard Chron Am* 22:253-4 O '18

Making the best of it; what will grow under lawn trees. S. F. Hamblin. *il Gard M* 23:295-6 Je '16

Real lawns wherever grass will grow. *il Gard M* 25:175-6 Ap '17

Repairing the old, neglected lawn. *il Country Gent* 81:696-7 Mr 25 '16

**Lawson, Thomas William, 1857-**

Turns Dreamworld over to Massachusetts to produce war food. *por Jersey B* 36:833-4 My 30 '17

**Leaching.** See Soil percolation

**Lead acetate**

Estimation of carbohydrates; the supposed precipitation of reducing sugars by basic lead acetate. W. A. Davis. *J Ag Sci* 8:7-15 S '16

**Lead arsenate**

Arsenate of lead costs for spraying apple orchards. *Better Fruit* 12:17 F '18

Arsenical residues after spraying. W. C. O'Kane and others. *bibliog il N H Ag Exp B* 183:1-62 '17

Calcium arsenate vs. lead arsenate; high prices require substitute for arsenical spray material. J. R. Stear. *Ohio Ag Exp B v* 3: 156-8 My '18

Influence of molasses on the adhesiveness of arsenate of lead. F. Z. Hartzell. *J Econ Entom* 11:62-6 F '18



**Lead arsenate—Continued**

- Lead arsenate in vine culture. C. G. Muttelet. *Int R Sci & Prac Ag* 7, no 12:1837-8 D '16
- Lead arsenates, stone fruits, and the weather. G. F. Gray. *il J Econ Entom* 10: 385-92 Ag '17
- Tobacco hornworm insecticide; recommendations for use of powdered arsenate of lead in dark-tobacco district. A. C. Morgan. *Farmers' B* 867:1-10 '17

**Analysis**

- Report on lead arsenate. R. C. Roark. *Assn Office Ag Chem J* 3:163-9 My '17

**Leadership**

- Call to rural leadership. L. H. Dennis. *Penn State F* 11:77-8 Mr '18
- Leadership. R. Bates. *Rural Manhood* 8:285-8 S '17
- Training rural leaders. H. C. Parkinson. *Penn State F* 11:79 Mr '18

**Leaf blister mites**

- Leaf blister mite on pear and apple foliage. H. C. Clarke. *Gard M* 27:29 F '18

**Leaf blotch**

- Leaf blotch disease of horse-chestnut. V. B. Stewart. *il Cornell Ag Exp B* 371:411-19 '16; Same. *Cornell Ag Exp Rep* 1916:411-19 '17
- Leaf blotch disease of horse-chestnut. V. B. Stewart. *il Phyt* 6:5-20 F '16

**Leaf case-bearers, Pecan. See Pecan leaf case-bearers****Leaf folders**

- See also* Grape leaf folders; Sweet potato leaf folders

**Leaf hoppers**

- Beet leafhopper and the curly-leaf disease that it transmits. E. D. Ball. *bibliog il map Utah Ag Exp B* 155:1-56 '17
- Clover leafhopper and its control in the central states. E. H. Gibson. *il Farmers' B* 737: 1-8 '16
- Grape leafhopper (*typhlocyba comes* Say) in the Lake Erie valley. F. Johnson. *il U S Ag B* 19:1-47 '14
- Leaf-hopper catcher. E. D. La Due. *il Country Gent* 81:906 Ap 22 '16
- Life histories of leafhoppers of Maine. H. Osborn. *il Maine Ag Exp B* 248:53-80 '16
- Life-history and control of the rose leaf-hopper. L. Childs. *il Ore Ag Exp B* 148:1-32 '18
- Notes on the beet leafhopper, *eutettix tenella* Baker. H. H. P. Severin and W. Thomas. *J Econ Entom* 1:308-12 Je '18
- Notes on three species of apple leaf-hoppers. F. H. Lathrop. *il J Econ Entom* 11:144-8 F '18
- Obtaining beet leafhoppers nonvirulent as to curly-top. C. F. Stahl and E. Carsner. *J Ag Research* 14:393-4 Ag 26 '18
- Sharp-headed grain leafhopper. E. H. Gibson. *U S Ag B* 254:1-16 '15
- Wild vegetation as a source of curly-top infection of sugar beets. P. A. Bonquet and C. F. Stahl. *il J Econ Entom* 10:392-7 Ag '17

*See also* Apple leaf hoppers

**Leaf miners**

- Notes on *pegomyia hyoscyami* Panz. E. N. Cory. *J Econ Entom* 9:372-5 Je '16
- See also* Apple leaf miners; Columbine leaf miners; Elm leaf miners; Sawfly leaf miners; Spike-horned leaf miners

**Leaf miners, Sawfly. See Sawfly leaf miners****Leaf mold**

- Value of leaf mold. A. C. Rutledge. *Gard M* 23:194 Ap '16

**Leaf rollers**

- Fruit-tree leaf roller (B. 367). G. W. Herrick and R. W. Leiby. *bibliog il Cornell Ag Exp Rep* 1916:247-79 '17; Same cond. (*In Report Entomological soc. of Ontario, 1916, p. 132-7*) *il '17 Ontario ag. dept., Toronto*

Further observations on the control of the fruit-tree leaf-roller in the Hood River valley. L. Childs. *Ore Ag Exp B* 141:18-27 '17

**Leaf-rollers, Strawberry. See Strawberry leaf-rollers****Leaf sewers**

*See also* Apple leaf-sewers

**Leaf spot**

- Alfalfa leaf spot. G. O. Osner. *Purdue Ag* 11: 37 My '17
- Alternaria leaf-spot of cotton. R. C. Faulwetter. *il Phyt* 8:98-105 Mr '18
- Ascochyta clematidina, the cause of stem-rot and leaf-spot of clematis. W. O. Glover. *bibliog il J Ag Research* 4:331-42 Jl '15; Same (Tech. B. 44). *N Y State Ag Exp Rep* 1915:318-29 '16
- Bacterium causing a disease of sugar-beet and nasturtium leaves. N. A. Brown and C. O. Jamieson. *il J Ag Research* 1:189-210 D '13
- Colletotrichum leafspot of turnips. B. B. Higgins. *il J Ag Research* 10:157-62 Jl 23 '17
- Control of cherry leaf spot in Wisconsin. G. W. Keitt. *il Wis Ag Exp B* 286:1-11 '18
- Control of tomato leaf-spot. (C., T., & F. C. D. C. 4) 4p *il '18 U. S. Bur. of plant industry, Washington, D.C.*
- Dimorphism in coniothyrium pirinum Sheldon. C. H. Crabill. *il Am J Bot* 2:449-67 N '15
- Dissemination of septoria lycopersici Speg. by insects and pickers. W. H. Martin. *bibliog Phyt* 8:365-72 Jl '18
- Dissemination of the angular leafspot of cotton. R. C. Faulwetter. *bibliog J Ag Research* 8:457-75 Mr 19 '17
- Experiments with apple leaf-spot fungi. J. W. Roberts. *bibliog il J Ag Research* 2:57-66 Ap '14
- Field studies on cercospora beticola. M. B. McKay and V. W. Pool. *il Phyt* 8: 119-36 Mr '18
- Leafblight of kalmia latifolia. E. M. A. Enlows. *bibliog il J Ag Research* 13:199-212 Ap 15 '18
- Leaf blight of the tomato. M. T. Cook and W. H. Martin. *il N J Ag Exp B* 96 4p '13
- Leaf-spot disease of tomato. E. Levin. *bibliog il Mich Ag Exp Tech B* 25:1-51 '16; Same. *Mich Ag Bd Rep* 1916:632-87; Same cond. (Popular ed.) *Mich Ag Exp Spec B* 81:1-15 '17; Same. *Mich Ag Bd Rep* 1917: 485-96
- Leaf spot of celery. *il J Bd Ag* 24:68-70 Ap '17
- Leaf spot of tomatoes. *Gard Chron (Lond)* 60: 208 O 28 '16
- Leaf-spot on vines. W. H. Dobson. *Gard Chron (Lond)* 59:267 My 20 '16
- Leaf-spot or shot-hole defoliation of cherry and plum. A. D. Selby. *Ohio Ag Exp B v 1: 206-8 J '16*
- New leaf-spot disease of cherries. B. A. Rudolph. *il Phyt* 7:188-97 Je '17
- New leaf-spot disease of polygonum persicaria. P. J. O'Gara. *il Mycol* 9:248 Jl '17
- New spray for leaf-spot of tomatoes. *Market Growers J* 21:94 S 1 '17
- Septoria injurious to celery in the neighbourhood of Petrograd. G. Dorogin. *Int R Sci & Prac Ag* 7, no 7:1041-2 Jl '16
- Septoria leaf spot disease of celery. G. H. Coons and E. Levin. *il Mich Ag Exp Spec B* 77:1-8 '16; Same. *Mich Ag Bd Rep* 1916: 372-8; Same cond. *Am Flor* 46:1218 Je 24 '16; Same cond. *Market Growers J* 19:207 N 1 '16
- Some septorias of wheat. W. B. Grove. *Gard Chron (Lond)* 60:194, 210 O 21-28 '16
- Stemphyllium leafspot of cucumbers. G. A. Osner. *il J Ag Research* 13:295-306 Ap 29 '18
- Studies in the life histories of some species of septoria occurring on ribes. R. E. Stone. *il Phyt* 6:419-27 D '16
- Tomato leaf spot. *Weekly N L* 5:2 Ag 8 '17
- Yellow-leafblotch of alfalfa caused by the fungus pyrenopeziza medicaginis. F. R. Jones. *bibliog il J Ag Research* 13:307-30 My 6 '18
- See also* Cucumber angular leaf-spot; Tobacco wildfire

**Leaf-tiers, Clover. See Clover leaf-tiers****Leaf weevils**

- Leaf-weevil. P. J. Parrott and H. Glasgow. *il N Y State Ag Exp Tech B* 56:1-24 '16

**Leaf worms, Pear. See Pear leaf-worms**

- League of national safety**  
League of national safety in Great Britain.  
A: Yapp. J Bd Ag 24:886-8 N '17
- Leakage meters**  
Calibration of the leakage meter. C. W. Woodworth. Cal Ag Exp B 264:231-4 '16
- Leases**  
Contract between landlord and tenant.  
Hoard's D 52:314 S 29 '16  
Debate: resolved, That improving farm leases is the best way of meeting the evils of tenancy. Wallaces' F 43:533 Mr 22 '18  
Good farm lease. Ohio F 137:454 Mr 25 '16  
Hoard's Dairyman farm lease. Hoard's D 52:275 S 22 '16  
Lease contracts used in renting farms on shares; a study of the distribution of investments, expenses and incomes between landlord and tenant. E. V. Wilcox. U S Ag B 659:1-36 '18  
Leasing a dairy farm. W. S. Tomlinson. Ohio F 137:259 F 19 '16  
Long-term lease. Wallaces' F 43:611 Ap 5 '18  
Model farm lease. Wallaces' F 43:1449 O 4 '18  
Real profit-sharing scheme. Wallaces' F 41:338 F 25 '16  
Renting a dairy farm on shares. Hoard's D 52:277 S 22 '16  
Sample stock share lease; bankers and farmers, study it. Banker-F 3:15 N '16  
Stock-share lease. A. M. TenEyck. Country Gent 81:1524 Ag 12 '16  
Suggested form of rental contract. Prog F 31:1074 S 9 '16  
Terms for a tenancy contract. H. P. Miller. Ohio F 142:244 S 14 '18  
Terms for tenancy partnership. H. P. Miller. Ohio F 137:126 Ja 29 '16  
Winnebago farmers' model lease; with text. O Judd Farmer 60:8 F 12 '16; Same. Wallaces' F 41:1608 D 8 '16
- Leather, John Walter, 1860-**  
Major John Walter Leather, V. D., F. I. C.; sketch. J. Mackenna. por Ag J of India 12:266-7 Ap '17
- Leather**  
Economy in leather. Weekly N L 4:4 My 23 '17; Same. Wallaces' F 42:1111 Ag 10 '17; Same abridged. J Home Econ 9:336-7 Jl '17  
Keeping leather in condition. J Ag (Quebec) 21:xiii Ap '18  
Keeping leather in condition. S. Orrick. Country Gent 82:1814 N 24 '17  
Study of the nitrification of different leathers available for agricultural use, and sulphurated rape cakes. Int R Sci & Prac Ag 7, no 9:1253-6 S '16  
*See also* Harness; Hides and skins; Tanning
- Analysis**  
Vegetable tanned leather; methods of analysis. Assn Offic Ag Chem J 2, no 2, pt 1: 59-61 Ag '16
- Leaves**  
Autumn foliage. Gard Chron Am 21:365 O '17  
\* Autumnal coloration of leaves and leaf-fall. Sci Am (233 Broadway, N. Y. 10c) 119:359 N 2 '18  
Chemical changes accompanying abscission in coleus blumei. H. C. Sampson. bibliog Bot Gaz 66:32-53 Jl '18  
Climatic distribution of certain types of angiosperm leaves. I. W. Bailey and E. W. Sinnott. Am J Bot 3:24-39 Ja '16  
Comparative study of winter and summer leaves of various herbs. J. P. Stober. Bot Gaz 63:89-109 F '17  
Conservation in autumn leaves. Am For 23:675 N '17  
Dead leaves valuable. Am For 23:731 D '17  
Development of the phylloxera vastatrix leaf gall. H. R. Rosen. bibliog il Am J Bot 3:337-60 Jl '16  
Duration of leaves in evergreens. V. A. Pease. bibliog Am J Bot 4:145-60 Mr '17; Summary. J For 15:913-15 N '17  
Factors determining the occurrence of silver-leaf on trees. L. Petri. Int R Sci & Prac Ag 8, no 8:1196-7 Ag '17  
Fall of the leaf. S. L. Bastin. il Country Life 31:76 F '17  
Forms of leaves. il Am For 23:412-13 Jl '17  
Gathering and using forest leaves. Rural N Y 76:1172 O 13 '17  
Green leaf; its scientific and economic exploitation. Sci Am Sup (233 Broadway, N.Y. 10c) 86:34 Jl 20 '18  
Influence of the leaf upon root formation and geotropic curvature in the stem of bryophyllum calycinum and the possibility of a hormone theory of these processes. J. Loeb. il Bot Gaz 63:25-50 Ja '17  
Investigations on the phylogeny of the angiosperms; foliar evidence as to the ancestry and early climatic environment of the angiosperms. E. W. Sinnott and I. W. Bailey. il Am J Bot 2:1-22 Ja '15  
Leaf size in plant geography. A. L. Bakke. Bot Gaz 63:242 Mr '17  
Leaf-structure as related to environment. H. C. Hanson. bibliog il Am J Bot 4:533-60 N '17  
Making paper from dead leaves. Am For 24:630 O '18  
Mechanism of movement and the duration of the effect of stimulation in the leaves of dioscorea. W. H. Brown. bibliog Am J Bot 3:68-90 F '16  
Overlapping of the leaf sheath and its lack of value for descriptive botanical literature. A. B. Conner and R. E. Karper. Science (Science Press, Garrison, N.Y. 15c) n s 45:144-5 F 9 '17  
Save the leaves. A. W. Galligher. Fruit-Grower 27:532 D 15 '16  
Senile changes in leaves, by H. M. Benedict. Review. Bot Gaz 61:435-8 My '16  
Senile changes in the leaves of vitis vulpina L., and certain other plants; abstract. H. M. Benedict. Int R Sci & Prac Ag 7, no 9:1260-3 S '16  
Studies of leaf and tree. R. W. Shufeldt. il Am For 24:29-35, 95-102, 151-9 Ja-Mr '18  
Temperature of leaves of pinus in winter. J. H. Ehlers. bibliog Am J Bot 2:32-70 Ja '15  
Why leaves change their color. Fla Ag Dept Quar B v 28:41-2 O '18  
Xerofotic movements in leaves. F. C. Gates. il Bot Gaz 61:399-407 My '16  
*See also* Botany; Chloranth; Glands (botany); Plants—Transpiration; Stomata; Trees
- Composition**  
Amount of humic substances in decomposing leaves. A. C. Trusov. Int R Sci & Prac Ag 7, no 8:1096-8 Ag '16  
Composition of citrus leaves at various stages of mottling. C. A. Jensen. bibliog J Ag Research 9:157-66 My 7 '17  
Composition of fallen leaves of forest trees and their quantities. S. Moriya. Int R Sci & Prac Ag 7, no 6:833-40 Je '16  
Plant food materials in the leaves of forest trees. P. Serex, jr. Am Chemical Soc J (Box 505, Washington, D. C. \$6 per yr.) 39:1286-96 Je '17
- Lecanium, Peach.** *See* Terrapin scales
- Lectures and lecturing**  
Looking after the woman speaker. Country Gent 81:2099 D 2 '16
- Leeks**  
Cultivation of the leek. W. W. Glenly. J Bd Ag 24:66-8 Ap '17  
Leeks. A. C. Bartlett. Gard Chron (Lond) 64:24 Jl 20 '18  
Leeks. R. W. Thatcher. Gard Chron (Lond) 63:104 Mr 9 '18
- Lefebure, Henry, 1866-1917**  
Death of Henry Lefebure. por Breeder's Gaz 72:212 Ag 16 '17
- Left- and right-handedness**  
Left-handedness. J Heredity 7:287 Je '16
- Leghorns (poultry)**  
Breeding high-quality single comb white leghorns. G. M. Curtis. Reliable P J 24:848+ D '17  
Breeding single comb white leghorns. Mrs R. West. Am P J 47:488 Mr '16



**Leghorns (poultry)—Continued**

- Breeding white leghorns for exhibition. R. R. Myers. *Am P J* 47:1378 D '16
- Brown leghorn. W. H. Card. *il Country Gent* 81:69 Ja 8 '16
- Care and growth of r. c. w. leghorns. A. M. Clarke. *Am P J* 47:1123 O '16
- Cost of raising leghorn pullets. A. G. Philips. *il Ind Ag Exp B* 196:1-20 '16; Summarized. Popular ed B 196 8p
- Due attention to the meat qualities of leghorns. Reliable *P J* 25:473+ JI '18; Excerpt. Weekly N L 5:5 My 1 '18
- Egg-producing leghorn. F. S. Jacoby and A. Bayes. *il Ohio F* 137:582 Ap 15 '16
- Farm woman praises brown leghorns. Mrs G. L. Russell. *Am P J* 48:750 Je '17
- 1st National all-leghorn show, Columbus, Ohio, Nov. 28-Dec. 3, 1917. S. Strong. *il Reliable P J* 24:1105+ F '18
- From law to leghorns. H. S. Stabler. *il Country Gent* 81:5-6 Ja 1 '16
- History of the little brown hen and her bright future. H. V. Tormohlen. Reliable *P J* 23: 1078-9 Ja '17
- How to breed r. c. w. leghorns and why. W. T. Mattinson; L. B. Quimby. *il Am P J* 47:616-17 Ap '16
- How Yesterlaid egg strain was developed. R. C. Lawry. *il Reliable P J* 25:22-4 Mr '18
- Leghorn—a desirable breed. L. H. Simmons. *Am P J* 48:887 Ag '17
- Leghorn broiler. R. F. Irvin. *il Country Gent* 81:1203 Je 10 '16
- Light and dark brown leghorns. H. V. Tormohlen. *Am P J* 48:422+ Mr '17
- My flock of fifty. A. Rutledge. *Country Gent* 81:1307 JI 1 '16
- Notes on breeding white leghorns. A. Wilberding. *Am P J* 48:823 JI '17
- Oak Dale farms buys the D. W. Young white leghorns. Reliable *P J* 25:690-1 O '18
- Popularity of the s. c. white leghorn. K. Dittmer. *Am P J* 47:430-2 Mr '16
- Popularity of the white leghorn. H. S. Carter. *Am P J* 49:78 Ja '18
- Produce cheaper eggs; superiority of leghorns as layers. Weekly N L 4:4 JI 18 '17
- Reasons for breeding s. c. white leghorns. A. J. Churchill. *Am P J* 48:261 F '17
- Reasons for selecting my variety. R. D. Jones. *Am P J* 48:114 Ja '17
- Rebuilding the leghorn. *il Field II* 26:413 My '16
- S. c. black leghorns. P. McCullough. *Am P J* 48:111 Ja '17
- S. c. white leghorns—a desirable breed. G. R. Williams. *il Am P J* 47:432-3 Mr '16
- S. c. white leghorns—a desirable variety. G. Amadon. *Am P J* 48:864 Ag '17
- S. c. white leghorns fill the bill. Mrs F. M. Kelley. *Am P J* 47:674 Ap '16
- Seven and eight pound s. c. w. leghorns. E. G. Steineck. *Am P Advocate* 26:338 Ap '18
- Study of egg production in the white leghorns; records of five laying contests. L. E. Card. *Conn Storrs Ag Exp B* 91:41-90 '17
- Thirty-six pullets. S. D. Williams. *il Country Gent* 81:1203 Je 10 '16
- West Virginia poultry; record of a suburban flock. F. Bachman. *il W Va Ag Dept B* 14:27-9 '16
- What is the Barron leghorn. G. A. Cosgrove. *Rural N Y* 75:500 Mr 18 '16
- Why I breed single comb brown leghorns. W. G. Warnock. *Am P J* 49:189 F '18
- Woman enumerates points in favor of single comb brown leghorns. E. Shultz. *Am P Advocate* 25:364 Ap '17

**Legislation**

- Activities at Washington affecting the farmer and his business. *Am Coop J* 13:324+ Ap '18
- Messages of three governors. Wallaces' *F* 42: 85 Ja 19 '17
- Washington and the farmer. J. Snure. *Am Coop J* 13:135-6 D '17
- What legislation farmers want this year. C. Poe. *Prog F* 31:511 Ap 8 '16

See also Conference on agricultural legislation

**Legume inoculation. See Soil inoculation**

**Legumes**

- Biochemical study of nitrogen in certain legumes. A. L. Whiting. *Int R Sci & Prac Ag* 7, no 10:1426-9 O '16
- Chemical studies of the efficiency of legumes as green manures in Hawaii. A. R. Thompson. *Hawaii Ag Exp B* 43:1-26 '17
- Comparative value of legumes as green manures. M. O. Johnson and others. *il Hawaii Ag Exp Press B* 52:1-14 '17
- Cover crops for Porto Rico. C. F. Kinman. *il Porto Rico Ag Exp B* 19:1-32 '16
- Cows need legumes. O Judd Farmer 64:13 F 9 '18
- Crops that grow crops. W. H. Dean. *il Country Gent* 81:3-4 Ja 1 '16
- Effect of soluble nitrogenous salts on nodule formation. E. B. Fred and E. J. Graul. *bibliog Am Soc Agron J* 8:316-28 S '16
- Experiences with winter legumes in Arkansas. C. O. Carpenter. *Prog F* 31:990 Ag 12 '16
- Experiments with legume crops under irrigation. J. S. Welch. *il Idaho Ag Exp B* 94:1-14 '17
- Failure of new seeding. C. G. Williams. *Ohio F* 138:430 N 4 '16
- Farm sources of soil fertility. A. Agee. *N J Ag Dept B* 8:253-90 '17
- Farming the air with the cowpea. *il S C Ag Dept B* 57:1-50 '16
- Feeding vs. plowing under legumes. T. Butler. *Prog F* 31:875 JI 15 '16
- Fertilisation of gramineae and leguminosae in relation to selection. N. H. Frandsen. *Int R Sci & Prac Ag* 8, no 9:1231-3 S '17
- Fitting legumes into a systematic rotation. D. H. Otis. *Hoard's D* 56:616+ N 29 '18
- Food for the soil—legumes. *il Rural N Y* 77: 1259 N 9 '18
- Forage legumes for West Virginia. F. W. Stemple. *W Va Ag Dept B* 30:15-20 '17
- Gain in nitrogen from growth of legumes on acid soils. E. B. Fred and E. J. Graul. *bibliog il map Wis Ag Exp Research B* 39:1-42 '16
- Grain farming in the corn belt. C. Vrooman. *Farmers' B* 704:17-26 '16
- How to get rich lands; emphasizing the importance of cover crops and legumes. T. Butler. *Prog F* 32:923 S 1 '17
- How to get rich lands; legumes; their place in soil improvement. T. Butler. *Prog F* 32: 880 Ag 18 '17
- Influence of hydrogen-ion concentration of medium on the reproduction of alfalfa bacteria. E. B. Fred and N. E. Loomis. *bibliog J Bact* 2:629-33 N '17
- Influence of reaction on nitrogen-assimilating bacteria. E. B. Fred and A. Davenport. *bibliog J Ag Research* 14:317-36 Ag 19 '18
- Influence of some common humus-forming materials of narrow and of wide nitrogen carbon ratio on bacterial activities. P. E. Brown and F. E. Allison. *Soil Sci* 1:49-75 Ja '16
- Intercropping to keep up fertility and provide some cash. M. Rosby. *il Country Gent* 81: 1631 S 2 '16
- Is symbiosis possible between legume bacteria and non-legume plants? T. J. Burrill and R. Hansen. *bibliog il Ill Ag Exp B* 202:115-181 '17
- Keeping up the grain land. E. E. Miller. *il Country Gent* 82:1723 N 10 '17
- Legume development in South. C. A. Whittle. *Hoard's D* 55:970 Je 28 '18
- Legume family. Wallaces' *F* 42:923 Je 15 '17
- Legume inoculation. L. Knudson. *il Cornell Ag Ext B* 2:19-28 '16
- Legumes as farm crops. C. F. Class. *il Hoard's D* 51:833+ Je 16 '16
- Legumes for dairy cows. Weekly N L 4:7 Je 27 '17
- Legumes for feeding purposes. H. G. Van Pelt. *Kimball's D F* 14:402 Je 15 '16
- Legumes for New England. F. S. Prince. *Hoard's D* 54:913 Ja 18 '18
- Legumes for protein food. *Rural N Y* 76:870 JI 14 '17
- Legumes for soil improvement. C. G. Williams. *Ohio F* 140:551 D 15 '17

**Legumes—Continued**

- Legumes for southern Illinois. W. M'Dowell. O Judd Farmer 62:7 Ap 7 '17
- Legumes for the dairy. C. W. Burkett. (*In* De Laval dairy hand book, p. 21-4) il '16 De Laval separator co., New York
- Legumes for the South. H. Marks. Hoard's D 51:332 Mr 17 '16
- Legumes for the South. E. E. Miller. Hoard's D 51:541 Ap 21 '16
- Legumes in the garden. W. H. Jenkins. Country Life 30:72 My '16
- Legumes increase yield. Kimball's D F 16:135 F 15 '18
- Legumes: nature's soil restorer and the farmer's best crop. B. L. Moss. Prog F 31:913 Jl 22 '16
- Legumes will increase dairy profits. J. M. Fuller. N H Ag Ext Press B 66 1p '17
- Leguminous crops. R. A. Moore. Tex Ag Dept B 52:13-18 '16
- Leguminous crops in desert agriculture. C. Howard and G. L. C. Howard. Ag J of India 12:27-43 Ja '17; Abstract. Int R Sci & Prac Ag 8, no 8:1120-3 Ag '17
- Leguminous plants and their uses. J. W. Poynton. J Ag New Zealand 14:38-45 Ja '17
- Lime for legumes. J. C. Beavers. il Country Gent 81:252 F 5 '16
- Lime for legumes. T. Butler. Prog F 32:815 Jl 28 '17
- Livestock or other crops. G. Sidney. il Country Gent 81:197 Ja 29 '16
- More legumes needed on upland farms in region of Gulf Coast. Weekly N L 6:7 O 9 '18
- More profitable cropping system. W. R. Perkins. Prog F 31:22 Ja 1 '16
- New legumes for green manuring. R. H. Forbes. Ariz Ag Exp Timely Hints 119:1-2 '16
- Nitrogen from legumes. H. G. Bell. (Soil improvement com pamph 18) 25p '16 Nat. fertilizer assn., Chicago
- Nitrogen-gathering crop for every acre this year. Prog F 31:461 Ap 1 '16
- Nodules on roots of legumes. W. E. Bowers. il Hoard's D 53:624 Ap 27 '17
- One big thing for all farmers. R. E. Lambert. Prog F 31:633 My 6 '16
- Peculiar partnership. Wallaces' F 41:847 Je 9 '16
- Relative effect of sodium chloride on the development of certain legumes. G. W. Hendry. Am Soc Agron J 10:246-9 S '18
- Soil management for vegetable and truck crops. A. E. Grantham. Prac F 113:425 D 15 '17
- Some common legumes. F. E. Robertson and F. C. Barlow. N Y Ag Dept B 86:2399-401 Ag '16
- Some effects of legumes on associated non-legumes. M. W. Evans. il Am Soc Agron J 8:348-57 N '16
- Studies of bacillus radicola: testing commercial cultures; soil as a medium. J. C. Temple. il Ga Ag Exp B 120:67-80 '16
- Studies of leguminous plants as green manure. N. Gangulee. Int R Sci & Prac Ag 8, no 12: 1194-5 D '17
- Studies on the root nodules of non-leguminous plants in Japan. K. Shibata and M. Tahara. Int R Sci & Prac Ag 8, no 10:1357-8 O '17
- Use the winter growing season by planting legumes. J. C. McAmis. il Tenn Ag Ext Gen Ser 10 (Pub. 18):1-8 '16
- Using the legumes to best advantage. A. F. Kidder. Prog F 32:453 Ap 7 '17
- Value of legumes. Hoard's D 50:818 Ja 14 '16
- Water as a factor of production in leguminosae. Int R Sci & Prac Ag 7, no 2:208-9 F '16
- Why and how to grow more legumes. E. H. Loveland. Hoard's D 53:481 Ap 6 '17
- See also Alfalfa; Beans; Chick peas; Clover; Cowpeas; Grass-peas; Green manuring; Lespedeza; Lima beans; Lupines; Peanuts; Peas; Soil inoculation; Soy beans; Sulla; Velvet beans; Vetch

**Diseases and pests**

- Araeocerus fasciculatus, a coleopteron injurious to tephrosia candida, in Java. P. van der Goot. Int R Sci & Prac Ag 8, no 12:1302-3 D '17
- Host plants of thielavia basicola. J. Johnson. bibliog il J Ag Research 7:289-300 N 6 '16; Summary. Int R Sci & Prac Ag 8, no 3:476-8 Mr '17

**Laws**

- Arrêté n. 5201 concernant l'établissement d'un office impérial pour l'approvisionnement en légumes et en fruits en Allemagne. Int Yearbook Ag Leg 1916:184-5 '17
- Arrêté n. 5295 modifiant l'ordonnance n. 4853 du 26 août 1915 concernant le commerce des légumineuses en Allemagne. Int Yearbook Ag Leg 1916:189-94 '17

**Seed**

- Inoculating legume seed. E. H. Phreaner. Market Growers J 23:88 S 1 '18
- Legumes in early spring. L. L. Rummell. il Country Gent 83:11 Mr 2 '18

Lehua. See Ohia lehua

**Leisure**

- Value of the woman of leisure. L. H. Cox. J Home Econ 8:407-13 Ag '16

**Lejeuneae**

- Noteworthy lejeuneae from Florida. A. W. Evans. il Am J Bot 5:131-50 Mr '18

**Lemoine, Victor, 1823-1911**

- Victor Lemoine, plant hybridist. por Gard M 25:234 My '17

**Lemon cottony rot**

- Cottony rot of lemons in California. C. O. Smith. il Cal Ag Exp B 265:237-58 '16
- Cottony rot of lemons in California. C. O. Smith. il Phyt 6:268-78 Je '16

**Lemon-grass oil**

- Possibility of the commercial production of lemon-grass oil in the United States. S. C. Hood. il U S Ag B 442:1-12 '17

**Lemon scab. See Citrus scab****Lemon sour rot**

- Sour rot of lemon in California. C. O. Smith. il Phyt 7:37-41 F '17

**Lemons**

- Bottle-necked lemon. L. Swingle. il J Heredity 8:559-60 D '17
- Bud curl of the lemon tree. C. C. Miller. il Cal State Comm Hort B v 7:515-19 S '18
- Bud variation in lemons. A. D. Shamel. il J Heredity 8:75-81 F '17; Abstract. Int R Sci & Prac Ag 8, no 6:858-9 Je '17
- Determination of the volatile oil content of citrus fruits. C. P. Wilson and C. O. Young. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:959-61 O '17
- Lemon bud variation. A. D. Shamel. il J Heredity 8:284 Je '17
- Lessons gathered from the year 1915. C. C. Teague. Cal State Comm Hort B v 5:176-8 My '16
- Not for the sweet tooth. A. B. Dunn. il Country Gent 81:491 F 26 '16
- Optimum moisture conditions for young lemon trees on a loam soil. L. W. Fowler and C. B. Lipman. Cal Univ Pub Ag Sci v 3, no 2 25-36p, pl 9-11 '17 (15c)
- Ponderosa lemon. T. J. Steed. il Gard M 22: 209 Ja '16
- Pruning and training a young lemon orchard. W. H. Fleet. il Cal State Comm Hort B v 5:250-62 Jl '16
- Renewing old lemon trees. J. D. Culbertson. Cal State Comm Hort B v 5:97-102 Mr '16
- Some effects of shading lemon trees. A. D. Shamel and others. il Cal State Comm Hort B v 7:441-51 Jl '18

**Curing**

- Humidifier for lemon curing rooms. A. D. Shamel. il U S Ag B 494:1-10 '17



Lemons—Continued

Diseases and pests

Causes of unnecessary decay in lemons. R. L. Willits. Cal State Comm Hort B v 5:213-16 Je '16

See also Citrus scab; Lemon cottony rot; Lemon sour rot

Lentils

Statistics

Commercial stocks of peas and lentils, Jan. 1. U S Food Surveys 1:5-7 Jl 20 '18  
Commercial stocks of peas and lentils, July 1. U S Food Surveys 2:4-6 O 1 '18

Leonard, Charles E., 1839-1916

Portrait. Breeder's Gaz 69:607 Mr 16 '16

Sketch. W. L. Nelson. Breeder's Gaz 69:614 Mr 16 '16

Leopard moths

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16,no 26:86-9 '16

Leopard moth: a dangerous imported insect enemy of shade trees. L. O. Howard and F. H. Chittenden. il map Farmers' B 708:1-10 '16

Simulate pear borer and leopard moth (C. 44). P. J. Parrott and H. Glasgow. il N Y State Ag Exp Rep 1915:484-6 '16

Lepidoptera

Check list of the lepidoptera of boreal America. W. Barnes and J. McDunnough. 392p '17 W: Barnes, 320 Millikin bldg., Decatur, Ill.

Female lepidoptera at light traps. W. B. Turner. bibliog J Ag Research 14:135-49 Jl 15 '18

Lepidosaphes ficus. See Mediterranean fig scale

Lespedeza

Best time to sow lespedeza in Mississippi. T. Butler. Prog F 31:171 F 5 '16

How to feed the dairy cow. H. G. Van Pelt. Kimball's D F 14:670 O 15 '16

Lespedeza: a summer legume for the whole South. B. L. Moss. Prog F 31:1004 Ag 19 '16

Lespedeza as a soil improver. M. Rosby. il Country Gent 81:678 Mr 25 '16

Lespedeza or Japanese clover as a hay crop in Tennessee. J. S. Denton. Prog F 23:1134 O 19 '18

Louisiana lespedeza hay versus western timothy hay. W. H. Dalrymple. La Ag Bd 7p n. d.

Planting wheat on lespedeza sod. Prog F 32:1059 O 13 '17

Success with oats and lespedeza. J. S. McGhee. Prog F 31:1016 Ag 19 '16

Seed

Lespedeza seed. M. Dworak. La Ag Ext C 11:1-11 '16

Lespedeza seed outlook. U S Seed Rep 2:2 D '18

Lespedeza seed production and movement for 1917. H. S. Coe. U S Seed Rep 1:8 D '17

Report of lespedeza germination tests. M. Dworak. Assn Offic Seed Analysts Pro 1916-1917:35-7 '17

Tabulation of reports from shippers of cowpeas, soy beans, and lespedeza, under date of December 31, 1917. U S Seed Rep 1:2 F '18

Lesser bud moths. See Bud moths

Lesser grain borers. See Grain borers, Lesser

Lesser peach tree borers. See Peach tree borers, Lesser

Letter writing. See Commercial correspondence

Letters to a young farmer. W: H. Dean. il Country Gent 81:1929, 1998, 2071; 82:97 N 4, 18, D 2 '16, Ja 20 '17

Lettuce

Comparison on percentages of nitrogen in tops and roots of head lettuce plants. H. A. Noyes. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:621-4 Ag '18

Early summer crop. C. E. Brehm. Country Gent 81:693-4 Mr 25 '16

Experiences with lettuce; symposium. Market Growers J 22:180-1 Mr 1 '18

Fall lettuce. R. M. Hasbrouck; J. M. Smith. Market Growers J 19:168 O 1 '16

Fall supply of lettuce Fruit-Grower 27:441 O 1 '16

Forcing head lettuce. C. W. Skinner. il Country Gent 82:1795 N 17 '17

Grand Rapids lettuce grown under glass, and what has come of it. Gleanings 44:1186-7 D 15 '16

Growing frame lettuce. Prog F 31:1000 Ag 19 '16

Growing lettuce. W. F. Massey. Prog F 33:928 Ag 24 '18

Head lettuce for Ohio greenhouses. S. N. Green. il Ohio Ag Exp B v 2:370-4 N '17; Same cond. Market Grower J 22:110 F 1 '18

Head lettuce growing in southern Arizona. S. B. Johnson. Ariz Ag Exp Timely Hints 128:1-8 '17

Head lettuce in summer. Rural N Y 76:348 Mr 3 '17

Head lettuce in the West. J. T. Rosa, jr. il Country Gent 81:1723 S 23 '16

Improving Grand Rapids lettuce. S. N. Green. il Ohio Ag Exp B v 2:308-12 S '17; Same cond. Market Growers J 22:148 F 15 '18

In the greenhouse: management of lettuce crop. C. W. Waid. Market Growers J 20:22 Ja 1 '17

Killing with lettuce. J: R. McMahon. il Country Gent 81:1997 N 18 '16

Late fall lettuce in New Jersey. R. W. DeBaun. il Market Growers J 21:53 Ag 1 '17

Lettuce as market-garden crop. H: M. Howard. Mass Ag Bd B 5:151-3 '18 (3d ed. rev.)

Lettuce culture in Wayne co., N. Y. il Rural N Y 76:191 F 10 '17

Lettuce: early spring crop. C. E. Brehm. il Country Gent 81:210 Ja 29 '16

Lettuce for all seasons. A. Kruhm. il Ohio F 137:498 Ap 1 '16

Lettuce for the salad hungry. J. H. Collins. Country Gent 81:1537 Ag 19 '16

Lettuce from May till November. il Country Gent 83:22 F 16 '18

Lettuce growing in California. S. S. Rogers. il Cal Ag Exp C 160:1-16 '17

Lettuce in air-tight boxes. A. E. Wilkinson. il Country Gent 81:1400 Jl 22 '16

Lettuce markets and prices. C. E. Brehm. Country Gent 81:114 Ja 15 '16

Lettuce: the forced crop. C. E. Brehm. il Country Gent 81:1337 Jl 8 '16

Lettuce under glass at Boston. Am Flor 50:228 F 16 '18

Lettuce: varieties. C. E. Brehm. il Country Gent 81:158 Ja 22 '16

Massachusetts greenhouse lettuce. Market Growers J 21:282 D 15 '17

Proper lettuce harvesting. Country Gent 81:452 F 26 '16

Protecting late lettuce. R. W. De Baun. il Rural N Y 75:1125 Ag 26 '16

Radishes and lettuce. Weekly N L 4:2 My 16 '17

Reducing the cost of growing lettuce. C. W. Waid. il Market Growers J 23:149 O 15 '18

Salads for late summer and fall. F. F. Rockwell. Gard M 23:340 Jl '16

Which lettuce, and why. A. Kruhm. il Gard M 23:79-81 Mr '16

Composition

\* Comparison of percentage of nitrogen in tops and roots of head lettuce plants. H. A. Noyes. J Industrial & Eng Chemistry (Am Chemical Soc., Easton, Pa. 60c) 10:621-4 Ag '18

Diseases and pests

Bacterial disease of lettuce. N. A. Brown. bibliog J Ag Research 4:475-8 Ag '15

Controlling aphid on lettuce. Market Growers J 22:149 F 15 '18

Fumigating with tobacco stems. V. S. Grifffen. Market Growers J 18:131 F 15 '16

Some bacterial diseases of lettuce. N. A. Brown. bibliog il J Ag Research 13:367-88 My 13 '18

See also Lettuce anthracnose; Lettuce rot

**Lettuce—Continued****Marketing**

Lettuce: preparing for market. C. E. Brehm. Country Gent 81:792 Ap 8 '16

**Transportation**

Handling and precooling of Florida lettuce and celery. H. J. Ramsey and E. L. Markell. il U S Ag B 601:1-23 '17

**Lettuce anthracnose**

Anthracois of lettuce caused by marssonina panattoniana. E. W. Brandes. il J Ag Research 13:261-80 Ap 29 '18

**Lettuce drop.** See Lettuce rot**Lettuce rot**

Controlling head lettuce rot. G: L. Reid. Market Growers J 21:93 S 1 '17

Lettuce rot. C. W. Waid. Market Growers J 18:15 Ja 1 '16

**Leucine**

Occurrence of *l*-leucine in sweet clover silage. G. P. Plaisance. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39: 2087-8 S '17

**Levees**

Levees for overflowed land. D. P. Weeks. Farm Eng 5:5 Ap '17

**Leveling.** See Surveying**Levels**

Farm level and how to use it. D. Scoates. il Prog F 31:176 F 5 '16

Home made engineering device. R. Bedichek. il Farm Eng 3:132 Ja '16

Leveling device. L. A. Markham. Prog F 31:43 Ja 8 '16

**Lever (tool)**

Some things you should know about levers. Wallaces' F 43:128 Ja 25 '18

**Liautard, Alexandre Francois, 1835-1918**

Life and work. R. W. Ellis. Am Vet M Assn J 53:296-8 My '18

**Liberty loans.** See War loans**Libraries**

Better library facilities for farmers. P. L. Vogt. maps Ohio F 137:591 Ap 22 '16

Country library. Mrs A. C. Wortman. Wallaces' F 42:53 Ja 12 '17

Library of the Royal botanic gardens, Kew. Gard Chron (Lond) 59:235-6 Ap 29 '16

Library situation in Mississippi. W. Davis. Miss Ag College (Agricultural College, Miss.) B v 13 45p '16

Library the power house of the community. Prog F 31:545 Ap 15 '16

Special rural library number. A. V. Jennings. Kearney (Nebraska) State Normal School B v 11:11-61 Ap '18

The use of separate "subject" shelves in libraries for books, pamphlets, recipes, and other information is recommended by the Oregon library director as a simple classification for the public—that is, all the meat saving publications on the "Meat" shelf, and those dealing with "Wheat," "Sugar," "Canning," and so forth, each on its own shelf

Work of the library in food conservation. E. Guerrier. J Home Econ 10:266-7 Je '18

See also Books and reading; High school libraries; Package libraries; School libraries

**Libraries (rooms in houses)**

Livable libraries. A. R. Fairman. il Country Life 32:56-9 S '17

**Libraries, Agricultural****Classification**

\* Classification of agricultural bulletins. S D Lib B (S. D. Free Lib. Comm., Pierre) 4: 94-6 S '18

**Libraries, Circulating**

Farmer's library. K. B. Wells; W. Davis. Prog F 32:541 Ap 23 '17

Our reading circle and the neighborhood library. A. C. Wortman. Country Gent 81: 89 Ja 8 '16

Travelling library; Quebec homemakers' clubs. F. Campbell. il J Ag (Quebec) 19:178 F '16

**Libraries, College.** See College libraries**Libraries, County**

County library; advantages and comparative legislation. J. L. Wheeler. 7p '17 Public lib., Youngstown, O.

Reprinted from Library Journal, Feb., 1917

**Bibliography**

List of references on county libraries. U. S. Library of Congress. 5p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew. 25c.)

**Libraries, Private**

List of books for the farmer's library. Ill Univ B v 13, no 24 22p '16

Making of a home library. M. F. Emerson. J Home Econ 8:597-602 N '16

**Libraries, School.** See School libraries**Libraries, Traveling.** See Traveling libraries**Lice**

Cootie and its control. G: H. Lamson, jr. Rural N Y 77:1287, 1306 N 16-23 '18

Household and camp insects. E. P. Felt. N Y State Museum (Albany) B 194:40-8 F '17

Lousiness in domestic animals. J. W. Kalkus. Western Wash Ag Exp B v 5:179-81 Mr '18

More common lice of poultry. D. C. Mote. il Ohio Ag Exp B v 3:144-7 My '18

Submits to cooties, aids Uncle Sam's fighting men; former Chicago official lends his body in government research. Weekly N L 6:4 S 18 '18

**License system**

Government to control necessities. Hoard's D 54:414 O 19 '17

See also Food control—United States—License system

**Lichens**

Fungi and lichens from the island of Guam. P. W. Graff. bibliog Mycol 9:4-22 Ja '17

Hermann Edward Hasse—lichenist; with bibliography of works. B. Fink. Mycol 8:243-8 S '16

Lichen alliance. S. L. Bastin. il Country Life 33:92 N '17

Lichens as a source of food. il Review of Reviews (30 Irving place, N.Y. 25c) 55:541-2 My '17

New genus and species of the collemaaceae. B. Fink. il Mycol 10:235-8 S '18

Rate of growth and ecesis in lichens. B. Fink. Mycol 9:138-58 My '17

Vegetable partnership; data on the lichens, recently proposed in Germany as a source of food. A. A. Hansen. il Scientific Am (233 Broadway, N.Y. 10c) 116:125+ F 3 '17

See also Mosses; Pyrenothrix

**Licorice**

Common medicinal plants. A. Retlas. Ohio F 137:145 Ja 29 '16

**Liens, Agricultural.** See Agricultural liens**Life**

Studies on the duration of life temperature coefficients and influencing factors. Int R Sci & Prac Ag 9, no 2:202-5 F '18

**Life insurance.** See Insurance. Life**Light.** See Plants, Effect of light on; Trees, Effect of light on**Light in the clearing.** I. Bacheller. See semi-monthly numbers of Practical farmer beginning Nov. 1, 1917**Lighting**

Adequate lighting for farm homes. H. C. Ramsower. il Ohio F 139:505+ Ap 7 '17

Farm lighting systems. E. W. Lehmann. il Mo Ag Ext C 39:1-12 '17

Heating and lighting the suburban house. J. R. McMahon. il Country Gent 81:1583 Ag 26 '16

Improved light for homes. G: Albers. Kimball's D F 14:118 F 15 '16

Lighting of farm buildings; with discussion. R. A. Andree. il Am Soc Ag Eng Trans 11: 32-54 '18

Lighting system for farm houses. G. H. Alford. il Prog F 31:1121 S 23 '16



**Lighting—Continued**

- Lighting systems for farm homes. G. H. Alford. *Prog F* 33:1001 S 14 '18  
 Lighting systems for farm homes. G. H. Alford. *Prog F* 32:1067 O 13 '17  
 More and better light. H. G. Van Pelt. *Kimball's D F* 15:71 F 1 '17  
 Rural lighting plants. C. C. Stedman. *N Y Prod R* 41:430-1 Ja 5 '16

See also Acetylene lighting; Carbide lighting; Electric lighting; Electricity on the farm; Gardens—Lighting

**Lightning**

- Is the beech lightning immune? E. S. Brinton. *il Gard M* 22:208-9 Ja '16  
 Lightning injury to citrus trees in Florida. H. E. Stevens. *il Phyt* 8:283-5 Je '18  
 Lightning injury to herbaceous plants. L. R. Jones and W. W. Gilbert. *il Phyt* 8:270-82 Je '18  
 Recovery of a chestnut tree from a lightning stroke. N. E. Stevens. *Phyt* 6:204-6 Ap '16  
 What are symptoms or evidences of lightning in live stock. C. H. Stange. *Wallaces' F* 41:1118 Ag 25 '16

See also Lightning protection

**Lightning protection**

- Do lightning rods protect the property. Hoard's *D* 51:235 Mr 3 '16  
 Facts on lightning rods. *Green's Fruit Grower* 37:9 My '17  
 Homemade lightning rods. C. S. Moore. *Rural N Y* 75:685 Ap 29 '16; Same. *J Ag (Quebec)* 19:237 My '16  
 Lightning control. S. C. Lee. *il Manitoba Ag Dept Farmers' Lib Ext B* 1:1-27 Ap '16  
 Lightning losses and protection. M. A. R. Kelley. *Am Soc Ag Eng Trans* 10,no 1:39-48 '17  
 Lightning protection for silo. K. J. T. Ekblaw. *O Judd Farmer* 60:18 Mr 25 '16  
 Lightning rods. Hoard's *D* 53:393 Je 22 '17  
 Lightning rods. Hoard's *D* 55:981 Jl 5 '18  
 Lightning rods. *Wallaces' F* 41:696 My 5 '16  
 Lightning rods. V. Overholt. *Ohio F* 139:710 My 26 '17  
 Modern methods of protection against lightning. R. N. Covert. *il Farmers' B* 842:1-32 '17  
 Protect your buildings from lightning. I. W. Dickerson. *Wallaces' F* 43:378 My 31 '18  
 Protection from lightning. K. J. T. Ekblaw. *il Country Gent* 81:985 My 6 '16  
 Safeguard your fences to prevent lightning from killing stock. T. Croft. *Country Gent* 81:234 Ja 29 '16  
 Silos and lightning. K. J. T. Ekblaw. *Country Gent* 82:1082 Je 30 '17  
 When lightning strikes. *Am Coop J* 13:390 My '18

**Lignier, Octave, 1855-1916**

- Botanical work. E. C. Jeffrey. *por Bot Gaz* 62:507-8 D '16

**Lignum nephriticum**

- Tree of lost identity. J. Foote. *il Am For* 23:488-90 Ag '17

**Lignum-vitae**

- Lignum vitae* in Curaçao. M. Haman. *il Am For* 23:331 Je '17

- Where pine and tropical hardwood meet. M. Haman. *il plan Pan Am Union B (17th & B sts, N.W., Washington, D.C. 25c)* 44:330-1 Mr '17

**Ligustrum lucidum**

- Specimens of Chinese wax-tree. *il J Ag New Zealand* 15:215 O '17

- Ligyrus* stalk beetles. See Carrot beetles

**Lilacs**

- Home garden lilacs. E. I. Farrington. *il Rural N Y* 77:314 Mr 2 '18  
 How the modern lilac came to be. T. A. Havemeyer. *il Gard M* 25:232-4 My '17  
 In lilacdom. E. H. Wilson. *il Gard M* 23:153-5 Ap '16  
 Lilac. *Country Gent* 81:897 Ap 22 '16  
 Lilacs for home planting. C. P. Halligan. *il Country Gent* 81:332 F 12 '16  
 New Chinese lilacs. *Am Flor* 50:1092 Je 15 '18; Same. *Gard Chron (Lond)* 64:22 Jl 20 '18

- Purple bud sport on pale flowered lilac (*syringa persica*). F. Cobb and H. H. Bartlett. *il Bot Gaz* 65:560-2 Je '18

**Lilies**

- Bulb garden: *lilium Brownii*. R. W. Wallace. *Gard Chron (Lond)* 63:155 Ap 13 '18  
 Bulb garden: *lilium sulphureum* and *l. nepalense*. F. S. Hayward. *Gard Chron (Lond)* 64:107 S 14 '18  
 Cultivation of *lilium speciosum*. J. Scheepers. *il Gard Chron Am* 20:145-6 Mr '16  
 Effect of frost on *lilium* bulbs. A. Grove. *Gard Chron (Lond)* 61:159 Ap 21 '17  
 Fertilization in *lilium*. W. Weniger. *bibliog il Bot Gaz* 66:259-68 S '18  
 Home-grown bulbs of *lilium*. E. H. Jenkins. *Gard Chron (Lond)* 63:127 Mr 23 '18  
 Hybrid lilies. *Am Flor* 46:1134 Je 17 '16  
 Lilies and their culture. *il Gard Chron Am* 21:441 D '17  
 Lilies from June to November. M. G. Kains. *O Judd Farmer* 60:26 Ap 15 '16  
 Lilies in a Sydney garden. A. P. Sparke. *Gard Chron (Lond)* 63:216 My 25 '18  
 Lilies in 1915. A. Grove. *il Gard Chron (Lond)* 59:43-4 Ja 22 '16  
 Lilies in 1916. A. Grove. *il Gard Chron (Lond)* 61:81-2 F 24 '17  
 Lilies in 1917. A. Grove. *il Gard Chron (Lond)* 63:109-10 Mr 16 '18  
 Possibilities of lilies as garden flowers. A. Herrington. *il Gard Chron Am* 22:140-1 My '18

See also Easter lilies; Torch-lilies; Water lilies

- Lilium formosum*. See Easter lilies

**Lilies-of-the-valley**

- Common medicinal plants; lily-of-the-valley. A. Retlas. *Ohio F* 137:472 Mr 25 '16  
 Lily of the valley. *Am Flor* 47:1038 D 2 '16  
 Systematic analytical study of certain North American convallariaceae, considered in regard to their origin through discontinuous variation. R. R. Gates. *Ann Bot* 32:253-7 Ap '18

**Lima beans**

- Cooking lima beans. *Kimball's D F* 14:70 F 1 '16  
 Experiences with lima beans; symposium. *Market Growers J* 22:371+ My 15 '18  
 Growing lima beans. C. O. Ormsbee. *Market Growers J* 23:43 Jl 15 '18  
 Growing the lima bean. D. Prowant. *Ohio F* 137:766 Je 3 '16  
 How to grow lima beans. J. T. Rosa, jr. *il Rural N Y* 76:724 My 26 '17  
 Lima beans; symposium. *Market Growers J* 18:259+ Ap 1 '16  
 Success with lima beans. J. H. Griffith. *Market Growers J* 21:96 S 1 '17

**Diseases and pests**

- Podblight of the lima bean caused by *diaporthe phaseolorum*. L. L. Harter. *bibliog il J Ag Research* 11:473-504 D 3 '17

- Limbberger cheese**. See Cheese

**Lime**

- Agricultural lime. M. F. Miller and H. H. Krusekopf. *il maps Mo Ag Exp B* 146:1-25 '17  
 Agricultural lime for the dairy farm. M. F. Miller. *il Kimball's D F* 15:900 D 15 '17  
 Agricultural use of lime. *Green's Fruit Grower* 36:10 S '16  
 Alfalfa in eastern Iowa. G. R. Bliss. *il Country Gent* 81:97 Ja 15 '16  
 Alfalfa, lime and milk. *Rural N Y* 75:1439-40 N 18 '16  
 Apply lime in fall or spring. *Power F* 25:53 S '16  
 Availability of potash in certain orthoclase-bearing soils as affected by lime or gypsum. L. J. Briggs and J. F. Breazeale. *J Ag Research* 8:21-8 Ja 2 '17; Summary. *Int R Sci & Prac Ag* 8,no 4:556-8 Ap '17  
 Availability of potash in some common soil-forming minerals—effect of lime upon potash absorption by different crops. J. K. Plummer. *bibliog il J Ag Research* 14:297-316 Ag 19 '18

## Lime—Continued

- Calcium, magnesium, potassium, and sodium in the drainage water from limed and unlimed soil. T. L. Lyon and J. A. Bizzell. *Am Soc Agron J* 8:81-7 Mr '16
- Carbon and nitrogen changes in the soil variously treated: soil treated with lime, ammonium sulfate and sodium nitrate. R. S. Potter and R. S. Snyder. *bibliog il Soil Sci* 1:76-94 Ja '16
- Catkins district mossbanks; an experiment in treatment. R. McGillivray. *il J Ag New Zealand* 13:198-9 S '16
- Cheaper lime for Arkansas farmers. *Prog F* 31:1016 Ag 19 '16
- Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on soil reaction. D. R. Hoagland and A. W. Christie. *bibliog Soil Sci* 5:379-82 My '18
- Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on water-soluble nutrients in soils. A. F. Christie and J. C. Martin. *bibliog Soil Sci* 5:383-92 My '18
- Correlation between bacterial activity and lime requirement of soils. F. E. Bear. *bibliog Soil Sci* 4:433-62 D '17
- Detection of lime used as a neutralizer in dairy products. H. J. Wichmann. *U S Ag B* 524:1-22 '17
- Determination of the lime requirements of soils by the use of calcium bicarbonate. L. P. Howard. *Assn Offic Ag Chem J* 3:141-4 My '17
- Different forms in which lime is used. *Prog F* 33:192 F 16 '18
- Distribution of lime. *Rural N Y* 75:150 Ja 29 '16
- Divergent effects of lime and magnesia upon the conservation of soil sulfur. W. H. MacIntire and others. *il Soil Sci* 4:231-7 S '17
- Economic use of lime on Pennsylvania soils. J. W. White. *il Penn State F* 10:167-9 N '17
- Economical way to apply lime. F. L. Clark. *Hoard's D* 56:446 O 25 '18
- Effect of grinding on the lime requirement of soils. R. C. Cook. *Soil Sci* 1:95-8 Ja '16
- Effect of liming on crop yields in cylinder experiments. J. G. Lipman and A. W. Blair. *il Soil Sci* 6:157-61 Ag '18
- Effect of quicklime on organic matter in soils. F. E. Bear. *Am Soc Agron J* 8:111-13 Mr '16
- Effects of lime and carbonate of lime on acid phosphate. G. S. Fraps. *Tex Ag Exp B* 223:1-16 '17
- Effects of liming the soil. A. E. Grantham. *il Prac F* 114:1 Ja 1 '18
- Factors influencing the lime and magnesia requirements of soils. W. H. MacIntire. *Tenn Ag Exp B* 115:1-48 '16
- Farmers' experience meeting; experiences in liming land. *Prog F* 33:1305 N 30 '18
- Farming the air; with discussion. H. J. Wheeler. *Farmers' Nat Congress Pro* 1916: 48-59
- For profit lime your land. H. K. Crofoot. *il Country Gent* 81:1488 Ag 5 '16
- Forms of lime. F. L. Allen. *Ohio F* 139:182 F 10 '17
- Ground limestone and prosperity on the farm. C. A. Mooers. *il Tenn Ag Exp B* 119:191-200 '17
- Ground limestone for sour soils. F. H. Hall. *Green's Fruit Grower* 36:5 Ag '16
- Heavy liming in Tennessee. *Rural N Y* 76:871 Jl 14 '17
- How often must liming be repeated? C. E. Thorne. *il Ohio Ag Exp B v* 3:236-8 Ag '18
- How to get rich lands; lime: its uses in soil building. T. Butler. *Prog F* 32:651 Je 2 '17
- How to get rich lands; lime: when and how to apply. T. Butler. *Prog F* 32:694 Je 16 '17
- How to store rock phosphate and limestone. *plan Am Coop J* 11:962 My '16
- How to use lime. C. B. Williams. *Country Gent* 82:615 Mr 24 '17
- How to use lime on the farm. C. B. Williams. *N C Ag Ext C* 24:1-12 '16
- Importance of lime in agriculture. C. G. Williams. *il Ohio F* 138:41 Jl 15 '16
- Influence of fineness of division of pulverized limestone on crop yield as well as the chemical and bacteriological factors in soil fertility. N. Kopeloff. *bibliog il Soil Sci* 4: 19-69 Jl '17
- Influence of lime on the yield and nitrogen content of corn. A. W. Blair and H. C. McLean. *bibliog Soil Sci* 1:489-504 My '16
- Influence of lime upon the yield of dry matter and nitrogen content of alfalfa. J. G. Lipman and A. W. Blair. *N J Ag Exp B* 316: 1-13 '17
- Influence of lime upon the yield of dry matter and nitrogen content of alfalfa; Influence of lime upon the growth and nitrogen content of soybeans (vines and roots). *N J Ag Exp Rep* 1916:387-93, 393-5 '17
- Influence of the lime; magnesia ratio in the soil on the yield in seed of sugar-beets. O. Fallada and I. K. Greisenegger. *Int R Sci & Prac Ag* 8,no 1:81-2 Ja '17
- Land plaster and lime: why gypsum was formerly used. *Rural N Y* 76:541 Ap 14 '17
- Lime an essential. *Nat Stock & F* 42:464 Ag 17 '18
- Lime and acidity pointers. R. V. Brown. *il Hoard's D* 51:421 Mr 31 '16
- Lime and inoculation—two alfalfa essentials. A. D. Cromwell. *il Prac F* 114:253 Ag 1 '18
- Lime and its action on land. J. P. Richardson. *J Dept Ag S Australia* 20:664-5 My '17
- Lime and its relation to potash. L. M. Carter. *Ga Ag Coll (Ext) C* 22:1-4 '16
- Lime and its uses in agriculture. R. Harcourt. *Ontario Ag Dept B* 238:1-12 '16
- Lime and its value in food production. A. Smith. *Gard Chron Am* 22:150-1 My '18
- Lime and liming. R. R. Hudelson. *Power F* 25:45 Ag '16
- Lime and liming in the South. W. D. Hunt. *J Ag New Zealand* 13:87-96 Ag '16
- Lime and magnesia in New Zealand soils. B. C. Aston. *J Ag New Zealand* 12:47-54 Ja '16
- Lime and nursery stock. H. J. Wheeler; U. P. Hedrick. *Rural N Y* 75:108 Ja 22 '16
- Lime and soil improvement. C. E. Thorne. *il Cornell Countryman* 15:397-9+ Ap '18
- Lime and soil; its properties and action on the soil. *J Ag (Quebec)* 19:192 Mr '16
- Lime as a fertilizer. *Wallaces' F* 41:277 F 18 '16
- Lime as a fertilizer in the provinces. *Ag Gaz of Canada* 3:333-5 Ap '16
- Lime as an insecticide. Z. P. Metcalf. *il J Econ Entom* 10:74-8 F '17
- Lime for legumes. J. C. Beavers. *il Country Gent* 81:252 F 5 '16
- Lime for legumes. T. Butler. *Prog F* 32:815 Jl 28 '17
- Lime in agriculture. S. J. Backus. *Am Fert* 44:38-9 Ap 29 '16
- Lime in agriculture. E. A. Felder. *S C Ag Dept B* 59:1-75 '17
- Lime in soils. *Gard Chron Am* 20:153 Mr '16
- Lime increases corn crop. C. E. Thorne. *Hoard's D* 54:685 D 7 '17
- Lime: its different forms and which to buy. T. Butler. *Prog F* 32:675 Je 9 '17
- Lime: its uses and how to apply it. T. Butler. *Prog F* 31:317, 357 Mr 4-11 '16
- Lime needed for good crops. R. R. Hudelson. *Fruit-Grower* 27:492 N 15 '16
- Lime on poor soils. H. J. Wheeler. *Rural N Y* 75:33 Ja 8 '16
- Lime on the farm. F. B. Guthrie. *New South Wales Ag Dept (Sydney) Farmers' B* 115: 1-31 Jl '17; Same cond. *Ag Gaz of New South Wales* 27:685-9, 761-7, 845-51; 28:1-7, 164-6 O '16-Ja, Mr '17
- Lime on the farm; how, when and where to use it. H. S. Hammond. *J Ag (Quebec)* 20: 5, 31 Jl-Ag '16
- Lime put on preferred list by the War priority board. *Weekly N L* 6:6 Ag 28 '18
- Lime report. J. W. Kellogg. *Pa Ag Dept B* 294:1-33 '17
- Lime requirements of some acid soils. S. D. Conner. *Assn Offic Ag Chem J* 3:139-40 My '17
- Lime soils and crops. J. F. Duggar. *Prog F* 33:370 Mr 16 '18



**Lime—Continued**

- Lime sweetens sour soils. C. A. LeClair. *il Country Gent* 82:1821 N 24 '17
- Lime—to assure better crops. D. K. Tressler. *Country Gent* 82:865 My 12 '17
- Lime to boost yields. J. C. Beavers. *il Country Gent* 83:24 Ap 13 '18
- Lime to increase production. M. Whitney. *Kimball's D F* 16:159 Mr 1 '18
- Lime vs. common sense. L. Glenn. *Nat Stock & F* 40:1130 Ja 27 '17
- Liming. W. Fear. *bibliog Am Assn Farmers' Inst Workers Pro* 1917:100-39 '18
- Liming and inoculating soils. C. S. Dorchester and others. *il map Ia Ag Ext B* 40:1-4 '16
- Liming and lime requirement of soil. J. W. Ames and C. J. Schollenberger. *Ohio Ag Exp B* 306:281-396 '16
- Liming of Oklahoma soils. D. R. Johnson. *il Okla Ag Exp C* 79 4p '18
- Liming; principles and practice. A. McTaggart. *il J Ag New Zealand* 12:339-56 My '16
- Liming tests in Canterbury. A. McTaggart. *J Ag New Zealand* 14:221-2 Mr '17
- Liming the land. C. E. Thorne. *Hoard's D* 55:608 Ap 26 '18
- Liming the land; decomposition and utilization of limestone in soil. J. W. Ames and C. J. Schollenberger. *Ohio Ag Exp B v* 2: 121-4 Ap '17
- Liming the land for alfalfa. *Prac F* 112:37 Ja 15 '16
- Liming the soil. P. E. Karraker. *il Ky Ag Ext C* 59:1-24 '18
- Liming the wheat crop. C. E. Thorne. *il Ohio Ag Exp B v* 1:277-81 S '16
- Maintenance of soil fertility; liming the corn crop. C. E. Thorne. *Ohio Ag Exp B v* 1:28-32 Ja '16
- Manufacture and use of lime for cane lands and sugar manufacture. C. W. Hines. *il Philippine Ag R* 10,no 4:350-60 '17
- Mixing acid phosphate and ground limestone unsafe. *Prog F* 31:362 Mr 11 '16
- Modern methods pay. *il O Judd Farmer* 63:3 S 29 '17
- More wheat in 1919. C. G. Williams. *Ohio F* 142:90 Ag 3 '18
- New phase of the lime question. W. F. Massey. *Rural N Y* 76:452 Mr 24 '17
- New rapid and accurate method for estimating lime and potash in soils. T. E. Keitt and C. J. King. *S C Ag Exp B* 183:1-5 n. d.
- Nitrogen, phosphorus and lime. Wallaces' *F* 41:930 Je 30 '16
- Outline of the relation of the use of lime to the improvement of the soil. E. O. Fippin. *Cornell Ag Ext B* 5:1-16 '16
- Oyster shells for lime. *Country Gent* 81:1028 My 13 '16
- Phosphates and lime; some farmers' experience. B. C. Aston. *J Ag New Zealand* 12: 217-19 Mr '16
- Principles of the liming of soils. E. C. Shorey. *il Farmers' B* 921:1-29 '18
- Production of lime in 1917. *Am Fert* 49:50 N 9 '18
- Pulverize the lime at home. *Power F* 26:51 My '17
- Quick returns from the use of lime. G. P. Williams. *il Ohio F* 141:341 Mr 9 '18
- Recent results concerning the use of lime on the soil. E. O. Fippin. *N Y Farms & Markets Dept Ag B* 97:66-9 Jl '17
- Relation between indications of several lime-requirement methods and the soil's content of bases. C. J. Schollenberger. *Soil Sci* 3: 279-88 Mr '17
- Relative efficiency of carbonate of lime of various degrees of fineness. W. H. MacIntire. *N Y Ag Dept B* 86:2300-9 Ag '16
- Rhododendrons and lime. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:375 D 9 '16
- Rhododendrons and lime. A. Grove. *Gard Chron (Lond)* 59:65 Ja 29 '16
- Shall we use lime? R. L. Shelly. *Prac F* 112: 345 S 15 '16
- Sifting and bagging burned lime. B. L. Scharing-Hausen. *il Rural N Y* 76:981 Ag 18 '17
- Sod in orchards; lime. *Rural N Y* 77:786 Je 15 '18
- Soil acidity and liming. A. H. Neuman. *Hoard's D* 53:608 Ap 27 '17
- Soil acidity and liming. A. R. Whitson and W. W. Weir. *il map Wis Ag Exp B* 230:1-32 '16
- Some cases of injury to citrus trees apparently induced by ground limestone. B. F. Floyd. *il Fla Ag Exp B* 137:163-79 '17
- Some soils of the southern island of New Zealand with special reference to their lime requirements. L. J. Wild. *J Ag Sci* 8:154-77 Mr '17
- Sound lime program. R. A. Hayne. *Nat Stock & F* 42:444 Ag 10 '18
- Spreading lime when the wind blows. G. H. Dacy. *Prac F* 112:189 My 1 '16
- Status of the problem of lime requirement. W. H. McIntire. *Assn Offic Ag Chem J* 3: 144-9 My '17
- Striking results of lime and fertilizer. *Nat Stock & F* 42:547 S 7 '18
- Use home-ground lime for the soil. J. R. Stone. *il Power F* 27:22 Ja '18
- Use more lime. *Kimball's D F* 16:76 F 1 '18
- Use of lime advocated. C. Vrooman. *Jersey B* 36:795 My 23 '17; Same. *Power F* 26:20 Je '17
- Use of lime in agriculture. J. H. Voorhees. (*In Am. fertilizer hdbk.*, 1918, p. 69-73) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia
- Use of lime in gardens. *Gard Chron (Lond)* 60:184 O 14 '16
- Use of lime, raw and burnt. *Va Ag Dept B* 117:8-11 My '17
- Use of oyster shell lime. *Rural N Y* 77:441 Mr 23 '18
- Uses of lime in agriculture and horticulture. H. E. P. Hodsoll. *Royal Hort Soc J* 42,pts 2-3:236-44 S '17
- Value of lime on Indiana soils. A. T. Wiancko and others. *il Ind Ag Exp B* 213:1-16 '18; Excerpts. *Am Fert* 48:80 Je 22 '18
- Value of lime on Indiana soils. *Am Fert* 48: 80 Je 22 '18
- Waste lime product. C. E. Thorne. *Ohio Ag Exp B v* 1:101-2 Ap '16
- Way to apply lime. *O Judd Farmer* 60:16 F 19 '16
- What alfalfa needs most—lime. L. F. Graber. *il Country Gent* 82:45 Ja 13 '17
- What lime shall I buy? F. J. Hickey. *Rural N Y* 77:145, 193, 262 F 2-16 '18
- What plants are most helped by lime. J. F. Duggar. *Prog F* 31:992 Ag 12 '16
- Wheels go round and round—turned by a crank. E. Arno. *Nat Stock & F* 40:1386 Mr 17 '17
- Where, how and when of lime; our experience pool. *Prac F* 113:390 N 15 '17
- Why, when, and where of acid soils and liming. E. Truog. *il Hoard's D* 56:439+ O 25 '18
- Yield and nitrogen content of soybeans as influenced by lime. J. G. Lipman and A. W. Blair. *bibliog Soil Sci* 4:71-7 Jl '17
- See also* Calcineters; Calcium arsenate; Calcium bicarbonate; Calcium carbonate; Limestone; Quicklime; Soils—Composition

**Analysis**

Analyses of commercial fertilizers and ground bone; analyses of agricultural lime. C. S. Cathcart. *N J Ag Exp B* 318:1-51 '17

Analysis of lime by the Virginia department of agriculture for 1916. *Va Ag Dept B* 112: 26-30 My '16

\* Determination of the value of agricultural lime. S. D. Conner. *il J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 66c)* 10:996-9 D '18

**Laws**

Act providing for the acquisition by the state of Oregon, for public use, real property containing limestone, calcareous shell deposits, and the manufacture and sale of the products thereof. (Ch. 397, P. L. 1917) 4p '17 Ore. Sec. of state, Salem

Act to regulate the sale of agricultural lime and gypsum. (Ch. 230, P. L. 1917) 3p '17 Ore. Sec. of state, Salem

**Lime—Laws—Continued**

Loi n. 306 visant la réglementation de la vente pour les besoins de l'agriculture, de la chaux, du plâtre et autres produits de ce genre et prescrivant les peines en cas de contraventions aux États-Unis d'Amérique. Int Yearbook Ag Leg 1916:228-31 '17

Ohio's new lime law. F. E. Bear. Ohio F 141: 286 F 23 '18

Pennsylvania lime law: legal definition of lime. Rural N Y 75:883 Je 17 '16

**Terminology**

Terms used in liming literature. Am Fert 48: 34 F 16 '18

**Lime arsenate.** See Calcium arsenate**Lime spreaders**

Homemade lime spreader. T. W. Harvey. il Country Gent 82:44 Ja 13 '17

Styles in limestone spreaders. C. G. Hopkins. O Judd Farmer 64:618 Je 15 '18

**Lime-sulphur**

Can old lime-sulphur be used? J. P. Stewart. Rural N Y 75:518 Mr 25 '16

Delayed applications of lime-sulphur. P. Thayer. il Ohio Ag Exp B v 3:82-5 Mr '18

Good farm lime-sulphur plant. M. L. Williams. il Country Gent 82:731 Ap 14 '17

Home preparation of lime sulphur sprays. A. L. Strausz. Wash Ag Ext Ser 1,no 37 4p '18

Homemade lime-sulphur concentrate. E. W. Scott. U S Ag B 197:1-6 '15

How to make lime-sulphur solution. Fruit-Grower 27:93 F 1 '16

Lime-sulphur; concentrated or self-boiled? J. R. Mattern. Gard M 23:98 Mr '16

Lime sulphur plant. W. S. Thornber. Wash Ag Ext Pub Ser 1,no 15 4p '16

Lime-sulphur spray at Ruakura. T. B. Roach. J Ag New Zealand 13:285-6 O '16

Lime-sulphur spraying compound. J. A. Campbell. J Ag New Zealand 13:52-5 Jl '16

Lime-sulphur vs. Bordeaux mixture as a spray for potatoes (B. 397). M. T. Munn. il N Y State Ag Exp Rep 1915:291-301 '16

Lime-sulphur vs. Bordeaux mixture as a spray for potatoes. M. T. Munn. il N Y State Ag Exp B 421:311-17 '16

Magic of lime-sulphur. H. R. Bowles. il Country Life 32:116 My '17

Manufacture of home made lime sulphur; with discussion. A. J. Dunlap. Ill State Hort Soc Trans 1917:137-42 '18

Preparation and use of lime-sulphur. J. A. Stevenson. il Porto Rico Insular Exp C 13: 1-9 '18

Preparation and use of lime-sulphur in orchard spraying. W. J. Morse. il Maine Ag Exp Doc 523:1-11 '16

Self-boiled lime-sulphur solution. A. A. Ramsay. Ag Gaz of New South Wales 29:210-11 Mr '18

To make lime-sulphur spread. Fruit-Grower 27:208 Mr 15 '16

Use of lime-sulphur as a summer spray for apple scab. C. C. Vincent. il map Idaho Ag Exp B 85:1-16 '16

Various forms, how made, how designated, for what purposes used and method of application. il Fruit-Grower 27:199 Mr 15 '16

See also Hydrated lime-sulphur

**Lime-sulphur dip**

Chemical composition of lime-sulphur animal dips. R. M. Chapin. bibliog U S Ag B 451:1-16 '16

Lime-sulphur animal dips. Weekly N L 4:8 Ja 3 '17

**Lime-water**

Improving war bread with lime-water. Scientific Am (233 Broadway, N.Y. 10c) 118: 131 F 9 '18

**Limes**

Dominica: lime fruit industry. Doc Leaflets 1,no 4:49-51 O '17

**By-products**

Value of lime seed as a by-product of the lime industry. Int R Sci & Prac Ag 7,no 1:141 Ja '16

**Diseases and pests**

Notes upon a market disease of limes. O. T. Wilson. il Phyt 8:45-50 F '18

**Limestone**

Agricultural ground limestone. M. A. Bachtell. il Ohio Ag Ext B v 13, no 11 14p '17-18

Agricultural value of ground limestone. J Ag (Quebec) 21:134 Mr '18

Availability of ground limestone of different degrees of fineness. T. B. Hutcheson and others. Va Ag Exp Rep 1915-1916:171-8 '17

Composition of limestone. J. W. Ames and C. J. Schollenberger. Ohio Ag Exp B v 2:15-16 Ja '17

Distributing limestone. C. G. Hopkins. O Judd Farmer 64:598 Je 8 '18

Fineness of limestone. F. E. Bear. Ohio F 142:115 Ag 10 '18

Ground limestone. J Ag (Quebec) 21:9 Jl '17

Ground limestone as a fertilizer. Wallaces' F 41:208 F 11 '16

Ground limestone for acid soils (B. 400). J. F. Barker and R. C. Collison. il N Y State Ag Exp Rep 1915:53-71 '16

Ground limestone for use in New York state. J. F. Barker and W. W. Baer. il maps N Y State Ag Exp B 430:1-32 '17

Home ground limestone. Power F 26:43 N '17

How fine should lime be ground. A. C. Weed. Rural N Y 76:871 Jl 14 '17

How finely ground should limestone be? Prog F 31:1383 D 2 '16

How to buy and apply limestone. C. G. Hopkins. O Judd Farmer 64:575 Je 1 '18

Injury to citrus trees by the improper use of ground limestone. B. F. Floyd. Fla Ag Exp Rep 1917:35R-46R '18

Lime for agricultural purposes. G. S. Beaumont and R. S. Dunham. il Farm Eng 5:7 Jl '17

Lime grinding—an opportunity for threshermen. Power F 25:43 N '16

Limestone tester. C. G. Hopkins. il Ill Ag Exp C 185:1-12 '16

Limestones of New York, with reference to their agricultural use (Tech. B. 47). R. C. Collison and J. F. Barker. il N Y State Ag Exp Rep 1915:72-107 '16

Limestones of New Zealand. B. C. Aston. J Ag New Zealand 17:98-102 Ag '18

Magnesia in limestone. J. B. Weems; C. G. Hopkins. Va Ag Dept B 115:123-6 '17

Map of New York showing the distribution of limestone. N Y State Ag Exp Rep 1915:(in pocket) '16

Need 40 million tons of limestone. C. C. Logan. O Judd Farmer 60:11 F 26 '16

Need of limestone and phosphorus. Rural N Y 77:404 Mr 16 '18

New limestone tester. C. G. Hopkins. Ill Ag Exp B 194:487-95 '17; Same. Am Soc Agron J 9:82-9 F '17

Relative value of limestone of different degrees of fineness. Pa Ag Exp B 147:22-3 '17

Soft limestone on the gum lands. B. C. Aston. J Ag New Zealand 12:10-12 Ja '16

Soil fertility questions. C. G. Hopkins. O Judd Farmer 65:111 Ag 10 '18

Study of soil containing residual limestone. H. A. Noyes. Assn Offic Ag Chem J 3:151-3 My '17

Tests of the availability of different grades of ground limestone. L. B. Broughton and others. Md Ag Exp B 193:31-45 '16; Same. Md Ag Exp Rep 1915-1916:31-45 F '16

Two notes on limestone. B. C. Aston. J Ag New Zealand 16:162-4 Mr '18

Use of fertilizer and ground limestone on gardens. H. J. Wheeler. Am Fert 48:54+ My 11 '18

Use of limestone in Tennessee. Rural N Y 77: 694, 718 My 18-25 '18

Value of limestone of different degrees of fineness. J. W. White. il Pa Ag Exp B 149: 1-24 '17; Same cond. Pa Ag Exp B 152:1-16 '18

See also Lime

**Analysis**

Analyses of county limestone deposits. J. W. Ames. Ohio Ag Exp B v 3:222-3 Jl '18



**Limestone—Analysis—Continued**

Determination of carbonates in limestone and other materials. J. F. Barker. N Y State Ag Exp Tech B 62:1-7 '17

**Limestone grinding machines**

Farmers' limestone, shell and marl grinding plants. C. C. Logan. il N C Ag Ext C 38:1-4 '17

Portable limestone crusher. J. C. Beavers. il Country Gent 81:1939 N 4 '16

**Lincoln, Abraham, 1808-1865**

Lincoln: quotations from letters and speeches. por Country Gent 82:240 F 10 '17

Unpublished account of Lincoln's assassination. J. Chidester. Ohio F 137:575 Ap 15 '16

**Lincoln highway**

Town forests and the Lincoln highway. H. A. Reynolds. Am For 22:174-5 Mr '16

**Lincoln memorial university, Cumberland Gap, Tennessee**

Lincoln battalion to fight for Uncle Sam. R. H. Moulton. Ohio F 140:84 Ag 4 '17

**Linden**

Linden; important summer-flowering tree. Am Flor 47:324 Ag 26 '16

\* Lindens. A. MacMechan. Nation (20 Vesey st. N. Y. 10c) 107:119 Ag 3 '18

Summer-flowering trees. Am Flor 49:134 Ag 4 '17

**Line breeding. See Breeding**

**Linen**

How to select and store household linens. M. E. Robinson. il Mo Ag Ext C 44:1-4 '18

Medium priced linens for institution and home. M. S. Woolman. J Home Econ 9:447-51 O '17

**Linoleum**

Care of linoleum. Prog F 32:614 My 19 '17

Home-made linoleum. Nat Stock & F 42:182 My 11 '18

Wood flour and the manufacture of dynamite and linoleum. Power F 25:24 S '16

**Linseed**

Linseed as a farm crop. J Bd Ag 22:1069-80 F '16

**Linseed oil**

Influence on linseed oil of the geographical source and variety of flax. F. Rabak. U S Ag B 655:1-16 '18

**Liquid-manure drills**

Strecker's liquid-manure drill. Int R Sci & Prac Ag 7,no 7:1005-6 Jl '16

**Liquids**

**Sterilization**

Sterilisation of liquids in thin streams by heat. H. Stassano. Int R Sci & Prac Ag 8,no 9:1308-9 S '17

**Liquor problem**

Booze and the hired man. A. C. Laut. il Country Gent 82:1473-4 S 29 '17

\* Food administration and the liquor question. H. Hoover. (In Official statement no. 2, p. 3) '18 U. S. Food administration, Washington, D. C.

**Liquors**

Materials used to make alcoholic liquors in the United States during the fiscal year ended June 30, 1916. Monthly Crop Rep 3: 40 My '17

\* Proclamation forbidding the use of any food-stuffs to produce malt liquors after December 1, 1918. W. Wilson. (In Official statement no. 5, p. 5) '18 U. S. Food administration, Washington, D. C.

See also Alcohol; Ale; Beer; Brandy; Wines and wine making

**Analysis**

Distilled liquors. Assn Offic Ag Chem J 2,no 2,pt 2:243-8 Ag '16

Study of the fusel oil and esters in distilled liquors. L. Katz. Assn Offic Ag Chem J 2: 188-96 F '17

*Liriodendron tulipifera.* See Tulip poplar

**Listers**

Lister to save labor. A. C. Hartenbower. Country Gent 82:975 Je 2 '17

**Litchi**

Edible litchi nut (*litchi chinensis*). B. E. Read. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 40:817-22 My '18

Litchi in Hawaii. J. E. Higgins. il Hawaii Ag Exp B 44:1-21 '17

**Litmus paper**

Acid soils and soil acidity. C. J. Schollenberger. Ohio Ag Exp B v 2:329-33 O '17

Soil acidity and the litmus paper method for its detection. J. T. Barlow. Am Soc Agron J 8:23-30 Ja '16

Value of blue litmus paper from different sources as a test for soil acidity. P. E. Kar-raker. Am Soc Agron J 10:180-2 Ap '18

Little Peter's flag; story. J. M. Parsons. Ohio F 142:254 S 14 '18

Littoral rights. See Riparian rights

**Live-forever (weed)**

Disease to destroy live-forever. J. L. Stone. Rural N Y 75:769 My 20 '16

**Live stock**

Add to the herds and flocks. F. D. Coburn. il Country Gent 83:5 Ap 6 '18

After the great war—what? T: E. Wilson. il Field Il 27:927+ D '17

Animals as factories. Wallaces' F 42:812 My 18 '17

Army and our meat supply. J. E. Poole. Field Il 28:566 Ag '18

Assurance to livestock farmers. Coop Manager & F 7:90 D '17

Banking wisdom and purebred stock. F. D. Tomson. Breeder's Gaz 72:139 Ag 2 '17

Beef, labor shortage and wheat. C: Gray. Rural N Y 77:404 Mr 16 '18

Better live stock. W. W. Wright. Ill Farmers Inst Rep 1917: 117-22 '17

Better livestock now. C: McIntire. Ohio F 140:584 D 22 '17

Biggest livestock year. S: Sosland. Country Gent 82:12 Ja 6 '17

Breeding purebreds for general farmers. W: A. Martin. Ohio F 140:136 Ag 25 '17

Conservation slaughter. W. W. Dimock. Hoard's D 55:408 Mr 22 '18

Contracting meat animals for future delivery. J. G. Imboden. Breeder's Gaz 71:1068 My 24 '17

Cow likes music. Nat Stock & F 42:446 Ag 10 '18

Crop and stock on the home farm; dairy cows and pigs. E. Molyneux. Gard Chron (Lond) 61:55 F 3 '17

Department works with us; better co-operation. il Field Il 26:401-3 My '16

Diversified farming is safe farming; let live stock do half the farming. 32p il '16 Int. harvester co., Chicago

Does livestock waste our food? C. T. Conklin. il Field Il 28:84-5 F '18

Efficient livestock management. H. P. Miller. Ohio F 139:827 Je 30 '17

Efficient stock management. J. G. Laughlin. Ohio F 140:118 Ag 18 '17

Europe needs foundation stock. R. E. Underwood. Penn State F 10:203 D '17

Factors affect dressing percentage. J. M. Carroll. O Judd Farmer 62:1 Mr 10 '17

Facts about livestock, feeds and feeding. Prog F 31:220 F 12 '16

Feeder of sheep, hogs and cattle. il Wallaces' F 42:1175 Ag 31 '17

Feeding animals to feed humans. W. F. McSparran. Prac F 114:134 Ap 1 '18

Financing the beginner with pure-bred livestock—how it has paid. F. E. Jackson. il Banker-F 4:14 Ag 17

Financing the purchase of purebreds. F. E. Jackson. Breeder's Gaz 72:77 Jl 19 '17

Fresh water for farm animals. Prac F 112:271 Jl 1 '16

Function of live stock in agriculture. G: M. Rommel. U S Ag Yearbook 1916:467-75; Same. Separate 694; Same. (In Pan American scientific congress Pro., 1915, v. 3, p. 309-14) '17; Summary. Nat Wool Grower 7:44 Ap '17; Summary. Irr Ag 32:121 Je '17

Get every farmer interested. B. F. Harris. Am Sheep B & W 37:753-4 D '17

Good livestock for profit and pleasure. C: McIntire. il Ohio F 138:142 Ag 19 '16

## Live stock—Continued

- Grain and live stock; national policy touching vital food elements indicated by factors of war period. H. Hoover. (B. 10) 16p '17
- U.S. Food administration, Washington, D.C. Growing and feeding meat animals. Mo Ag Bd B v 15:1-63 S '17
- Handling livestock in winter. C: McIntire. Ohio F 138:662 D 30 '16
- Hogs, steers and milk cows. Wallaces' F 43:1819 D 13 '18
- How to borrow to buy pure bred live stock. F. E. Jackson. il System on the Farm 1:69-70 Ap '17
- How to register an animal. Prog F 32:220 F 17 '17
- How was stock wintered? B. E. Carmichael. Ohio F 137:562 Ap 15 '16
- How we can have better livestock. J: R. Hutcheson. Prog F 31:568 Ap 22 '16
- Identification of pedigreed animals. H. W. McLaughlin. Breeder's Gaz 71:164 Ja 25 '17
- Identification records for pure bred stock. W. S. Guilford. System on the Farm 3:14 Jl '18
- Improvement of live stock. R. A. Hayne. Mass Ag Bd Yearbook 1916, pt 2:87-96 '17
- Is the easiest way the most profitable? Hoard's D 51:256 Mr 3 '16
- Keep your breeding stock. A. G. Leonard. Ag Digest 2:783-4 Ja '18
- Keeping pure-breds. Wallaces' F 43:911 Je 7 '18
- Know the markets. Ag Digest 1:381 Ap '17
- Labor requirements of livestock. A. Boss and others. Minn Ag Exp B 161:1-43 '16
- Labor saving in livestock production. G: M. Rommel. il U S Ag C 122:1-14 '18
- Leveling our agricultural progress. E. N. Wentworth. il Field II 26:311-13 Ap '16
- Livestock and dairy. See weekly numbers of Progressive farmer
- Livestock and dairy situation. W: A. Martin. Ohio F 141:305 Mr 2 '18
- Livestock and dairy suggestions for March. Prog F 31:330 Mr 4 '16
- Livestock and dairying. See weekly numbers of Progressive farmer
- Live stock and orchard. I. D. Graham. Better Fruit 10:22-3 Ap '16
- Live stock and soil fertility. W. H. Tomhave. il Prac F 113:241-2 Jl 1 '17
- Livestock and the maintenance of organic matter in the soil. E. O. Fippin. Am Soc Agron J 9:97-105 Mr '17
- Live stock and the orchard. L. J. Iddings. Better Fruit 12:16 Je '18; Same. Better Fruit 13:15 Ag '18
- Livestock as a war factor. Ag Digest 2:922 Ap '18
- Live stock conservation. J. E. Markle. Coop Manager & F 6:96-7 Jl '17
- Livestock conservation and production. W. B. Kreuck. il Purdue Ag 11:24-6 Je '17
- Livestock essential to sound farming—let's have more in 1917! Banker-F 4:11 Ap '17
- Livestock growers' prospects. A. G. Leonard. il Field II 27:607-9 Ag '17
- Live stock in war-time. C. F. Curtiss. Mo Ag Bd B v 16:1-19 S '18
- Live stock in war time. R. H. Williams. Breeder's Gaz 73:704 Ap 4 '18
- Live stock interests in wartime. E. Davenport. il Breeder's Gaz 73:55 Ja 10 '18
- Live stock on the farm. il Country Life 30:43 S '16
- Livestock opportunity. P. D. Hammett. Ohio F 141:490 Ap 6 '18
- Livestock or other crops. G: Sidney. il Country Gent 81:197 Ja 29 '16
- Live stock outlook. E. Davenport. Hoard's D 55:980 Jl 5 '18
- Live stock production and the veterinarian. F. Torrance. Am Vet M Assn J 52:793-7 Mr '18
- Livestock production should supplement grain farming in the corn belt. H. W. Mumford. il Banker-F 4:14-15 Je '17
- Live stock questions and answers. Mo Ag Bd B v 15:1-40 N '17
- Live stock report; losses from disease and exposure. Hoard's D 51:646 My 5 '16
- Livestock rotation. G. A. Cross. Ohio F 138:518 N 25 '16
- Live stock situation. J. M. Carroll. Coop Manager & F 6:83-4 Je '17
- Livestock suggestions for July. Prog F 33:772 Jl 6 '18
- Livestock suggestions for August. Prog F 32:842 Ag 4 '17
- Livestock suggestions for August. Prog F 33:862 Ag 3 '18
- Livestock, the banker, his program. R. A. Blanchard. Nat Wool Grower 8:47 My '18
- Livestock utility on the general farm. J. I. Falconer. Ohio F 140:549 D 15 '17
- Livestock vs. grain farming. C. G. Williams. Ohio Ag Exp B 328:39-53 '18
- Loans on livestock. T. J. Delohery. il Country Gent 83:14 Jl 20 '18
- Make livestock more profitable. Banker-F 4:15 O '17
- Marketing of livestock. (In Nat. conf. on marketing and farm credits, 1916, p. 189-305) \$2 '17 C. W. Holman, sec. Madison, Wis.
- Includes: Why investigate the livestock industry? by E. L. Burke; Livestock industry and national welfare, by E: C. Lasater; Present status of livestock industry, by T. W. Tomlinson; Why a federal investigation of the livestock industry? by D. B. Heard; Why probe the livestock industry? by A. E. de Ricqles; Inequality in marketing livestock, by J. B. Kendrick; Why livestock prices change, by G: K. Andrews; Federal market news service of livestock and meats, by L: D. Hall; Competitive public method of marketing livestock, by M. L. McClure; Selling through cooperative livestock shipping associations, by S. S. Beach; Farmers' cooperative packing plant at Rockford, Ill., by F. A. Bingham; Cooperative packing plants, by C: W. Holman; Livestock marketing in Canada, by W. J. Rutherford
- Meat supply and the high cost of living. H. R. Smith. City Club Bulletin (315 Plymouth Court, Chicago) 10:159-62 My 5 '17
- Military needs stir up livestock market. Am Coop J 13:164 D '17
- Mobilizing the live stock industry. Breeder's Gaz 72:249 Ag 23 '17
- More livestock is needed. il Purdue Ag 11:23-4 N '16
- Need a livestock loan? S: Sosland. Country Gent 82:430 Mr 3 '17
- Need of more livestock. Ag Digest 2:529-30 Jl '17
- Opportunity in animal husbandry. W. H. Tomhave. Penn State F 9:312-13 F '16
- Orchard-raised livestock. R. E. Jones. il Country Gent 83:15 Mr 6 '18
- Our present and prospective meat supply. M. E. Woods. il Nat Wool Grower 8:11-13 Mr '18
- Our supply of livestock. J. A. Rickart. Country Gent 81:1464 Ag 5 '16
- Outlook for the stockman and dairyman. W. Macmonnies. Jersey B 36:1433-5 S 19 '17
- Patriotism and profit for the dairyman. Ag Digest 2:703 N '17
- Place of live stock on the farm. Coop Manager & F 6:99 Ag '17
- Prospects for American purebreds. E. N. Wentworth. il Field II 27:182-3 Mr '17
- Purchasing farm animals. C: McIntire. Ohio F 138:6 Jl 1 '16
- Rumors around the stock yards. J. M. Carroll. O Judd Farmer 64:525 My 18 '18
- Secret of successful farming; rich lands, gotten through legumes, livestock and good pastures, the way to success. Prog F 33:931 Ag 24 '18
- Simple sanitation. F. B. Hadley. Country Gent 81:1789 O 7 '16
- Some avoidable wastes in animal production. B. E. Carmichael. il Ill Farmers Inst Rep 1917:123-35 '17
- Some phases of live stock production on the range. R. H. Williams. Am Soc Animal Production Pro 1915-1916:186-92 '17
- Standards of weight of improved breeds. W: Hislop. Wallaces' F 42:945 Je 22 '17
- Stock-farming in war times. E. McFarland. il Breeder's Gaz 73:1293 Je 20 '18



**Live stock—Continued**

- Suggestions to beginners in stockraising. B. E. Carmichael. *Breeder's Gaz* 74:293 Ag 29 '18
- Summer comforts for livestock; our experience pool. *Prac F* 114:234 J1 '18
- Talk live stock war production. il O Judd Farmer 64:14 Ja 19 '18
- Technique of live stock extension. K. F. Warner. *Breeder's Gaz* 72:1262 D 27 '17
- Things affecting livestock production. A. E. DeRicqles. *Nat Wool Grower* 7:46-7 N '17
- True function of livestock. *Prog F* 32:87 Ja 27 '17
- Truth about live stock farming and soil fertility. J. C. Courter. *Hoard's D* 51:281 Mr 10 '16
- Useful information for livestock growers. map *Prog F* 32:198 F 17 '17
- Value of animal husbandry. M. Ryder. *Ohio F* 139:276 F 24 '17
- War and our meat supplies. J. A. Rickart. *Country Gent* 82:1024 Je 16 '17
- War meat and meat animals. H. F. Thurston. il *Am Coop J* 13:229-30+ F '18; Same cond. *Ag Digest* 2:877-8 Mr '18
- Water at the barn for the livestock. *Prac F* 114:51 F 1 '18
- Water-holding capacities of bedding materials for live stock, amounts required to bed animals, and amounts of manure saved by their use. J. W. Whisenand. *bibliog J Ag Research* 14:187-90 J1 22 '18
- Weeding out the herds. W. F. McSparran. *Ohio F* 140:100 Ag 11 '17
- We're growing beef to feed a hungry world. F. B. Nichols. il *Country Gent* 82:1724-5 N 10 '17
- What of live stock after the war? O Judd Farmer 64:3 Ja 26 '18
- Wholesale farming and feeding. il, *Wallaces' F* 42:1151 Ag 24 '17
- Why the banker should help to increase livestock production. J. O. Armour. il *Banker-F* 4:4 My '17
- Why we must increase our chief food animals—cattle, sheep and hogs. H. C. Hoover. *Banker-F* 4:10-11 N '17
- Why we should have pure-bred live stock on our farms. *Prac F* 112:270 J1 1 '16
- Wintering live stock. F. C. Beall. *Purdue Ag* 13:107-8 D '18
- World's live stock and the war. T. K. Doherty. *Ag Gaz of Canada* 5:213-16 F '18
- See also Asses and mules; Barns and stables; Breeding; Cattle; Cows; Domestic animals; Feeding and feeding stuffs; Goats; Grazing; Horses; Insurance; Live stock; Oxen; Poultry; Range management; Sheep; Swine; Veterinary medicine; also American society of animal production; United States—Animal industry, Bureau of

**Bibliography**

- Animal industry; farm animals, poultry and dairying; list of publications for sale by superintendent of documents, Washington, D.C. (Price list 38-10th ed) 25p '18 Supt. of doc., Washington, D.C.

**Branding**

- Loi concernant l'enregistrement des marques du bétail, et visant aussi d'autres fins en Australie. *Int Yearbook Ag Leg* 1916:664-76 '17

- Marking of live stock. E. S. Archibald. *J Ag (Quebec)* 20:59 S '16

**Breeds**

- Strong points of live-stock breeds. *J Ag (Quebec)* 19:181 F '16
- Types and breeds of farm animals; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 58) 12p '17 U.S. States relations service, Washington, D.C.
- What is a breed? O. Lloyd-Jones. il *Field* 11 26:758-9 S '16

**Costs**

- Our live stock-corn ratios. *Wallaces' F* 42: 1305 S 28 '17

**Diseases and pests**

- Abdominal hernias. C. A. Cary. *Am Vet M Assn J* 50:823-30 Mr '17

- About the foramen of Botal. *Am Vet M Assn J* 49:787-8 S '16
- Alfalfa bloat. R. H. Williams. *Hoard's D* 53: 477 Ap 6 '17
- Animal disease and our food supply. E. B. Mitchell. il maps U S Ag Yearbook 1915: 159-72
- Are uniform regulations feasible among the different American countries for the prevention of the introduction and dissemination of diseases of animals? *Am Vet M Assn J* 50:361-6 D '16
- Barrenness in livestock. W. J. Colebatch. il *J Dept Ag S Australia* 20:775-82 My '17
- Best way to stop the spread of disease. *Va Ag Dept B* 110:12 Mr '16
- Certain aspects of the pathology of spavin. S. A. Goldberg. *Am Vet M Assn J* 54:136-9 N '18
- Common livestock diseases and their prevention. P. F. Bahnsen. *Prog F* 31:1416 D 9 '16
- Conservation of livestock by controlling animal diseases. J. R. Mohler. *Int Assn Dairy & Milk Inspep Rep* 1917:220-32
- Contribution to the life-history and habits of the spinose ear tick, *ornithodoros megnini*. W. B. Herms. *J Econ Entom* 10:407-11 Ag '17
- Cures for foot rot. F. Kleinheinz. *Country Gent* 81:1228 Je 17 '16
- Dead animals may spread disease; burn or bury carcasses at once. *Weekly N L* 6:2 S 11 '18
- Department of veterinary science and bacteriology; present status of various projects. *Nev Ag Exp Rep* 1917:44-56 '18
- Detecting common livestock ailments. W. C. Fair. *Ohio F* 138:171 Ag 26 '16
- Diseases and treatment in Iowa. *Am Vet M Assn J* 48:718-25 Mr '16
- Diseases of live stock. T. E. Munce. *Pa Ag Dept B v* 1:40-4 Ap '18
- 8th biennial report of the State veterinarian of California for the two years ending June 30, 1916. 24p '17 Cal. State veterinarian, Sacramento
- Eupatorium ageratoides, the cause of trembles. R. S. Curtis and F. A. Wolf. *bibliog il J Ag Research* 9:397-404 Je 11 '17
- Hairlessness of goiter in new-born domestic animals. H. Welch. il map *Mont Ag Exp B* 119:82-104 '17; Abstract. *Am Vet M Assn J* 53:523-6 J1 '18
- Household and camp insects; animal pests. E. P. Felt. *N Y State Museum (Albany)* B 194:77-80 F '17
- Injury to livestock by simulum columbiae. in Hungary. M. Schmidt. *Int R Sci & Prac Ag* 7,no 7:987-8 J1 '16
- Is it cornstalk disease? O Judd Farmer 61:6 D 30 '16
- Lessons of the livestock plague. C. E. Gapen. il *Country Gent* 81:7-8 Ja 1 '16
- Live stock sanitation. O. E. Dyson. O Judd Farmer 61:8 D 9 '16
- Losses from live stock diseases. *Country Gent* 81:839 Ap 15 '16
- Losses from preventable diseases. J. D. Wilson. *Penn State F* 10:202 D '17
- Lung parasites. S. B. Freeborn. *Country Gent* 81:889 Ap 22 '16
- Maintaining the health of our farm animals. R. L. McCally. il *Purdue Ag* 12:82-3 N '17
- Maladies des animaux. *Int Yearbook Ag Leg* 1916:680-9 '17
- Manure disposal as a factor in the control of parasitic diseases of live stock. M. C. Hall. *Am Vet M Assn J* 51:675-8 Ag '17
- Medicinal treatment of parasitic diseases—an undeveloped field of veterinary medicine. M. C. Hall. *Am Vet M Assn J* 50:608-11 Ja '17
- Modern ammunition for fighting animal diseases. N. S. Mayo. *Breeder's Gaz* 72:1073 D 13 '17
- Outbreak of vesicular stomatitis. *Am Vet M Assn J* 50:667-70 F '17
- Perverse digestion in young ruminants. G. B. Jones. *Am Vet M Assn J* 53:528-31 J1 '18
- Preparedness—for disease. *Wallaces' F* 41:157 F 4 '16
- Preparedness in our livestock sanitation. D. S. White. *Ohio F* 139:510 Ap 7 '17

**Live stock—Diseases and pests—Continued**

- Prevention and eradication of destructive animal diseases and the effect upon agriculture and the meat supply. A. R. Ward. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 702-9) '17
- Recent progress in the development of methods for the control and treatment of parasites of live stock. B. H. Ransom. bibliog (*In* Pan American scientific congress Pro., 1915, v. 3, p. 709-19) '17
- Repellents for protecting animals from the attacks of flies. H. W. Graybill. bibliog U S Ag B 131:1-26 '14
- Report of committee on diseases. A. V. M. A. J. R. Mohler. Am Vet M Assn J 50:895-904 Mr '17
- Report of state veterinarian. D. F. Luckey. Mo Ag Bd Yearbook 1916:36-44
- Scours, navel disease or joint ill in newly born animals. Wallaces' F 41:504 Mr 24 '16
- Second biennial report, 1915-1916; sanitary control work in West Virginia. il W Va Ag Dept B 18:52-63 '16
- 6th annual report of the Massachusetts commissioner of animal industry for the year ending November 30, 1917. (Pub. Doc. no. 98) 57p '18 Mass. Dept. of animal industry, Boston
- \* South Dakota live stock laws, 1909-11-13-17; rules and regulations of the Live stock sanitary board. 61p '18 S. D. State live stock sanitary bd., Pierre
- Spreaders of disease. A. S. Alexander. Rural N Y 77:162 F 2 '18
- Vesicular stomatitis may conceal presence of foot-and-mouth disease. Weekly N L 4:2 Ja 31 '17
- Veterinary diseases in southern Rhodesia. E. W. Bevan. Am Vet M Assn J 53:606-16 Ag '18
- White scours of sucklings. H. Marshall. Am Vet M Assn J 48:731-8 Mr '16

See also Infectious diseases in animals; Parasites—Animals; Veterinary medicine; also names of diseases and pests, e. g. Abortion, Infectious; Acidosis in animals, Anthrax; Anthrax, Symptomatic; Buffalo gnats, Distomatosis, Foot-and-mouth disease, Forage poisoning, Johne's disease, Liver flukes, Melanosis, Pica (depraved appetite), Rinderpest, Spotted-fever ticks, Tuberculosis in animals, Warble flies

**Preventive inoculation**

- Protective inoculation of stock in India. A. W. Shilston. Ag J of India 11:112-33 Ap '16

**Exhibits**

See Live stock shows

**Feeding**

See Feeding and feeding stuffs; Grazing

**Fitting for show**

- Getting livestock ready for the fairs. Prog F 33:590 My 11 '18
- Preparing stock for exhibition. J. Underwood. Prac F 113:263 Jl 15 '17

**Judging**

- Boys and girls livestock judging contests. J. M. McKee. il Penn State F 9:287-8 Ja '16
- Boys' and girls' stock-judging contests. C. G. McBride. il Nat Stock & F 42:404 Jl 27 '18
- Conventionalism in the teaching of live stock judging. E. B. Forbes. Am Soc Animal Production Pro 1915-1916:178-85 '17
- Judges for stock shows. G. E. Brown. Breeder's Gaz 73:1145 My 30 '18
- Judging at exhibitions in the provinces. Ag Gaz of Canada 5:872-5 S '18
- Livestock judging. H. H. Havner and others. il Pa Ag Ext C 52:1-43 '16
- Livestock men of tomorrow. H. H. Havner. Nat Stock & F 42:764 N 23 '18
- Mental processes of a stock judge. R. R. Benson. Breeder's Gaz 74:81 Jl 18 '18
- New method of judging stock. A. B. West. il Hoard's D 53:804 Je 1 '17
- Question of judges. E. Rail. Breeder's Gaz 69:1329 Je 29 '16

- Revised score cards needed. A. D. Cromwell. Breeder's Gaz 70:49 Jl 13 '16
- Seen from the ringside. F. D. Tomson. Breeder's Gaz 72:314 S 6 '17
- Short courses for live stock judges. E. S. Archibald. il (*In* Report, Ontario ag. societies, 1917, p. 21-6) Ontario ag. dept., Toronto
- Showyard judging of livestock. L. McWhorter. J Ag (Quebec) 21:42 S '17
- Value of boys' stock-judging work. G. B. Crane. Breeder's Gaz 69:180 Ja 27 '16
- Value of stock judging contests. F. L. Bentley. Breeder's Gaz 69:126 Ja 20 '16

**Marketing**

- Buying stock at sales. H. W. Mumford. Breeder's Gaz 69:912 Ap 27 '16
- Commission man and shipper. Country Gent 81:1369 Jl 15 '16
- Competitive public method of marketing livestock. M. L. McClure. (*In* Nat. conf. on marketing and farm credits, 1916, p. 261-7) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Condemnations cost pretty penny; diseased animals factor in H C of L. J. Carroll. O Judd Farmer 62:3 Ap 21 '17
- Country buying by packers. C. B. Hinemann. Nat Wool Grower 7:16-18 Ja '17
- Federal market news service of livestock and meats. L. D. Hall. (*In* Nat. conf. on marketing and farm credits, 1916, p. 248-61) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Five-day market. Wallaces' F 41:264 F 18 '16
- Full values for live stock. il O Judd Farmer 60:13 F 12 '16
- How zone shipping system works. O Judd Farmer 64:22 Ja 12 '18
- In favor of country buying. J. M. Carroll. O Judd Farmer 61:9 O 28 '16
- Inequality in marketing livestock. J. B. Kendrick. (*In* Nat. conf. on marketing and farm credits, 1916, p. 237-40) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Just the plain truth. J. O. Southard. il Country Gent 83:10 Mr 9 '18
- Live stock advertising. Hoard's D 51:505 Ap 14 '16
- Livestock marketing in Canada. W. J. Rutherford. (*In* Nat. conf. on marketing and farm credits, 1916, p. 301-5) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Live-stock marketing problem. D. B. Heard. Review of Reviews (30 Irving place, N.Y. 25c) 55:293-6 Mr '17
- Livestock marketing problems. Country Gent 81:157 Ja 22 '16
- Market committee's work. J. B. Killian. Breeder's Gaz 70:126 Jl 27 '16
- Marketing livestock. T. J. Delohery. Country Gent 81:1596 Ag 26 '16
- Marketing live stock and meats. Coop Manager & F 6:90-1 Ja '17
- Marketing live stock and meats. Wallaces' F 41:1475 N 10 '16
- Marketing live stock in the South. S. W. Doty. Farmers' B 809:1-16 '17
- Marketing livestock in the South. T. Wright. Am Soc Animal Production Pro 1915-1916: 223-6 '17
- Marketing problem in Canada. Ag Gaz of Canada 3:28-30 Ja '16
- Meaning of market runs. F. H. Higgins. Ohio F 140:192 S 8 '17
- Meat markets in South. Weekly N L 4:4 My 30 '17
- Meat producers demand inquiry. Hoard's D 52:798 D 29 '16
- Meat situation in the United States. pt 5. Methods and cost of marketing live stock and meats. L. D. Hall and others. il maps U S Ag Report 113:1-98 '16
- My plan for selling stock before it is born. J. Fisher. il System on the Farm 2:212-13 Je '18
- Object and the task of the Allgemeine oestereichische viehverwertungsgesellschaft. Int R Ag Econ 76:28-30 Ap '17
- Problems in marketing meat stock. J. G. Imboden. Breeder's Gaz 71:274 F 8 '17
- Selling farm stock in South America. H. T. Morgan. Country Gent 81:197 Ja 29 '16
- Selling market livestock. C. McIntire. Ohio F 137:98 Ja 22 '16



**Live stock—Marketing—Continued**

- Selling pure-bred livestock. E. N. Wentworth. *il Field* 11 27:610-11, 674-5 Ag-S '17  
Selling pure-breds. Country Gent 81:449 F 26 '16  
Selling water at 12 cents a pound. J. M. Carroll. *O Judd Farmer* 61:5 D 2 '16  
Situation at the live stock markets. E. L. Burke. *Wallaces' F* 41:1658 D 22 '16  
Suggestions to mail order buyers and sellers of advertised articles or animals. T. Butler. *Prog F* 33:999 S 14 '18  
Supply and prices of stock in the Northwest. T. M. Meikle; L. K. Cogswell. *Breeder's Gaz* 69:1016 My 11 '16  
Tried plans for selling pure bred live stock. System on the Farm 3:56 Ag '18  
Where does the meat maker get off? W. L. Nelson. *il Country Gent* 81:823-4+ Ap 15 '16  
*See also* Live stock markets; Live stock shipping associations

**Photographs and photography**

- Photography in live stock keeping. C. Bundy. *il Rural N Y* 77:250 F 16 '18  
Selling live stock with photographs. *il System on the Farm* 1:263-4 S '17  
Use of the camera. *Nat Stock & F* 41:1076 Ja 26 '18

**Prices**

- Cattle shipments exceed expectations. *Am Coop J* 12:634 My '17  
Chicago market overcomes January cattle decrease. *Am Coop J* 13:308 Mr '18  
Cycle of live-stock prices. *Monthly Crop Rep* 4:38 Ap '18  
Future prices for livestock. *Ag Digest* 2:804 Ja '18  
Good year for feeders. J. A. Rickart. *Country Gent* 82:282 F 10 '17  
Live stock business. *Am Coop J* 12:460 F '17  
Live stock business promising. *Am Coop J* 13:210-11 Ja '18  
Live stock market. E. F. Hill. *Wallaces' F* 42:1666 D 7 '17  
Live stock trade in 1916. *Breeder's Gaz* 70:1282 D 23 '16  
Marketing of live stock. *Am Coop J* 12:526 Mr '17  
Monthly prices of live stock for six years, 1910-1915. *Wallaces' F* 41:345 F 25 '16  
More money for live stock. *Am Coop J* 13:34 S '17  
New records in live stock values. B. W. Snow. *O Judd Farmer* 62:6 Ja 27 '17  
Open letter to Secretary Houston. *Wallaces' F* 42:735 Ap 27 '17  
Pound of flesh. G. Gusler. *Country Gent* 82:926 My 26 '17  
Prospects in the meat market. R. N. Watt. *J Ag (Quebec)* 20:138 Ja '17  
Relationship of livestock prices. F. H. Higgins. *Ohio F* 140:21 Ji 14 '17  
Still a new record in live stock values. *O Judd Farmer* 64:4 Ja 26 '18  
Why livestock prices change. G. K. Andrews. (*In* Nat. conf. on marketing and farm credits, 1916, p. 240-8) \$2 '17 C. W. Holman, sec., Madison, Wis.  
Why probe the livestock industry? A. E. de Ricqlès. (*In* Nat. conf. on marketing and farm credits, 1916, p. 223-37) \$2 '17 C. W. Holman, sec., Madison, Wis.

**Protection**

- Compilation and digest of laws relating to compensation for injuries to livestock by dogs. W. Webb, comp. 94p '17 N. Y. (state). Lib. legislative reference section  
Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew \$4.70)  
Manual of laws pertaining to the Department of farms and markets; licensing of dogs and protection of domestic animals therefrom. N Y Farms & Markets Dept Ag B 108:119-35 Je '18  
New York state dog law. *Rural N Y* 76:1001-2 Ag 25 '17  
Report relative to the licensing of dogs and the protection of domestic animals. 5p '18 Comr. of ag., Albany, N.Y.

- State dog laws; laws of Maryland 1918. Md Ag Ext C 43 5p '18

**Renting**

- Division of stock raised on shares. B. E. Carmichael. *Breeder's Gaz* 69:494 Mr 2 '16  
Raising livestock on shares. T. Butler. *Prog F* 33:235 F 23 '18

**Study and teaching**

- Coordination of courses in animal husbandry. C. S. Plumb. *Am Soc Animal Production Pro* 1915-1916: 70-6 '17  
Curriculum. W. C. Coffey. *Am Soc Animal Production Pro* 1915-1916:82-93 '17  
Teaching breed history to advanced students. H. W. Mumford. *Am Soc Animal Production Pro* 1915-1916:252-9 '17  
Teaching the value of the fundamental sciences to students in animal husbandry. E. S. Savage and L. A. Maynard. *Am Soc Animal Production Pro* 1915-1916:174-7 '17  
Value of the fundamental sciences in teaching and in investigation in animal husbandry. E. S. Savage. *Am Soc Animal Production Pro* 1915-1916:77-81 '17

**Terminology**

- Use of "thoroughbred." *Wallaces' F* 41:214 F 11 '16

**Transportation**

- Breeders win in rate case. *Kimball's D F* 14:515 Ag 15 '16  
Breeders win over railroads. M. D. Munn and W. Dinsmore. *Hoard's D* 52:38 Ag 4 '16  
Cleaning and disinfection of live stock cars; with discussion. S. F. Musselman. *Am Vet M Assn J* 53:85-96 Ap '18  
Complaint of unloading law. *Breeder's Gaz* 74:185 Ag 8 '18  
Difficult to ship stock. *O Judd Farmer* 64:6 Mr 23 '18  
Dimmitt-Caudle-Smith live stock commission company et al. v. Chicago, Burlington & Quincy railroad company et al. (No. 9131) 287-322, i-iiip '17 Interstate commerce comm., Washington, D. C.  
Embargoes on live freight. *Wallaces' F* 43:568 Mr 29 '18  
Free transportation of breeding and feeding cattle and sheep in Canada. H. S. Arkell. *Ag Gaz of Canada* 4:859-60 O '17  
From feed lot to market. J. L. Tormey. *il Country Gent* 81:1256-7 Je 24 '16  
Getting there on a cattle train. K. D. Oliver. *Country Gent* 81:8 Ja 1 '16  
Handled humanely. *Weekly N L* 5:5 N 14 '17  
Important notice to live stock shippers. R. M. Gow. *Jersey B* 36:384 Mr 14 '17  
Improved stock cars. A. H. Kolbe. *il Hoard's D* 52:204 S 8 '16  
Inter-state live stock shipping regulations, issued Dec. 11, 1915. *Jersey B* 35:526, 569+ Ap 5-12 '16  
Lessening transit losses. J. Deare. *Country Gent* 83:26 Je 8 '18  
Live stock classification. (Investigation and suspension docket no. 956) 335-46, i-xxixp '17 Interstate commerce comm., Washington, D.C.  
Live stock shippers attention called to new decision of the Interstate commerce commission. W. Dinsmore. *Wallaces' F* 42:271 F 9 '17  
New railroad rules. *Breeder's Gaz* 70:173 Ag 3 '16  
Pointers on shipping live stock. J. M. Carroll. *Frac F* 114:281 Ag 15 '18  
Practical shipping crate. W. R. Merriam. *Kimball's D F* 15:238 Ap 1 '17  
Regulating livestock transportation. *Field* 11 28:248 Ap '18  
Restrictions on livestock shipment. T. Butler. *Prog F* 31:1407 D 9 '16  
Sheep labor being drafted. H. Sproat. *Nat Wool Grower* 8:28-9 Ji '18  
Stock shippers save money. *Country Gent* 82:686 Ap 7 '17  
Stock valuation matter settled. *Wallaces' F* 41:1064 Ag 11 '16

**Live stock—Transportation—Continued**

28-hour law regulating the interstate transportation of live stock: its purpose, requirements, and enforcement. H. Goding and A. J. Raub. *il plans U S Ag B* 589:1-19 '18; Same (pt. 1). *Am Sheep B & W* 38:703-6 N '18

*See also* Live stock shipping associations; also State livestock association of Illinois; also subhead Transportation under names of animals

**Algeria**

Present state of the livestock industry in Algeria. G. Trouette. *Int R Sci & Prac Ag* 8,no 1:1-7 Ja '17

**Arabia**

Live stock in the Aden-Red Sea district. A. E. Southard. (Commerce Reports no. 101) p 405 (My 1) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Argentina**

Argentine livestock. C. F. Curtis. *il Field II* 26:1014 D '16

Herd and stud books of the Argentine rural society. *Int R Sci & Prac Ag* 8,no 3:413-15 Mr '17

Herd books of the Argentine rural society. *Int R Sci & Prac Ag* 7,no 2:249-51 F '16

\* Live-stock department for Buenos Aires province. W. H. Robertson. (Commerce Reports no. 266) p 592 (N 12) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

Sheep and pig breeding in the Argentine Republic at the present day. G. Martinoli. *Int R Sci & Prac Ag* 8,no 9:1205-13 S '17

**Arizona**

Breeders of pure-bred livestock in Arizona. E. P. Taylor. *Ariz Ag Ext C* 16:1-7 '17

On Arizona's ranges. W. C. Barnes. *Breeder's Gaz* 72:175 Ag 9 '17

**Australia**

Big improvement in Australian situation. *Am Sheep B & W* 36:172 Mr '16

Duties of farmers as rearers of livestock for the state. A. J. Perkins. *J Dept Ag S Australia* 21:105-16 S '17

Livestock in the South-East. A. J. Perkins. *J Dept Ag S Australia* 20:803-7 My '17

Live stock industry in Australia. W. A. N. Robertson. *Int R Sci & Prac Ag* 9,no 5:529-34 My '18

Loi concernant l'enregistrement des marques du bétail, et visant aussi d'autres fins. *Int Yearbook Ag Leg* 1916:664-76 '17

Loi n. 69 assurant l'entretien et le contrôle des abattoirs, des parcs à bestiaux et des marchés de la viande dans un certain district dans et autour de la ville de Sydney, par les soins d'un comité constitué dans ce but, etc. *Int Yearbook Ag Leg* 1916:738-49 '17

South Australian livestock industries. A. J. Perkins. *J Dept Ag S Australia* 21:571-6 F '18

**Brazil**

Brazil to encourage sheep and goat raising. R. P. Momsen. (Commerce Reports no. 83) p 116-17 (Ap 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Brazilian live stock. C. F. Curtiss. *Breeder's Gaz* 71:570 Mr 15 '17

Cattle raising and the meat industry in southern Brazil. R. Porchat. (*Int Pan American scientific congress* Pro., 1915, v. 3, p. 591-6) '17

**California**

Domestic animals. *Cal Ag Bd Rep* 1917:38-60 '18

Domestic animals. (*Int Statistical report*, 1916, p. 33-65) '17 Cal. State bd. of ag., Sacramento

*See also* California—Veterinarian, State

**Canada**

Among the Howick farmers again. *il J Ag* (Quebec) 21:23 Ag '17

Folly of sacrificing live stock. G. E. Day. (*Int Report, Live stock branch*, 1916, p. 11-15) '17 Ontario ag. dept., Toronto, Canada

Grants to live stock and poultry organizations. *Ag Gaz of Canada* 3:546-50 Je '16

\* Live stock and the dairy: Statistics of live stock; Sheep, swine and poultry in Ontario; Wool clip, poultry on hand and live stock sold in Ontario. (*Int Report, Bur. of industries*, 1917, p. 15-17, 18-19, 42-3, 44) '18 Ontario ag. dept., Toronto

New federal act and trade in live stock. *Int R Ag Econ* 9,no 1:77-9 Ja '18

Quebec live stock breeders. *il J Ag* (Quebec) 20:168-72, 186-7 F-Mr '17

Reminiscences of a veteran stock breeder. R. Ness. *J Ag* (Quebec) 22:25 Ag '18

Report from the division of animal husbandry on beef cattle, dairy cattle and dairying, horses, sheep and swine for the fiscal year ending March 31, 1916. (*Int Experimental farms*, 1916, v. 1, p. 383-598) *il* 45c '17 Canada Ag

Saskatchewan; the recommendations of the Royal live stock commission. *Ag Gaz of Canada* 5:1168-9 D '18

*See also* Canada—Veterinary director general; Western Canada live stock union

**Colorado**

Denver has grown famous as the western center of live stock marketing and the business of packing meat. Commercial (Denver civic and commercial assn. 5c) 9:29 Ja 24 '18

**Connecticut**

*See also* Connecticut—Domestic animals, Commissioner of

**Corn belt**

Grain farming in the corn belt; with live stock as a side line. C. Vrooman. *Farmers' B* 704:33-9 '16

Twelve good reasons why corn belt farmers should raise more live stock. J. A. Spoor. 16p n.d. Union stock yard & transit co., Union stock yards, Chicago

**Cuba**

Stock raising in Cuba. *il Field II* 26:1045 D '16

**Denmark**

Live-stock owned by members of agricultural co-operative societies in 1914. *Int R Ag Econ* 62:41-2 F '16

Live stock situation in Denmark. F. Rasmussen. *Breeder's Gaz* 72:372 S 13 '17

Living and winter feeding in Denmark. O. Molgaard. *Kimball's D F* 16:294-5 Ap 15 '18

**Florida**

Florida live stock association meeting. Jersey B 35:393 Mr 15 '16

Open range problems in Florida. F. S. Hastings. *Breeder's Gaz* 74:96 Jl 18 '18

**France**

Livestock tangle in France. W: H. Dean. *il Country Gent* 83:8-9 Jl 6 '18

**Georgia**

Georgia live stock campaign. C: A. Whittle. Hoard's D 51:186 F 25 '16

Proper financing of the live-stock industry in Georgia. D. H. Kirkland. *Nat Assn Credit Men B* (103 Main st., Cooperstown, N.Y.) 17:966-7 O '17

*See also* Georgia dairy and live stock association

**Germany**

Arrêté grand-ducal prescrivant la tenue de registres de bétail pour les exploitations agricoles en Luxembourg. *Int Yearbook Ag Leg* 1916:307-8 '17

**Great Britain**

British livestock. E: Brown. *Country Gent* 81: 544 Mr 4 '16

Improvement of live stock in England and Wales, 1916. *J Bd Ag* 23:417-25 Ag '16

Improvement of live stock in England and Wales, 1917. *J Bd Ag* 24:497-503 Ag '17



**Live stock—Great Britain—Continued**

Improvement of live stock in England and Wales; report for the year 1917-1918. J Bd Ag 25:541-9 Ag '18

Live stock in Great Britain. Wallaces' F 42: 1154 Ag 24 '17

Livestock situation in Great Britain. E. G. Preece. il Field II 26:214 Mr '16

What of British agriculture and live stock after the war? il Breeder's Gaz 70:1186 D 21 '16

**Hawaiian Islands**

Hawaii territorial fair held at Honolulu, June 10-15. L. A. Hanke. il Breeder's Gaz 74:149 Ag 1 '18

**Illinois**

Southern Illinois turning to live stock. O Judd Farmer 63:3 O 27 '17

**India**

Protective inoculation of stock in India. A. W. Shilston. Ag J of India 11:112-33 Ap '16

**Iowa**

Iowa exploits the home product. R. V. Hoff- man. il Field II 26:843-5+ O '16

**Kansas**

How Kansas bankers paved the way for live- stock improvement. Banker-F 4:14 N '17

**Kentucky**

How live stock is handled in the bluegrass region of Kentucky. J. H. Arnold. Farmers' B 812:1-14 '17

Live stock statistics for Kentucky by counties. Ky Ag Dept Rep 1916-1917:272-83 '18

**Louisiana**

Livestock raising in Louisiana. H. D. Wilson. 17p il '17 Louisiana co., New Orleans

Louisiana live stock from an investment standpoint. H. C. Warmoth. 16p il '17 Louisiana co., New Orleans, La.

Meat production in Louisiana. R. K. Boney. 16p il '17 Louisiana co., New Orleans, La.

See also Louisiana—Live stock sanitary board, State

**Massachusetts**

Fifth annual report of the Commissioner of animal industry, for year ending November 30, 1916. (Pub. doc. no. 98) 53p '17 Mass. Dept. of animal industry, Boston

**Michigan**

Climate of upper Michigan. W. S. Prickett. Am Sheep B & W 37:733 D '17

Offer from Cloverland. Am Sheep B & W 37: 734 D '17

See also Michigan improved live stock breeders' and feeders' association

**Missouri**

Missouri live stock, 1916. il Mo Ag Bd B v 15: 1-34 My '17

Missouri stock center, Johnson county. il Country Gent 82:1342 S 1 '17

Rural progress in Missouri; live stock. W. L. Nelson. Mo Ag Bd B v 14:22-5 Mr '16

See also Cattle, swine and sheep feeders' association

**Nevada**

Conditions in Nevada. W. N. McGill. Nat Wool Grower 7:19 D '17

See also Nevada—Stock commissioners, State board of

**New Mexico**

Factors affecting range management in New Mexico. E. O. Wooton. il maps U S Ag B 211:1-39 '15

**New York**

Gov. Whitman states that it is important that something should be done to encourage and promote the livestock industry. He recommends an appropriation of \$225,000 to provide for the present payment of damage claims arising from the slaughter of diseased horses and cattle by the state and of \$200,000 for the payment of such claims up to June 30, 1919

Owners of pure-bred live stock in New York. il N Y Ag Dept B 91:1-183 Ja '17

See also New York state breeders' association

**New Zealand**

Pedigree live-stock; development of breeding in New Zealand. J. L. Bruce. J Ag New Zealand 17:65-70 Ag '18

Table showing the approximate numbers of the principal varieties of live-stock in each land district in the dominion. J Ag New Zealand 15:116 Ag '17

**Ohio**

Better livestock for Ohio. B. E. Carmichael. Ohio F 138:70 J1 22 '16

Ohio livestock at International. il Ohio F 140: 581 D 22 '17

**Oklahoma**

Stock progress in Oklahoma. W. Stemmons. Breeder's Gaz 73:107 Ja 17 '18

See also Oklahoma—Livestock registry board, State

**Oregon**

Notes on live stock. J. W. Brewer. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 13:83-5 Ap 20 '18

Stockkeeping in the Willamette valley. A. Chalmers. Breeder's Gaz 69:1156 Je 1 '16

**Pennsylvania**

Report of committee on livestock. J. M. Pax- ton. Pa Ag Dept B v 1:102-7 Ap '18

Report of veterinarian on infectious diseases, 1915. C. J. Marshall. Pa Ag Dept B 278: 49-54 '16

**Philippine Islands**

Live-stock industry of the Philippines. C. W. Edwards. il Philippine Ag R 9,no 2:136-49 '16

**South Dakota**

See also South Dakota—Live stock sani- tary board, State

**Southern states**

Animal industry of the South—past, present and future. W. H. Dalrymple. (In Cut-over land conf. of the South, 1917, p. 142-50) \$2.50 '17 Southern pine assn., New Orleans, La.; Same abr. La Ag Bd 10p '17

As to live stock in the South. C. A. Wells. Breeder's Gaz 69:959 My 4 '16

Live-stock industry booming in South; re- ports of specialists tell of advances. Weekly N L 6:4 D 11 '18

Meat cropping in the nation's garden spot. A. Maull. 32p il n.d. Agricultural and im- migration dept., Atlantic coast line, Wil- mington, N.C.

Place of livestock in the farm management of the South. T. Butler. Prog F 31:1470 D 23 '16

Southeastern beefsteak and pork chop. J. H. Collins. il Country Gent 82:1504 S 29 '17

Survey of the live stock situation. A. M. Soule. (In Cut-over land conf. of the South, 1917, p. 125-41) \$2.50 '17 Southern pine assn., New Orleans, La.

To what extent should livestock be produced in southern farming? T. Butler. Prog F 31:495 Ap 8 '16

What scrub sires cost the South. C. O. Car- penter. Prog F 31:1430 D 9 '16

What the scrub animal means to the farmer. E. E. Miller. Rural N Y 75:1165 S 2 '16

**Southwestern states**

If the rain comes soon. G. F. Stratton. il Country Gent 83:5+ Ap 20 '18

**Sweden**

\* Live stock in Sweden. (Commerce Reports no. 265) p 576 (N 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D. C.

**Tennessee**

Directory of Tennessee breeders of registered live stock. R. M. Murphy and C. D. Lowe. il Tenn Ag Ext Gen Ser 6 (Pub 13):1-67 '16

## Live stock—Continued

## United States

- Agricultural production for 1918; with special reference to spring planting and to live stock. U S Ag C 103:1-22 '18
- American livestock after the war. P: Weis. il Field II 28:414-15 Je '18
- Double profits from a single farm; Overbrook farm. C: J. Lisle. il Country Life 29:46-7 Ja '16
- Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; live-stock production for 1919. U S Ag C 123:1-14 '18
- Live stock farming pays; Wisconsin vs. Tennessee. Hoard's 51:639 My 5 '16
- Live stock in the country; tabulation by U. S. crop reporting board. Wallaces' F 41:290 F '18 '16
- Live stock in the United States. Monthly Crop Rep 4:9 F '18
- Livestock industry and the war. J. R. Brown. Swine World 5:18+ Mr '18
- Livestock situation. J. E. Poole. Field II 28: 326-7 My '18
- Live stock situation during the great war. J. R. Brown. Coop Manager & F 7:98-9 F '18
- Meat production in New England. C. W. Adams. Country Gent 81:417 F 19 '16
- Meat situation in the United States. 5 pts il maps U S Ag Reports 109-113 '16; Abstracts (pts 1, 2 and 3). Int R Sci & Prac Ag 8,no 3:465-8 Mr; 8,no 6:902-6, 927-31 Je '17
- Official government statement on livestock. Nat Wool Grower 7:28-30 S '17
- On the battle line of the tick. H. S. Stabler. il Country Gent 81:878-9 Ap 22 '16
- Reply of Swift & company to questions submitted July 23, 1917, by the Federal trade commission. 35p '17 Swift & co., Chicago
- Rosemary—an estate to withstand a siege. R. R. Conklin. il Country Life 34:49-52 My '18
- Stockmen's opportunity. il Field II 27:541-2 Jl '17
- Ups and down for stockmen; 1915 record. S. Sosland. il Country Gent 81:110 Ja 15 '16
- See also Northwestern live stock conference, St Paul; United States—Animal industry, Bureau of

## Uruguay

- Loi portant modification des articles 31, 39 et 40 de la loi sur la police sanitaire des animaux. Int Yearbook Ag Leg 1916:687-8 '17

## Washington

- \* Dairying, poultry and stock raising in the state of Washington. H. F. Giles. 96p il maps '16 Washington State bur. of statistics and immigration, Olympia
- Directory of breeders of pure-bred live stock in Washington. Wash Ag Ext Ser 1, no 30:1-14 '17

## West Virginia

- West Virginia live stock and directory of breeders. W Va Ag Dept B 16:1-104 '16
- West Virginia live stock and directory of breeders. W Va Ag Dept B 30:1-71 '17
- Includes: Address of the president of the West Virginia livestock association; Live-stock program for West Virginia, by E. A. Sheets; Livestock and soil fertility, by W. H. Tomhave; Forage legumes for West Virginia, by F. W. Stemple; Production of roughage on West Virginia farms, by W. D. Zinn; Some experimental results in wintering beef cattle, by E. W. Sheets; Development of the sheep industry in West Virginia, by T. C. Atkeson; Utilization of cut over lands for live stock, by F. M. Foote; Sheep among the Appalachian hills, by E. W. Sheets; Weeding out the unprofitable cow, by H. W. Cave; Feeding for economical milk production, by W. A. Rhea; Pork production on the farm, by R. L. Muncie

## Western states

- Live stock in the Pacific Northwest. I. D. Graham. Breeder's Gaz 71:114 Ja 18 '17
- Northwest needs more live stock. J. Withycombe. il Breeder's Gaz 72:1145 D 20 '17

## Wyoming

- Prospects for Wyoming stockmen. W. C. Barnes. Breeder's Gaz 72:426 S 20 '17
- Live stock, agricultural, irrigation, and engineering societies of Idaho, Conference of. See Conference of agricultural, live stock, irrigation and engineering societies of Idaho
- Live stock association, American national. See American national live stock association
- Live stock associations  
See also Dairymen's associations; Live stock breeders' associations; Live stock shippers' associations

## Directories

- Agricultural and live stock associations of Kentucky. Ky Ag Dept Rep 1916-1917:373-6 '18
- National and state live-stock associations and allied organizations; with secretaries and addresses. U S Ag Yearbook 1917:595-603; Same. U S Ag Separate 742

## Live stock breeders

- Quebec live stock breeders. il J Ag (Quebec) 20:168-72, 186-7 F-Mr '17

## Directories

- Breeders of pure-bred livestock in Arizona. E. P. Taylor. Ariz Ag Ext C 16:1-7 '17
- Directory of breeders of pure-bred live stock in Washington. Wash Ag Ext Ser 1,no 30:1-14 '17
- Directory of Tennessee breeders of registered live stock. R. M. Murphy and C. D. Lowe. il Tenn Ag Ext Gen Ser 6 (Pub 13):1-67 '16
- Owners of pure-bred live stock in New York. il N Y Ag Dept B 91:1-183 Ja '17
- West Virginia directory of breeders of pure bred live stock. W Va Ag Dept B 30:54-71 '17

## Live stock breeders' associations

- Community breeders' organizations. C. Henry. il Purdue Ag Ext Leaflet 83:1-6 '17
- Community breeding. H. Rabild. Pa Ag Dept B 283:118-26 '16
- Community breeding associations. W. G. Weigle. Purdue Ag 12:136-8 D '17
- Community breeding in Hunterdon, Ind. C. M. McConnell. il Ohio F 141:585+ Ap 27 '18
- Community cattle breeding. W: L. Hanning. Ohio F 138:496 N 18 '16
- Community effort in livestock improvement. S. T. Simpson. Swine World 5:14 Mr '18
- Community livestock breeding. S. T. Simpson. Mo Ag Ext C 33:1-4 '17; Abstract. Coop Manager & F 7:100 Jl '18
- Community live stock breeding. A. E. Tomhave. il Penn State F 11:164-5 My '18
- Community organization for live stock improvement. G. C. Humphrey. Am Soc Animal Production Pro 1915-1916:94-100 '17
- Constitution and by-laws for a breeders' association. Prog F 31:622 My 6 '16
- Co-operation in live stock breeding. W. H. Tomhave. il Prac F 112:307+ Ag 15 '16
- Cooperative associations of livestock-breeders in the west of Canada. Int R Ag Econ 67: 37-9 Jl '16
- County breeders' organizations. il Wallaces' F 43:927 Je 14 '18
- County breeding organizations. Wallaces' F 42:1460 O 26 '17
- Décret n. 2633 approuvant le règlement pour la constitution des syndicats d'élevage en Portugal. Int Yearbook Ag Leg 1916:913-19 '17

- Iowa live stock breeders' association. il Wallaces' F 41:695 My 5 '16

- Kansas breeders' clubs. F. B. Nichols. Country Gent 81:764 Ap 1 '16

- Live stock breeders' week in Toronto. Ag Gaz of Canada 5:299-302 Mr '18

- Live stock organization a necessity. K. C. Ikeler. Penn State F 9:327-8 F '16

- Live stock record associations. H. T. Morgan. Farm Eng 5:9 O '17

- Local breeders' associations active; Illinois has 15 county organizations that are getting results. O Judd Farmer 61:4 D 23 '16



**Live stock breeders' associations—Continued**

Now is the time to organize pure-bred live-stock associations throughout the South. G. R. Hooks. *Prog F* 33:892 Ag 10 '18  
 Opportunities of the small breeder. D. O. Thompson. *il O Judd Farmer* 64:1 F 9 '18  
 Registration of pedigrees. W. Dinsmore. *Breeder's Gaz* 70:881-2 N 9 '16; *Abstract. Int R Sci & Prac Ag* 8,no 1:105-8 Ja '17  
 Statement with respect to the loan of rams and boars to farmers' associations. T. R. Arkell. *Ag Gaz of Canada* 4:452-3 Je '17  
 Success of co-operative effort demonstrated by 136 community associations in Wisconsin. *Coop Manager & F* 6:91-2 Ja '17  
 Successful efforts in community breeding. C. T. Conklin. *il Field II* 27:453-4 Je '17  
 Value of community breeding. F. B. Nichols. *il Field II* 26:592 JI '16  
 Value of the farm bureau in developing the live stock industry; with discussion. F. S. Barlow. *N Y Ag Dept B* 80:1452-62 F '16; *Same. N Y Ag Dept Rep* 1916,pt 3:1452-62 '17  
 What community breeding does. R. Baker. *il Country Gent* 81:1358 JI 15 '16  
 What does registration mean? *Hoard's D* 55:484 Ap 5 '18

*See also Cattle breeders' societies; Horse breeders' societies; Live stock shipping associations; Poultry breeders' associations; Swine breeders' societies; also names of associations, e.g. American Jersey cattle club, American national live stock association, Arkansas stock growers' association, Cattle, swine and sheep feeders' association, General breeders' association, Illinois live stock breeders' association, International live stock exposition association, Michigan improved live stock breeders' and feeders' association, Minnesota livestock breeders' association, Missouri live stock producers' association, New York state breeders' association, Southern settlement and development organization, State live-stock association of Illinois, United States live stock sanitary association, West Virginia live stock association, Western Canada live stock union*

**Directories**

How to register an animal; list of the American record associations for horses, cattle and hogs, and their secretaries; 1918. *Prog F* 33:204 F 16 '18  
 List of the American record associations and their secretaries, 1917. *Prog F* 32:220 F 17 '17  
 Purebred livestock associations; addresses of secretaries. *Ohio F* 141:428 Mr 23 '18  
 Live stock breeding. *See Breeding*

**Live stock clubs**

Live stock club work in Pennsylvania. C. G. McBride. *Breeder's Gaz* 74:155 Ag 1 '18

**Live stock exchanges**

Live stock exchange and the live stock shipper. A. F. Stryker. *Am Sheep B & W* 38:319 My '18  
 Uses of the live stock exchange. *Ag Digest* 1:337 Mr '17

**Live stock exhibits**

Planning a fair exhibit. H. E. McCartney. *Breeder's Gaz* 74:80 JI 18 '18

**Live stock farms**

Automatic meat making; high-pressure methods of a feeder of hogs and cattle. C. E. Gapen. *il Country Gent* 83:5 My 18 '18  
 Big farming by a young farmer. *il Wallaces' F* 43:1459 O 11 '18  
 Big farming without fancy work. W. H. Dean. *il Country Gent* 81:2107-8 D 9 '16  
 Bill Jackson's corn-belt farm. P. S. Richey. *il Country Gent* 82:1593 O 20 '17  
 Colt farm plans for the future. *il Field II* 27:104 F '17  
 Developer of pure-bred stock; Ridgewood farms. T. H. Wittkorn. *il Prac F* 112:427-8 N 15 '16  
 Developing a model farm. F. M. Loomis. *il Farm Eng* 4:91-2 D '16

Diversified mule farm. G. Day. *il Country Gent* 83:44 Ja 19 '18  
 East's Shropshire champion. *il Am Sheep B & W* 37:666-7 N '17  
 Farm of rotations. *il Wallaces' F* 41:1559 D 1 '16  
 Farming with pastures. *il Wallaces' F* 41:43 Ja 14 '16  
 From hired man to stock breeder. L. J. Haynes. *il Wallaces' F* 41:1463 N 10 '16  
 Handling 900 brood sows in McLean county, Ill. *il O Judd Farmer* 63:3 JI 7 '17  
 Has nothing but purebred stock. *il O Judd Farmer* 65:276 O 5 '18  
 Island stock farm. *il Wallaces' F* 42:915 Je 15 '17  
 Life story of Peter Mouw. R. Davis. *il Swine World* 5:6-7+ Je '18  
 Live stock and grass. *il Wallaces' F* 43:339 F 22 '18  
 Making cattle pay. *Wallaces' F* 42:1519 N 9 '17  
 Making feeding pay. *il Wallaces' F* 43:975 Je 28 '18  
 Meat making in Missouri; Hudson farm, McBaine, Mo. W. L. Nelson. *il Breeder's Gaz* 73:857 Ap 25 '18  
 Profit of \$7,000 from pork hogs. J. M. Carroll. *Swine World* 5:3 O '17  
 Progressive tenant. *Wallaces' F* 43:711 Ap 26 '18  
 Raising cattle the self-feeder way. *il Wallaces' F* 41:1431 N 3 '16  
 Recollections of Bow Park. S. F. Lockridge. *Breeder's Gaz* 72:1074 D 13 '17  
 Retired on the farm. J. M. Brickey. *il Country Gent* 81:1907 O 28 '16  
 Sni-a-bar's grades; old red cows and a good bull make profitable beef. J. E. Pickett. *il Country Gent* 83:6-7 D 21 '18  
 Steer feeding and soil fertility. *il Ohio F* 140:242 S 22 '17  
 Sticking to the right idea in Georgia. H. S. Stabler. *il Country Gent* 82:307 F 17 '17  
 Success with corn and cattle. *Wallaces' F* 42:1615 N 30 '17  
 Two Scotch Iowa feeders. J. J. Newlin. *Breeder's Gaz* 73:810 Ap 18 '18  
 Two thousand acres of grass. W. D. Nicholls. *Country Gent* 83:5 F 2 '18  
 Well balanced livestock establishment. C. M. McConnell. *il Ohio F* 140:237-8 S 22 '17  
 Well-managed Indiana stock farm. C. M. McConnell. *il Ohio F* 141:381 Mr 16 '18  
 What about brood mares? S. O. Rice. *il Country Gent* 83:32 S 28 '18  
 Wholesaler of pure-breds. *il Wallaces' F* 43:1135 Ag 9 '18  
 Young beef on high-priced land. C. M. McConnell. *il Breeder's Gaz* 72:837 N 8 '17

**Live stock industry committee, United States.**  
*See United States live stock industry committee*

**Live stock inspection**

Importation of live stock into New Zealand. *J Bd Ag* 23:515 Ag '16  
 Inspecting hogs for interstate shipment. *Breeder's Gaz* 69:962 My 4 '16

**Live stock insurance.** *See Insurance, Live stock*

**Live stock laws**

Action to enjoin the live stock sanitary board from destroying certain mares infected with dourine as determined by the complement-fixation test; Supreme court of North Dakota. *Am Vet M Assn J* 53:691-2 Ag '18  
 Agricultural law, 1916; diseases of domestic animals. *N Y Ag Dept B* 83:2007-23 My '16; *Same. N Y Ag Dept Rep* 1916,pt 3:2007-23 '17  
 Are uniform regulations feasible among the different American countries for the prevention of the introduction and dissemination of diseases of animals? *Am Vet M Assn J* 50:361-6 D '16  
 Arrêté grand-ducal prescrivant la tenue de registres de bétail pour les exploitations agricoles en Luxembourg. *Int Yearbook Ag Leg* 1916:307-8 '17  
 Bovine tuberculosis laws in Wisconsin. E. G. Hastings. *Hoard's D* 55:421 Mr 29 '18

**Live stock laws—Continued**

- Brazil to encourage sheep and goat raising. R: P. Momsen. (Commerce Reports no. 83) p 116-17 (Ap 9) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Élevage des animaux; maladies des animaux; protection des animaux. Int Yearbook Ag Leg 1916:663-91 '17
- Great Divide wants 50-50; Colorado laws. Am Sheep B & W 36:463 Ag '16
- Health guaranteed. H. T. Morgan. Country Gent 82:560 Mr 17 '17
- Help kill this ruinous herd law; Colorado. Am Sheep B & W 36:326 Je '16
- Herd law legislation in Colorado. C: I. Bray. Am Sheep B & W 36:603 O '16
- Idaho priority law. Nat Wool Grower 8:64-5 Ap '18
- Importations of stock into N. S. W.; the quarantine laws and regulations. S. T. D. Symons. Ag Gaz of New South Wales 29: 321-9 My '18
- Increasing the grazing fees on national forests. Am For 23:177 Mr '17
- Live stock laws of the state of Arizona: rules and regulations. 42p n.d. Ariz. Live stock sanitary bd., Phoenix
- Live stock laws of Wyoming and regulations of State veterinarian. 58p '17 State veterinarian, Cheyenne, Wyoming
- Live stock sanitary laws of Montana, also rules and regulations and orders of the Montana live stock sanitary board. 136p '17 Mont. Live stock sanitary bd., Helena
- Live stock sanitary laws of the state of Arkansas. Ark Ag Exp B 126:1-12 '16
- Livestock sanitary measures. H. T. Morgan. Country Gent 82:1003 Je 9 '17
- Manual of laws pertaining to the Department of farms and markets; diseases of domestic animals. N Y Farms & Markets Dept Ag B 108:99-114 Je '18
- Orders respecting foot and mouth disease, imports of animals, etc. Ag Gaz of Canada 3:515-16 Je '16
- Priority right law a misnomer. A. G. Butterfield. Am Sheep B & W 36:480 Ag '16
- Read the 640-acre act; facts regarding the homestead law. Am Sheep B & W 37:138-41 Mr '17
- Right to use the range. Nat Wool Grower 7: 22-3 Ag '17
- Sheepmen and cattlemen in Idaho. H. Sproat. Am Sheep B & W 36:330-1 Je '16
- \* South Dakota live stock laws, 1909-11-13-17; rules and regulations of the Live stock sanitary board. 61p '18 S. D. State live stock sanitary bd., Pierre
- Stock law upheld by supreme court. Prog F 33:1380 D 14 '18
- Stock-raising homestead law; explanatory statement relative to the provisions of the act entitled An act to provide for stock-raising homesteads, and for other purposes, together with a copy of the act as approved by the President of the United States on December 29, 1916. (U.S. 64th Cong. 2d sess. S. Doc. 663) 8p '17 Apply to congressmen
- Ten fundamental principles recommended by the National society of record associations. Kimball's D F 15:293 Ap 15 '17
- \* Tick eradication quarantine law. (In 5th biennial report, p. 60-7) '18 La. State live stock sanitary bd., Baton Rouge
- See also Horses—Laws; Stallion law
- Live stock markets**
- Annual review of the big mutton markets. Am Sheep B & W 37:39-41 Ja '17
- Dublin cattle market. O. W. H. Roulston. il J Dept Ag Ireland 17, no 1:57-63 '16
- Great central markets for live stock and meats. L: D. Hall. (In Pan American scientific congress Pro., 1915, v. 3, p. 335-41) '17
- Live stock market review for 1916. Mo Ag Ed Yearbook 1916:193-207
- Marketing live stock. Am Coop J 13:394 My '18
- Ownership of stock yards. M. L. McClure. Wallaces' F 43:1815 D 13 '18
- \* Proclamation requiring stockyard firms to secure trade license on or before September 19. W. Wilson. (In Official statement no. 5, p. 2-3) '18 U. S. Food administration, Washington, D. C.
- Production and markets. J: Bright and H. S. Arkell. 16p '16 Canada Ag
- Public livestock market. J. E. Poole. il Field 11 26:1015-16 D '16; Abstract. Int R Sci & Prac Ag 8, no 3:469-70 Mr '17
- Why investigate the livestock industry? E. L. Burke. (In Nat. conf. on marketing and farm credits, 1916, p. 191-8) \$2 '17
- C. W. Holman, sec., Madison, Wis.
- Zone system for cattle markets. P. Greer. il Country Gent 83:8 F 23 '18
- See also Chicago stockyards; Live stock exchanges
- Regulation**
- General regulations governing licensees operating stock yards, or handling or dealing in live stock in or in connection with stock yards. U S Ag C 116:1-14 '18; Same cond. Coop Manager & F 7:90 Ag '18
- Regulations for stockyards prohibit deceptive dealing. W. Wilson. Coop Manager & F 8: 96-7 S '18
- Live stock sanitary boards**
- County live stock boards. Breeder's Gaz 70: 169 Ag 3 '16
- Favors board for each county. O Judd Farmer 60:8 Ja 29 '16
- Necessity of a live stock sanitary commission or bureau in the state of New York. L: Griessman. Am Vet M Assn J 49:621-4 Jl '16
- Live stock sheds**
- Building straw-covered sheds. E. V. Laughlin. Farm Eng 7:10 Mr '18
- Live stock shipping associations**
- Associations for selling live stock. Rural N Y 75:708 My 6 '16
- Constitution and by-laws of the Farmington live stock shipping association. Wallaces' F 41:425 Mr 10 '16
- Co-operative livestock marketing. H. E. Erdman. Ohio F 142:582 D 14 '18
- Co-operative live stock marketing. A. A. Macmillan. J Ag (Quebec) 20:58 S '16
- Cooperative live stock shipping associations. S. W. Doty and L. D. Hall. il Farmers' B 718:1-16 '16; Same cond. Prog F 31:680 My 20 '16; Same cond. N Y Prod R 42:312 Je 14 '16; Same cond. Hoard's D 52:55 Ag 4 '16
- Cooperative livestock shipping associations in Minnesota; with list of associations. E. D. Durand. maps Minn Ag Exp B 156:1-29 '16
- Co-operative marketing of livestock. Ohio F 137:490 Ap 1 '16
- Co-operative sale of live stock in Germany. Int R Ag Econ 72:1-10 D '16
- Cooperative shipping. Country Gent 81:1077 My 20 '16
- Co-operative shipping in Henry county, Ill. J. M. Carroll. O Judd Farmer 65:49, 69 Jl 20-27 '18
- Cooperative shipping in Minnesota. Breeder's Gaz 70:57 Jl 13 '16
- Cooperative shipping of hogs. I. W. Carpenter. Prog F 31:1410 D 9 '16
- Co-operative shipping of livestock. T. M. Patterson. il Prog F 32:777 Jl 14 '17
- Co-operative shipping of live stock proves success in the Northwest. Coop Manager & F 6:104 F '17
- Co-operative shipping of live stock; successful association found in La Salle county, Ill. O Judd Farmer 65:24 Jl 13 '18
- Co-operative stock shipping. O Judd Farmer 61:9 Jl 1 '16
- Co-operative stock shipping association. Wallaces' F 41:1513 N 17 '16
- How they ship live stock co-operatively in Nevada. L. E. Cline. Am Coop J 13:396 My '18
- How to organize and manage. E. G. Gordon. Ontario Ag Dept C 15:1-8 '18
- How to ship live stock co-operatively. D. W. Hubbard. Am Coop J 11:1054 Je '16
- How Wisconsin farmers market their livestock cooperatively. R. M. Orchard. Banker-F 3:13 Je '16
- How Yazoo county farmers cooperate in selling hogs. W. R. Ritch. Prog F 31:902 Jl 22 '16
- Improving on the shipping associations. il Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr) 6:13 F 4 '18



**Live stock shipping associations—Continued**

- Livestock shipping associations. B. H. Hibbard and A. Hobson. map Wis Ag Exp B 282:16-19 '17
- Livestock shipping co-operatively. F. C. Hart. Ag Gaz of Canada 5:877-9 S '18; Same. Coop Manager & F 8:72 N '18
- Local stock shipping association. A. W. Jacob. Breeder's Gaz 70:126 J1 27 '16
- Oldest shipping association; Farmers' shipping association of Superior, Nebraska. Country Gent 81:207 Ja 29 '16
- Profitable shipping association. il Wallaces' F 41:1111 Ag 25 '16
- Selling through cooperative livestock shipping associations. S. S. Beach. (In Nat. conf. on marketing and farm credits, 1916, p. 268-78) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Suggested constitution and by-laws for the organization of farmers' cooperative live stock shipping associations. Am Coop J 12:334 D '16
- Suggestions on marketing live stock. A. M. Soule. il Ga Ag Coll (Ext) C 37 8p '16
- System of accounts for live-stock shipping associations. J. R. Humphrey and W. H. Kerr. U S Ag B 403:1-14 '16; Same. (In Minnesota farmers' institute annual, 1916, p 231-9) '16 Extension division, University Farm, St Paul
- Thirty-five years of coöperation. E. E. Miller. Country Gent 81:2043 N 25 '16
- Why shipping associations may fail. O Judd Farmer 65:342 O 19 '18
- See also names of associations, e. g. Corn belt meat producers' association, National live stock shippers' protective league, State livestock association of Illinois

**Live stock shows**

- Breeders' shows at state fairs. Breeder's Gaz 73:112 Ja 17 '18
- County fair livestock classes. C. T. Conklin. Ohio F 141:426 Mr 23 '18
- Denver show awards, students' judging contest. Breeder's Gaz 71:233+ F 1 '17
- Fort Worth show awards. il Breeder's Gaz 71:693 Mr 29 '17
- In the days of the biggest hog. N. H. Gentry. Breeder's Gaz 69:236 F 3 '16
- Live-stock classifications at county fairs. S. H. Ray. Farmers' B 822:1-12 '17
- Minnesota state fair, 1918. Wallaces' F 43:1298-9 S 13 '18
- Montana advances her farm resources. R. V. Hoffman. il Field II 26:936-7+ N '16
- 1918 Ormstown spring show. il J Ag (Quebec) 22:8-9 J1 '18
- Ormstown spring show. il J Ag (Quebec) 21:11-12 J1 '17
- Pacific Coast show circuit. A. D. Milligan. Breeder's Gaz 72:1261 D 27 '17
- Pacific Coast stock show? J. E. Painter. Breeder's Gaz 72:732 O 25 '17
- Prizes at fairs for non-productive live stock. Ag Gaz of Canada 5:584-6 Je '18
- Purdue's second annual live stock show. J. B. Markey. Purdue Ag 11:24-5 Ja '17
- Purebreds in Alberta. C. M. McLennan. Breeder's Gaz 73:58 Ja 10 '18
- Royal show of England. Breeder's Gaz 70:92 J1 20 '16
- Shows in Oklahoma and Florida. Breeder's Gaz 73:552d Mr 14 '18
- Southwest-American live stock show at Oklahoma City, Okla., March 3-9. Breeder's Gaz 62:675-6 Mr 23 '16
- Stock shows and Shropshires. H. N. Gibson. il Field II 28:173 Mr '18
- Stories of the showyard. T. E. Robson. Breeder's Gaz 73:104 Ja 17 '18
- Syracuse sets the pace. H. G. Gulliver. il Field II 26:817-9+ O '16
- Two memorable small shows. J. E. Robbins. Breeder's Gaz 73:56 Ja 10 '18
- Value of the show ring. Hoard's D 52:658 D 1 '16
- See also Cattle shows; Dairy shows; Horse shows; Poultry shows; Sheep shows; Swine shows; also Association of American horse shows; California land and live stock show; Inter-mountain fat stock show; Interna-

tional live stock exposition; Interstate live stock fair; Kansas national live stock show; Mid-continent live stock exposition; National breeders' and feeders' show; National dairy show; National western live stock show; Northwest live stock show; Pacific international live stock exposition; Southwest American live stock show; Southwestern dairy show

**Live stock trade**

- Banner year for the stockman. P. D. Hammett. Ohio F 141:101 Ja 26 '18
- Cattle liquidation extremely liberal. Am Coop J 14:60 O '18
- Controlling price fluctuations. J. M. Carroll. O Judd Farmer 61:7 N 18 '16
- Federal market regulations. Breeder's Gaz 74:84 J1 18 '18
- First aid to the cattlemen. J. E. Markle. il Country Gent 83:7 O 5 '18
- Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; live-stock production for 1919. U S Ag C 123:1-14 '18
- Hides and skins; production, foreign trade, supply, and consumption. G. K. Holmes. U S Ag Yearbook 1917:425-46
- Live stock and meat trade prospects. Breeder's Gaz 73:12 Ja 3 '18
- Live stock industry, present and prospective. J. J. Ferguson. Am Vet M Assn J 54:8-17 O '18
- Live stock industry's greatest year. J. M. Carroll. O Judd Farmer 65:499+ N 30 '18
- Livestock market. J. E. Poole. Ag Digest 1:157 O '16
- Live stock men sound warning in plea for aid. A. Sykes. Coop Manager & F 7:93 Mr '18
- Marketing live stock. Am Coop J 13:356, 442 Ap, J1 '18
- Much uncertainty among feeders; analysis of live stock market situation. J. M. Carroll. O Judd Farmer 63:11 N 3 '17
- Notable half-year at the markets. Breeder's Gaz 69:1324 Je 29 '16
- On the hog market. J. M. Carroll. Swine World 5:14 My '18
- Peace talk and live stock values. J. M. Carroll. O Judd Farmer 65:395 N 2 '18
- Some commonly neglected factors underlying the stock breeding industry. R. Pearl. Maine Ag Exp B 258:1-28 '17; Same. Maine Ag Exp Rep 1917:1-28
- Spread in beef values widens considerably. Am Coop J 12:736 J1 '17
- Stockyard receipts of food animals increased in June. Weekly N L 5:13 J1 31 '18
- Storm king rules live stock business. Am Coop J 13:258 F '18
- What can the railroad do to develop the live stock industry in its territory; with discussion. D. E. Willard. (In Pro. Railway development assn., 1917, p. 22-5) '17 D. C. Welty, sec., Comr. of ag., Missouri Pacific railroad co., St Louis
- See also Cattle industry and trade; Live stock markets; Meat industry and trade; Poultry industry and trade; Sheep industry and trade; Wool trade and industry

**Statistics**

- Condition of farm animals Apr. 1, and estimated losses during year ending Mar. 31, 1917, with comparisons. Monthly Crop Rep 3:30 Ap '17
- Condition of farm animals April 1, and estimated losses during year ending March 31, 1918, with comparisons. Monthly Crop Rep 4:34-5 Ap '18
- Domestic animals. Cal Ag Bd Rep 1917:38-60 '18
- Government live stock statistics. Wallaces' F 42:341 F 22 '18
- Livestock in principal and other countries. See United States Department of agriculture Yearbooks
- Live stock in principal countries; changes since the outbreak of the war. Monthly Crop Rep 4:16 F '18
- \* Live stock in Sweden. (Commerce Reports no. 265) p 576 (N 11) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Live stock trade—Statistics—Continued**

- Live stock in Switzerland. L. W. Haskell. (Commerce Reports no. 233) p 62 (O 4) '18  
U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
Live stock in the country; tabulated list. Wallaces' F 41:510 Mr 24 '16  
Live stock in the country; tabulation by U. S. crop reporting board. Wallaces' F 41:290 F 18 '16  
Live stock in the United States. Monthly Crop Rep 4:9 F '18  
Live stock in the United States, 1910-1917. Monthly Crop Rep 3:1 Ja '17  
Live stock on farms of crop reporters July 1, 1918, and July 1, 1917. Monthly Crop Rep 4:92 Ag '18  
Live stock statistics for Kentucky by counties. Ky Ag Dept Rep 1916-1917:272-83 '18  
Missouri live stock, 1916. il Mo Ag Bd B v 15:1-34 My '17  
New Zealand live stock and crop statistics. A. A. Winslow. (Commerce Reports no. 237) p 128 (O 9) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
Record-breaking live stock values in United States. B. W. Snow. O Judd Farmer 60:16 Ja 29 '16  
Statistics of farm animals and their products. See United States Department of agriculture Yearbooks  
\* Statistics of live stock; Sheep, swine and poultry in Ontario; Wool clip, poultry on hand and live stock sold in Ontario. (In Report, Bur. of industries, 1917, p. 18-19, 42-3, 44) '18 Ontario ag. dept., Toronto  
Yearly marketings of live stock, 1900-1915; tabulation. Wallaces' F 41:338 F 25 '16

**Laws**

- Arrêté n. 5105 concernant l'exécution d'un recensement extraordinaire du bétail au 15 avril 1916 en Allemagne. Int Yearbook Ag Leg 1916:26 '17

**Liver, Hydatids of**

- Multivesicular hydatid cyst of the liver. M. C. Hall. Am Vet M Assn J 51:714-16 Ag '17

**Liver flukes**

- Fluke in sheep. J Dept Ag Victoria 15:705-10 D '17  
Liver fluke disease, its treatment and control. M. C. Hall. Am Vet M Assn J 49:534-5 Jl '16  
Liver flukes in sheep, goats, and cattle. B. T. Simms. Ore Ag Ext B 211 2p '17  
New host for fasciola magna. S. Hadwen. il Am Vet M Assn J 49:511-15 Jl '16

**Liverworts**

- American species of marchantia. A. W. Evans. il (Trans. v. 21, p. 201-313) \$1.20 '17 Conn. academy of arts and sciences, New Haven  
Archegonium and sporophyte of treubia insignis Goebel. D. H. Campbell. il Am J Bot 3:261-73 Je '16  
Columella in marchantia polymorpha. J. E. Cribbs. il Bot Gaz 65:91-6 Ja '18  
Mexican aytonia. A. M. Starr. bibliog il Bot Gaz 61:48-58 Ja '16  
Noteworthy lejeuneae from Florida. A. W. Evans. il Am J Bot 5:131-50 Mr '18  
Structure of the cytoplasm in the cells of alicularia scalaris. Cord. M. P. Rivett. bibliog il Ann Bot 32:207-14 Ap '18  
Studies on some East Indian hepaticae. D. H. Campbell. il Ann Bot 32:319-38 Jl '18

**Living costs. See Cost of living****Living rooms**

- Comfortable living rooms. J. C. Marshall. il Country Life 31:110+ F '17  
Living room and bedrooms. N. K. Jones. Country Gent 81:1207 Je 10 '16  
Living up to Genevieve; story. H. C. Bennett. il Country Gent 82:1949-50 D 8 '17

**Load (mechanics)**

- Soil pressure of tractors. G. P. Pearce. Country Gent 82:1689 N 3 '17  
Tests of three large-sized reinforced-concrete slabs under concentrated loading. A. T. Goldbeck and E. B. Smith. il J Ag Research 6:205-34 My 8 '16

**Loan act, Federal farm. See Agricultural credit—United States—Law****Loan associations. See Building and loan associations****Loan associations, National farm. See National farm loan associations****Loans**

- Amortization methods for farm mortgage loans. L. E. Truesdell and C. W. Thompson. U S Ag C 60:1-12 '16; Same. Fla Ag Dept Quar B v 26:32-52 Jl '16  
Are farmers slow pay? R. N. Day. Prog F 31:1260 O 28 '16  
Beef and the banker. F. N. Shepherd. il Nation's Business (Riggs bldg., Washington, D. C. 25c) 6:11-12 Ap '18  
Beef credit makes good. Ag Digest 2:913 Ap '18  
Cattle loans in the United States. Int R Ag Econ 72:83-5 D '16  
Cows for southern Illinois. T. J. Delohery. Country Gent 81:206 Ja 29 '16  
Cows on borrowed money. Country Gent 81:1265 Je 24 '16  
Factors affecting interest rates and other charges on short-time farm loans. C. W. Thompson. map U S Ag B 409:1-12 '16  
Financing cattle feeders. O Judd Farmer 60:17 F 19 '16  
Financing the beginner with pure-bred livestock—how it has paid. F. E. Jackson. il Banker-F 4:14 Ag '17  
Financing the cow keeper. Country Gent 82:805 Ap 28 '17  
Financing the purchase of purebreds. F. E. Jackson. Breeder's Gaz 72:77 Jl 19 '17  
First aid to the cattlemen. J. E. Markle. il Country Gent 83:7 O 5 '18  
First federal farm loan. Ag Digest 2:565 Ag '17  
How bankers have cooperated to loan farmers money to buy cattle. Banker-F 4:10-11 My '17  
How eleven banks cooperate to bring better cows and bigger milk checks. H. I. Wood. il Banker-F 4:6-7 Ja '17; Same cond. Ag Digest 1:295-6 F '17  
How to borrow money to buy cattle. Ag Digest 1:214-15 D '16  
How to borrow to buy pure bred live stock. F. E. Jackson. il System on the Farm 1:69-70 Ap '17  
Interest on farm loans. Wallaces' F 42:565 Mr 30 '17  
Livestock, the banker, his program. R. A. Blanchard. Nat Wool Grower 8:47 My '18  
Living on borrowed money. J. E. Pickett. Country Gent 82:1876-7 D 1 '17  
Loans on cattle. Field il 26:244 Mr '16  
Loans on livestock. T. J. Delohery. il Country Gent 83:14 Jl 20 '18  
Loans on live stock in Canada. H. Vanderhoof. Jersey B 36:795 My 23 '17  
Loans to drought-hit farmers described in treasury and agricultural circular. Coop Manager & F 8:44 O '18  
Meat makers' money. S. O. Stanley. il Country Gent 81:146 Ja 22 '16  
Money to buy cattle. R. Baker. Kimball's D F 15:186 Mr 15 '17; Same. Banker-F 3:10 N '16  
Need a livestock loan? S. Sosland. Country Gent 82:430 Mr 3 '17  
Our foreign loans. J. R. Milligan. Ohio F 138:222 S 9 '16  
\$12,000,000 first mortgage loans to farmers. Ag Digest 2:566 Ag '17  
Uncle Sam furnished the creamery—but a banker produced the cows. il Banker-F 4:12 Ja '17  
What is meant by cattle paper. O Judd Farmer 61:17 O 21 '16  
See also Mortgages; National farm loan associations

**Lockjaw. See Tetanus****Lockridge, S. F.**

Portrait. Breeder's Gaz 72:489 S 27 '17

**Locks and keys**

Safeguarding the home. G. H. Hall. il Country Life 29:116 Mr '16



**Locust borers**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v 16, no 26:55-60 '16*
- Locust borer. C. E. Sanborn and H. R. Painter. *bibliog il Okla Ag Exp B 113:1-8 '17*
- Locust borer and other insect enemies of the black locust. H. Garman. *il Ky Ag Exp B 200:99-135 '16*
- Two destructive shade tree borers. C. R. Hutchings. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 65-70) *il '17*

**Locust trees**

- Black locust. *Weekly N L 5:8 D 5 '17*
- Likes the locust tree. E. S. Hacker. *Rural N Y 76:812 Je 23 '17*
- Locust. J. Bentley, jr. *il Cornell Rural School Leaflet v 11, no 1:194-9 '17*
- Locust trees recommended to prevent soil erosion. *Prac F 112:186 My 1 '16*
- Locusts; identification and characteristics. S. B. Detwiler. *il Am For 23:88-92 F '17*
- Ship builders need black locust wood for tree-nails. *Weekly N L 5:5 My 22 '18*
- Yellow locust. J. J. Crumley. *il Ohio Ag Exp B v 1:149-52 My '16*

**Diseases and pests**

*See also* Locust borers

**Locusts**

- Algo sobre la langosta (schistocerca Americana) y la necesidad de una convención internacional para obtener su destrucción. J. J. R. Luna. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 596-8) *'17*
- Cheaper grasshopper poison induces farmers to combat pest energetically. *Weekly N L 5:12 Je 5 '18*
- Control of grasshoppers in New York state. G. W. Herrick and C. H. Hadley, jr. *il Cornell Ag Ext B 4:71-9 '16*
- Control of locusts in various countries. *Int R Sci & Prac Ag 8, no 1:167-8 Ja '17*
- Control of the black cricket; Californian methods with grasshoppers. E. Clifton. *J Ag New Zealand 12:187-9 Mr '16*
- Controlling a plague of grasshoppers. *il Rural N Y 77:893, 915 Jl 20-27 '18*
- Controlling grasshoppers. *Am Flor 46:1218 Je 24 '16*
- Damage by grasshoppers. *il Ohio F 142:280 S 21 '18*
- Destroy the grasshoppers. T. D. Urbahns. *il Cal State Comm Hort B v 6:249-53 Je '17*
- Device for sowing grasshopper poison. T. H. Parks. *il J Econ Entom 10:524-5 D '17*
- Dipteros nuevos parásitos de la schistocerca peregrina. C. Nocado. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 877-83) *'17*
- Economic importance of grasshoppers in Indiana. C. G. Randell. *Purdue Ag 13:29 O '18*
- Efficiency and economy in grasshopper control. E. D. Ball. *J Econ Entom 10:135-8 F '17*
- Experiments in locust control by means of coccobacillus acridorum in Argentina. R. Kraus. *Int R Sci & Prac Ag 7, no 9:1383-4 S '16*
- Experiments on the control of locusts with coccobacillus acridorum d'Herelle. E. M. DuPorte and J. Vanderleck. (*In* Report, Entomological soc. of Ontario, 1916, p. 91-5) *'17* Ontario ag. dept., Toronto
- Experiments with grasshopper baits with incidental observations on the habits and destructiveness of the differential grasshopper. A. W. Morrill. *J Econ Entom 11: 175-86 Ap '18*
- Grasshopper baits; extra oranges or lemons added to the Criddle mixture or to poison bran bait add to effectiveness. *J Ag (Quebec) 20:31 Ag '16*
- Grasshopper control. C. R. Jones. *il Colo Ag Exp B 233:1-27 '17*
- Grasshopper control. D. E. Merrill. *il N M Ag Exp B 102:1-32 '16*
- Grasshopper control in Montana. R. A. Cooley and others. *il Mont Ag Exp C 76:119-47 '18*

- Grasshopper control in relation to cereal and forage crops. W. R. Walton. *il Farmers' B 747:1-18 '16*
- Grasshopper destruction. Wallaces' *F 42:1142 Ag 17 '17*
- Grasshopper outbreak in New Mexico during the summer of 1913. H. E. Smith. *bibliog il U S Ag B 293:1-12 '15*
- Grasshoppers. T. L. Guyton. *Ohio Ag Exp B v 3:204-7 Jl '18*
- Grasshoppers and their control. H. C. Severin and G. I. Gilbertson. *il S D Ag Exp B 172:552-88 '17*
- How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B 835:13-16 '17*
- How to poison grasshoppers. *Weekly N L 5:8 My 15 '18*
- How we fooled the locusts. C. L. Martzloff. *Fruit-Grower 27:239 Ap 1 '16*
- Invasions of locusts in Uruguay, in 1915 and 1916. *Int R Sci & Prac Ag 8, no 7:1064-6 Jl '17*
- Lesser migratory locust. G. W. Herrick and C. H. Hadley, jr. *bibliog il map Cornell Ag Exp B 378:1-45 '16; Same. Cornell Ag Exp Rep 1917:1-45 '18*
- Methods of controlling grasshoppers. F. B. Milliken. *il map Kansas Ag Exp B 215:1-30 '16*
- New sarcophagid parasite of grasshoppers. E. O. G. Kelly. *bibliog il J Ag Research 2: 435-46 S '14*
- Poisoned bait as a control for grasshoppers. A. H. Sherwood. *il S D Ag Ext C 5:1-8 '18*
- Quiet grasshopper. E. M. Patch. *il Country Life 35:78 N '18*
- Recent grasshopper outbreaks and latest methods of controlling them. F. M. Webster. *il map U S Ag Yearbook 1915:263-72*
- Report on the great invasion of locusts in Egypt in 1915 and the measures adopted to deal with it. 72p *il maps 25c '16* Ministry of agriculture, Cairo, Egypt
- Turning a pest to profit. *il Scientific Am (233 Broadway, N.Y. 10c) 118:232 Mr 16 '18*
- Warning re grasshopper swarms this summer, 1918-19. W. B. Gurney. *Ag Gaz of New South Wales 29:656 S '18*
- See also* Cicadas

**Investigations**

Uruguay—Government has appointed a commission to make further investigations and experiments with respect to the utilization of locusts for industrial purposes recommended by Sr Alejandro Otaegui. Sr Otaegui has been experimenting for some time, and believes that locusts can be profitably utilized in the manufacture of fertilizer, soap, lubricants, and stock food. The locust is, it is stated, rich in nitrogen and phosphoric acid

**Laws**

Décret n. 7 relatif à la destruction des sauterelles au Soudan. *Int Yearbook Ag Leg 1916: 865-6 '17*

**Lodging houses**

Boston students' union. Mrs K. Osborne. *J Home Econ 8:475-8 S '16*

**Loess**

- \* Loess-depositing winds in Louisiana. F. V. Emerson. *il map J Geology (Univ. of Chicago Press, Chicago 65c) 26:532-41 S '18*
- Loess soils of Nebraska and their relation to fruit raising. G. E. Condra. *il (In Nebraska Horticulture v. 6, no. 12, p. 35-40) (F) '17* Neb. state hort. soc., Lincoln
- Loess soils of the Nebraska portion of the transition region: humus, humus-nitrogen and color. F. J. Alway and M. J. Blish. *bibliog map Soil Sci 1:239-58 Mr '16*
- Loess soils of the Nebraska portion of the transition region: hygroscopicity, nitrogen and organic carbon. F. J. Alway and G. R. McDole. *bibliog il maps Soil Sci 1:197-238 Mr '16*
- Loess soils of the Nebraska portion of the transition region: mechanical composition and inorganic constituents. F. J. Alway and C. O. Rost. *bibliog Soil Sci 1:405-36 My '16*

**Loess**—*Continued*

Loess soils of the Nebraska portion of the transition region: potash, soda, and phosphoric acid. F. J. Alway and R. M. Isham. bibliog map Soil Sci 1:299-316 Ap '16

Loess soils of the Nebraska portion of the transition region: the relative rawness of the subsoils. F. J. Alway and others. bibliog il map Soil Sci 3:9-35 Ja '17

Loess soils of the Nebraska portion of the transition region: the water-soluble constituents. F. W. Upson and others. bibliog map Soil Sci 2:377-86 O '16

Variations in the moisture content of the surface foot of a loess soil as related to the hygroscopic coefficient. F. J. Alway and G. R. McDole. bibliog map J Ag Research 14:453-80 S 9 '18

**Log cabins**

Log cabin on the estate of Mr Charles S. Walton, St David's, Pa.; photographs. Country Life 30:54 My '16

Modern log cabin. I. L. Palmer. il Country Life 32:148 My '17

**Loganberries**

Chemical examination of the loganberry. M. R. Daughters. bibliog Ore Ag Exp B 151:1-10 '18

Composition of loganberry juice and pulp. M. R. Daughters. J Industrial & Eng Chemistry (Am. Chemical soc., Easton, Pa. 60c) 9:1043 N '17

Culture of the Logan blackberry and related varieties. G. M. Darrow. il Farmers' B 998:1-24 '18

Experience with loganberry hybrids. J Heredity 8:202 My '17

Is the hybrid origin of the loganberry a myth? il J Heredity 7:504-7 N '16

Loganberry. W. S. Brown. Ore Ag Ext B 165:1-8 '16

Loganberry and the acid content of its juice. M. R. Daughters. J Industrial & Eng Chemistry (Am. Chemical soc., Easton, Pa. 60c) 10:30 Ja '18

Loganberry culture in the Northwest. C. L. Lewis. Cal State Comm Hort B v 5:357-61 O '16

Loganberry of the Northwest. F. Lockley. il Country Life 30:64b S '16

Origin of the loganberry. il Gard Chron (Lond) 60:280 D 9 '16

Origin of the loganberry. R. A. Rolfe. Gard Chron (Lond) 61:9 Ja 6 '17

Valley of the loganberry. C. A. Lisle. Better Fruit 13:19 Ag '18

**Logarithmic curves.** See **Logarithms****Logarithms**

Fitting logarithmic curves by the method of moments. J. R. Miner. bibliog J Ag Research 3:411-23 F '15

**London, Jack, 1876-1916**

Jack London's oak. il Am For 23:436 Jl '17

**Lonesome land; story.** B. M. Bower. See weekly numbers of Orange Judd farmer October 27, 1917-May 4, 1918**Long Island**

Institute worker on Long Island. J. Van Wagenen, jr. Rural N Y 75:236, 275 F 12-19 '16

**Longerenong agricultural college**

Fourth annual field day. il J Dept Ag Victoria 16:1-9 Ja '18

**Longevity**

Constitutional vigor in the ancestry of Thomas A. Edison. J Heredity 7:414-15 S '16

Death. Wallaces' F 43:1749 N 29 '18

Families of six generations. G. M. Gould. il J Heredity 9:132-4 Mr '18

Long life means many children. J Heredity 7:98-101 Mr '16

Long-lived first-born. J Heredity 7:395-8 S '16

See also Vital statistics

**Longicorn beetles**

Forest longicorn beetles and their parasites. W. W. Froggatt. il Ag Gaz of New South Wales 27:561-7 Ag '16

**Longulus scale.** See **Citricola scale****Lonicera.** See **Honeysuckles****Loons**

Photographing the elusive loon. H. V. Roberts. il Country Life 32:47-8 Ag '17

**Louisiana**

Hill lands of north Louisiana. W. E. Dawkins. Hoard's D 51:35 Ja 28 '16

Louisiana reclamation project grows to seven thousand acres. A. M. Shaw. il plan map Eng News-Record (10th av at 36th st, N.Y. 15c) 79:603-5 S 27 '17

See also subhead Louisiana under special subjects. e.g. Agriculture—Louisiana, Dairying—Louisiana

**Agriculture and immigration, Department of**

Annual report of the agricultural and industrial statistics and crop report for the year 1916. La Ag Bd 14p '17

18th biennial report for the years 1916 and 1917. La Ag Bd 15p '18

**Conservation, Department of**

Biennial report, 1916-1918. 180p il maps '18

La. Dept. of conservation, New Orleans

Includes reports on work covering the conservation of mines and minerals, the conservation of forests, the conservation of birds, game, and fur-bearing animals, the conservation of fisheries and all sea-food other than oysters, and the conservation of oysters

**Description and travel**

Louisiana's invitation; the queen state of the South. il La Ag Bd 208p n. d.

Map of Louisiana. La Ag Bd n. p. '16

**Industries and resources**

Livestock raising in Louisiana. H. D. Wilson. 17p il '17 Louisiana co., New Orleans

Louisiana beef cattle. W. C. Stubbs. 16p il '17 Louisiana co., New Orleans

Louisiana live stock from an investment standpoint. H. C. Warmoth. 16p il '17 Louisiana co., New Orleans, La.

Louisiana pork industry. O. P. Geren. 16p il '17 Louisiana co., New Orleans

Meat production in Louisiana. R. K. Boney. 16p il '17 Louisiana co., New Orleans, La.

Scraping the American sugar bowl. J. R. McMahon. il Country Gent 82:1958-9 D 15 '17

**Live stock sanitary board, State**

\* 5th biennial report, 1916-1918. E. P. Flower. 91p il '18 La. State live stock sanitary bd., Baton Rouge

**Marketing, Bureau of**

Annual report, 1917-1918. La Ag Bd 14p '18

**Louisiana agricultural experiment station**

29th annual report for 1916. W. R. Dodson. 29p '17 Louisiana ag. exp. station, Baton Rouge

30th annual report, 1917. La Ag Exp Rep 1917:1-24 '18

**Louisiana dairymen's cooperative association**

Convention, New Orleans, April 27, 1916. Kimball's D F 14:336 My 15 '16

Incorporates at annual meeting. R. G. Miller. Hoard's D 56:155 Ag 30 '18

2d quarterly meeting, New Orleans, April 27. J. M. Caldwell. Hoard's D 51:717 My 19 '16

**Louisiana state fair**

11th annual Louisiana state fair at Shreveport. Breeder's Gaz 70:1026 N 30 '16; Kimball's D F 14:767 D 1 '16

**Louisiana state university and agricultural and mechanical college**

Louisiana to the front; views. Country Gent 81:1025 My 13 '16

**Louisiana swine breeders' association**

Call for a general conference of all agricultural and allied interests of Louisiana Mar. 4 to discuss matters of vital importance. 8p n. d. O. P. Geren, pres., Baton Rouge, La.

**Lovage**

Lovage. G. H. Hardy. Gard Chron (Lond) 64:155 O 19 '18



Love vine. See Dodder

Loxostege sticticalis. See Sugar-beet web-worms

**Lubrication and lubricants**

Castor oil for airplanes. E. B. Reid. *il Country Gent* 82:6- Mr 23 '18

Don't neglect to lubricate your machinery. I. W. Dickerson. *Wallaces' F* 43:982 Je 28 '18

Engine lubrication. A. Johnston. *Country Life* 34:90 Je '18

Engine lubrication and carbon. *Power F* 26:41 Ja '17

Gas engine lubrication. *Farm Eng* 3:226- Ap '16

How and why of crankcase oil. W. B. Jones. *Power F* 27:20 Mr '18

Keeping the motor lubricated. P. T. Hines. *Prog F* 33:276 Mr 2 '18

Look to the household bearings in the spring. M. H. Talbott. *Country Gent* 81:816 Ap 8 '16

Lubrication in fertilizer plants. L. B. Lockhart. *Am Fert* 44:38 My 13 '16

Lubrication, life of tractor engine. D. L. Arnold. *O Judd Farmer* 61:6 Jl 29 '16

Proper oiling of automobiles. H. A. Taran-tous. *O Judd Farmer* 60:2 My 6 '16

Reasons for changing crankcase oil. *Power F* 25:33 N '16

Requisites in engine operation. I. W. Dickerson. *il O Judd Farmer* 60:4 Ap 1 '16

Tractor lubrication. E. R. Wiggins. *Country Gent* 81:1698 S 16 '16

See also Automobile engines—Lubrication

Lucerne. See Alfalfa

**Lumber**

Cost of transportation as a tax on the lum-ber consumer of the lake states. K. J. Braden. *J For* 15:605-8 My '17

Discussion of log rules—their limitation and suggestions for correction. H. D. Tiemann. *Soc Am For Pro* 11:93-6 Ja '16

Lumber for an army cantonment. *Am For* 23:398 Jl '17

Lumber for war-time uses. *Am For* 23:397 Jl '17

Lumber used in the manufacture of wooden products. J. C. Nellis. *maps U S Ag B* 605:1-17 '18

Lumber's place on the farm. R. B. Goodman. *il Field* 11:27:853-5 N '17

Nation's lumber cut in 1917 placed at 35,831-239,000 feet. *Weekly N L* 5:1 Jl 10 '18

Production of lumber in 1918. *map U S Ag B* 232:1-32 '15

Use of lumber on California farms. M. B. Pratt. *bibliog il Cal Ag Exp B* 299:89-121 '18

Uses of lumber. W. B. Bullock. *Am For* 22:173-4 Mr '16

Uses of wood; the sawing and transportation of lumber. H. Maxwell. *il Am For* 24:333-41 Je '18

Uses of wood; wood used in rough construc-tion. H. Maxwell. *il Am For* 24:419-26 Jl '18

\* Utilization of forest products in Massachusetts as affected by the war. P. D. Kneeland. 14p '18 *Mass. State forester*, Boston

War, lumber and ships. *Am For* 23:261-2 My '17

Wood-using industries of Quebec. R. G. Lewis and J. A. Doucet, comps. (*Forestry Branch B.* 63) 89p *il '18 Canada Dept. of interior*, Ottawa

See also Forests and forestry; Pine; Saw-mills; Timber

**By-products**

See Wood waste

**Costs**

\* Need and value of accurate cost records. J. P. Robertson. (*In Forest club annual*, p. 36-8-+) '18 *College of forestry*, Univ. of Wash., Seattle

**Drying**

Theory of drying and its application to the new humidity-regulated and recirculating dry kiln. H. D. Tiemann. *U S Ag B* 509:1-23 '17

**Transportation**

Interstate commerce commission decision no. 9536; Willamette valley lumbermen's asso-ciation v. Southern Pacific company et al. 250-63p '18 *U. S. Govt. ptg. office*, Washing-ton, D. C.

Lumber camps. See Forest planting camps

**Lumber Inspection**

Service in the department of inspection and grades. 16p n. d. *Southern pine assn.*, New Orleans, La.

**Lumber trade**

Continuous forest production of privately owned timberlands as a solution of the economic difficulties of the lumber industry.

B. P. Kirkland. *tables J For* 15:15-64 Ja '17

Distribution of softwood lumber in the Mid-dle West; retail distribution; pt. 9 of *Studies of the lumber industry*. O. M. Butler. *U S Ag Rep* 116:1-100 '18

Distribution of soft wood lumber in the Middle West; wholesale distribution; pt. 8 of *Stud-ies of the lumber industry*. O. M. Butler. *maps U S Ag Rep* 115:1-96 '17

\* Export lumber trade of the United States. E. E. Pratt. (*Misc. ser. no. 67*) 117p *il maps '18 U. S. Bur. of foreign and domestic commerce*, Washington, D.C.

Forester's duty toward lumbering. G. M. Cornwall. *Soc Am For Pro* 11:66-74 Ja '16

Forestry and community development. S. T. Dana. *il U S Ag B* 638:1-33 '18

Forests of Worcester county; results of a forest survey of 59 towns in county and a study of their lumber industry. H. O. Cook. 88p *il '17 Mass. State forester*, Boston

Georgia industries using farm woodland products (sup. to B. 129). *Ga Ag Coll (Ext)* C 69:1-8 '17

Hardening lumber situation. *O Judd Farmer* 60:8 Ja 29 '16

Historical review of Canada's timber industry. J. Lawler. *Int R Sci & Prac Ag* 7,no 9:1227-34 S '16

Home-grown timber trade. *Gard Chron (Lond)* 63:42 F 2 '18

How a successful country lumber dealer han-dled one of the most vexing problems of the retailer. F. Kneisler. *Bldg Age* (243 W. 39th st, N.Y. 25c) 40:174-6 Mr '18

Lumber marketing. *Am Coop J* 11:741 Mr '16

Lumber markets of the Mediterranean region and the near East. R. Zon. (*Misc. ser. 51*) 31p '17 *U.S. Bureau of foreign and domestic commerce*, Washington, D.C.

Lumber supply of the world. *Am For* 22:432-3 Jl '16

Lumbermen's activities, past, present and fu-ture. J. L. Thompson. (*In Cut-over land conf. of the South*, 1917, p. 46-50) \$2.50 '17

National forest timber sales and its purposes. H. H. Chapman. *il Am For* 24:25-8 Ja '18

National forests in California and the lumber industry. *Cal Ag Bd Rep* 1917:247-59 '18

National forests in California and the lum-ber industry. (*In Statistical report*, 1916, p. 230-40) '17 *Cal. State bd. of ag.*, Sacra-mento

Present conditions in the lumber industry. W. Compton. *J For* 15:387-93 Ap '17

Price problem in the lumber industry. W. Compton. *Am Economic Review* (Ithaca, N. Y. \$1.25) 7:582-97 S '17

Production of lumber, lath, and shingles in 1915 and lumber in 1914. J. C. Nellis. *il map U S Ag B* 506:1-45 '17

Production of lumber, lath and shingles in 1916. F. H. Smith and A. H. Pierson. *U S Ag B* 673:1-43 '18

Science in the lumber industry. W. J. Ferry. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:178 F 17 '17

Shortleaf pine; its economic importance and forest management; lumber industry. W. R. Mattoon. *U S Ag B* 308:11-23 '15

Some public and economic aspects of the lum-ber industry. W. B. Greeley. *maps U S Ag Report* 114:1-100 '17; *Review. J For* 15:628-33 My '17

**Lumber trade —Continued**

- South American forest resources and their relation to the world's timber supply. R. Zon. (*In* Pan American scientific congress Proc., 1915, v. 3, p. 483-92) '17
- South American lumber markets. E. C. Robbins. *Am. Economic Review* (Am. economic assn., Ithaca, N.Y., \$1.25) 6:945-6 D '16
- Starting a small lumber yard. *Am Coop J* 11: 744 Mr '16
- Substitution of other materials for wood. *U S Ag Rep* 117:1-78 '17
- Timber situation in United Kingdom. J. F. Butler. (*Commerce Reports* no. 104) p. 459-63 (My 4) '17 *U.S. Bur. of foreign and domestic commerce*, Washington, D. C.
- Tying up western lumber. C. Merz. *New Republic* (421 W. 21st st., N.Y. 10c) 12:242-4 S 29 '17
- See also* Canadian lumbermen's association

**Bibliography**

- Forestry; U.S. government publications relating to tree planting, wood tests, and lumber and timber industries, for sale by the superintendent of documents, Washington, D.C. (Price list 43—10th ed) 21p '16
- Supt. of doc., Washington, D.C.

**Statistics**

- \* Forest products of Canada, 1916. (Forestry Branch—B. 62) 64p '18 Canada Dept. of the interior, Ottawa
- \* Productivity and cost of labor in the lumber industry. B. M. Squires. *Monthly R* (U. S. Bur. of Labor Statistics, Washington, D. C.) 5:704-17 O '17

**Terminology**

- Forest terminology; terms used in the lumber industry; prepared by a committee of the Society of American foresters. *J For* 16:1-75 Ja '18

**Lumbering**

- American forestry units are working fifty-three tracts of French timber land. R. K. Tomlin, jr. *il Eng News-Record* (10th av at 36th st, N.Y. 15c) 81:566-70 S 26 '18
- Checking check scalers. T. S. Woolsey, jr. *Soc Am For Pro* 11:245-8 Ap '16
- Development of logging operations. H. Maxwell. *il Am For* 24:272-9 My '18
- Electricity in logging and saw mills. E. H. Horstkotte. *il Gen Electrical Review* (Schenectady, N.Y. 20c) 21:151-61 F '18
- Fighting with axe and saw; a regiment of American lumberjacks and foresters for European service. C. H. Claudy. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:204 S 22 '17
- Flumes and fluming. E. S. Bruce. *il U S Ag B* 87:1-36 '14
- From gray birches to barrel staves. W. A. Curtis. *il Country Gent* 81:12-13 Ja 1 '16
- \* Getting out airplane spruce. F. W. Vincent. *il Sci Am* (233 Broadway, N. Y. 10c) 119: 438-9 N 30 '18
- Harmonizing lumbering and esthetics. C. M. Granger. *il Am For* 23:299-302 My '17
- How lumbermen in following their own interests have served the public. A. Cary. *J For* 15:271-89 Mr '17
- Laissez faire vs. foresight in forest management. B. P. Kirkland. *J For* 15:290-306 Mr '17
- Lumber operations under war conditions in France. F. S. Kellogg. *il Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2263:39-40 S 28 '18
- Lumbering in the sugar and yellow pine region of California. S. Berry. *il map U S Ag B* 440:1-99 '17
- New topographic survey methods. J. H. Bonner and F. R. Bonner. *il For Quar* 14:433-40 S '16
- Place of logging engineering in forestry. J. F. Clark. *Soc Am For Pro* 11:75-8 Ja '16
- Race for airplane spruce and ship timbers. *il Am For* 24:523-7 S '18
- Science in the lumber industry. W. J. Ferry. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:178 F 17 '17

- \* Soldiers build logging roads in spruce forests. W. A. Welch. *il Railway Age* (Woolworth Bldg., N. Y. 15c) 65:805-7 N 8 '18
- Time study of variable operations. C. M. Bigelow. *il Industrial Management* (6 E. 39th st, N.Y. 25c) 56:109-12 Ag '18
- Wages in logging. *J For* 15:497-8 Ap '17
- War lumbering in France. R. H. Faulkner. *il Am For* 24:392-3 Jl '18
- Where the motor truck has displaced the horse. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:388 D 16 '16

**By-products**

*See* Wood waste

**Costs**

- Cost of logging large and small timber. W. W. Ashe. *For Quar* 14:441-52 S '16
- Logging costs. *For Quar* 14:141 Mr '16

**Safety devices and measures**

- \* Safety in lumbering. *il Am Industries* (30 Church st, N. Y. 10c) 18:sup 1-4 Ja '18

**Lumbermen**

- \* Causes and remedies of labor unrest in the lumber industry. W. F. Ogburn. (*In* Forestry club annual, p. 11-14) '18 College of forestry, Univ. of Wash., Seattle
- Lumberman's duty toward forestry. F. E. Olmstead. *Soc Am For Pro* 11:79-83 Ja '16

**Lunch rooms**

- Application of statistics to budget making for lunch rooms. R. H. Vivian. *J Home Econ* 8:19-28 Ja '16

**Lunch rooms, Employees'**

- Office restaurant and its opportunities. L. S. Kelton. *J Home Econ* 9:121-2 Mr '17

**Lunches**

- Children's lunch. H. Wilde. *Fruit-Grower* 28: 287 Je 1 '17
- Cold school lunch. B. Bell. *il Mo Ag Ext C* 10:1-7 '16
- Hamper for the motor run. A. Remsen. *Country Life* 32:124 Je '17
- Lunches again. *Nat Stock & F* 40:728 O 14 '16
- School lunch. G. Hadley. *il Purdue Ag Ext B* 72:1-8 '18
- School lunch. I. M. Richardson. *il Purdue Ag* 13:74-5 N '18
- School lunch basket and its preparation. D. H. Stockman. *Am Assn Farmers' Inst Workers Pro* 1916:108-19 '17
- School lunch box. F. H. McLean. *il Country Gent* 81:136 Ja 15 '16
- School lunches. *Prog F* 31:233 F 12 '16
- School lunches. C. L. Hunt and M. Ward. *Farmers' B* 712:1-26 '16
- School lunches. Mrs. C. Johnston. *Rural N Y* 76:1184 O 13 '17
- School lunches. N. W. Massey. *il Purdue Ag* 11:42-3 N '16
- Suggestions for light school lunches. *Prog F* 31:685 My 20 '16
- Wide-awake girls learn about school lunches. Mrs. W. N. Hutt. *Prog F* 31:684 My 20 '16

*See also* Sandwiches; School lunches

Lunches, School. *See* School lunches

Lung flukes. *See* Flukes

Lungs (animals)

**Diseases**

- Empyema of the chest and gangrenous necrosis of lungs. D. D. LeFevre. *Am Vet M Assn J* 53:106-13 Ap '18

**Lungworms**

- Lungworms; treatment and life history. W. B. Herms and S. B. Freeborn. *il Cal Ag Exp C* 148:1-8 '16

- Pulmonary strongylosis. W. B. Herms and S. B. Freeborn. *Am Vet M Assn J* 50:862-8 Mr '17

**Lupines**

- Exchange of ions between the roots of lupinus albus and culture solutions containing one nutrient salt. R. H. True and H. H. Bartlett. *Am J Bot* 2:255-78 Je '15



**Lupines—Continued**

Exchange of ions between the roots of lupinus albus and culture solutions containing two nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 2:311-23 J1 '15

Exchange of ions between the roots of lupinus albus and culture solutions containing three nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 3:47-57 F '16

Influence of the perennial lupin on the development of forest trees:—Trials in Bohemia. K. Nawratil. *Int R Sci & Prac Ag* 8,no 7:1008-9 J1 '17

Lupine poisoning avoidable. W. H. Lytle. *Am Sheep B & W* 36:682 N '16

Lupines and their cultivation. *il Gard Chron Am* 20:123 Mr '16

Lupines as poisonous plants. C. D. Marsh and others. *bibliog il U S Ag B* 405:1-44 '16

Lupines poisonous to sheep. *Nat Wool Grower* 7:51 Ja '17

Plants poisonous to sheep. C. D. Marsh. *Am Sheep B & W* 38:176-7 Mr '18

**Lustre ware**

Lustre and silverware treasures; photographs. *Country Life* 29:32-3 F '16

**Luther, Martin, 1483-1546**

Luther in the day of rural rebellion. G. H. Gerberding. *Rural Manhood* 8:337-9 O '17

**Lux school of industrial training**

Lux school of industrial training. San Francisco, California. *J Home Econ* 8:170-2 Ap '16

**Lycopodium**

Morphology of phylloglossum Drummondii. Kunze. K. Sampson. *il Ann Bot* 30:315-31 Ap '16

Note on the sporeling of phylloglossum attached to a prothallus. K. Sampson. *il Ann Bot* 30:605-7 O '16

Prothallia and sporelings of three New Zealand species of lycopodium. C. J. Chamberlain. *bibliog il Bot Gaz* 63:51-65 Ja '17

Prothallia of lycopodium in America. E. A. Spessard. *Bot Gaz* 63:66-76; 65:362 Ja '17, Ap '18

**Lyctus. See Powder-post beetles**

**Lyda hypotrophica. See Sawflies**

**Lydia of the pines; story. H. Willsie. See weekly numbers of Orange Judd farmer beginning June 22, 1918**

**Lye**

*See also* Box lye

**Lygidea mendax. See Apple red bugs**

**Lygus**

Revision of the genus lygus as it occurs in America north of Mexico, with biological data on the species from New York. H. H. Knight. *bibliog il Cornell Ag Exp B* 391:557-645 '17; Same. *Cornell Ag Exp Rep* 1917:557-645 '18

**Lymphadenoma. See Hodgkin's disease**

**Lymphangitis**

Case reports of lymphangitis in cattle. J. Traum. *il Am Vet M Assn J* 49:254-7 My '16

**Lymphangitis, Epizootic**

Compounds of mercury in the treatment of epizootic lymphangitis. *Ag J of India* 13:480-2 J1 '18

Intra-palpebral reaction in the diagnosis of epizootic lymphangitis. A. Lanfranchi. *Am Vet M Assn J* 53:784-5 S '18; Same. *Int R Sci & Prac Ag* 9,no 2:198-9 F '18

Treatment of epizootic lymphangitis by means of the autolysed extract of yeast, by M. Nicolle and others; Leucocythotherapy; or aseptic pyrotherapy; its use in certain cases of equine lymphangitis, by J. Bridée. *Int R Sci & Prac Ag* 9,no 2:199-201 F '18

**Lymphatics**

Tissue fluid. P. A. Fish. *Am Vet M Assn J* 50:129-32 N '16

**Lysichiton. See Skunk cabbage**

**Lysimeters**

Facilities for lysimeter and out-door pot culture work at the station. J. F. Barker. *il N Y State Ag Exp Tech B* 61:1-10 '17

Lysimeter experiments; records for tanks 1 to 12 during the years 1910 to 1914 inclusive. T. L. Lyon and J. A. Bizzell. *bibliog il plan Cornell Ag Exp Memoir* 12:1-115 '18

**M**

**Macaroni**

Making macaroni; photographs. *Country Gent* 81:2225 D 30 '16

*See also* Cookery—Macaroni

**McCall, James, d. 1915**

Sketch. J. Lennox. *Field* 11 26:40 Ja '16

**McClay, James Zuill, d. 1916**

Sketch. W. L. Houser. *por Breeder's Gaz* 69:241 F 3 '18

**McCray, Warren T.**

Best farmer in Indiana; Warren T. McCray, breeder of \$10,000 Herefords. J. R. McMahon. *il Country Gent* 83:10-11 S 28 '18

**McDonald berry. See Dewberries**

**Macdonald college**

Annual inspection of Macdonald college. J. Ag (Quebec) 21:41 S '17

Report of Macdonald college. (*In* Report, 1917 p. 14-42) *il '17 Quebec ag. dept., Quebec Visit to the cereal department, Macdonald college. il J Ag (Quebec)* 21:6 J1 '17

**Macdonald college summer school**

Macdonald college summer school for rural improvement. *J Ag (Quebec)* 22:38 S '18

**Machine sheds**

Idea for housing the tractor. P. T. Hines. *plan Power F* 27:41 Ap '18

Implement sheds. K. J. T. Ekblaw. 19p plans '16 *Nat. lumber mfrs. assn., Chicago Save a dollar a week by housing implements. A. S. Rosing. il plans Power F* 27:7-8 Mr '18

Sheds that conserve implements. K. J. T. Ekblaw. *il plans Country Gent* 83:5 F 16 '18

**Machinery**

Industrial history lessons. *Ohio F* 141:146 F 2 '18

*See also* Bearings (machinery); Cheese-making machinery; Concrete mixers; Engines; Excavating machinery; Farm machinery; Fruit peeling machines; Gearing; Governors (machinery); Harvesting machinery; Limestone grinding machines; Oil extracting apparatus; Pumping machinery; Refrigeration and refrigerating machinery; Road making machinery; Screw threads; Seed disinfection machinery; Straw balers; Sugar machinery; Textile machinery; Tractors

**McKinney, Henry N., 1849-1918**

Life and work. *por Jersey B* 37:723 My 8 '18; Same. *Prac F* 114:199 My 15 '18

**Macronoctua onusta. See Iris worms**

**Macrophoma**

Macrophoma disease of figs. F; A. Wolf and E. E. Stanford. *il Phyt* 8:24-7 Ja '18

**Macrosiphum granarium. See English grain aphid**

**Macrosiphum illinoisensis. See Grapevine aphid**

**Macrosiphum pisi. See Pea aphid**

**Macrosiphum rosæ. See Rose aphid**

**Macrosporium**

Taxonomic characters of the genera alternaria and macrosporium. J. A. Elliott. *bibliog il Am J Bot* 4:439-76 O '17

**Madagascar. See Agricultural products—Madagascar**

**Magnesia**

Divergent effects of lime and magnesia upon the conservation of soil sulfur. W. H. Macintire and others. *il Soil Sci* 4:231-7 S '17

**Magnesia—Continued**

- Factors influencing the lime and magnesia requirements of soils. W. H. Macintire. *Tenn Ag Exp B* 115:1-48 '16
- Lime and magnesia in New Zealand soils. B. C. Aston. *J Ag New Zealand* 12:47-54 Ja '16
- Magnesia in limestone. J. B. Weems; C. G. Hopkins. *Va Ag Dept B* 115:123-6 '17

**Magnesium carbonate**

- Action of precipitated magnesium carbonate on soils. W. P. Kelley. *bibliog Am Soc Agron J* 9:285-96 S '17
- Influence of carbonates on magnesium and calcium on bacteria of certain Wisconsin soils. H. L. Fulmer. *bibliog J Ag Research* 12:463-504 F 25 '18

**Magnesium nitrate**

- Influence of light and chlorophyll formation on the minimum toxic concentration of magnesium nitrate for the squash. R. B. Harvey and R. H. True. *il Am J Bot* 4:407-10 J1 '17

**Magnetos**

- Care and installation of magnetos. C. V. Hull. *il Power F* 26:16+ N '17
- High-tension magneto. C. V. Hull. *il Power F* 26:35+ S '17
- Low tension magneto. C. V. Hull. *il diag Power F* 26:24 Ag '17
- Magneto characteristics. J. G. Zimmerman. *il Am Soc Ag Eng Trans* 10,no 2:115-30 '17
- Magneto experience. W. B. Jones. *Power F* 27:43 My '18

**Magnolia**

- Cell division by furrowing in magnolia. C. H. Farr. *bibliog il Am J Bot* 5:379-95 J1 '18
- Florida magnolia tree. J. L. Kyle. *il Am For* 23:349-50 Je '17
- Magnolias for northern lawns. W. E. Bont-rager. *Ohio Ag Exp B v* 3:159-60 My '18

**Mahogany**

- Forest treasures of Honduras. *il Pan Am Magazine* (70 5th av. N.Y. 20c) 24:184-91 F '17
- True mahogany. C. D. Mell. *il map U S Ag B* 474:1-24 '17

**Maidenhair ferns**

- Pot culture of maidenhair ferns. *Gard Chron Am* 21:46 F '17

**Maidenhair tree. See Ginkgo****Mail order business**

- Mail orders and economy. *Am P J* 48:854 Ag '17

**Maine**

- See also* subhead Maine under special subjects, e.g. Agriculture—Maine, Dairying—Maine

**Forest commissioner**

- Eleventh report, 1916. 155p *il* '17 Forest com'r., Augusta, Me.

**Maine agricultural experiment station**

- Abstracts of papers not included in bulletins; finances; meteorology; index. *Maine Ag Exp B* 257:345-67, i-xii '16
- Abstracts of papers not included in bulletins; finances; meteorology; index. *Maine Ag Exp B* 268:297-324, i-xvi '17; Same. *Maine Ag Exp Rep* 1917:324, i-xvi
- Barn and field experiments in 1917. C. D. Woods. *Maine Ag Exp B* 269:1-44 '18
- 33d annual report, 1917; bulletins 258-268, official inspections 81-85. *Maine Ag Exp Rep* 1917:i-xvi, 1-324, 1-148

**Maine breeders' association**

- Annual meeting, Portland, Nov. 18-23. M. B. Aiken. *Hoard's D* 56:698 D 13 '18

**Maine state dairy association**

- Annual meeting, Portland, Nov. 18-23. M. B. Aiken. *Hoard's* 56:698 D 13 '18
- Meeting, Portland, Nov. 18-23. *Jersey B* 37:2067 D 11 '18

**Maine university****Agricultural extension service**

- Annual report for the fiscal year ending June 30, 1916. *Maine Ag Ext B* 109:1-48 '17

**Maize. See Corn****Malze billbugs. See Corn billbugs**

- Making of Mary; story. B. W. Yale. *il Am Coop J* 14:82+ N '18

**Malacosoma. See Tent caterpillars****Malaria**

- Catechism on the mosquito and malaria. D. B. Tucker. *Okla Ag Ext C* 47:4p '17
- Diagnosis and treatment. *Prog F* 31:893 J1 15 '16
- Eucalyptus trees and malaria. S. L. Bostin. *Ag J of India* 12:495 J1 '17
- Facts about malaria. L. O. Howard. *il Farmers' B* 450:1-11 '16
- Importance of malaria to agriculture and studies on malarial soil. G. Rossi. *bibliog Soil Sci* 5:323-32 Ap '18
- Malaria parasite in the mosquito. M. B. Mitzmain. (Reprint no. 422 Pub. health reports) 16p '17 U.S. Public health service, Washington, D.C.
- Relation of malaria to crop production. D. L. Van Dine. *bibliog Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 3:431-9 N '16
- Rice fields as a factor in the control of malaria. S. B. Freeborn. *bibliog J Econ Entom* 10:354-9 Je '17
- Stamping out malaria. E. Mellen. *O Judd Farmer* 65:38 J1 13 '18
- State-wide malaria-mosquito survey of California. W. B. Herms. *J Econ Entom* 10:359-70 Je '17

**Malic acids**

- Optical method for the determination of malic and tartaric acids in the same solutions. J. J. Willaman. *Am Chemical Soc J* (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:693-704 Ap '18

**Mallards. See Ducks, Wild****Mallein test**

- Ophthalmic mallein for the diagnosis of glanders. J. R. Mohler and A. Eichhorn. *il U S Ag B* 166:1-11 '15
- Palpebral malleinization. *Am Vet M Assn J* 53:587-96 Ag '18
- Preliminary report on the intrapalpebral mallein test. L. Price. *il Am Vet M Assn J* 53:597-606 Ag '18

**Mallow caterpillars. See Okra caterpillars****Malt****Laws**

- Arrêté n. 5182 concernant la prohibition du commerce du malt en Allemagne. *Int Year-book Ag Leg* 1916:35-7 '17

**Malta fever**

- Prevention of Malta fever by active immunization of animal carriers. H. Vincent. *Int R Sci & Prac Ag* 9,no 4:411-12 Ap '18

**Maltese dogs**

- History of the Maltese dog. A. Rossman. *il Country Life* 30:46 Ag '16

**Malthusianism**

- Explanation of the term Malthusianism. Wallaces' *F* 41:1448 N 3 '16

**Malvaes**

- Some features in the anatomy of the malvaes. C. C. Forsaith. *il Am J Bot* 2:238-49 My '15

**Mammary glands**

- Aspects of the physiology of milk secretion. R. L. Hill. *bibliog Am Vet M Assn J* 49:483-510 J1 '16
- Cow's udder and process of milk production. M. H. Reynolds. *il Hoard's D* 55:552-3 Ap 19 '18
- Some aspects of the physiology of mammary secretion. R. L. Hill. *bibliog Am Vet M Assn J* 51:642-54 Ag '17
- Studies in milk secretion; the relation of the glands of internal secretion to milk production. J. Hammond and J. C. Hawk. *J Ag Sci* 8:147-53 Mr '17

**Mammary veins**

- Experiment with milk veins. R. R. Graves. *il Hoard's D* 52:687 D 8 '16
- Milk veins and milk capacity. R. R. Graves. *il Country Gent* 81:1831 O 14 '16
- Relation of the milk-vein system of dairy animals to production. A. W. Aldrich and J. W. Dana. *Vt Ag Exp B* 202:3-24 Mr '17



- Mammitis.** See Udder—Diseases
- Man**  
Color inheritance in mammals. J Heredity 9: 227-40 My '18
- Man, Origin of**  
Arboreal man. il J Heredity 8:531-42 D '17
- Man, Prehistoric**  
Earliest man, by F; W: H. Migeod. Review. J Heredity 9:117-24 Mr '18
- Man of the forest; story.** Z. Grey. See weekly numbers of Country gentleman Oct. 20, 1917-Jan. 26, 1918
- Manatees**  
New food mammal. il J Heredity 8:339-45 Ag '17
- Manchester, England**  
Parks and playgrounds  
Manchester public parks. il Gard Chron (Lond) 60:71, 102 Ag 12, 26 '16
- Manchester terriers**  
Return of the Manchester. W. Haynes. il Country Life 30:58-9 My '16
- Manchuria.** See Agriculture—Manchuria
- Mandarin brown spot.** See Citrus fruit—Diseases and pests
- Mandrake.** See May apples
- Manganese**  
Arsenic manganese in plants. Scientific Am Sup (233 Broadway, N.Y. 10c) 82:371 D 9 '16  
Development of soluble manganese in acid soils as influenced by certain nitrogenous fertilizers. M. J. Funchess. bibliog il Ala Ag Exp B 201:37-78 '18  
Manganese as a cause of the depression of the assimilation of iron by pineapple plants. M. O. Johnson. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr.) 9:47-9 Ja '17  
Manganese content of the ash of certain drugs. L. E. Westman and R. M. Rowat. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:558-61 Mr '18  
El manganeso en la capa arable del Uruguay. J. M. Sarrasin. map (In Pan American scientific congress Pro., 1915, v. 3, p. 687-701) '17  
Occurrence of manganese in wheat. W: P. Headen. bibliog J Ag Research 5:349-55 N 22 '15  
See also Chrysanthemums—Manganese content
- Manganese as fertilizer**  
Action of manganese in soils. J. J. Skinner and M. X. Sullivan. U S Ag B 42:1-32 '14  
Action of manganese under acid and neutral soil conditions. J. J. Skinner and F. R. Reid. il U S Ag B 44:1-12 '16  
Alkaline reaction produced by acids in soils, viewed from the standpoint of plant nutrition. G. Masoni. Int R Sci & Prac Ag 7, no 6:799-800 Je '16  
Effect of some manganese salts on ammonification and nitrification. P. E. Brown and G. A. Minges. Ia Ag Exp Research B 35:1-22 '16; Same. Soil Sci 2:67-85 Ji '16  
Experiments on fertilizing sugar beets with manganese. Int R Sci & Prac Ag 7, no 1:76 Ja '16  
Influence of manganese on the nitrogen content of sugar beets; experiments in Germany. K. Ulrich. Int R Sci & Prac Ag 8, no 5:742-3 My '17  
Manurial experiments with manganese slag in Germany. M. Popp. Int R Sci & Prac Ag 7, no 11:1600 N '16  
Recent investigations of the action of manganese on plant growth. G. Masoni. Int R Sci & Prac Ag 7, no 3:345-6 Mr '16
- Mangels**  
Crop for land and livestock. A. G. Morrell. il Country Gent 81:781-2 Ap 8 '16  
Cultivation of mangolds on the flat in east Suffolk. D: Black. J Bd Ag 23:1187-91 Mr '17  
Culture of the mangel. A. H. DeGraff. Hoard's D 53:564 Ap 20 '17  
Growing mangels. G: W. Rogers. Rural N Y 77:174 F 2 '18  
Harvesting mangolds. E. Molyneux. il Gard Chron (Lond) 64:192 N 9 '18  
How we grow mangels. R. J. Holliday. Prac F 112:133 Mr 15 '16  
Mangel as a feed. L. W. Lighty. Nat Stock & F 41:1136 F 9 '18  
Mangel trials at Moumahaki. J Ag New Zealand 13:141-2 Ag '16  
Mangels or field beets. C. G. Williams. Ohio F 141:666 My 18 '18  
Mangels versus silage. Prog F 33:1048 S 28 '18  
Raising mangels for cows. Hoard's D 51:7 Ja 28 '16  
Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the mangold leaf. W: A. Davis; A. J. Daish and G: C. Sawyer. bibliog J Ag Sci 7:255-326 F '16  
Studies of the formation and translocation of carbohydrates in plants; the dextrose-laeulose ratio in the mangold. W: A. Davis. J Ag Sci 7:327-51 F '16  
See also Feeding and feeding stuffs—Mangels
- Statistics**  
\* Mangels and turnips in Ontario. (In Report, Bur. of industries, 1917, p 34) '18 Ontario ag. dept., Toronto
- Mangers**  
Concrete manger for cows. O. C. Cunningham. il Ohio F 137:166 F 5 '16
- Mangoes**  
Contribution to the history of the mango in Florida. P. J. Wester. il Philippine Ag R 10, no 2:146-9 '17  
Indian mango plants for United States. Scientific Am (233 Broadway, N.Y. 10c) 115: 573 D 23 '16  
Mango in Porto Rico. C. F. Kinman. il Porto Rico Ag Exp B 24:1-30 '18  
Mangoes. C. F. Kinman. Porto Rico Ag Exp Rep 1916:19-20 '18  
Pollination of the mango. W. Popenoe. il U S Ag B 542:1-20 '17
- Diseases and pests**  
Anthracnose of the mango in Florida. S. M. McMurran. il U S Ag B 52:1-15 '14
- Mangolds.** See Mangels
- Mangrove**  
Australian grey mangrove. Gard Chron (Lond) 61:38 Ja 27 '17  
Cultural experiments in mangrove plantations in Madagascar. N. Tollim. Int R Sci & Prac Ag 8, no 11:1071-2 N '17
- Manihot.** See Cassava
- Manitoba.** See subhead Canada under special subjects
- Mannan**  
Mannan content of the gymnosperms. A. W. Schorger. J For 15:197-202 F '17
- Mannitol**  
Occurrence and significance of mannitol in silage. A. W. Dox and G. P. Plaisance. Ia Ag Exp Research B 42:353-64 '17
- Mannose**  
Toxicity of galactose and mannose for green plants and the antagonistic action of other sugars toward these. L. Knudson. il Am J Bot 4:430-7 Ji '17
- Manship, Paul**  
Some garden sculpture of Paul Manship. il Country Life 33:53-5 N '17
- Mantels**  
Mantel details; photographs. Country Life 30:46-7 My '16
- Manual training**  
Agriculture correlated with manual training. W: Giese. il plans Industrial Arts Magazine (129 Michigan st, Milwaukee, Wis. 25c) 6:477-9 D '17  
Home manual training for the farm boy. L. M. Roehl. il Hoard's D 52:888 Ja 12 '17  
Manual arts in the Ravenna township school. C: A. Bennett. il plan Manual Training (Peoria, Ill. 25c) 18:150-6 F '16  
Manual training and household science in rural schools. A. H. Leake. Ag Gaz of Canada 5:809-11 Ag '18

**Manual training—Continued**

- Reaching rural schools in Colorado. V. E. Rowton. *il Manual Training Magazine* (Peoria, Ill. 25c) 18:336-9 Ap '17  
 Some exercises in farm handicraft for rural schools. H. O. Sampson. *il U S Ag B* 527:1-38 '17  
 Woodworking problems. S. T. Newton. plans map Manitoba Ag Coll B 20:1-68 '16

**Manufactures**

- Manufactures in California. Cal Ag Bd Rep 1917:260-85 '18

**Manure sheds and pits**

- Concrete manure dump. O. Crooker. *il Kimball's D F* 15:753 O 15 '17  
 Convenient manure shed. J. J. Hooper. *il Jersey B* 36:1289 Ag 22 '17  
 Covered manure shed. R. C. Miller. plans Ohio F 138:463 N 11 '16  
 Farm manure and its housing. B. G. Southwick and F. W. Duffee. plans Conn Ag Coll Ext B 5:14-21 '17  
 \* Manure pit eliminates waste. F. T. Fellner. *il plans Bldg Age* (243 W. 39th st, N. Y. 25c) 40:560-2 D '18  
 Storage of manure. E. B. Hart. *il Hoard's D* 55:373 Mr 22 '18  
 Valuable manure pits. C. A. LeClair. *il Country Gent* 81:989 My 6 '16

**Manure spreaders**

- About manure spreaders. Prog F 32:137 F 3 '17  
 Manure spreader pays. Prog F 33:128 F 2 '18  
 Points of a good manure spreader. Coop Manager & F 7:51 Ja '18  
 Spreader scores again. J. R. Neller. *il Hoard's D* 54:702 D 7 '17  
 Spreading manure in the row. G. E. Smith. *il Market Growers J* 21:270 D 15 '17  
 \* Two uses for the manure spreader. Power F 25:27 Je '16

**Manures**

- Agriculture for beginners; making, saving and using farm manure. W. I. Chamberlain. Nat Stock & F 40:4 Ap 1 '16  
 Amounts of fertilizing constituents excreted by two-year old steers. W. H. Mumford and others. *il Am Soc Animal Production Pro* 1915-1916:233-41 '17  
 Autumn versus spring manuring. *il J Dept Ag Ireland* 18, no 2:142-50 '18  
 Best way to apply stable manures. T. Butler. Prog F 33:611 My 18 '18  
 Buying manure at \$4 per ton. T. Butler. Prog F 33:267 Mr 2 '18  
 Can vegetables be grown commercially without animal manures? S. B. Haskell. *il Market Growers J* 21:245-8 D 1 '17  
 Can vegetables be grown commercially without animal manures? W. F. Massey. *il Rural N Y* 76:1465 D 29 '17  
 Care and use of farm manure. J. B. R. Dickey. *il N J Ag Ext B v 1*, no 14:1-16 '17  
 Care of farm manure. L. E. Husted. *il Purdue Ag* 13:20 O '18  
 Cashing in the manure crop. W. Galloway. *il Kimball's D F* 14:186 Mr 15 '16  
 Changes taking place during the storage of farmyard manure. E. J. Russell and E. H. Richards. *il J Ag Sci* 8:495-563 D '17  
 Chemistry of the manure pile. J. J. Willaman. *il Field* 11 28:321+ My '18  
 Composition of army stable manure. E. J. Russell. *il Bd Ag* 23:1053-5 F '17  
 Concerning farm manures. R. T. Burdick. *il Vt Ag Exp B* 206:1-72 '17  
 Conservation and utilization of farmyard manure. *il Ag Gaz of Canada* 4:472-6 Je '17  
 Conservation of farm manure. E. W. Gage. *il Kimball's D F* 16:113 F 15 '18  
 Conserve farm-made fertility. W. A. Cook. *il Country Life* 31:76 N '16  
 Conserving and using stock manures. J. C. Beavers. *il Breeder's Gaz* 72:45 JI 12 '17  
 Conserving farm manure. J. C. Beavers. *il Country Gent* 81:80 Ja 8 '16  
 Cotton dirt in fertilizer. W. Marland. *il Country Gent* 81:451 F 26 '16  
 Crops need barnyard waste. L. L. Rummell. *il Country Gent* 83:12 F 23 '18  
 Daily removal of manure. O. Crooker. *il Kimball's D F* 15:285 Ap 15 '17

- Decomposition of green and stable manures in soil. R. S. Potter and R. S. Snyder. *il J Ag Research* 11:677-98 D 24 '17  
 Deep cultivation and food supply. F. G. Drew. *il Gard Chron (Lond)* 59:1 Ja 1 '16  
 Does live stock maintain fertility. E. O. Fippin. *il Rural N Y* 75:464 Mr 18 '16  
 Don't waste manure. *il Fruit-Grower* 28:312 JI 1 '17  
 Economic handling of barnyard manure. M. C. Taylor. *il Purdue Ag* 12:96-7 N '17  
 Effect of irrigation water and manure on the nitrates and total soluble salts of the soil. F. S. Harris and N. I. Butt. *il J Ag Research* 8:333-59 F 26 '17  
 Effect of sulfur and manure on availability of rock phosphate in soil. P. E. Brown and A. R. Gwinn. *il Ag Exp Research B* 43:369-89 '17  
 Equipment to stop manure waste. *il Power F* 26:14 Ag '17  
 Experiences with stable manure; symposium. *il Market Growers J* 23:37-8 JI 15 '18  
 Experiments with night-soil as manure. P. C. Patil. *il Ag J of India* 13:281-6 Ap '18  
 Farm manure and its housing. B. G. Southwick and F. W. Duffee. plans Conn Ag Coll Ext B 5:1-21 '17  
 Farm manure as a fertilizer. *il Fruit-Grower* 28:283 Je 1 '17  
 Farm manure; its production, conservation and use. E. O. Fippin. *il Cornell Reading Course* 127:39-72 '17  
 Farm manures. R. B. Dustman. *il W Va Ag Ext C* 97:1-16 '16  
 Farm manures; how to save and use them. B. L. Moss. Prog F 31:400 Mr 18 '16  
 Farm sources of soil fertility. A. Agee. *il N J Ag Dept B* 8:276-90 '17  
 Farmer and the dung heap. *il J Bd Ag* 25:705-6 S '18  
 Fermentation of manure treated with sulfur and sulfates; changes in nitrogen and phosphorus content. J. W. Ames and T. E. Richmond. *il Soil Sci* 4:79-89 JI '17  
 Fertilizer-saving by improved stable methods. H. L. Blanchard. *il Western Wash Ag Exp B v 5*:130-1 D '17  
 Fertilizing constituents excreted by two-year-old steers. H. S. Grindley and others. *il Ag Exp B* 209:127-62 '18  
 Fixation of nitrogen in faeces. E. H. Richards. *il J Ag Sci* 8:299-311 Je '17  
 Further experiments in the destruction of fly larvae in horse manure. F. C. Cook and others. *il J U S Ag B* 245:1-22 '15  
 Georgia fertilizer factory. J. B. Wood. plan *il Farm Eng* 5:16 F '17  
 Gold in the manure heap. E. J. Russell. *il Jersey B* 35:1119 JI 19 '16  
 Handling barnyard manure in eastern Pennsylvania. D. A. Brodie. *il Farmers' B* 978:1-24 '18  
 Handling dairy-farm manure right. C. A. LeClair. *il plans Country Gent* 82:2006+ D 22 '17  
 Handling manure in the winter. *il Prac F* 112:440 D 1 '16  
 Handling stable manure. A. L. French. *il Country Gent* 81:450 F 26 '16  
 How long will stable manure be effective in increasing crop yields? T. Butler. Prog F 31:531 Ap 15 '16  
 How to get rich lands; applying or using livestock manures. T. Butler. Prog F 32:1208 N 17 '17  
 How to get rich lands; livestock manures. T. Butler. Prog F 32:1092 O 20 '17  
 How to get rich lands; livestock manures; their production and value. T. Butler. Prog F 32:1123 O 27 '17  
 How to get rich lands; saving livestock manures. T. Butler. Prog F 32:1146 N 3 '17  
 How to get rich lands; saving livestock manures in the open. T. Butler. Prog F 32:1181 N 10 '17  
 Humus in arid soil. T. S. Parsons. *il Country Gent* 81:690 Mr 25 '16  
 Influence of barnyard manure and water upon the bacterial activities of the soil. J. E. Greaves and E. G. Carter. *il J Ag Research* 6:889-926 S 4 '16



**Manures—Continued**

Influence of fertilizers and soil amendments on soil acidity. J. J. Skinner and J. H. Beattie. *Am Soc Agron J* 9:25-35 Ja '17

Influence of some common humus-forming materials of narrow and of wide nitrogen-carbon ratio on bacterial activities. P. E. Brown and F. E. Allison. *Soil Sci* 1:49-75 Ja '16

Injurious effect of farmyard manure on the balance of nitrogen in the soil. A. Sabachnikov. *Int R Sci & Prac Ag* 7:no 6:802 Je '16

Intensive and extensive application of manure. M. Ryder. *Jersey B* 36:244 F 14 '17

Irrigation and manuring studies; effect of varying quantities of irrigation water and manure on the growth and yield of corn. F. S. Harris and D. W. Pittman. *Utah Ag Exp B* 154:1-29 '17

Keep the stable wastes busy. *il Kimball's D F* 16:387 My 15 '18

Larger crop through balanced feeding. J. W. Hinceroth. *Ag Digest* 2:487 Je '17

Lime in stables injures manure. J. B. R. Dickey. *Market Growers J* 22:218 Mr 15 '18

Liquid content of manure. O. Crooker. *Kimball's D F* 15:858 D 1 '17

Little talks on manuring. *Rural N Y* 75:1515 D 9 '16

Live stock and soil fertility. W. D. McKee. *Mo Ag Bd Yearbook* 1916:477-81

Livestock and the maintenance of organic matter in the soil. E. O. Fippin. *Am Soc Agron J* 9:97-105 Mr '17

Losses in manure fertility. D. F. Malin. *il Kimball's D F* 15:342 My 15 '17

Making manure go farthest. J. F. Duggar. *Prog F* 31:21 Ja 1 '16

Making the most of manures. C. A. LeClair. *il Country Gent* 83:9 S 23 '18

Management of liquid and solid manure in Belgium. H. Vendelmans. *J Bd Ag* 23:1208-21 Mr '17

Manure. Wallaces' *F* 43:1793 D 6 '18

Manure a natural plant food. T. B. Terry. *Prac F* 112:6 Ja 1 '16

Manure and house-flies. W. H. Saunders. *Gard Chron (Lond)* 59:319 Je 17 '16

Manure and market gardeners. E. I. Farrington. *il Country Gent* 81:1687 S 16 '16

Manure and phosphate. C. E. Thorne. *Nat Stock & F* 41:1062 Ja 26 '18

Manure as a source of potash. *Prac F* 113:76 F 15 '17

Manure disposal as a factor in the control of parasitic diseases of live stock. M. C. Hall. *Am Vet M Assn J* 51:675-8 Ag '17

Manure heap. *Gard Chron Am* 20:146 Mr '16

Manure heap. *Gard Chron (Lond)* 64:60 Ag 10 '18

Manure, nitrogen, cover crops. *Rural N Y* 77:549 Ap 13 '18

Manure on the pasture. G. W. Rogers. *Rural N Y* 77:762 Je 8 '18

Manure should be protected from leaching. *Jersey B* 36:1645 O 17 '17

Manure supply. A. E. Wilkinson. *il Country Gent* 82:654 Mr 31 '17

Manure versus fertilizer. J. F. Duggar. *Prog F* 31:1479 D 23 '16

Manures for the fruit growers. H. E. Van Deman. *Green's Fruit Grower* 36:7 Ja '16

Manurial values of concentrated foods in relation to cost of food in the production of milk. J. Mackintosh. *J Bd Ag* 23:209-24 Je '16

Manuring of corn in the spring of 1916. *J Bd Ag* 22:1274-6 Mr '16

Manuring of cottage gardens and allotments. *J Bd Ag* 22:1271-4 Mr '16; Same. *Gard Chron (Lond)* 59:231 Ap 29 '16

Nitrogen-assimilating organisms in manure. H. L. Fulmer and E. B. Fred. *J Bact* 2:423-34 Ji '17

Notes on manures in the month. See monthly numbers of *Journal of the board of agriculture*

On increased food production. S. Ashmore. *il Gard Chron (Lond)* 64:21 S 21 '18

Plant food and humus. F. F. Rockwell. *il Country Gent* 81:31+ Ja 1 '16

Prevent manure losses. F. P. Weaver. *Nat Stock & F* 41:718 O 27 '17

Production of available phosphorus from rock phosphate by composting with sulfur and manure. P. E. Brown and H. W. Warner. *bibliog Soil Sci* 4:269-82 O '17

Redeeming an impoverished soil. C. E. Thorne. *Ohio Ag Exp B v* 2:339-43 O '17

Relation of manures to bacterial action and growth in the soil. L. E. Husted. *Purdue Ag* 13:126-7 D '18

Rotation and manure experiments on the Wisconsin drift soil area. W. H. Stevenson and P. E. Brown. *la Ag Exp B* 167:463-76 '16

Sampling tubes for manure, alfalfa or other organic materials. A. D. Shamel. *il Rural N Y* 76:668 My 12 '17; Same. *Cal State Comm Hort B v* 6:225-8 Je '17

Save barnyard manure. H. H. Charles. *Jersey B* 37:872 My 29 '18; Same. *Kimball's D F* 16:635 Ag 15 '18

Save farm fertility; farm manure is Wisconsin's main fertilizer. A. W. Hopkins. *Hoards D* 53:91 F 9 '17

Save hog manure. R. A. Hayne. *Nat Stock & F* 41:486 Ag 18 '17

Save the manure. *il Nat Stock & F* 40:1182 F 10 '17

Save the manure. *Prog F* 31:1047 S 2 '16

Saving fertility; manure and sewage preservation in the different parts of the world. L. Dykstra. *Farm Eng* 6:5 Ja '18

Saving the dairy farm manure. J. C. Beavers. *il Kimball's D F* 15:901 D 15 '17

Silage and farm fertility. *Rural N Y* 76:667-8 My 12 '17

Soil fertility considerations in the feeding of hogs and milch cows. E. B. Forbes. *Ohio Ag Exp B v* 1:351-2 N '16

Stable manure. *Market Growers J* 19:192-3 O 15 '16

Stable manure. A. J. Legg. *Nat Stock & F* 41:1002 Ja 12 '18

Stable manure as a fertilizer for sugar cane. T. F. Johnson. *Prog F* 31:468 Ap 1 '16

Stable-manure business of big cities. C. C. Fletcher. *il U S Ag Yearbook* 1916:375-9; Same. *Separate* 716; Same. *Market Growers J* 20:427-8 Je 1 '17

Stop manure waste. *Weekly N L* 4:5 Ji 18 '17; Same. *Hoards D* 54:8 Ji 27 '17; Same. *Am Coop J* 12:769 Ag '17; Same. *Jersey B* 36:1221 Ag 8 '17; Same abridged. *Am Flor* 49:204 Ag 18 '17

Storage of manure and fly suppression at Durban remount depot. C. K. Brain. *J Econ Entom* 11:339-41 Je '18

Storing barnyard manure; a pit is a money saver. L. L. Rummell. *Country Gent* 83:54 F 2 '18

Sweetening alkali spots. H. R. Richardson. *il Farm Eng* 5:6 Ja '17

Twenty years' work on the availability of nitrogen in nitrate of soda, ammonium sulfate, dried blood and farm manures. J. G. Lipman and A. W. Blair. *il Soil Sci* 5:291-301 Ap '18

Use of litters in saving natural manures. *J Dept Ag Victoria* 14:628 O '16

Using manure in 1917. J. W. Henceroth. *il Am Coop J* 12:558 Ap '17

Using manure in the Southwest. A. C. Hartenbower. *Country Gent* 83:54 F 2 '18

Utilizing animal and vegetable waste as fertilizer. M. R. Conover. *Country Life* 29:108 Mr '16

Value and care of manure. R. V. Brown. *il Hoards D* 50:821 Ja 14 '16

Value of burned manure. *Rural N Y* 77:578 Ap 20 '18

Value of manure. *il Va Ag Dept B* 111:3-6 Ap '16

Value of manure. M. G. Kains. *Fruit-Grower* 27:136 F 15 '16

Value of manure. C. E. Thorne. *Nat Stock & F* 41:882 D 15 '17

Value of manure as compared with chemical fertilizers. C. E. Thorne. *Ohio Ag Exp B v* 1:253-6 Ag '16

War increases value of manure. *O Judd Farmer* 60:16 Ja 8 '16

Waste in farm sources of fertility. L. L. Rummell. *il Hoards D* 54:911 Ja 18 '18

Wasting fertilizer. L. L. DeBra. *Hoards D* 51:122 F 11 '16

**Manures—Continued**

Water-holding capacities of bedding materials for live stock, amounts required to bed animals, and amounts of manure saved by their use. J. W. Whisenand. bibliog J Ag Research 14:187-90 J1 22 '18

See also Compost; Fertilizers; Milk, Manure in; Poultry manure; Sheep manure

**Bacteriology**

Legume bacteria in manure. E. B. Fred. Hoard's D 55:1057 J1 19 '18

Study of the bacteriology of fresh and decomposing manure. T. J. Murray. Va Ag Exp Tech B 15:103-17 '17; Same. Va Ag Exp Rep 1915-1916:103-17 '17

**Disinfection**

Boron: its effect on crops and its distribution in plants and soil in different parts of the United States. F. C. Cook and J. B. Wilson. bibliog J Ag Research 13:451-70 My 27 '18

**Manures, Liquid**

Liquid manure and how to use it. E. R. Towle. Hoard's D 51:103 F 11 '16

Liquid manure and the nitrogen supply. J. B. Abbott. il Ohio F 137:621 Ap 29 '16

Liquid manure with addition of sulphuric acid as spring manure and means of control against weeds and lodging of wheat. I. Giglioli. Int R Sci & Prac Ag 7,no 9:1273-5 S '16

Management of liquid and solid manure in Belgium. H. Vendelmans. J Bd Ag 23:1208-21 Mr '17

Rapid and simple determination of the nitrogen in liquid manure by means of a densimeter. Int R Sci & Prac Ag 7,no 8:1086-7 Ag '16

Tank war on manure losses. C. A. Lee. il Hoard's D 53:787+ Je 1 '17

What to do with manure liquids. Rural N Y 76:724 My 26 '17

See also Liquid-manure drills

**Manuscripts, Preparation of**

Preparation of copy for the Botanical gazette. Bot Gaz 61:337-40 Ap '16

**Manzanillo**

Deadly manzanillo. F. Coyne. il Am For 23:423 J1 '17

**Maple**

Acerpolymorphum—the Japanese maple. il Gard Chron Am 22:198 J1 '18

Canadian maples to mark Canadian graves in France. W. T. Macoun. il Ag Gaz of Canada 3:1038-41 D '16

Japanese maples. Gard Chron Am 21:102 Mr '17

Storage of sugar in the maple tree. C. H. Jones. Assn Offic Ag Chem J 2,no 2,pt 1: 103-11 Ag '16

Trees of Vermont; the maples. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:161-75 '16

Uses of commercial woods of the United States; beech, birches and maples. H. Maxwell. U S Ag B 12:1-56 '13

Variations in mineral composition of sap, leaves, and stems of the wild-grape vine and sugar-maple tree. O. M. Shedd. bibliog J Ag Research 5:529-42 D 20 '15

**Diseases and pests**

Nectria parasitic on Norway maple. M. T. Cook. Phyt 7:313-14 Ag '17

See also Sugar maple borers

**Maple products**

Farmer's sugar tree. F. Farrington. il Country Gent 83:24 Ja 19 '18

Making maple luxuries. S. J. Record. il Country Gent 81:101 Ja 15 '16

Maple products. (In Report, 1917, p. 79-82) '17 Quebec ag. dept., Quebec

Maple sirup and sugar production. B. A. Chandler. (Wartime conservation pub.) 7p il n.d. N.Y. State food comm., Albany, N.Y.

Maple sugar and sirup. Ohio F 141:548 Ap 13 '18

Maple sirup and maple sugar industry. J. H. Lefebvre. (In Report, Quebec Dairymen's assn., 1916, p. 309-14) '17

Maple sirup and sugar making as a farm activity. (Press B. 161) 4p '18 N. C. Geological and econ. survey, Chapel Hill

Production of maple sirup and sugar. A. H. Bryan and W. F. Hubbard. il plan Farmers' B 516:1-42 '18

Some aspects and prospects of the maple industry. J. H. Grimm. il J Ag (Quebec) 19: 210 Ap '16

**Statistics**

Maple sugar and sirup. Monthly Crop Rep 4:46 My '18

Maple sugar and sirup production, 1918. Monthly Crop Rep 4:61 Je '18

**Maple products exhibits**

Great exhibition to be held at Quebec, June 25-28. J Ag (Quebec) 21:181 Je '18

**Maple sirup**

Echoes from the maple groves. C. H. Sapp. Ohio F 139:355 Mr 10 '17

Making and canning maple sirup. C. O. Ormsbee. Rural N Y 76:545 Ap 14 '17

Making uniform maple sirup. W. I. Gibson. O Judd Farmer 60:3 Mr 18 '16

Maple sirup making. Wallaces' F 42:484 Mr 16 '17

Notes on making maple sirup. C. O. Ormsbee. Rural N Y 77:441 Mr 23 '18

Pure maple sirup and sugar association's annual meeting. il J Ag (Quebec) 20:205 Ap '17

Shall we tap this year? W. I. Chamberlain. Nat Stock & F 40:1304 Mr 3 '17

**Maple sugar**

Doing our bit along sugar lines. R. Lampman. il Rural N Y 77:246 F 16 '18

Making maple sugar. B. Adams. il Am For 22:158-60 Mr '16

Making maple sugar. R. H. Smith. il Rural N Y 75:511-12 Mr 25 '16

Maple sugar and food conservation. C. O. Ormsbee. Rural N Y 77:272 F 23 '18

Maple sugar and sirup industry. J. A. Grenier. il Ag Gaz of Canada 3:742-4 Ag '16

Maple sugar and sirup industry, season 1917. F. N. Savoie. Ag Gaz of Canada 4:591 J1 '17

Maple sugar; composition, methods of analysis, effect of environment. A. H. Bryan and others. maps U S Ag B 466:1-46 '17

Maple sugar outlook. M. G. Feint. il Rural N Y 77:273 F 23 '18

Maple sugar tree helps to relieve sugar shortage. il Sci Am Sup (233 Broadway, N.Y. 10c) 85:324 My 25 '18

Patriotic duty of all owners of sugar maples. J. H. Grimm. il J Ag (Quebec) 21:131-2 Mr '18

Producing maple sugar. Gard Chron Am 22: 218 Ag '18

Profits in the maple sugar industry. J. H. Grimm. J Ag (Quebec) 20:185 Mr '17

Storage of sugar in the maple tree. C. H. Jones. Assn Offic Ag Chem J 2,no 2,pt 1: 103-11 Ag '16

Sugar camp days. E. W. Gage. Breeder's Gaz 71:726 Ap 5 '17

Sugar from all maples. Rural N Y 77:618 Ap 27 '18

See also Vermont maple sugar makers' association

**Costs**

Cost of producing maple products in 1912 and 1913. C. J. Frink. Vt Ag Exp B 203:17-24 Mr '17

**Maps**

Map of Louisiana. La Ag Bd n. p. '16

Map of New York showing the distribution of limestones. N Y State Ag Exp Rep 1915: (in pocket) '16

State and county agricultural maps, accurately showing local farm products, are suggested as a library contribution to food conservation by Cornelia Marvin, library public information director for Oregon. These maps are made by the librarians, who start with a post-route map of their state, sold by the third assistant postmaster general. Statistics of farm production are indicated on the map in graphic form, together with information about local industries. These maps



**Maps**—*Continued*

are useful not merely in indicating lines along which farm production can be increased, but they show the consuming public what food staples are raised locally, making it possible to center consumption upon them and decrease hauling of outside commodities

See also Farm maps; Relief maps

**Marasmius perniciosus.** See Cacao—Diseases and pests

**Marattiaceae.** See Ferns

**March flies**

March fly in grain fields and as a pest of celery. E. H. Strickland. *il Ag Gaz of Canada* 3:600-3 J '16

**Marchantiaceae.** See Liverworts

**Mare's tail**

Origin of the endodermis in the stem of hip-puris. K. Barratt. *Ann Bot* 30:91-9 Ja '16

**Margarine**

Manufacture of margarine in the Netherlands. S. Listoe. (Commerce Reports no. 203) p 812-14 (Ag 30) '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.

See also Oleomargarin

**Statistics**

Commercial stocks of margarine for January 1, 1918. U S Food Surveys 1:15-17 Je 22 '18

Commercial stocks of margarine for July 1, 1918. U S Food Surveys 2:11-13 Ag 31 '18

Denmark's production and consumption of margarin. W. H. Gale. (Commerce Reports no. 208) p 888-9 (S 6) '17 U.S. Bur. of foreign and domestic commerce, Wash- ington, D.C.

**Marguerites**

Marguerites for winter. *Am Flor* 48:902 My 12 '17

**Marietta truck growers' association**

Growing and marketing vegetables at a profit. W. W. Brownfield. *il Ohio F* 139:661 My 12 '17

**Marine botany.** See Aquatic plants

**Marionville, Missouri**

Good place to live. C. N. Crottsburg. *Fruit-Grower* 27:368 J1 15 '16

**Marked quarter;** story. L. A. Corey. *il Country Gent* 83:16-17 F 23 '18

**Market gardeners' associations.** See Vegetable growers' associations

**Market gardening**

Advantages and use of flats. R. L. Watts. *Market Growers J* 18:124 F 15 '16

Advertising for the market gardener. J. E. Mitchell. *Market Growers J* 18:124 F 15 '16

Advice on gardening. Wallaces' *F* 41:289 F 18 '16

Asleep at the switch. *Fruit-Grower* 27:360 J1 15 '16

Attempt at complete market gardening. R. D. Pearce. *Market Growers J* 18:77-8 F 1 '16

Aunt Nell's truck farm. W. Covey. *Country Gent* 82:179 F 3 '17

Bay State gets together. J. R. McMahon. *il Country Gent* 83:6-7 F 23 '18

Boston market gardeners at Concord. *Rural N Y* 75:472 Mr 18 '16

Business of market gardening. T. Keithley. *O Judd Farmer* 62:7 My 5 '17

City boy becomes a successful farmer. R. W. De Baun. *il Rural N Y* 77:140 F 2 '18

Crops for wintering over. *Market Growers J* 19:91-+ Ag 15 '16

Developing a paying trucking business. H. H. Haynes. *Prog F* 31:110 Ja 22 '16

A drug store in Nashville, Tenn., saves all paper sanitary cups used at the soda fountain, turning them over to truck gardeners in that locality to be used as individual pots for starting seedling tomatoes, egg-plants, cabbages, melons, etc. The seedlings are started indoors and afterwards set out in garden or field in the cups, thereby giving plants an early start, without inter- ruption due to transplanting, with a cor- responding earliness in bearing

Dutch market-gardening and its organization. H. M. R. Leopold. *Int R Ag Econ* 81:1-6 S '17

Early cabbage. J. T. Rosa, jr. *il Country Gent* 83:42 F 16 '18

Experiences in supplying a local market. W. H. Evans. *Market Growers J* 21:166 O 15 '17

Experiment in fall seed sowing. F. W. Beck- with. *Market Growers J* 18:392 Je 15 '16

Figures from a Massachusetts market gar- den. *il Rural N Y* 75:833 Je 3 '16

Fruit and vegetables on 40 acres. I. E. Schnell. *O Judd Farmer* 60:13 F 19 '16

Garden crops and the market. *Rural N Y* 75: 1256 S 30 '16

Gardenag by the card index system. J. Schwab. *Market Growers J* 20:93-4 F 1 '17

Gardening for the family hamper trade. J. W. Griffin. *il Prac F* 113:89 Mr 1 '17

Gardening in Colorado. Mrs H. W. Patten. *Fruit-Grower* 27:125 F 15 '16

Gardening situation around Boston; facts about an important industry. E. I. Farring- ton. *il Rural N Y* 77:829, 850 Je 29-J1 6 '18

Getting into market gardening. F. F. Rock- well. *il Country Gent* 81:266 F 5 '16

Growing plants as a greenhouse side line; symposium. *Market Growers J* 18:84-+ F 1 '16

Growing unusual vegetables. R. D. Pearce. *Market Growers J* 18:138 F 15 '16

Growing vegetable plants for the amateur gardener. *il Country Gent* 83:49 F 2 '18

How British gardeners are carrying on. W. F. Giles. *Market Growers J* 22:211 Mr 15 '18

How to make market gardening a success. D. H. Culver. *Market Growers J* 21:165-6 O 15 '17

Irrigation in the market garden; with dis- cussion. C. E. Warner. *il Minn Hort* 46: 70-5 F '18

Little farm well tilled. G. H. Dacy. *Country Gent* 82:1106 J1 7 '17

Making a garden pay. D. Prowant. *Fruit- Grower* 27:167 Mr 1 '16

Managing a New England market garden. A. H. Smith. *Market Growers J* 18:389-90 Je 15 '16

Manure and market gardeners. E. I. Farring- ton. *il Country Gent* 81:1687 S 16 '16

Manuring of market garden crops, with spe- cial reference to the use of fertilizers. F. T. Shutt and B. L. Emslie. 36p '17 Canada Ag

Market-garden district of Biggleswade, Bed- fordshire. T. Rigg. *J Bd Ag* 24:834-9, 950-5 N-D '17

Market-garden equipment. F. F. Rockwell. *Country Gent* 81:328 F 12 '16

Market gardening. *Nat Stock & F* 41:490 Ag 18 '17

Market gardening; with discussion. R. H. Garrahan. *Mass Ag Bd Yearbook* 1916, pt 2: 62-86 '17

Market gardening. R. L. Watts. *Nat Stock & F* 41:1207 F 23 '18

Market gardening as a career for women. L. J. Humphreys. *J Dept Ag Ireland* 17, no 1:36-9 '16

Market gardening in Massachusetts. H: M. Howard. *Mass Ag B* 5:9-17 '18 (3d ed. rev.)

Market gardening in New Jersey. D. T. Hen- drickson. *Prac F* 114:68 F 15 '18

Markets for truck crops. F. F. Rockwell. *Country Gent* 81:394 F 19 '16

Methods of successful market growers. R. W. DeBaun. *il Ohio F* 140:261 S 29 '17

My way of gardening. P. H. Tucker. *Prac F* 113:90 Mr 1 '17

New York market garden. H. R. Cox. *Coun- try Gent* 81:2000 N 18 '16

Pennsylvania market gardening methods. R. H. Garrahan. *il (In Report, Ontario vege- table growers' assn., 1917, p. 67-74) '18 Ont- ario ag. dept., Toronto; Same. Market Growers J* 22:5-6, 45-6 Ja 1-15 '18

Points on management of a market garden. T. Keithley. *Market Growers J* 18:305-6 My 1 '16

Profitable crops; symposium. *Market Growers J* 23:192-3 N 15 '18

**Market gardening—Continued**

- Profits from an autumn garden. D. Prowant. Ohio F 138:23 J1 8 '16
- Recent advancement in market gardening; with discussion. R. L. Watts. il Mass Ag Bd B 5:18-33 '18 (3d ed. rev.)
- Report of the extension specialist in market gardening. R. W. DeBaun. N J Ag Exp Rep 1916:275-9 '17
- Research in market gardening. Gard Chron (Lond) 61:126 Mr 24 '17
- Rhubarb, raspberries and tomatoes. C. O. Warford. Market Growers J 18:148 F 15 '16
- Saving labor. R. W. DeBaun. Country Gent 81:1400 J1 22 '16
- Seasonable reminders for March work. Market Growers J 18:173 Mr 1 '16
- Seasonable reminders for April work. Market Growers J 18:253 Ap 1 '16
- Soil fertility and market gardening. H. G. Bell. Market Growers J 19:208 N 1 '16
- Soils and crops of the market-garden district of Biggleswade. T. Riggs. maps J Ag Sci 7:385-431 Ap '16
- Solving the vegetable riddle. J. R. McMahon. il Country Gent 83:10-11 F 9 '18
- Some market garden partnership problems. J. R. Bechtel. Market Growers J 22:171 Mr 1 '18
- Spring gardening in Kentucky. Market Growers J 22:269 Ap 1 '18
- Suitable sites for market gardening. A. J. Pinn. Ag Gaz of New South Wales 27:633-9 S '16
- Ten-acre market garden. H. R. Cox. il Country Gent 82:247 F 10 '17
- Things that help in a bad year. L. B. Pierce. Market Growers J 18:172 Mr 1 '16
- Truck as an additional source of income. C. O. Warford. Prac F 112:100 Mr 1 '16
- Truck farming in Philadelphia county. 12p il '17 Educational committee, Chamber of commerce, Philadelphia
- Truck farming without manure. R. E. Allen. Prac F 113:198 My 15 '17
- Truck gardening as an alternative employment for longshoremen. (In Report on dock employment in New York city, p 74-82) 50c '16 Mayor's committee on unemployment, New York city
- Vegetable growing. bibliog il Mass Ag Bd B 5:1-193 '18 (ed ed. rev.)
- Revised edition includes following new articles: Common potato diseases and their control, by A. V. Osmun; Common storage of fruits and vegetables, by E. H. Forbush

See also Cold frames; Gardening; Green-houses; Hotbeds; Truck farming; Vegetable gardening, Commercial; also names of vegetables

**Bibliography**

- Bibliography; brief list of books and Farmers' bulletins. Mass Ag Bd B 5:185-7 '18 (3d ed. rev.)

**Study and teaching**

- Garden apprenticeship for college graduates. G. Cooper. Market Growers J 20:341 Ap 15 '17

**Market surveys**

- Marketing survey of New Haven. L. D. H. Weld and others. map 50p '17 New Haven chamber of commerce, New Haven, Conn.

**Market trains**

- Possibilities of a market-train service. G. C. White and T. F. Powell. U S Ag Yearbook 1916:477-87; Same. Separate 701

**Marketing**

- Adjustments of disputes between buyers and sellers of farm produce. A. Hobson. Western Wash Ag Exp B v 6:11-13 Ap '18
- Advantages of a brand. Market Growers J 18:284 Ap 15 '16
- Advertising a state's products. G. Batten. N Y Ag Dept B 81:1827-36 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1827-36 '17
- Advertising agricultural products. H. K. Hannah. Mass Ag Bd Yearbook 1916, pt 2: 49-60 '17

- America faces a war tragedy; how crops of perishable vegetables are to be conserved and brought to the consumer. H. C. Hardy. il Scientific Am (233 Broadway, N.Y. 10c) 117:117+ Ag 18 '17

- Annual report of the demonstration and extension work in the state of South Carolina for calendar year 1916; marketing. F. W. Hofmann. S C Ag Ext Rep 1916:83-97 '17

- Better prices for your products. Country Gent 81:1268 Je 24 '16

- Box-car market; Iowa farmers are reaching the neglected consumer direct. J. H. Collins. il Country Gent 81:1146-7 Je 3 '16

- Bringing seller and buyer together; market clearing house work in Iowa. O Judd Farmer 60:5 Ja 8 '16

- Broadening the market. M. Floyd. Va Ag Dept B 109:86-7 '16

- Building up a trade with consumers direct. T. F. Jager. Market Growers J 18:245-6 Ap 1 '16

- Business of selling farm goods. E. Hutchins. Rural N Y 77:111 S 28 '18

- Care of preparation of products. N. Ponton. (In Report, Quebec Dairymen's assn., 1916, p. 375-9) '17

- Catalogs that increase farm mail-order business. M. F. Delano; P. H. Hofius. il System on the Farm 1:105-7 My '17

- City marketing. Ag Digest 1:218 D '16

- Closer cooperation needed between producer and consumer. Prog F 32:542 Ap 28 '17

- Community market. Wallaces' F 41:762 My 19 '16

- \* Cooperation between country and city. O. B. Morgan. Columbia Univ Quar (Columbia Univ. Press, N. Y. 30c) 20:116-24 Ap '18

- Cornell students of marketing. N Y Prod R 42:16 Ap 26 '16

- County agents talk marketing at meeting in Worcester, Mass., June 23. Rural N Y 75: 968 J1 8 '16

- Cutting out the middleman. C. R. Bashore. Rural N Y 76:367 Mr 10 '17

- Democracy and distribution; with discussion. W. H. Ingersoll. (In Sagamore sociological conference, Pro., 1917, p. 7-15) '17 W: C. Ewing, sec., 985 Washington st, Boston

- Developing a home mail order business. S. R. Hall. Rural N Y 75:488 Mr 18 '16

- Direct country buying disastrous for producer. Am Sheep B & W 36:264 My '16

- Direct exchange of products. Mrs E. L. Wilson. il Farmers Inst Household Sci 1917: 180-91 '18

- Direct marketing. R. G. Kirby. Ohio F 141:80 Ja 19 '18

- Direct selling. J. W. Chamberlain. Ohio F 137:171 F 5 '16

- Distribution for the grower. P. Fassig. Ohio F 137:818 Je 17 '16

- Doing business by letter. S. R. Hall. Country Gent 82:247 F 10 '17

- Economic bearing of future trading in agricultural commodities. H. C. Emery. (In Pan American scientific congress Pro., 1915, v. 3, p. 21-5) '17

- Efectos de la apertura del canal de Panamá, sobre la distribución de productos agrícolas, by E. C. Bascuñán; Effective use of the Panama canal in the distribution of products, by C. J. Brand. (In Pan American scientific congress Pro., 1915, v. 3, p. 905-11, 911-15) '17

- Efficiency in farm marketing. W. H. Olin. (In Pro., Railway development assn., 1917, p. 75-7) '17 D. C. Welty, sec., Comr. of ag., Missouri Pacific railroad co., St Louis

- Efficiency in marketing. R. L. Greene. Rural N Y 77:973 Ag 17 '18

- Efficient marketing. H. A. Bereman. Farm Eng 3:207 Mr '16

- Farm advertising. R. Price. Fruit-Grower 27: 392 Ag 15 '16

- Farmer's share of retail prices. L. D. H. Weld. il Country Gent 82:1814-15 N 24 '17

- Finding a better market. System on the Farm 3:158 O '18

- Finding customers. il System on the Farm 1:380-1 D '17



Marketing —Continued

- Food control and democracy: an article proposing the organization of chambers of agriculture to regulate the equitable distribution of farm products at fair prices both for the producer and the consumer. D: Lubin. (U. S. 65th Cong., 1st sess. S. Doc. 120) 13p '17 Apply to congressmen
- From the Atlantic monthly for August, 1917
- Forsaking the middleman. Mrs H. Dunn. O Judd Farmer 61:20 S 23 '16
- From grower to grocer. J. H. Collins. Country Gent 81:1464 Ag 5 '16
- From the producer direct to the consumer. H. W. Collingwood. N Y State Fruit Growers' Assn Pro 1916:272-86
- Function of grades and standards in the marketing of farm products. A. Hobson. Western Wash Ag Exp B v 5:142-4 Ja '18
- Great American waste; losses on the farm and at country shipping points. L. D. H. Weld. il Country Gent 82:1254 Ag 11 '17
- Grocer as a market. W. C. Smith. Fruit-Grower 27:98 F 1 '16
- He was caught red-handed. W. C. Covey. Am Fruit Grower 38:12 D '18
- Helpful marketing suggestions. L. T. Rhodes. Prog F 31:904 Jl 22 '16
- Helping Alabama farmers find markets. E. A. Jones. Prog F 31:903 Jl 22 '16
- High food prices, middlemen and speculation. L. D. H. Weld. North Am Review (171 Madison av., N.Y. 35c) 206:586-94 O '17
- Hints on marketing grain, fruits, hay, peanuts and poultry. W: H. Harrison. Prog F 32:857 Ag 11 '17
- Home-hamper business. Country Gent 82:716 Ap 14 '17
- Hope farm notes; public marketing. Rural N Y 75:1238 S 23 '16
- \* Housewife and the marketing problem. C. B. Crane. Nat Municipal R (North American bldg., Philadelphia \$1) 7:349-54 Jl '18
- How advertising pays farmers; three experiences. R. C. Gano. Prog F 33:1087 O 5 '18
- How the cities can solve the food problem. R. G. Stoddard. Am City—City ed (Tribune bldg., N.Y. 35c) 17:6-9 Jl '17
- Huntingdon plan for organizing a community. A. B. Ross. Am City—Town and County ed (Tribune bldg., N.Y. 35c) 16:21-5 Ja '17
- Importance of investigational work in the field of marketing. A. Hobson. Western Wash Ag Exp B v 5:178-9 Mr '18
- Indiana woman's marketing. Mrs R. F. Cripps. Ohio F 138:396 O 21 '16
- Inter-county commerce. W. J. Hagar. Hoard's D 50:807 Ja 7 '16
- Justly caustic comment; marketing of farm produce. N Y Prod R 43:326 D 20 '16
- Lessons in marketing. Prog F 31:902 Jl 22 '16
- Little adventure in roadside advertising. E. Warren. Am P Advocate 26:556 S '18
- Live-stock marketing problem. D. B. Heard. Review of Reviews (30 Irving Place, N.Y. 25c) 55:293-6 Mr '17
- Living within our income. H: J. Waters. Mo Ag Ed Yearbook 1917:70-9
- Local truck marketing. Weekly N L 5:2 Ag 22 '17
- Maine has organized definite machinery for the marketing of its 1918 crops with a view to improving the farmer's selling conditions and increase the state's consumption of its own soil products. At a recent meeting of the State Committee on food production and conservation, a marketing committee was appointed. A bureau of information is to be established to deal with prices and output of farm products. At the close of the 1918 harvest a survey will be made of crops by counties through committees and organizations that already exist. A survey is to be made immediately of the markets of the state to ascertain their requirements of produce grown in Maine, this work being undertaken by boards of trade, chambers of commerce, labor organizations, and committees of public safety
- Making sure of orders after the catalog is sent. System on the Farm 3:53-4 Ag '18
- Many roads to market; Forest home farm, Virginia. G: H. Dacy. il Country Gent 81: 479 F 26 '16
- Market captured by farmers. A. Hobson. il Hoard's D 55:875+ Je 14 '18
- Market end of farming. Nat Stock & F 40:848 N 18 '16
- Market problems: what are we doing to solve them? A. Hobson. Hoard's D 53:760 My 25 '17
- Marketing. B. Adams. N Y Ag Dept B 86:2311-20 Ag '16
- Marketing and farm credits; a collection of papers and documents read at the fourth annual session of the National conference on marketing and farm credits, Chicago, Dec. 4-9, 1916. 546p \$2 '17 C. W. Holman, sec., 340 Washington bldg., Madison. Wis.
- Contains: Federal farm loan act and personal credit; Land settlement and immigration; Marketing of livestock; Marketing of grain and cheese; Organization of agriculture
- Marketing as affecting profits in farming. E. O. Anderson. Penn State F 10:29-30 F '17
- Marketing experiences that will help the gardener. R. J. Buchanan. Prog F 31:111 Ja 22 '16
- Marketing farm crops in Pennsylvania. G: H. McKay. il Penn State F 10:28-9 F '17
- Marketing farm woodland products in Georgia. G. N. Lamb. il map Ga Ag Coll (Ext) B 129:1-32 '17
- Marketing fundamentals and cooperation. L. D. H. Weld. N Y Ag Dept B 92:66-72 F '17
- Marketing of farm produce; with discussion. E. B. Dorsett. Pa Ag Dept B 278:165-79 '16
- Marketing of farm products. C: J. Brand. Ag Gaz of Canada 3:183 F '16
- Marketing of farm products, by L. D. H. Weld. Review. N Y Prod R 41:616 F 9 '16
- Marketing on consignment. J. J. Castellini. W Va Ag Dept B 13:37-40 '16
- Marketing our first war crop. A. E: Richter. il Country Gent 82:1442-3 S 22 '17
- Marketing; perishable crops should be handled with unusual care. Weekly N L 4:3 Ag 1 '17
- Marketing plan. Weekly N L 5:4 Ag 15 '17
- Marketing problems. Weekly N L 4:1 Jl 11 '17
- Marketing problems of northwestern grain growers. L. J. Frazier. (In Nat. conf. on marketing and farm credits. 1916. p. 309-21) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Marketing—the paramount problem in farming. C. R. White. il N Y Ag Dept B 86:2641-8 Ag '16
- Marketing through the trade. J. H. Collins. il Country Gent 82:531-2 Mr 17 '17
- Markets for truck crops. F. F. Rockwell. Country Gent 81:394 F 19 '16
- Middleman: elimination or regulation? A. Hobson. Hoard's D 53:946 Jl 6 '17
- Modern market methods. A. L. Clark. il N J Ag Dept B 7:219-46 '17
- Money in milk. A. G. Morrell. il Country Gent 81:727-8 Ap 1 '16
- More from produce. J. C. Farmer. il System on the Farm 1:222-3 Ag '17
- Motor wagons for Mass. gardeners. Rural N Y 75:423 Mr 11 '16
- My legal rights as a land owner. M. L. Hayward. il System on the Farm 1:67-8 Ap '17
- Necessary middleman. E. P. Sandsten. Country Gent 81:1574 Ag 26 '16
- Need of rural credit and improved market conditions. Va Ag Dept B 109:162-5 '16
- Open competitive examination for assistant in marketing, grade 1, \$1,800-\$2,400. Coop Manager & F 7:37 O '17
- Our marketing problem: the producers' part. A. Hobson. Hoard's D 54:357 O 12 '17
- Our marketing problems: the consumer's part. A. Hobson. Hoard's D 54:489 N 2 '17
- Outlets and methods of sale for shippers of fruits and vegetables. J. W. Fisher, jr., and others. U S Ag B 266:1-27 '15
- Peddler and motor truck. Rural N Y 76:377 Mr 10 '17
- Perishable produce under food regulation. W. F. Gephart. Quarterly J Econ (Harvard Univ. Press, Cambridge, Mass. \$3 per yr.) 32:621-34 Ag '18

## Marketing—Continued

- Point of origin plan for marketing. A. B. Ross. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:206-10 N '17
- Points on retail marketing. *Market Growers* J 18:167 Mr 1 '16
- Practical market system for our large cities. G. V. Branch. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 642-6) '17
- Problem of the sale of agricultural products in the United States in connection with economy in farming. *Int R Sci & Prac Ag* 7, no 2:280-2 F '16
- Problems of marketing. D. Lubin. *Mo Ag Bd Yearbook* 1916:106-12
- Production and marketing plans for next year. C. J. Brand. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:164-81 N '17
- Profitable marketing of crops. D. E. Wimple. *Farmers' Nat Congress* Pro 1916:74-8
- Provide a cash market for the farmers' products. J. F. Jones. *Prog F* 31:1329 N 18 '16
- Public markets in Massachusetts. R. E. Annin, jr. *il Mass Ag Bd C* 84:1-23 '18
- Public safety marketing plan; with discussion. H. J. Hughes. *Minn Hort* 46:52-6 F '18
- Reaching the consumer. F. G. Heaton. *Country Gent* 81:594 Mr 11 '16
- Reform of food distribution. J. J. Dillon. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:367 Je 9 '17
- Remedy to curtail the enormous waste of food stuffs. G. Hildebrand. *Prac F* 113:197 My 15 '17
- Repressing competition at the market. *Am Sheep B & W* 36:362 Je '16
- Results of a survey of state marketing activities throughout the United States. (Doc.—Markets 3.) 7p '16 U. S. Ag
- Roadside market. P. Gillette. *Ohio F* 137:818 Je 17 '16
- Selling at his own door. D. J. Lane. *il Country Gent* 82:1985 D 15 '17
- Selling direct to the consumer. *Market Growers* J 20:154 F 15 '17
- Selling farm produce. D. N. Barrow. *Prog F* 31:523 Ap 8 '16
- Selling live stock with photographs. *il System on the Farm* 1:263-4 S '17
- Selling on commission and buying direct from producers. J. H. Killough. *N Y Ag Dept B* 79,pt 1:906-10 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:906-10 '17
- Selling produce on looks. C. E. Brehm. *il Country Gent* 82:1341 S 1 '17
- Selling to boarding houses. N. E. Regner. *Country Gent* 81:1651 S 9 '16
- Some points on salesmanship. W. B. Davis. *Market Growers* J 18:364 Je 1 '16
- Southern farmer's big advantage in marketing grain crops. T. Butler. *Prog F* 32:1143 N 3 '17
- Splitting the difference by direct dealing. H. A. Wright. *Country Gent* 81:1255 Je 24 '16
- State exchange marketing. *Kimball's D F* 16: 625 O 15 '18
- Studying the market problem. J. J. Dillon. *il Wallaces' F* 41:1660 D 22 '16
- Suggests a producers' exchange. W. B. Yearly. *Breeder's Gaz* 69:525 Mr 2 '16
- Surplus crops—how can they be marketed? D. H. Williams. *Country Gent* 82:1249-50 Ag 11 '17
- System of direct distribution between producer and consumer. J. L. Levy. *N Y Ag Dept B* 92:54-65 F '17
- Teamwork between the farmer and his agent. C. E. Bassett. *U S Ag Yearbook* 1917:321-5; Same. *Separate* 736
- 25-cent dollar. *Rural N Y* 75:1387 N 4 '16
- Three essentials to successful marketing. Mrs W. E. Jenkins. *Prog F* 31:919 J 22 '16
- Trifling with the food problem. *New Republic* (421 W. 21st st., N.Y. 10c) 9:142-3 D 9 '16
- Truck gardener's clothes; selling direct to consumer. C. L. Meller. *Country Gent* 81: 1394 J 22 '16
- Two plans for marketing. R. W. De Baun. *il Rural N Y* 75:1066 Ag 12 '16
- Two principles of successful marketing. J. F. Duggar. *Prog F* 31:905 J 22 '16
- Two ways of marketing food. *Literary Digest* (354 4th av., N. Y. 10c) 54:398-9 F '17 '17

- Wartime marketing. J. H. Collins. *il Country Gent* 82:1139-4 J 14 '17
- What a dollar did for us. J. Moffett. *Country Gent* 81:1275 Je 24 '16
- Why farmers make money at a loss. H. L. Staples. *il Country Gent* 83:5-6+ S 14 '18
- Why the middleman stays. R. A. Hayne. *Nat Stock & F* 42:654 O 19 '18
- Work of a produce clearing house. *Wallaces' F* 41:217 F 11 '16
- World markets for American farmers. E. N. Hurley. *il Country Gent* 83:5-6+ S 28 '18
- Would have national markets. F. J. Sonnenburg. *Fruit-Grower* 27:429 S 15 '16

See also Commission merchants; Farm management; Labels; Live stock—Marketing; Markets, Farmers'; National chamber of agriculture; Packing for shipment; also sub-head Marketing under names of products, e.g. Cantaloupes—Marketing, Canned food, Home—Marketing, Flowers—Marketing, Fruit—Marketing, Wool—Marketing, also Hawaiian islands—Marketing division, Territorial

## Auction method

- Auction selling is gaining. *Rural N Y* 75:199 F 5 '16
- Auction system of selling perishables. C. B. Downer. *Market Growers* J 20:339-41 Ap 15 '17
- Economic value of the auction as a distributor of perishable commodities. V. K. McElheny, jr. *il (In* Pan American scientific congress Pro., 1915, v. 3, p. 740-8) '17
- See also Fruit—Marketing—Auction method; Wool—Marketing—Auction method

## Bibliography

- Marketing farm products; selected list of books and pamphlets in Wisconsin legislative reference library. *Wis. Lib. comm. Legislative reference dept.* 9p '17
- Obtained only thru Public affairs information service, 958-961 University av., N.Y. (Typew 45c)
- \* Selected list of publications on the marketing of farm products. M. E. Griffith. 9 pts mim '18 U. S. Bur. of markets lib., Washington, D. C.
- This bibliography includes only material printed in English, exclusive of periodical references, except reprints, and proceedings of associations. It is issued in nine parts dealing with special crops or special phases of the marketing question

## Costs

- Lower distribution costs. J. Comstock. *System on the Farm* 3:133-4 O '15
- Marketing costs. L. D. H. Weld. *Cornell Countryman* 15:395-6 Ap '18

## Government aid

- Development of a market news service. W. A. Sherman. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 635-41) '17
- How Hawaii helps her farmers to market their produce. E. V. Wilcox. *il U S Ag Yearbook* 1915:131-46
- Inspect for shippers; inspection service on fruits and vegetables established at principal markets. *Weekly N L* 5:6 N 28 '17
- Market freedom through federal loans. J. H. Collins. *Country Gent* 83:36 Ja 5 '18
- Market news service; Bureau of markets to open several new branch offices. *Weekly N L* 5:4 Ag 22 '17
- Market train service. G. H. Dacy. *Country Gent* 82:1055 Je 23 '17
- Market under federal reserve. J. H. Collins. *Country Gent* 82:862 My 12 '17
- Municipal terminal markets. C. C. Miller. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 720-9) '17
- Needs and duties of a market commission. A. Hobson. *Hoard's D* 54:130 S 7 '17
- Possibilities of a market-train service. G. C. White and T. F. Powell. *U S Ag Yearbook* 1916:447-87; Same. *Separate* 701
- Relation of the government to the marketing problem. B. T. Galloway. *Green's Fruit Grower* 36:3 J 1 '16



**Marketing—Government aid—Continued**

- Relation of the government to the marketing problem. B. T. Galloway. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 50-5) F 1 '17
- 2d annual report of the Director of farm markets. Dec. 15, 1916. 27p '16 Idaho Dept. of farm markets, Boise
- Value of a market news service to farmers and fruit growers. H. W. Selby. Mass Ag Bd C 76:1-22 '18
- Washington (state)—Legislature of 1917 authorized the director of farm markets to investigate and report annually on the methods of commission merchants, the feasibility of direct dealing between producers and consumers thru the agency of the parcel post and mail order methods, problems of farm labor and methods, delays and charges in the transportation of farm products

What the food and markets department can do. Rural N Y 76:923 JI 28 '17

**Laws**

- Act in relation to farms and markets, constituting chapter sixty-nine of the consolidated laws. (Ch. 802, P. L. 1917) 39p '18 N.Y. Dept. of farms and markets, Albany
- Laws governing farm markets department as amended and passed by the 14th session of the Idaho legislature 1917. 16p postage 2c '17 Idaho Dept. of farm markets, Boise
- Loi étendant l'application et portant modification de la loi de 1915 sur les marchés de blé en Australie. Int Yearbook Ag Leg 1916:114-16 '17
- Manual of laws pertaining to the Department of farms and markets; sale of farm produce on commission. N Y Farms & Markets Dept Ag B 108:167-72 Je '18

**Parcel post**

- By parcel post; direct-to-consumer market. A. L. Sarran. il Country Gent 81:1177-8 Je 10 '16
- Crops sold by mail. R. Adams. il System on the Farm 2:210 Je '18
- Direct marketing of farm produce. B. H. Hibbard and A. Hobson. il Hoard's D 50:857+ Ja 21 '16
- Eggs by parcel post. G. H. Dacy. il Country Gent 82:1069 Je 23 '17
- Eggs by parcel post. Mrs G. L. Russell. il Fruit-Grower 28:79 F 1 '17
- How advertising gets parcel post and express orders. M. J. Beall. il System on the Farm 1:331-3 N '17
- How I developed a parcel post egg trade. W. A. Bickel. System on the Farm 1:77 Ap '17
- Mail order farmer. J. T. Bartlett. Prac F 113:245 JI 1 '17
- Marketing berries and cherries by parcel post. C. C. Hawbaker and C. A. Burmeister. il U S Ag B 688:1-17 '18
- Marketing butter and cheese by parcel post. L. B. Flohr and R. C. Potts. il Farmers' B 930:1-12 '18; Same. Hoard's D 56:4-5 JI 26 '18; Same cond. N Y Prod R 46:294-5 JI 19 '18; Same cond. Jersey B 37:1045-6 JI 3 '18
- Marketing butter in the city by parcel post. Mrs W. H. Alexander. Prog F 31:498 Ap 8 '16; Same. Hoard's D 51:970 JI 14 '16
- Marketing eggs by parcel post. L. B. Flohr. il Farmers' B 830:1-22 '17; Excerpts. Ag Digest 2:758 D '17
- Marketing eggs by parcel post. L. A. Richardson. Am P J 47:342 F '16
- Marketing of farm produce in the United States by parcel post. J Bd Ag 23:375-8 JI '16
- Marketing of farm products through the medium of the parcel post. S. G. Andrus. Cal State Comm Hort B v 6:207-13 My '17
- Marketing perishables via parcel post. E. W. Gage. il Prac F 112:261-2 JI 1 '16
- Parcel post business methods. C. C. Hawbaker and J. W. Law. Farmers' B 922:1-20 '18
- Parcel post egg shipments. J. C. Wickham. Rural N Y 75:313 F 19 '16
- Parcel post marketing. Fruit-Grower 27:403 S 1 '16

- Parcel post marketing. Kimball's D F 16:861 N 15 '18
- Poultry by parcel post. Fruit-Grower 27:103 F 1 '16
- Sending apples by parcel post. P. Thayer. il Ohio Ag Exp B v 1:377-82 D '16
- Shipping comb honey by parcel post. J. L. Byer. Gleanings 44:234 Mr 15 '16
- Suggestions for parcel post marketing. il Va Ag Dept B 115:27-36 '17
- Suggestions for parcel post marketing. L. B. Flohr and C. T. More. il Farmers' B 703:1-20 '18 (rev.); Same cond. Market Growers J 18:103 F 1 '16
- System of direct distribution between producer and consumer. J. L. Levy. N Y Ag Dept B 92:54-65 F '17
- Trucks and airplanes for parcel post. J. E. Pickett. il Country Gent 83:8-9+ Mr 9 '18

**Study and teaching**

- Advisability of collegiate courses on marketing and distribution. T. N. Carver. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 396-9) '17
- Marketing farm products. H. P. Barrows. (Doc. 72) 12p '17 U.S. States relations service, Washington, D.C.

**Marketing, Cooperative**

- Another advantage of coöperative marketing. R. L. Boylin. Prog F 31:756 Je 10 '16
- Another church takes hold. D. H. Steffins. Cornell Countryman 14:731 Je '17
- Assistance extended to associations in the co-operative sale of wool. T. R. Arkell. il Ag Gaz of Canada 5:141-3 F '18
- Bringing the producer and consumer together. R. S. Mackintosh. Minn Hort 44:321-5 Ag '16
- Collective buying and selling. C. A. Lyman; W. H. Hayes; O. J. Baer. Am Coop J 13:108-9 N '17
- Coöperation in cheese sales. H. Krumrey. (*In* Nat. conf. on marketing and farm credits. 1916, p. 347-53) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Co-operation in marketing. V. H. Davis. (*In* Ohio vegetable growers' assn. directory, 1918, p. 22-5) n.d. Ohio vegetable growers' assn., Columbus
- Co-operation in marketing fruit; the South Australian pool. J Dept Ag S Australia 21:644-5 Mr '18
- Co-operation in selling honey: California association. J. E. Ross. Gleanings 44:655-6 Ag 1 '16
- Co-operation in wool marketing. R. W. Wade. (*In* Report, Ontario ag. & exp. union, 1917, p. 23-4) '18 Ontario ag. dept., Toronto
- Co-operation is spreading fast. Am Coop J 11:1004 Je '16
- Co-operation spells success; starting growers' marketing associations. R. C. Gano. il Fruit-Grower 27:357 JI 15 '16
- Co-operative associations. C. A. Byers. il Fruit-Grower 27:454-5 O 15 '16
- Co-operative carlot shipment of live stock and farm crops. Va Ag Dept B 126:142-4 '18
- Co-operative efforts. J. Hendricks. Am Bee J 57:270 Ag '17
- Co-operative handling of wool in the provinces. Ag Gaz of Canada 5:959-71 O '18; Excerpt. J Ag (Quebec) 22:79 N '18
- Coöperative hay marketing. T. W. Harvey. Country Gent 81:1398 JI 22 '16
- Co-operative marketing. Wallaces' F 41:577 Ap 7 '16
- Coöperative marketing. J. Owens. Cornell Countryman 14:363-5 F '17
- Co-operative marketing and distribution of butter—history of Minnesota co-operative dairies association. N Y Prod R 45:20 N 7 '17
- Co-operative marketing of agricultural produce. Int R Ag Econ 82:1-9 O '17
- Co-operative marketing of creamery butter—are conditions favorable for an extension of the idea? N Y Prod R 46:700 S 11 '18
- Co-operative marketing of dairy products. E. L. Brigham. il Hoard's D 54:360+ O 12 '17

**Marketing, Cooperative—Continued**

- Co-operative marketing of fruits. E. A. Leatherman. W Va Ag Dept B 13:25-30 Ja '16
- Cooperative marketing of milk. R. B. Swift. Breeder's Gaz 70:198 Ag 10 '16
- Co-operative marketing of poultry products. J. H. Hare. Ag Gaz of Canada 5:284-5 Mr '18
- Co-operative marketing of poultry products. F. W. Kasmeier. Tex Ag Ext B B-10:66-8 '16
- Co-operative marketing of sheep and lambs. C. Harper. il Ohio F 139:442 Mr 24 '17
- Co-operative marketing of the onion crop. C. Hanna. Market Growers J 22:305-6 Ap 15 '18
- Co-operative marketing of wool. Ag Gaz of Canada 4:863-73 O '17
- Co-operative marketing of wool in the provinces. il Ag Gaz of Canada 3:880-4 O '16
- Cooperative marketing—where? when? how? C. E. Bassett and O. B. Jesness. U S Ag Yearbook 1917:385-93
- Co-operative poultry marketing in Saskatchewan. Int R Sci & Prac Ag 7,no 3:437 Mr '16
- Cooperative purchasing and marketing organizations among farmers in the United States. O. B. Jesness and W. H. Kerr. il map U S Ag B 547:1-78 '17
- Co-operative sale of tobacco in Russia. Int R Ag Econ 82:14-16 O '17
- Co-operative sale of wool. Int R Ag Econ 74:14-24 F '17
- Co-operative sale of wool. J. H. Tubbs. Am Sheep B & W 37:531 S '17
- Co-operative selling. J Ag (Quebec) 21:vii F '18
- Cooperative selling found to be profitable by a number of women's organizations. Weekly N L 4:7 My 16 '17
- Cooperative selling of wool. C. S. Plumb. Breeder's Gaz 74:154 Ag 1 '18
- Co-operative selling pays Texas honey producers. C. Gano. Am Bee J 58:158, 192 My-Je '18
- Co-operative societies for sale of cotton in the southern Maratha country. G. F. Keatinge. Ag J of India 13:121-30 Ja '18
- Cooperative wool marketing. J. Gelder. il Am Sheep B & W 38:174 Mr '18
- Co-operative wool marketing in Quebec—1918. A. E. MacLaurin. J Ag (Quebec) 22:26 Ag '18
- Cooperative wool-marketing system. J. H. McKenney. Nat Stock & F 40:916 D 9 '16; Same. Breeder's Gaz 71:1198 Je 14 '17
- Co-operative wool sales conducted in Canada. (In Appendix to report, Live stock branch, 1917, p. 42-95) '17 Ontario ag. dept., Toronto
- Cooperative wool-selling. Nat Stock & F 40:427 JI 22 '16
- Cotton and wool; the results of organization. W. W. Reynolds. Rural N Y 77:953 Ag 10 '18
- Dairy branch enlarges its marketing operations. Hoard's D 52:36 Ag 4 '16
- Difficulties in co-operative selling. P. C. Chadwick. Gleanings 44:843 S 15 '16
- Egg trade and co-operation in Russia. Int R Ag Econ 81:7-11 S '17
- Example from Hawaii. Prog F 31:918 JI 22 '16
- Extent and possibilities of cooperative marketing. C. E. Bassett. Am Assn Farmers' Inst Workers Pro 1916:31-4 '17
- Farm women's partnership. Mrs F. J. Doudican. il Ohio F 138:186 Ag 26 '16
- Farmers' cooperative selling associations. E. S. Turville. Nat Stock & F 42:849 D 21 '18
- Farmers' exchange. W. L. Nelson. Country Gent 82:340 F 17 '17
- Farmers' selling organizations in New Jersey. W. B. Duryee, jr. il N J Ag Dept B 3:71-84 '17
- Farming industry: business, profession. C. Poe. Prog F 31:407 Mr 18 '16
- Fighting the egg speculator. W. V. Woehlke. il Country Gent 83:9 F 2 '18
- Financing cooperative marketing associations. W. H. Kerr. (In Pan American scientific congress Pro., 1915, v. 3, p. 612-24) '17
- From car door to consumer. H. C. Filley. il Neb Ag Exp C 5:1-20 '18
- Gardener's marketing exchange. L. F. Miller. Country Gent 83:56 Mr 9 '18
- Growing and marketing vegetables at a profit. W. W. Brownfield. il Ohio F 139:661 My 12 '17
- How co-operative associations distribute and sell. R. C. Gano. Am Bee J 58:377 N '18
- How Maine farmers sell their crops. C. E. Embree. (In Nat. conf. on marketing and farm credits, 1916, p. 374-82) \$2 '17 C. W. Holman, sec., Madison, Wis.
- How to organize a co-operative association. M. Cole. N Y State Fruit Growers Assn Pro 1916:143-52
- Illustration of successful co-operation in the marketing of eggs and poultry. E. Rhoades. Ag Gaz of Canada 3:124 F '16
- Improvements needed in the marketing of southern farm products. J. F. Duggar. Prog F 32:779 JI 14 '17
- Is cooperative marketing applicable to Illinois conditions? J. W. Lloyd. Ill State Hort Soc Trans 1917:128-36 '18
- Jefferson county wool growers' association; constitution and by-laws. Wallaces' F 42:1464 O 26 '17
- Legalizing co-operative marketing. C. Gano. Am Bee J 58:299 S '18
- Market distribution of poultry products. E. W. Benjamin. Am P Advocate 24:106 Ja '16
- Marketing fruit and vegetable crops individually or through an association; with discussion. L. D. Sweet. (In Nebraska Horticulture v. 6, no. 12, p. 126-32) (F) '17 Neb. state hort. soc., Lincoln
- Marketing hogs cooperatively. M. Andersen, jr. Prog F 31:482 A, 1 '16
- Marketing hogs co-operatively. W. H. Smith. Ag Gaz of Canada 4:1068-9 D '17
- Marketing melons at a profit. T. W. Harvey. il Country Gent 82:1078 Je 30 '17
- Marketing milk and cream. E. L. Bradford. Mass Ag Bd Yearbook 1916, pt 2:162-7 '17
- Marketing the 1916 wool clip in Quebec co-operatively. J Ag (Quebec) 20:7 JI '16
- Milk marketing corporation. O Judd Farmer 61:6 JI 22 '16
- Milk production and co-operation. M. R. Tolstrup. il Hoard's D 55:602+ Ap 26 '18
- Mississippi marketing plan proves a success. Prog F 31:289 F 26 '16
- Mulberry farmers' market club. H. H. Cory. Prog F 31:901 JI 22 '16
- Necessity, importance and wisdom of farmers' cooperative marketing. H. Weinstock. Cal State Comm Hort B v 7:60-2 Ja '18
- Needs of eastern fruit growers. S. J. T. Bush. Rural N Y 75:1065, 1095, 1129 Ag 12-26 '16
- New plan for direct selling. J. Smith. Rural N Y 76:108 Ja 27 '17
- Organization for marketing. il Ag Gaz of Canada 4:275-87 Ap '17
- Organized marketing. J. R. Gardner. Fruit-Grower 28:186a Mr 15 '17
- Plan for increasing potato profits. C. C. Boyce. map System on the Farm 1:117-19 My '17
- Plan for reorganizing the milk business. J. J. Dillon. Rural N Y 75:1007 JI 22 '16
- Plea for co-operative education. E. G. McCol-lum. Am Coop J 12:298 D '16
- Putting system into marketing. G. H. Powell. il Country Gent 82:1731 N 30 '17
- Second-wind success. G. F. Stratton. il Country Gent 82:1597 O 20 '17
- Selling association for watermelon growers. R. M. Harkey. Prog F 31:902 JI 22 '16
- Selling Michigan certified grapes. G. E. Prater, jr. (In Nat. conf. on marketing and farm credits, 1916, p. 365-73) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Solve Streater milk problem. O Judd Farmer 60:14 My 6 '16
- Solving Kentucky's market problems. F. Mutchler. (In Nat. conf. on marketing and farm credits, 1916, p. 357-64) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Solving the marketing problem. G. Hildebrand. Prac F 112:291+ Ag 1 '16
- State market commission of California. C. C. Plehn. Am Econ Review (Ithaca, N.Y. \$1.25) 8:1-27 Mr '18



**Marketing, Cooperative—Continued**

- Successful farmer's exchange of Monmouth county, N.J. D. T. Hendrickson. Fruit-Grower 27:238 Ap 1 '16
- Swift condemns market plan. R. B. Swift. O Judd Farmer 61:9 Jl 8 '16
- Swift warns milk producers. O Judd Farmer 61:9 Jl 15 '16
- Truck marketing on a large scale under cooperative principles, by N. P. Westcott; Extent and possibilities of cooperation, by C. E. Bassett. (In Pan American scientific congress Pro., 1915, v. 3, p. 341-7, 456-9) '17
- Warehouse and marketing department bulletin no 22. F. C. Weinert and P. Radford. 20p il '16 Permanent warehouse dept., Houston, Texas
- Why a central selling agency? W. G. Howard. Am Coop J 12:440 F '17
- Why farmers make money at a loss. H. L. Staples. il Country Gent 83:10-11+ O 5 '18
- Working with other folks: seven suggestions for August. Prog F 32:845 Ag 4 '17
- See also Cheese factories, Cooperative; Creameries, Cooperative; Dairymen's associations; Egg marketing associations; Farmers' grain dealers' associations; Fruit growers' associations; Grain dealers' associations; Live stock shipping associations; Vegetable growers associations; also names of cooperative associations, e.g. California fruit growers' exchange, Imperial valley long-staple cotton growers' association, Moore cooperative cheese and creamery company, New England poultry producers' exchange, Sheboygan county cheese producers' federation

**Laws and legislation**

- South Australia—Act providing that if fruit growers subscribe a certain sum and come in as individuals on cooperative principle, government may advance money to construct packing sheds and grading plant. Bill provides for advances being made for cool stores, storage and packing of fruit, erection of canning and packing factories, preservation of fruit and vegetables, erection of fruit packing sheds, erection of butter, cheese and bacon factories, and silos. Silo is the only thing that does not come under the heading of cooperative system. (Passed Assembly 1917)
- Victoria—Act providing that majority of orchardists within given area can petition for creation of fruit trust, and trust has power to levy compulsory rate and then obtain government advance for building cool stores. Measure is designed to enable fruit-growers collectively to build cool stores and establish canning, drying and packing and preserving establishments. (Passed Assembly '17)

**Marketing bureaus**

- Functions of a state bureau of markets. A. E. Cance. Mass Ag Bd Yearbook 1916, pt 2:122-34 '17
- Suggestions for an act to establish a division of marketing in any state. (Service and regulatory announcements—Markets 21) 7p '17 U S Ag
- Value of a market news service to farmers and fruit growers; with discussion. H. W. Selby. Mass Ag Bd Yearbook 1917, pt 2:8-27 '18
- See also Marketing, Cooperative; also Idaho—Farm markets, Department of; Louisiana—Marketing, Bureau of; West Virginia—Markets, Bureau of

**Laws**

- Laws governing Farm markets departments as amended and passed by the 14th session of the Idaho legislature 1917. 16p '17 Idaho Dept. of farm markets, Boise

**Marketing clubs.** See Cooperative buying

**Marketing of farm produce.** See Marketing

**Marketing surveys**

- Results of a survey of state marketing activities throughout the United States. (Doc.—Markets 3) 7p '16 U S Ag

**Markets**

- Big war tasks; Bureau of markets organized and expanded. Weekly N L 5:4 D 19 '17
- Boards of trade and the national welfare. J. R. Mauff. (In Nat. conf. on marketing and farm credits, 1916, p. 326-38) \$2 '17
- C. W. Holman, sec., Madison, Wis.
- Bureau of markets in its relation to the grain trade. C. J. Brand. (In Pro., Grain dealers nat. assn., 1917, p. 21-4) '17 Charles Quinn, sec. treas., Toledo, O.
- Changing market conditions. E: L. Burke. O Judd Farmer 60:31 F 5 '16
- City markets. G: W. Perkins. N Y Ag Dept B 81:1761-71 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1764-71 '17
- Clearing house for farmers. B. C. Taylor. Rural N Y 75:181 F 5 '16
- Crop and market outlook and review. See semi-monthly numbers of Market growers journal
- Development of a market news service. W. A. Sherman. (In Pan American scientific congress Pro., 1915, v. 3, p. 635-41) '17
- Farm prosperity and the local market problem in Mecklenburg. E. C. Branson. 18p 10c '17 Univ. of N.C., Dept. of rural economics and sociology, Chapel Hill
- Federal market reports on live stock and meats. S. W. Doty. Ia Ag Bd Yearbook 1916:429-32
- 1st annual report of the State market director of California for the year ending Dec. 1, 1916. 110p '16 Cal. State market director, Sacramento
- Includes present state market law of California and proposed amendments
- 2d annual report of the State market director to the governor for the year ending December 1, 1917. 52p '18 State market commission of California, 525 Market st, San Francisco
- Five-day market. Wallaces' F 41:264 F 18 '16
- Foods and markets bill. N Y Prod R 43:637+ F 21 '17
- How can we lower the cost of food? G: W. Perkins. il Field 11 26:317-18 Ap '16
- Improving town markets; Washington, D.C. market. Prog F 31:565 Ap 22 '16
- Increasing the market by wider distribution. Better Fruit 11:19 Mr '17
- Inspect for shippers; inspection service on fruits and vegetables established at principal markets. Weekly N L 5:6 N 28 '17
- Inspection of grocery stores and markets; with discussion. H. C. Smith. Assn Am Dairy Food & Drug Off Pro 1916:194-203
- Market news service; Bureau of markets to open several new branch offices. Weekly N L 5:4 Ag 22 '17
- Market news service for Boston. H. F. Tompson. Market Growers J 21:148-9 O 1 '17
- Markets. See weekly numbers of Breeder's gazette
- Modern market methods. A. L. Clark. il N J Ag Dept B 7:219-46 '17
- Municipal, farmers' and auction markets. C. M. Arthur. il Penn State F 10:31+ F '17
- Northwestern market demands. W: Hislop. Breeder's Gaz 69:176 Ja 27 '16
- Our weekly market letter. See weekly numbers of Wallaces' farmer
- Pennsylvania's curb markets decided success. C. M. Arthur. Market Growers J 23:127-8 O 1 '18
- Practical market system for our large cities. G. V. Branch. (In Pan American scientific congress Pro., 1915, v. 3, p. 642-6) '17
- Products, prices and trade. See weekly numbers of Rural New-Yorker
- Public markets. J. W. Wentworth. 7p n.d. J. W. Wentworth, sec., Dept. of public works, New York City
- Public markets in Massachusetts. R. E. Annin, jr. il Mass Ag Bd C 84:1-23 '18
- \* Public markets: what curb markets may be expected to accomplish. W. S. Bittner. (B. v. 3, no. 11) 20p bibliog '18 Indiana Univ., Ext. div., Bloomington
- Reducing living costs in Europe. A. J. Stemple. il Am Coop J 13:468 Ag '18

**Markets—Continued**

Report farm produce: new service, found successful in Providence, R.I. Weekly N L 5:6 Ja 9 '18

Results of a survey of state marketing activities throughout the United States. (Doc.—Markets 3.) 7p '16 U S Ag

Sanitation of food stores and markets. D. B. Armstrong. J Home Econ 8:577-83 N '16

Small city markets. Weekly N L 5:8 Ag 5 '17

Speculators at the markets. C. E. Collins. Wallaces' F 42:953 Je 22 '17

Terminal market in New York; cutting out the profitless parasites. Rural N Y 76:15 Ja 6 '17

3d annual report for year ending Dec. 31, 1916. 26p '17 N.Y. Dept. of foods and markets, Albany

Washington's new office of markets. Better Fruit 11:10 My '17

See also Commission merchants; Live stock markets

**Bibliography**

Bibliography on public markets. C. C. Williamson. (In Summary of the market situation in Boston, p. 143-70) '16 City planning bd., Boston, Mass.

**Laws**

Act in relation to farms and markets, constituting chapter sixty-nine of the consolidated laws. (Ch. 802, P. L. 1917) 39p '18 N.Y. Dept. of farms and markets, Albany

Farms and markets law. Greater New York (Merchants' Association, Woolworth bldg., N.Y.) 6:13-14 Je 25 '17

Laws governing farm markets department as amended and passed by the 14th session of the Idaho legislature 1917. 16p postage 2c '17 Idaho Dept. of farm markets, Boise

Market bill completed; food and market bill in New York legislature. N Y Prod R 43:597+ F 14 '17

Market bill progress; milk dealers protest and criticize. N Y Prod R 43:1022 Ap 18 '17

Market commission's report; recommendations for N.Y. state legislation. N Y Prod R 43:412 Ja 3 '17

Market laws for Massachusetts. Rural N Y 75:276 F 19 '16

Markets and warehouse law of the state of Texas. (House bill no. 97) 24p '17 Von Boeckmann-Jones co., Austin, Tex.

New markets bill being prepared to take the place of Wicks-Grant measure. N Y Prod R 43:961 Ap 11 '17

Statement of Harris Weinstock, state market director in answer to the criticisms of Senator Wm. E. Brown of Los Angeles, relative to the administration of the California state market law. 48p '17 State market director, San Francisco, Cal.

Wicks bill features. N Y Prod R 43:868-9 Mr 21 '17

Wicks bill hearing. N Y Prod R 43:760 Mr 7 '17

Wicks bill hearing; local trade goes to Albany to protest. N Y Prod R 43:833 Mr 21 '17

**Markets, Farmers'**

Curb market in Lancaster, Pa. L. Rupp. Rural N Y 77:892 Ji 20 '18

Farmers' roadside markets. C. M. Arthur. Market Growers J 23:107-8 S 15 '18

Vegetable growers' market. E. I. Farrington. Rural N Y 77:67 Ja 19 '18

**Markets, Municipal**

Can farmer and consumer cooperate? A. Grif-fen. Ag Digest 3:7-8 Ji '18

City markets; symposium. Market Growers J 21:153+ O 1 '17

City markets; how to start and operate a city public retail market. F. T. Stockton. Ind Univ Ext B v 2:1-16 Ji '17

Community market. L. P. Jefferson. bibliog il map Mass Ag Ext B 21:1-22 '18

Conservation via the municipal market. M. C. Kumler. il Am Coop J 14:22 S '18

Developing a local market. F. H. Ballou. Ohio F 137:10-11 Ja 1 '16

Direct from producer to consumer via municipal markets. A. L. Clark. il N J Municipalities (Bur. of municipal information, Princeton, N.J. 20c) 2:113-16 Ap '18

\* Establishment and operation of municipal public markets. Monthly R (U. S. Bur. of Labor Statistics, Washington, D. C.) 5:131-5 Ji '17

Failure of municipal markets in Wisconsin. Market Growers J 20:156 F 15 '17

Food direct from producer to consumer, Albany, N.Y. J. R. Watt. il Am City (Tribune bldg., N.Y. 35c) 18:315-16 Ap '18

Ideal gardeners' market. R. H. Adams. Market Growers J 20:375 My 1 '17

Local production and distribution from the war garden. L. Theiss and M. Theiss. il Century (353 4th av, N.Y. 35c) 96:398-403 Ji '18

Market laws for Massachusetts. Rural N Y 75:276 F 19 '16

Municipal markets in New Jersey. A. L. Clark. Modern City (43 Franklin bldg., Baltimore 35c) 3:32-3 F '18

Municipal markets of the Northwest. Mrs F. Calkins. J Home Econ 8:343-7 Ji '16

Municipal terminal markets. C. C. Miller. (In Pan American scientific congress Pro., 1915, v. 3, p. 720-9) '17

Municipality of Buenos Aires has been authorized by the executive to install a market of fruit, fish and vegetables in the government warehouses in the port of the capital. The purpose of this arrangement is to reduce the price of foodstuffs to consumers. (Commerce Reports, Ap 11 '17)

Public markets voted a success. Ag Digest 1:299 F '17

Successful municipal markets. M. C. Kumler. il Nat Stock & F 42:264 Je 8 '18

Successful public market at Eugene, Oregon. A. G. B. Bouquet. Market Growers J 18:107 F 1 '16

Suggestions on the establishment of public markets. A. L. Clark. N J Ag Dept C 10 4p '17

Summary of the market situation in Boston. 175p '16 City planning bd., Boston, Mass.

When the men fell down. G. F. Stratton. Country Gent 82:1334 Ag 25 '17

Markets and rural organization, Office of. See United States—Markets, Bureau of

**Marl**

Agricultural value of greensand marl. A. W. Blair. map N J Ag Exp C 61:1-13 n.d.

Greensand marls of the Eastern states. G. H. Ashley. map Am Fert 47:25-30 O 13 '17

Marl, a sweetener. O. A. Baer. Purdue Ag 12:495 My '18

Marl as a sweetener. S. D. Conner. Country Gent 83:28 Ap 6 '18

Notes on the greensand deposits of the eastern United States. G. H. Ashley (U.S. Geol. Survey B. 660-B 27-58p '17). Exp Sta Record 38:122-3 F '18

**Marmalade**

Jellies and marmalades from citrus fruits. W. V. Cruess. il Cal Ag Exp C 146:1-8 '16

Jellies, preserves and marmalades. A. E. Harris and S. W. Partridge. Florida State College for Women B 18:1-29 '18

Marmalade and jam; less sugar and some salt. I. E. Lord. J Home Econ 9:375 Ag '17

Marmalades, jams and jellies to carry you through till summer. M. H. Talbott. il Country Gent 81:86 Ja 8 '16

Sending Tommy his marmalade. D. McIlwraith. il Country Life 34:64 Ag '18

Vegetable marmalades. Weekly N L 5:5 O 31 '17

Marmara. See Apple-twigg miners

Marquis wheat. See Wheat

**Marriage**

Coeducation and marriage. J Heredity 8:43-5 Ja '17

Equal partners. E. White. Ohio F 141:90 Ja 19 '18

Great unmarried. J Heredity 7:557-61 D '16

What to say about marriage? A. E. Hamilton. J Heredity 7:77-80 F '16

See also Consanguinity

**Marriage customs**

Quaint bit of sentiment. G. T. K. Norton. il Am For 23:668 N '17



Marriage statistics. See Vital statistics

**Marsh lands**

- Bet you can't lose. R. V. Newcomb. Farm Eng 5:3 O '17
- Bill to promote reclamation of arid and swamp lands. Irr Age 32:59-60 F '17
- Bringing swamp land to fertility. il Rural N Y 77:719 My 25 '18
- Choice acres from swamp land. O Judd Farmer 60:4 Ap 8 '16
- Debate: resolved, That arid- and swamp-land reclamation can be undertaken more advantageously by government activity than by private enterprise. W. R. King; C. R. Graves. Irr Age 32:54-8,70-6 F-Mr '17
- Development of peat swamps. R; Reynolds. il J Ag New Zealand 15:9-15 Jl '17
- Development of swamp land at Ruakura. A. W. Green. il J Ag New Zealand 16:1-6 Ja '18
- Drainage of white land and other wet lands in Oregon. W. L. Powers; T. A. H. Teeter. il maps Ore Ag Exp B 137:1-80 '16
- Draining and cultivation of the Poitevin marsh, France. J. Welsh. Int R Sci & Prac Ag 8, no 3:347-9 Mr '17
- Estuarial lands of the North Island. D. M. Ross. J Ag New Zealand 14:125-32 F '17
- Fodder crops on reclaimed swamp lands. W. J. Spafford. J Dept Ag S Australia 21:480-92 Ja '18
- Forest succession and rate of growth in sphagnum bogs. G. B. Rigg. il J For 15:726-39 O '17
- Observations on the flora and fauna of flooded fenland. F. R. Petherbridge. il J Ag Sci 7:508-11 Ap '16
- Physical conditions in sphagnum bogs; data collected by H. J. Cox. G. B. Rigg. Bot Gaz 61:159-63 F '16
- Reclaiming a thousand acres. R. S. Dunham. Farm Eng 5:7 S '17
- Reclaiming swamp land. map Wallaces' F 41:1562 D 1 '16
- Reclaiming the swamp. Weekly N L 5:4 Ag 8; 5 Ag 15 '17
- Reclamation of bog land in Ireland. Int R Sci & Prac Ag 7, no 5:649-50 My '16
- Reclamation of peat bogs by gravelling. J. Orchiston. J Ag New Zealand 17:9-11 Jl '18
- Reclamation of swamp lands. R. B. Henchen. il Penn State F 10:171-2 N '17
- Reclamation of tidal-swamp lands in North Auckland. R. Rowan. J Ag New Zealand 15:328-31 D '17
- Report on the water supply in the cranberry bogs of New Jersey. F. O. Church. N J Ag Exp Rep 1916:343-66 '17
- Report upon the black and boggy swamps drainage district, Hampton and Jasper counties. S. C. F. G. Eason. maps U S Ag B 114:1-21 '14
- Vegetation on swamps and marshes as an indicator of the quality of peat soil for cultivation. T. J. Dunnewald. Am Soc Agron J 9:322-4 O '17
- Wet lands of southern Louisiana and their drainage. C. W. Okey. il maps U S Ag B 71:1-82 '14; Same revised. U S Ag B 652:1-67 '18
- Working a farm double shift. H. W. Collingwood. il Country Life 30:40-1 Jl '16
- See also Aquatic plants; Bog water; Drainage; Everglades; Reclamation of land

**Marshall, Duncan M'Lean, 1872-**

Portrait. Breeder's Gaz 69:421 F 24 '16

**Martinique.** See Agricultural credit—Martinique

**Martinsburg (West Virginia) fruit exchange**

Martinsburg, W. Va. fruit exchange. H. L. Alexander. Green's Am Fruit Grower 37:9 D '17

**Mary Saunders' hired man; story.** H. C. Bennett. Am Coop J 13:60-4, 98-9 O-N '17

**Maryland**

See also subhead Maryland under special subjects, e.g. Agriculture—Maryland, Forests and forestry—Maryland

**Conservation commission**

2d annual report, 1917. 80p '18 Md. Conservation comm., 512 Munsey bldg., Baltimore

**Description and travel**

Maryland, my Maryland. W. C. Barnes. il Breeder's Gaz 70:312 Ag 31 '16

**Forestry, State board of**

\* Report for 1916 and 1917. 86p il Maryland State forester, Baltimore

**Law**

Won't-works must work in Maryland. W. H. Dean. il Country Gent 82:1476-7 S 29 '17

**Maryland agricultural experiment station**

29th annual report, 1915-1916. H. J. Patterson. il Md Ag Exp Rep 1915-1916:v-xii, 1-92 '16

30th annual report, 1916-1917. il Md Ag Exp Rep 1916-1917:1-347 '17

**Maryland agricultural society**

Report of the Maryland agricultural society including the reports of the State horticultural society, Crop improvement association, State dairymen's association and State beekeepers' association. Md Ag Soc Rep 1916, v 1:1-343 '17 Maryland agricultural society, T. E. Symons, sec., College Park, Md.

**Maryland crop improvement association**

Report of the 9th annual meeting, Nov. 16, 1916. Md Ag Soc Rep 1916, v 1:209-43 '17

**Maryland state beekeepers' association**

Report of the 8th annual meeting, Nov. 18, 1916. il Md Ag Soc Rep 1916, v 1:296-313 '17

**Maryland state college of agriculture**

**Extension service**

3d annual report for the year ending June 30, 1917. il Md Ag Ext Rep 1917:1-31 '18

**Maryland state dairymen's association**

11th annual meeting, Nov. 17, 1916. Md Ag Soc Rep 1916, v 1:249-95 '17

**Maryland state fair**

State fair, Timonium. il Hoard's D 56:514 N 8 '18

**Maryland state horticultural society**

19th annual meeting, Baltimore, Md., Nov. 14-18, 1916. Md Ag Soc Rep 1916, v 1:101-208 '17

Summer meeting, Hancock, Aug. 29-30. Nat Stock & F 40:605 S 9 '16; Ohio F 138:254 S 16 '16

**Maryland vegetable growers' association**

Maryland growers organize. Market Growers J 22:192 Mr 1 '18

**Masonry**

Farmer his own builder. H. A. Roberts. Country Gent 82:93-4, 312 Ja 20, F 17 '17

**Massachusetts**

See also subhead Massachusetts under special subjects, e.g. Agriculture—Massachusetts, Dairying—Massachusetts

**Agriculture, State board of**

64th annual report, 1916. Mass Ag Bd Yearbook 1916, pts 1 & 2:1-246, 1-279 '17

65th annual report, 1917, il plans Mass Ag Bd Yearbook 1917, pt 2:1-180 '18

**Animal industry, Commissioner of**

5th annual report, for year ending November 30, 1916. (Pub. doc. no. 98) 53p '17 Mass. Dept. of animal industry, Boston

6th annual report for the year ending November 30, 1917. (Pub. Doc. no. 98) 57p '18 Mass. Dept. of animal industry, Boston

**Apiaries, Inspector of**

7th annual report, 1916. B. N. Gates. Mass Ag Bd Yearbook 1916, pt 1:125-50 '17

**Dairy bureau**

26th annual report; also Report on the encouraging of dairying contests, 1916. P. M. Harwood. Mass Ag Bd Yearbook 1916, pt 1:151-91 '17

**Forester, State**

13th annual report, 1916. F. W. Rane. (Pub. Doc. 73) 124p il '17 Mass. State forester, Boston

**Massachusetts—Forester, State—Continued**

14th annual report, 1917. (Pub. Doc. no. 73)  
99p il '18 Mass. State forester, Boston

**Highway commission**

24th annual report for the fiscal year ending  
November 30, 1916. (Pub. Doc. 54) 291p il  
'17 Mass. highway comm., Boston

**Nursery inspector, State**

15th annual report, 1916. H. T. Fernald. il  
map Mass Ag Bd Yearbook 1916, pt 1:69-97  
'17

**Ornithologist, State**

9th annual report, 1916. E. H. Forbush. il  
Mass Ag Bd Yearbook 1916, pt 1:99-124 '17

**Massachusetts agricultural college**

Brief history of the Massachusetts agricul-  
tural college. L. B. Caswell. 72p il '17  
Mass. ag. coll., Amherst

\* Massachusetts agricultural college: Can it  
be made of more practical benefit to the  
farmers and the farming industry of the  
commonwealth by efficiency and economy  
through co-operation; the answer. C. F.  
Shirley. 12p '18 C: F. Shirley, South Dux-  
bury, Mass.

Massachusetts college; views. Country Gent  
81:205 Ja 29 '16

Report of the Commission on the investiga-  
tion of agricultural education. 61p '18  
Wright & Potter ptr. co., 32 Derne st, Bos-  
ton

Report of the Commission on the investigation  
of agricultural education in Massachusetts.  
Exp Sta Record 38:361-8 Mr '18

Work of the legislative committee investiga-  
ting the Massachusetts agricultural college  
at Amherst. School and Society (Science  
Press, Garrison, N.Y. 10c) 5:202-3 F 17 '17  
Yearbook; the Florists' and gardeners' club.  
40p il '17 M.A.C. florists' & gardeners' club,  
101 Pleasant st., Amherst, Mass.

**Bibliography**

Bibliography of the college; pt 1, The institu-  
tion. (Semicentennial pub., no. 2) 69p '18  
Mass., ag coll., Amherst

**Extension work**

Extension News is the name of a farm news  
bulletin of extension work in Massachusetts,  
the first number being issued June 15; pub-  
lished bi-monthly

**Massachusetts agricultural experiment station**

Guide to plots; plans and data relating to the  
field plots of the agricultural department.  
Mass Ag Exp 20p '16

29th annual report, January, 1917, ending the  
34th year from the founding of the station.  
(Public Doc. 31) 98p '17 Wright & Potter  
ptg. co., state printers, 32 Derne street,  
Boston

**Massachusetts dairymen's association**

Annual meeting, Springfield, Jan. 9-12.  
1917. O. A. Jamison. Hoard's D 53:135 F 16  
'17

Annual meeting, Worcester, Mass., Jan. 9.  
1918. O. A. Jamison. Hoard's D 55:54 F 1 '18

**Massachusetts forestry association**

Nineteenth annual report, 1916. (B. 119) 48p  
il '16 Harris A. Reynolds, sec., Belmont,  
Mass.

**Massachusetts horticultural society**

Transactions for the year 1916. Mass Hort  
Soc Trans 1916 (2 pts.):1-143, 144-267 '16-  
'17 Massachusetts horticultural society,  
Wm. P. Rich, sec., 300 Massachusetts av,  
Boston

Transactions for the year 1917. Mass Hort  
Soc Trans 1917 (2 pts.):1-107, 108-212 '17-'18

Transactions for the year 1918. il Mass Hort  
Soc Trans 1918, pt 1:1-101 '18 Massachusetts  
horticultural society, Wm. P. Rich, sec., 300  
Massachusetts av, Boston

**Massachusetts poultry convention**

Fourth annual poultry convention, Amherst,  
July, 1916. N. W. Sanborn. Am P Advocate  
24:720-1 S '16

5th annual convention, Massachusetts agri-  
cultural college, Amherst, July 25-7, 1917.  
Reliable F J 24:644+ O '17

**Massachusetts veterinary association**

Meeting, Springfield, Oct. 17, 1917. E: A.  
Cahill. Am Vet M Assn J 52:762-5 F '18

**Mat plants.** See Cushion plants**Matches**

War styles in matches. il Am For 23:10 Ja  
'17

**Maternity insurance.** See Insurance, Maternity**Mathematical drawing.** See Mechanical drawing**Mathematics**

Mathematics applied to the household arts.

K. F. Ball. J Home Econ 8:521-6 O '16

Mathematics on the farm. H. M. Fogelsanger.  
Breeder's Gaz 72:1266 D 27 '17

**Tables**

See also Logarithms

**Mathis, Mrs G. H.**

How the success of a woman farmer is in-  
spiring the South. Banker-F 3:11 Ja '16

**Matthews, Scott**

Egypt takes the cow cure. C. E. Gapen. il  
Country Gent 81:1499-1500 Ag 12 '16

**Matthiola.** See Stocks (flowers)**May apples**

Common medicinal plants. A. Retlas. Ohio F  
137:695 My 13 '16

Pink-flowered May-apple. P. H. Smith. Gard  
M 23:287 Je '16

**May beetles.** See June bugs**May-bugs.** See June bugs**Mayetiola destructor.** See Hessian flies**Mayview farmers' club**

How a farmers' club can help. L. Shippey. il  
Country Gent 83:12 Ja 12 '18

**Meadow fescue.** See Fescue**Meadow-foxtail midges**

Meadow-foxtail midge. A. H. Cockayne. il J  
Ag New Zealand 13:459-66 D '16

**Meadow plant bugs**

Meadow plant bug miris dolabratus. H. Os-  
born. bibliog il J Ag Research 15:175-200 O  
21 '18

**Meadows.** See Pastures and meadows**Meal snout moths**

Meal snout moth. Purdue Ag 11:37 D '16

**Meals**

Cooking and serving. N. K. Jones. Country  
Gent 81:1635 S 2 '16

Gardening time meals. Mrs M. R. Morris.  
Ohio F 137:724 My 20 '16

How to plan meals in war time. M. S. Rose  
and others. (Technical Educ. B. 33) 15p  
'17 Teachers college, Columbia univ., N.Y.

Meals and their substitutes for war purposes.  
(In Suggestions for food conservation, p.  
38-42) '17 Women's central committee on  
food conservation, St Louis

Meals for threshers. Ohio F 142:229 S 7 '18

Planning and serving meals. N. S. Knowles  
and others. il Ia Ag Ext Home Econ B 1:1-32  
'17

Planning of meals. L. McGuire. Ohio Ag Ext  
B v 12, no 3 16p '16-'17

Providing meals for threshers. C. B. Williams.  
Ohio F 138:130 Ag 12 '16

Serving meals. M. R. McPheeters. il Okla  
Ag Ext C 65 4p '17

Serving of meals. R. E. Dick. il Ohio Ag Ext  
B v 13, no 2 16p '17-'18

Setting the pace; meals for threshers. M. E.  
Bronson. Wallaces' F 43:1116 Ag 2 '18

Three delicious meals every day for the  
farmer. G. W. Carver. Tuskegee Exp B 32:1-  
13 '16

To plan three meals. Weekly N L 4:7-8 My 9  
'17

Well-planned meals. J. Vance. Neb Ag Ext  
B 48:1-20 '17

See also Diet; Menus

**Mealy bugs**

Common mealybug and its control in Cali-  
fornia. R. S. Woglum and J. D. Neuls. il  
Farmers' B 862:1-16 '17



**Mealy bugs—Continued**

- Grape mealybug. R. L. Nougaret. il Cal State Comm Hort B v 7:511-14 S '18  
Grass-feeding mealy-bugs (coccidae). T. D. A. Cockerell. J Econ Entom 9:312-13 Ap '16  
Insect parasites and predators as adjuncts in the control of mealybugs. H. S. Smith. il Cal State Comm Hort B v 6:108-14 Ap '17  
Mealy bug of the muscat grape. F. K. Howard. il Cal State Comm Hort B v 5:67-8 F '16  
Mealy bug on vines. S. F. Anderson. J Ag New Zealand 16:166 Mr '18  
Mealybug question. Cal State Comm Hort B v 6:94-5 Ap '17  
Methods for the study of mealy-bugs. G. F. Feiris. J Econ Entom 10:321-4 Je '17  
New genera and species of encyrtinae from California parasitic in mealybugs. P. H. Timberlake. il Cal Univ Pub Entom v 1, no 8 347-67p '18 (25c)  
On the life history and successful introduction into the United States of the Sicilian mealybug parasite. H. S. Smith. il J Econ Entom 10:262-8 Ap '17  
Satisfactory method of rearing mealy bugs for use in parasitic work. E. J. Branigan. il Cal State Comm Hort B v 5:304-6 Ag '16  
Some comparisons of coccus citricola and c. hesperidum. H. J. Quayle. J Econ Entom 10:373-6 Je '17

**Mealy plum aphid.** See Plum aphid, Mealy

**Measurement.** See Calipers; Forest mensuration; Hay—Measuring; Surveying; Timber—Mensuration

**Measurement of flowers.** See Flowers—Measurement

**Measures.** See Weights and measures

**Meat**

- Cattle producers and meat eaters. J. A. Rickart. Country Gent 81:1750 S 30 '16  
Control of meat. G. Soule. New Republic (421 W. 21st st, N.Y. 10c) 14:13-15 F 2 '18  
Economic use of meat in the home. C. F. Langworthy and C. L. Hunt. Farmers' B 391:1-29 '17  
Farm meat supply. Prac F 114:10 Ja 1 '18  
Immature meat. Am Vet M Assn J 49:448-50 Jl 16  
Live-stock and meat situation. L. D. H. Weld. Annals Am Academy (36th st and Woodland av, Philadelphia \$1) 78:168-75 Jl '18  
Meat for the farm table. I. C. E. Allen. il Country Gent 81:609 Mr 11 '16  
Meats: place in the diet; curing and preserving; use of substitutes. (Ser. 2, no. 10) 29p '17 Winthrop normal and industrial college, Rock Hill, S.C.  
Mobilizing the Arctic. C. Leden. Outlook (381 4th av, N.Y. 10c) 117:413-14 N 14 '17  
Products of the farm slaughter house, sausage kitchen and smoke house. A. Haring and W. Hislop. Wash Ag Ext Pub Ser 1,no 10:1-23 '16  
Thrift in meat consumption. J Ag (Quebec) 20:v Ag '16  
Waste of meat in the home. S. Usher. il Cornell Reading Course Farm Home 109:1-40 '16

See also Bacon; Beef; Cookery—Meat; Horse flesh; Meat, Salted; Mutton; Palates as food; Pork; Slaughter-houses; Smoke-houses; Veal; Venison; also headings beginning Meat

**Analysis**

- Meat and meat products. bibliog Assn Offic Ag Chem J 2,no 3,pt 2:271-86 N '16  
Report on meat and fish. E. D. Clark. Assn Offic Ag Chem J 2:229-30 F '17  
Report on separation of nitrogenous substances. A. D. Emmett. bibliog Assn Offic Ag Chem J 2,no 1, pt 1:22-8 My '16

**Marketing**

- Changing market conditions. E: L. Burke. O Judd Farmer 60:31 F 5 '16  
Direct selling of farm-grown meats. W: H. Dean. il Country Gent 81:1645 S 9 '16

- Meat situation in the United States. pt 5, Methods and cost of marketing live stock and meats. L: D. Hall and others. il maps U S Ag Report 113:1-98 '16  
Slaughtering and marketing mutton and lamb. K. J. Seulke. il N Y Ag Dept B 96:115-27 Je '17

**Preservation**

- Curing and smoking meats. G. V. Gray. il Country Gent 83:30-1 N 23 '18  
Curing meat on the farm. R. H. Williams. Ariz Ag Exp Timely Hints 129:1-7 '17  
Curing of meat and meat products on the farm. K. J. Seulke. Cornell Reading Course 119:147-64 '16  
Home canning and curing of meats. M. A. Hauser. N J Ag Ext B v 1, no 15 11p '17  
Home cured meat. C. L. Chambers. il Okla Ag Ext C 46 4p '17  
Home curing of meat. H. S. Elliot. Fla Ag Dept B v 26:9-11 O '16  
Home curing of meats and their preparation. M. M. Haynes. il Colo Ag Ext B 129:1-12 '17  
How to smoke meats. Prog F 31:1361 N 25 '16  
Meat-curing on southern farms. S. R. Winters. Breeder's Gaz 72:784 N 1 '17  
Meat preservation on the farm. J. C. Marshall. J Dept Ag Victoria 14:596-601 O '16  
Packing meat in snow. A. M. Paterson. Wallaces' F 42:93 Ja 19 '17  
Preparing meats. A. M. Paterson. Kimball's D F 15:67 F 1 '17  
Preservation of food products by drying. G. C. Shadwell. il Transactions of the Am Soc of Heating and Ventilating Eng (29 W. 39th st, N.Y.) 23:537-44 '17  
Preservation of meat. A. Boss. il N D Ag Ext B 12:1-22 '17  
Shrinkage of meat during curing process. F. H. Jeter. Prog F 31:150 Ja 29 '16  
Slaughtering and curing pork on the farm. W. M. Burson. il Ga Ag Coll (Ext) C 33 8p '16  
Smoking meat on the farm. H. C. Campbell. il Prac F 114:305 S 15 '18  
Suggestions on preservation of meat. Mich Ag Ext Course Notes 19:1-4 '18  
Summer care of the meat. Ohio F 139:678 My 12 '17

See also Beef—Preservation; Meat canning; Pork—Preservation; Smokehouses

**Prices**

- Fresh beef. (B. no. 228, Retail prices, 1907-1916, p. 33-8) '17 U.S. Bur. of labor statistics, Washington, D.C.  
Meat is costing too much, admits Armour, and he tells why. Current Opinion (63 W. 36th st, N.Y. 25c) 63:427 D '17  
Meat (maximum prices) order, 1917. J Bd Ag 24:675-7 S '17  
Meat prices in France. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1156 My '18  
Meat prices to be stabilized and uniform. J. P. Cotton. Hoard's D 55:142 F 15 '18  
Price fixing by the government. H. Hoover. Am Sheep B & W 38:388 Je '18  
Stockman and the packer. L. C. Swift. il Wallaces' F 41:1659 D 22 '16  
Will the price of meat be fixed? Am Fert 48:37-8 Ap 27 '18

**Storage**

- Desiccation of meat resulting from freezing and cold storage. K. Freiman. Int R Sci & Prac Ag 8,no 9:1312-14 S '17  
Saving of meat-storage and shipping space. il J Ag New Zealand 15:16-19 Jl '17

**Meat, Salted**

- Coloring matter of raw and cooked salted meat. R. Hoagland. bibliog il J Ag Research 3:211-26 D '14

**Meat, Substitutes for**

- Meat substitutes. Ohio Ag Ext B v 13,no 8 19p '17-18  
Meat substitutes. G. Erickson. Md Ag Ext Letter no 31 4p n.d.  
Substitutes for wheat and meat. J. Whitacee. (In Ohio vegetable growers' assn. directory, 1918, p. 13-14) n.d. Ohio vegetable growers' assn., Columbus

**Meat canning**

- Canned meat and meat substitutes. Mrs W. E. Holcomb. *Rural N Y* 75:630 Ap 15 '16
- Canned poultry. *Weekly N L* 5:7 S 26 '17
- Canned rabbit for summer lunch. F. L. Snow. *Country Gent* 83:28 Ag 24 '18
- Canning and curing meats. *Rural N Y* 75:11 Ja 1 '16
- Canning everything but the moo; directions for putting up meat in glass or tin. F. P. Lund. *il Country Gent* 83:50-1 Ap 20 '18
- Canning meat and fish with steam pressure canner. M. B. Reeves. *Miss Ag Ext Home Econ B* 6 8p '17
- Canning meat by the cold-pack method. C. Lommel. *il Purdue Ag* 13:122-4 D '18
- Canning meats and soups. *Prog F* 31:685 My 20 '16
- Canning meats and vegetables in steam pressure canner. S. W. Partridge. *il Florida State College for Women B* 13:1-18 '17
- Canning of meats. G. E. Farrell. *Ill Farmers Inst Household Sci* 1917:202-7 '18
- Canning quantities of beef. S. Trapp. *Ohio F* 141:509 Ap 6 '18
- Chicken by the quart. *il Country Gent* 82:2074 D 29 '17
- Cold-pack methods with poultry, meats and fish. *Country Gent* 81:1708 S 16 '16
- Difficult canning problems solved. *il Rural N Y* 77:458 Mr 23 '18
- Experiences in canning. *Rural N Y* 75:470 Mr 18 '16
- Fresh meats via steam pressure canner. M. G. Feint. *il Rural N Y* 76:226 F 17 '17
- Home-canned meats. G. Dietz. *il Fruit-Grower* 28:125 F 15 '17
- Home canning of meats. *Okla Ag Ext C* 63:1-8 '17
- Home canning of meats and sea foods with the steam-pressure canner. F. P. Lund. (Doc. 80) 28p *il '18 U. S. States relations service, Washington, D.C.*
- Let us start campaign for chicken in the jar. Mrs A. Stocker. *il Reliable P J* 24:518+ Ag '17
- Make the most of a roast; canned soups. A. Mills. *Country Gent* 81:1099 My 20 '16
- Notes on meat canning. *Rural N Y* 76:1219 O 20 '17
- Successful meat canning. Mrs A. T. Welsh. *Rural N Y* 75:470 Mr 18 '16
- Waste of meat in the home. S. Usher. *il Cornell Ag Exp Rep* 1916, v 2:1021-6 '17
- Winter canning. M. G. Feint. *O Judd Farmer* 60:33 Ja 22 '16
- Winter meat for summer use. *Nat Stock & F* 40:1124 Ja 27 '17
- Meat clubs**
- Community meat clubs. *Wallaces' F* 41:266 F 18 '16
- Coöperative beef ring and the summer meat supply. P. C. Henry. *Country Life* 32:160 My '17
- Farmers' beef club. P. F. Trowbridge. *il Mo Ag Exp C* 85:1-32 '18
- Farmers' beef ring. W. H. Peters. *N D Ag Ext B* 5:1-8 '16
- Neighborhood beef clubs. E. C. Johnson. *O Judd Farmer* 61:6 Ag 12 '16
- Successful beef ring. *Wallaces' F* 42:154 Ja 26 '17
- Meat demonstrations**
- Iowa meat demonstration. H. W. Vaughan. *Breeder's Gaz* 71:871 Ap 26 '17
- Meat industry and trade**
- Address before the National wool growers convention, Salt Lake City. L. F. Swift. *Am Sheep B & W* 38:83-4 F '18; Same. *Nat Wool Grower* 8:19-20 F '18
- American meat packers' part in the winning of the war. F. E. White. *Coop Manager & F* 8:75+ N '18
- Beef cattle trade in Canada. H. S. Arkell. (*In Report, Live stock branch, 1916, p. 62-6*) '17
- Ontario ag. dept., Toronto, Canada
- Beef production now at low ebb. J. E. Poole. *Field* 11 28:494+ J1 '18
- Beef trust's system is laid bare. R. L. Harmon. *Nonpartisan Leader* (Box 575, St Paul, Minn. \$2.50 per yr.) 6:4+ F 4 '18
- Benefits to the packer from exclusive competitive buying. *Coop Manager & F* 6:89-90 Ja '17
- Business of meat production. W. C. Illick. *Breeder's Gaz* 71:1014 My 17 '17
- Cattle raising and the meat industry in southern Brazil. R. Porchat. (*In Pan American scientific congress Pro., 1915, v. 3, p. 591-6*) '17
- Cattle situation. C. H. Herr. *Ohio F* 140:166 S 1 '17
- Condemnations cost pretty penny; diseased animals factor in H C of L. J. Carroll. *O Judd Farmer* 62:3 Ap 21 '17
- Contracting meat animals for future delivery. J. G. Imboden. *Breeder's Gaz* 71:1068 My 24 '17
- Contraction of meat imports. *Breeder's Gaz* 69:128 Ja 20 '16
- Country buying by packers. C. B. Hinemann. *Nat Wool Grower* 7:16-18 Ja '17
- Decrease in beef exports. *Breeder's Gaz* 70:882 N 9 '16
- Economies of the large packer. L. D. H. Weld. *Cornell Countryman* 15:520+ Je '18
- Exorbitant war profits. *Wallaces' F* 43:1004 J1 5 '18
- \* Exports of meat from the River Plate. (*Commerce Reports no. 268*) p 611 (N 14) '18 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Farmers cut meat cost by cooperative butcher shop. *Weekly N L* 6:15 S 11 '18
- Federal market news service of livestock and meats. L. D. Hall. (*In Nat. conf. on marketing and farm credits, 1916, p. 248-61*) \$2 '17
- C. W. Holman, sec., Madison, Wis.
- Federal market reports on live stock and meats. S. W. Doty. *la Ag Bd Yearbook* 1916: 429-32
- Free markets needed. E. C. Lasater. *Country Gent* 82:1065 Je 23 '17
- Government uses packers to feed allies. L. D. H. Weld. *Am Coop J* 13:439 J1 '18
- Heavy beef for the navy. S. O. Rice. *il Country Gent* 83:9 N 2 '18
- Increased meat production from the producers' standpoint. R. H. Monier. *Swine World* 5:22 Mr '18
- Investigating the packers. *Wallaces' F* 41:601 Ap 14 '16
- Investigation of beef industries; hearings before House committee on judiciary on H. Res. 148 (April 3, 4, 5, 6, 14, 26 and June 6, 1916). 545p '16 Apply to congressmen
- Live stock and meat trade prospects. *Breeder's Gaz* 73:12 Ja 3 '18
- Livestock industry and the war. J. R. Brown. *Swine World* 5:18+ Mr '18
- Livestock tangle in France. W. H. Dean. *il Country Gent* 83:8-9 J1 6 '18
- Market reports for meat. *Weekly N L* 4:4 Mr 7 '17
- Meat industry from its inception, and its possibilities under modern conditions. H. A. Jastro. *il Cal Ag Bd Rep* 1917:xv-xvi '18
- Meat packing in South America. (*Commerce Reports no. 144*) p 1094-9 (Je 20) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Meat situation. C. E. Collins. *Wallaces' F* 43:762 My 3 '18
- Meat situation. O. C. E. Matthies. *Wallaces' F* 43:956 Je 21 '18
- Meat situation in the United States. 5 pts *il maps U S Ag Reports* 109-113 '16; Same cond. (pt 1) *Int R Sci & Prac Ag* 8,no 3:465-8 Mr '17
- \* Our daily meat. E. Wildman. *Forum* (118 E. 28th st, N.Y. 25c) 60:581-91 N '18
- Packer on the meat situation. F. S. Hayward. *Breeder's Gaz* 72:205-6 Ag 16 '17
- Packers are people; brief biographical sketches of the stalwart pioneers who founded the great American packing industry. L. L. Heller. *il Field* 11 28:559-63+ Ag '18
- Packers' trust. *Wallaces' F* 41:633 Ap 21 '16
- Plight of the packer. L. D. H. Weld. *Wallaces' F* 43:574 Mr 29 '18
- Present status of livestock industry. T. W. Tomlinson. (*In Nat. conf. on marketing and farm credits, 1916, p. 212-19*) \$2 '17 C. W. Holman, sec., Madison, Wis.



**Meat industry and trade—Continued**

- Rapid progress of Brazil as a meat producing and exporting country. *Econ World* (128 Water st., N.Y. 25c) n s 13:268 F 24 '17
- Rumors around the stock yards. J. M. Carroll. *O Judd Farmer* 64:525 My 18 '18
- Seeing Armour's. 47p il n.d. Armour & co., Chicago
- Selling direct to the packer. C. G. Cockerill. *Ia Ag Bd Yearbook* 1916:395-8
- Situation at the live stock markets. E. L. Burke. *Wallaces' F* 41:1658 D 22 '16
- Southwestern stock-raiser's viewpoint. *Breeder's Gaz* 72:139 Ag 2 '17
- Still opposing entry of store cattle. *Breeder's Gaz* 72:278 Ag 30 '17
- Stockman and the packer. L. C. Swift. il *Wallaces' F* 41:1659 D 22 '16
- Studying the meat packers' business. W. H. Dean. *Country Gent* 82:1653 O 27 '17
- War and our meat supplies. J. A. Rickart. *Country Gent* 82:1024 Je 16 '17
- What about the packers? W. Kent. Public (122 E. 37th st., N.Y. 10c) 21:530-1 Ap 27 '18
- When meat is wanted most. G. Gusler. *Breeder's Gaz* 72:1034 D 6 '17
- Where does the meat maker get off? W. L. Nelson. il *Country Gent* 81:823-4+ Ap 15 '16
- Why a federal investigation of the livestock industry? D. B. Heard. (*In Nat. conf. on marketing and farm credits*, 1916, p. 220-3) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Why investigate the livestock industry? E. L. Burke. (*In Nat. conf. on marketing and farm credits*, 1916, p. 191-8) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Why probe the livestock industry? A. E. de Ricques. (*In Nat. conf. on marketing and farm credits*, 1916, p. 223-37) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Why the cow jumped over the moon. B. N. Timmons. il *Country Gent* 81:1535 Ag 19 '16
- See also Live stock markets; Live stock trade; Meat; Packing houses

**Regulation**

- Commerce du bétail et des produits animaux. *Int Yearbook Ag Leg* 1916:268-317 '17
- Federal trade commission and the packers. *Wallaces' F* 43:1409 O 4 '18
- General regulations governing licensees operating stock yards, or handling or dealing in live stock in or in connection with stock yards. *U S Ag C* 116:1-14 '18; Same cond. *Coop Manager & F* 7:90 Ag '18
- Industrie des produits animaux. *Int Yearbook Ag Leg* 1916:721-61 '17
- Investigate meat packers; Federal trade commission continues probe in Chicago. *N Y Prod R* 45:637 Mr 6 '18
- Labor award in packing-house industries. *Monthly R* (U. S. Bur. of labor statistics, Washington, D. C.) 6:1163-75 My '18
- Meat-food-products establishments; licensing and regulation. (Pamph. no. 778) 4p 1c '17 Committee on license, Chicago city council
- Meat packers censured; severely criticised in report of Federal trade commission. *N Y Prod R* 46:563+ Ag 14 '18
- Meat—production, care, and sale. (*In Municipal ordinances*, 1916, p. 183-216) '17 U.S. Pub. health service, Washington, D.C.
- Packers' comments upon the report and recommendations of the Federal trade commission. *N Y Prod R* 46:595 Ag 21 '18
- President's proclamation requires buyers for packers to obtain federal licenses. *Weekly N L* 6:3 S 25 '18
- \* Rejoinder of Swift & company to the statement of the Federal trade commission. 28p '18 Swift & co., Union stock yards, Chicago; Abstract. *Am Sheep B & W* 38:591 S '18
- Reply of Swift & company to questions submitted July 23, 1917, by the Federal trade commission. 35p '17 Swift & co., Chicago
- Swift & co.'s answer to report of Federal trade commission concerning the meat packers' business. *N Y Prod R* 46:706 S 11 '18

**Statistics**

- \* Argentine meat consumption and export. R. S. Barrett. (Commerce Reports no 269) p 629-31 (N 15) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- \* Beef situation; and pork situation, Sept. 1918 compared with Sept. 1917, prices, exports, etc. (*In Official statement* no. 7, p. 30-1) '18 U.S. Food administration, Washington, D.C.
- \* Beef situation; pork situation, July 1917-March 1918. (*In Official statement* no. 1, p. 8-9) '18 U.S. Food administration, Washington, D.C.
- Census of manufactures: 1914; slaughtering and meat packing. I. K. Lane. 25p '17 U.S. Bur. of the census, Washington, D.C.
- Commercial stocks of cured meats and fish, July 1. *U S Food Surveys* 2:1-12 S 30 '18
- Commercial stocks of meat and meat products, Jan. 1. *U S Food Surveys* 1:1-31 Je 29 '18
- Commercial stocks of miscellaneous animal food products in the United States on August 31, 1917; hams, bacon and shoulders, salt pork, salt beef, salt fish, and condensed milk. *U S Ag C* 101:1-19 '18
- Exports of frozen, chilled and preserved meat; Argentina, Brazil and New Zealand, Australia. Doc Leaflets 1, no 3:38-40 S '17
- \* Meat situation; July 1917-April 1918. (*In Official statement* no. 2, p. 14) '18 U.S. Food administration, Washington, D.C.
- \* Meat situation; July 1917-May 1918. (*In Official statement* no. 3, p. 14) '18 U.S. Food administration, Washington, D.C.
- \* Meat situation; July 1917-July 1918. (*In Official statement* no. 4, p. 18) '18 U.S. Food administration, Washington, D.C.
- \* Meat situation; July and Aug. 1917 compared with July and Aug. 1918. (*In Official statement* no. 5, p. 27-8) '18 U.S. Food administration, Washington, D.C.
- Our meat production increasing. *Nat Wool Grower* 8:16 Ja '18
- Meat inspection**
- Décret portant réglementation du fonctionnement de la section d'inspections départementales de police animale à l'Uruguay. *Int Yearbook Ag Leg* 1916:685-6 '17
- Department begins grading of beef for military use under new specifications. *Weekly N L* 6:11 N 27 '18
- Economic importance of the federal inspection of meats. G. Ditewig. *U S Ag Yearbook* 1915:273-80
- Federal meat inspection service. V. A. Moore. il *Field H* 27:614 Ag '17
- Keeping tab on slaughterhouses. J. M. Carroll. *O Judd Farmer* 61:3 N 11 '16
- Meat inspection. J. G. Jervis. *Am Vet M Assn J* 52:263-7 D '17
- Meat-inspection service of the United States Department of agriculture. G. Ditewig. il *U S Ag Yearbook* 1916:77-97; Same. Separate 714
- Municipal meat inspection. A. E. Merry. *Am Vet M Assn J* 48:611-13 F '16
- Necessity for adequate meat inspection laws for the rural districts. C. S. Chase. *Am Vet M Assn J* 51:396-402 Je '17
- Notices regarding meat inspection. (Service and regulatory announcements—Bur. of animal industry 121) p 48-53 '17 U S Ag
- Reports of Drs Veranus A. Moore, Mazýek P. Ravenel, and William T. Sedgwick upon the federal meat inspection. *U S Ag C* 58:1-10 '16
- Statistics**
- Municipal meat inspection in N.Y. state cities; tabulation. N.Y. state bur. municipal information. Rept. 251 6p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 60c)
- Number of establishments and total number of animals inspected at slaughter. See United States Department of agriculture Yearbooks
- Meat inspectors' association of Canada.** See Dominion veterinary meat inspectors' association of Canada

- Meat meal.** See Feeding and feeding stuffs—Meat meal
- Meat products**  
 Bouillon cubes: their contents and food value compared with meat extracts and home-made preparations of meat. F. C. Cook. U S Ag B 27:1-7 '13
- Meat supply**  
 America's meat supply. A. Fisher. Yale Review (Yale Publishing Association, New Haven, Conn. 75c) 6:806-22 J1 '17  
 Animal disease and our food supply. E. B. Mitchell. il maps U S Ag Yearbook 1915: 159-72
- \* Argentine meat consumption and export. R. S. Barrett. (Commerce Reports no. 269) p 629-31 (N 15) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Arrêté n. 5110 concernant l'approvisionnement en viande en Allemagne. Int Yearbook Ag Leg 1916:272-6 '17
- Bad for cattle feeders. J. R. Brown. O Judd Farmer 64:19 Mr 2 '18
- Beef production for New England. S. R. Morrison. il Rural N Y 75:547-8 Ap 1 '16
- Commercial stocks of miscellaneous animal food products in the United States on August 31, 1917; hams, bacon and shoulders, salt pork, salt beef, salt fish, and condensed milk. U S Ag C 101:1-19 '18
- Conservation of breeding stock. Am Sheep B & W 37:406-10 J1 '17
- Conservation slaughter; with discussion. W. W. Dimock. Am Vet M Assn J 53:221-30 My '18
- Contracting for meat production. E. Davenport. Breeder's Gaz 71:869 Ap 26 '17
- Crisis in meat production. J. E. Poole. Field 11 28:160+ Mr '18
- Dean Curtiss discusses cattle outlook. O Judd Farmer 64:3 Ap 13 '18
- Décret n. 1685 de la lieutenance portant des dispositions pour réglementer la consommation de la viande en Italie. Int Yearbook Ag Leg 1916:304-7 '17
- Eat more lamb and fix wool prices. F. J. Hagenbarth. Am Sheep B & W 38:79-80 F '18
- Favors use of lamb. F. M. Rothrock. Nat Wool Grower 7:24 Ag '17
- Future market for beef; there is at least one reason why cattle raisers should rejoice. J. E. Pickett. il Country Gent 83:12-13+ Ap 20 '18
- Herds of Europe have been diminished. D. F. Houston and H. Hoover. Coop Manager & F 7:74-5 O '17
- How shall we have meat? G: F: Stratton. Country Gent 83:3-4+ Mr 9 '18
- Hurting the sheep business. J. E. Poole. Nat Wool Grower 7:17 Ag '17
- Increased meat production from the producers' standpoint. R. H. Monier. Swine World 5:22 Mr '18
- Interview with H. C. Hoover. Reliable P J 24:663+ O '17
- Lamb boycott. Nat Wool Grower 7:35 Ag '17
- Lamb prospect. W. R. Smith. Nat Wool Grower 8:26 J1 '18
- Lambs should be eaten. F. A. Ellenwood. Nat Wool Grower 7:23-4 O '17
- Larger meat supply is essential—how Uncle Sam will mobilize it. Banker-F 4:7 S '17
- Livestock as a war factor. Ag Digest 2:922 Ap '18
- Livestock policy of food administrator. J. P. Cotton. Swine World 5:27 Mr '18
- Live stock situation during the great war. J. R. Brown. Coop Manager & F 7:98-9 F '18
- Loi approuvée par la conseil de l'empire et par la Douma, concernant les mesures à prendre pour la réduction de la consommation de la viande et des produits de la viande du gros bétail bovin, des veaux, des moutons, des agneaux, des porcs et des cochons de lait en Russie. Int Yearbook Ag Leg 1916:309-10 '17
- \* Meat. New Statesman (10 Great Queen st, Kingsway, London 6d) 10:466-7 F 16 '18
- Meat buying in the United States by the allied nations. J. P. Cotton. 5p mim '18 U.S. Food administration, Washington, D.C.; Same. Purdue Ag 12:337-9 Mr '18
- Meat policy of the U. S. Food administration. E. D. Durand. Swine World 5:5+ Mr '18
- Meat producers and food administration. Nat Stock & F 42:31 Mr 30 '18
- Meat producing industries of United States to be saved from ruin. Reliable P J 25: 334-5 My '18
- Meat production and the demand. Prog F 31: 891 J1 15 '16
- Meat production in New England. C. W. Adams. Country Gent 81:417 F 19 '16
- Meat shortage. Wallaces' F 42:1377 O 12 '17
- Meat situation. Wallaces' F 43:640 Ap 12 '18
- Meat situation. H. R. Smith. Country Gent 82: 1328 Ag 25 '17
- Meat situation in the United States. 5 pts il maps U S Ag Reports 109-13 '16
- Meat supply in California. Cal Commonwealth Club Transac (San Francisco 12c) 13:177-213 J1 '18
- Meat supply situation. Weekly N L 5:5 S 19 '17
- Mobilizing the live stock industry. Breeder's Gaz 72:249 Ag 23 '17
- Official report of the Sheep, wool and calf conservation committee of the Nebraska state council of defense. Am Sheep B & W 38:197 Mr '18
- Our present and prospective meat supply. M. E. Woods. il Nat Wool Grower 8:11-13 Mr '18
- Packer on the meat situation. F. S. Hayward. Breeder's Gaz 72:205-6 Ag 16 '17
- Pork production for 1918. Weekly N L 5:1-2 D 5 '17; Same. Swine World 5:11 Ja '18; Same abr. Ag Digest 2:789-90 Ja '18
- Prevention and eradication of destructive animal diseases and the effect upon agriculture and the meat supply. A. R. Ward (In Pan American scientific congress Pro., 1915, v. 3, p. 702-9) '17
- Price of beef during the war in other countries and the United Kingdom. J Bd Ag 25: 853-6 O '18
- Reindeer—a source of food. H. Bragg. Canadian Municipal J (Coristine bldg., Montreal \$1.25 per yr.) 14:118-19 Ap '18
- Shall we conserve female breeding stock by legislative enactment? Prog F 32:1119 N 17 '17
- Stockman and the food administration. J. P. Cotton. Wallaces' F 42:1714 D 21 '17
- To conserve food animals. Creamery 6:35 S '17
- U.S. Food administration will help stimulate consumption. il Reliable P J 25:479+ J1 '18
- War and our meat supply. J. P. Cotton. Am Sheep B & W 38:81-2 F '18; Same. Wallaces' F 43:124 Ja 25 '18; Excerpt. O Judd Farmer 64:14 F 2 '18
- War meat and meat animals. H: F: Thurston. il Am Coop J 13:229-30+ F '18; Same cond. Ag Digest 2:877-8 Mr '18
- We begin to tackle the meat question. M. C. Hessler. Country Gent 82:1103 Je 30 '17
- We do not advocate boycotting lamb. Am Sheep B & W 37:470-1 Ag '17
- Whale as a food factor. C. H. Claudy. il Scientific Am (233 Broadway, N.Y. 10c) 118:208-9 Mr 9 '18
- Whale beef and whales. E: T. Martin. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:23 Ja 12 '18
- Why we must increase our chief food animals—cattle, sheep and hogs. H. C. Hoover. Banker-F 4:10-11 N '17
- Wild game as a war weapon; neglected means of increasing and conserving our meat supplies. E. C. MacMechen. il Scientific Am (233 Broadway, N.Y. 10c) 118:88-9 Ja 26 '18
- Would not slaughter ewe lambs. R. Wood. Nat Wool Grower 7:20-1 Je '17; Same. Am Sheep B & W 37:409 J1 '17
- See also Fish as food; Food supply; Horse flesh; Manatees
- Meat waste**  
 Arrêté n. 5146 concernant le commerce des os, des pieds de bœufs et des cornes en Allemagne. Int Yearbook Ag Leg 1916:276-8 '17
- Arrêté n. 5297 concernant l'utilisation des cadavres d'animaux et des déchets de boucherie en Allemagne. Int Yearbook Ag Leg 1916:251-2 '17



**Mechanical drawing**

Mechanical drawing. C. C. Henry. Farm Eng 3:152, 180, 214, 238, 260; 4:10 Ja-My, JI '16

**Study and teaching**

Mechanical drawing for the farm and agricultural school. G. F. Krogh. bibliog il plans maps Minnesota Univ Ag Dept (Minneapolis) General Ser B 43 72p JI '16 25c

Teaching drawing to agricultural students. F. W. Ives. Am Soc Ag Eng Trans 11:159-63 '18

**Mechanical theory of life**

Hit-or-miss universe. J. Loeb. il J Heredity 8:320-34 JI '17

Man—an adaptive mechanism. by G. W. Crile. Review. il J Heredity 7:482-92 N '16

**Medicago sativa.** See Alfalfa

**Medical botany.** See Botany, Medical

**Medical laboratories**

Laboratory of hygiene for every southern state. Prog F 31:986 Ag 12 '16

**Medical milk commissioners, American society of.** See American society of medical milk commissioners

**Medical research**

Veterinary and medical science. A. M. Paterson. J Ag New Zealand 14:186-90 Mr '17

**Medicinal plants.** See Botany, Medical; Drug farming

**Medicine**

Farmer's medicine chest. M. G. Dunn. O Judd Farmer 61:22 N 11 '16

Trees in medicine. J. Foote. il Am For 22: 648-53 N '16

See also Medical laboratories; Public health; Veterinary medicine; Veterinary patent medicine

**Meditations and mutterings of a mower.** E. C. A. Smith. il Country Life 31:56 Mr '17

**Mediterranean fig scale**

Mediterranean fig scale. F. P. Roullard. il Cal State Comm Hort B v 6:246-8 Je '17

**Mediterranean flour moths.** See Flour moths

**Mediterranean fruit flies**

Banana as a host fruit of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. bibliog il J Ag Research 5:793-804 Ja 24 '16

Citrus fruit insects in Mediterranean countries. Mediterranean fruit-fly. H. J. Quayle. il U S Ag B 134:1-11 '14

Effect of cold-storage temperatures upon the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. bibliog J Ag Research 5:657-66 Ja 10 '16

Effect of cold-storage temperatures upon the pupae of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. J. Ag Research 6:251-60 My 15 '16

Florida and the Mediterranean fruit fly. E. A. Back. il Fla State Plant Bd Quar B v 1: 159-71 JI '17

Holding the fruit fly at bay. L. Campbell. il map Country Gent 81:1260-1 Je 24 '16

Life history of the Mediterranean fruit fly from the standpoint of parasite introduction. E. A. Back and C. E. Pemberton. il J Ag Research 3:363-74 F '15

Mediterranean fruit fly. E. A. Back. il Cal State Comm Hort B v 6:69-80 Ap '17

Mediterranean fruit fly. E. A. Back and C. E. Pemberton. il map U S Ag B 640:1-43 '18

Mediterranean fruit fly. G. H. Hecke. il Cal State Comm Hort B v 6:316-18 JI '17

Mediterranean fruit-fly (ceratitis capitata Wied.) breeds in bananas. H. P. Severin. bibliog J Econ Entom 10:318-21 Je '17

Mediterranean fruit fly in Bermuda. E. A. Back. U S Ag B 161:1-8 '14

Mediterranean fruit fly in Hawaii. E. A. Back and C. E. Pemberton. il U S Ag B 536:1-118 '18

Parasitism among the larvæ of the Mediterranean fruit-fly in Hawaii during 1915. E. A. Back and C. E. Pemberton. J Econ Entom 9:306-11 Ap '16

Susceptibility of citrus fruits to the attack of the Mediterranean fruit fly. E. A. Back and C. E. Pemberton. bibliog il J Ag Research 3:311-30 Ja '15

Work and parasitism of the Mediterranean fruit fly in Hawaii during 1917. C. E. Pemberton and H. F. Willard. J Ag Research 14:605-10 S 23 '18

**Megastigmus.** See Chalcid flies

**Melampsora**

Species of melampsora occurring upon euphorbia in North America. E. B. Mains. Phyt 7: 101-5 Ap '17

**Melanophila fulvoguttata.** See Hemlock borers

**Melanosis**

Generalized melanosis in a pig. E. M. Pickens. il Am Vet M Assn J 52:707-13 F '18

Melanosis. il Am Vet M Assn J 49:312-16 Je '16

**Melezitose**

Occurrence of melezitose in a manna from the Douglas fir. C. S. Hudson and S. F. Sherwood. Am Chemical Soc J (Box 505, Washington, D. C. \$6 per yr.) 40:1456-60 S '18

**Melilotus.** See Clover, Sweet

**Meliola**

Some meliolicolous parasites and commensals from Porto Rico. F. L. Stevens. il Bot Gaz 65:227-49 Mr '18

Spegazzinian meliola types. F. L. Stevens. Bot Gaz 64:421-5 N '17

**Melon aphid**

Control of the melon aphid. F. H. Chittenden. il Farmers' B 914:1-16 '18

**Melon flies**

Life history of the melon fly. E. A. Back and C. E. Pemberton. J Ag Research 3: 269-74 D '14

Melon flies in Hawaii. E. A. Back and C. E. Pemberton. bibliog il U S Ag B 491:1-64 '17

Melon fly. E. A. Back and C. E. Pemberton. il U S Ag B 643:1-31 '18

Melon fly. F. Maskew. il Cal State Comm Hort B v 6:307-9 JI '17

**Melon trees.** See Papayas

**Melons**

Cultivation of melons (also cucumbers) in Florida. H. S. Elliott. Fla Ag Dept Quar B v 26:33-7 Ap '16

Grow your own melons. J. M. Myers. il Fruit-Grower 28:191 Mr 15 '17

Home garden; how to grow melons of quality. il Country Gent 83:36 Ap 13 '18

Melon cultivation. F. Woodward. Gard Chron (Lond) 60:276 D 9 '16

Melon growing in Indiana. H. J. Reed. il Ind Ag Exp C 68:1-16 '17

Melons in dirt bands; seedlings started this way will make a good crop. C. E. Durst. il Country Gent 83:38 F 23 '18

Melons in Macedonia. J. E. Palmer. Gard Chron (Lond) 63:225 Je 1 '18

Our success with early melons. W. E. Beebe. Market Growers J 22:270-1 Ap 1 '18

Outdoor melon culture. H. Knight. Gard Chron Am 21:50 F '17

Serving the melons. E. Locke. Ohio F 138: 130 Ag 12 '16

Uplift of the cantaloupe. J. H. Collins. il Country Gent 82:181 F 3 '17

See also Cantaloupes; Honey dew melons; Muskmelons; Watermelons

**Diseases and pests**

Common diseases of cucumbers and melons. W. H. Martin. il N J Ag Exp C 68:1-11 '17

**Marketing**

See also Indiana melon growers' association

**Membracidae**

Biology of the membracidae of the Cayuga Lake basin. W. D. Funkhouser. bibliog il map Cornell Ag Exp Memoir 11:181-445 '17; Same. Cornell Ag Exp Rep 1917:181-445 '18

**Memorial day**

Meaning of Memorial day. C. S. Lowdon. Ohio F 137:747 My 27 '16

Memorial day preparations. Am Flor 46:925 My 20 '16

Memorial day suggestions. il Am Flor 50:861-4 My 18 '18

- Memphis tri-state fair**  
Fair that beat its own record and set an example that other fairs may well follow. Prog F 32:1036 O 6 '17
- Jerseys put up corking show at Memphis.**  
Jersey B 37:1598 O 2 '18
- Memphis tri-state fair.** Prog F 33:1088 O 5 '18
- 9th annual Tri-state fair at Memphis, 1916.**  
Breeder's Gaz 70:791-2 O 26 '16
- 10th annual Tri-state fair, Memphis, Tenn., Sept. 22-29.** Breeder's Gaz 72:676-7 O 18 '17
- Mendelism**  
Adzuki beans and jimson weeds; favorable class material for illustrating the ratios of Mendel's law. A. F. Blakeslee and B. T. Avery. *il J Heredity* 8:125-31 Mr '17
- \* **Autosomal bristle modifier, affecting a sex-linked character.** D. E. Lancefield. *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:462-4 Ag '18
- Breeder's compass—Mendel's law.** W. Haynes. *il Country Life* 30:42 Ag '16
- Color inheritance in swine.** B. O. Severson. *il J Heredity* 8:379-81 Ag '17; Same. *Int R Sci & Prac* Ag 9, no 1:80-3 Ja '18
- Essence of Mendelism.** J. Belling. *J Heredity* 8:288 Je '17
- Evolution and Mendelism.** R. Broom. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:66-7 F 3 '17
- \* **Factors for yellow in mice and notch in drosophila.** W. A. Lippincott. *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:364-5 Je '18
- \* **Inheritance in orthoptera.** J. S. Dexter. *biolog Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:61-4 Ja '18
- \* **Inheritance of number of feathers of the fan-tail pigeon.** T. H. Morgan. *biolog il Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:5-27 Ja '18
- Is species-specificity a Mendelian character?** J. Loeb. *Science* (Science Press, Garrison, N.Y. 15c) n 5 45:191-3 F 23 '17
- Linkage and crossing-over in oats.** H. H. Bartlett. *Bot Gaz* 62:323-5 O '16
- \* **Linkage in maize: the C aleurone factor and waxy endosperm.** T. Bregger. *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:57-61 Ja '18
- \* **Maternal inheritance in the soy bean.** H. Terao. *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:61-6 Ja '18
- Mechanism of Mendelian heredity, by T. H. Morgan and others.** Review. *J Heredity* 7: 17-23 Ja '16
- Mendelism of short ears in sheep.** E. G. Ritzman. *J Ag Research* 6:797-8 Ag 14 '16
- Mendel's law. Wallaces' F** 41:1640 D 15 '16
- Mendel's law. Wallaces' F** 43:497 Mr 15 '18
- Mendelian-bred cats and cattle.** H. L. Atkinson. *Nat Stock & F* 40:498 Ag 12 '16
- Models to illustrate segregation and combination of Mendelian characters.** H. M. Chibber. *Ag J of India Sci Congress* No 1916:80-5 '16
- Modern conceptions of heredity and genetic studies at the Scripps institution.** F. B. Sumner. (B. no. 3) 24p '17 Scripps institution for biological research, San Diego, Cal.
- Quantitative characters in beans.** W. Brotherton. *Bot Gaz* 63:417-18 My '17
- Somatic segregation, a misleading term.** E. B. Babcock and F. E. Lloyd. *il J Heredity* 8: 82-9 F '17
- Status of the presence and absence hypothesis.** J. Belling. *J Heredity* 8:260 Je '17
- See also Hybridization*
- Mendel's law.** See Mendelism
- Mending**  
Mending. *J Home Econ* 8:182-3 Ap '17
- Mending and darning.** M. Palmer. *Kimball's D F* 14:352 My 15 '16
- We learn patching.** Mrs W. N. Hutt. *Prog F* 31:1290 N 4 '16
- Menhaden**  
Is the menhaden a migratory fish? *Am Fert* 48:34 Mr 16 '18
- Menhaden industry of the Atlantic coast.** R. L. Greer. (Doc. 811) 30p *biolog il* 10c '17
- U.S. Bur. of fisheries, Washington, D.C.**
- Meningitis**  
Culture medium for maintaining stock cultures of the meningococcus. C. G. A. Roos. *J Bact* 1:67-71 Ja '16
- Meningitis, Cerebrospinal**  
Cerebrospinal meningitis (forage poisoning). J. R. Mohler. *U S Ag B* 65:1-14 '14
- Mensuration.** See Forest mensuration; Hay—Measuring; Surveying; Timber—Mensuration
- Mental hygiene**  
School as a factor in the mental hygiene of rural communities. T. Clark. *Nat Conf Charities and Correction Pro* (Wm. T. Cross, 315 Plymouth Court, Chicago \$2) 1916:215-23
- Menus**  
Economical diet and cookery in time of emergency. M. S. Rose and others. (Technical educ. B. 30) 8p '17 Teachers college, Columbia univ., N.Y.
- Food combinations; how to make use of left overs.** *Weekly N L* 4:8 My 2 '17
- Food for the family.** 15p 5c '17 N.Y. Assn. for improving the condition of the poor, 105 E 22d st., N.Y.
- Food thrift.** Mrs A. E. Harvey. *Mass Bd of Educ* (Boston) B v 2:1-11 S '17 (2d ed rev)
- Housekeeping in war time.** M. Aldis. *J Home Econ* 10:73-9 F '18
- How to plan meals in war time.** M. S. Rose and others. (Technical Educ. B. 33) 15p '17 Teachers college, Columbia univ., N.Y.
- Lessons in food values and economical menus.** A. Bradley. 23p 25c '17 Miss Farmer's school of cookery, 30 Huntington av., Boston
- Low-cost meals for high-cost times.** 31p 15c '17 Ladies' home journal, Independence sq., Philadelphia
- Menu making.** M. R. McPheeters. *Okla Ag Ext C* 61:1-8 '17
- Menus for national needs.** A. L. Weeks. *Univ of Rochester* (N.Y.) *Ext B* v 1, no 3 15p '17
- Menus for simple balanced meals.** N C Ag *Ext C* 7:42-4 '16
- Menus for wheatless days.** M. L. Matthews. *Purdue Ag Ext Leaflet* 98:1-6 '18
- Moderate cost menus and recipes from Florida food materials.** N. Henderson. *Florida State College for Women* B 15:1-25 '17
- New form of food-chart: the inometer.** T. Johnson. *J Dept Ag Ireland* 17, no 3:433-50 '17
- New light on the cost of living.** M. Maddocks. *il Good Housekeeping* (119 W. 40th st., N.Y. 15c) 64:70+ Mr '17
- Overloaded table.** E. C. Morgan. *Kimball's D F* 15:534 Ag 1 '17
- Patriotic food show; official recipe book containing all demonstrations given during patriotic food show, St Louis, Feb. 2-10, 1918.** 48p 10c n.d. Women's central com. on food conservation, 905 Locust st, St Louis
- Planning and serving meals.** N. S. Knowles and others. *il Ia Ag Ext Home Econ B* 1:1-21 '17-'18
- Principles of menu making.** A. E. Richardson. *Texas Univ* (Austin) B 1716:1-21 Mr 15 '17
- Simple menus for informal occasions.** M. R. McPheeters and D. Sexauer. *Okla Ag Ext C* 39 10p '16
- Suggestive menus.** *Ia Ag Ext Short Course Notes* 23:1-12 '16-'17
- Suggestive seasonal menus.** *Ia Ag Ext Home Econ C* 16:1-7 '17-'18
- Tested menus and recipes.** A. L. Weeks. *Univ of Rochester* (N.Y.) *Ext B* v 1, no 2 19p '17
- Three meals a day.** H. G. Gates. *Purdue Ag Ext Leaflet* 74:1-6 '17
- War meals; practical suggestions to save beef, bacon, wheat and flour to meet the war-needs overseas.** 12p '17 Canada Food controller, Ottawa
- What shall we eat on wheatless and meatless days?** *Wis Ag Ext C* 106:1-47 '18
- Who cares for potatoes?** F. S. Culver. *il Good Housekeeping* (119 W. 40th st., N.Y. 15c) 64:76 Mr '17
- Wide-awake girls learn to balance meals.** Mrs W. N. Hutt. *Prog F* 31:122 Ja 22 '16



**Menus—Continued**

Wrong food combinations. Prog F 31:373 Mr '11 '16

See also Breakfasts; Dinners; Meals; Suppers

**Merchant marine**

Factory money for the farmer. E: N. Hurley. Purdue Ag 13:105 D '18

Merchant marine and the farmer. E: N. Hurley. Wallaces' F 43:1001 J1 5 '18

World markets for American farmers. E: N. Hurley. il Country Gent 83:5-6+ S 28 '18

**Merchants and farmers**

Disturb busting in Canby. B. Ostrolenk. il Country Gent 81:143-4 Ja 22 '16

Farmers and businessmen to co-operate. F. B. Lamson. Hoard's D 56:224 S 13 '18

How a country merchant cooperates with his farmer customers. H. Gernert. il Banker-F 3:10 Mr '16

How the country merchant or general storekeeper can aid in building up the farms, and in improving rural communities. R. K. Gernert. (In Agricultural extension, p 106-9) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

I want to buy from my home merchant. A. L. French. Prog F 31:1332 N 18 '16

My town. il Country Gent 82:2017+ D 22 '17

Need of local organizations of business and professional men for the study and development of rural conditions. T. Butler. (In Agricultural extension, p 8-11) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

One thing lacking. G: R. Varney. Country Gent 82:1875 D 1 '17

Problems of the village merchant. W: J. Sholar. Rural Manhood 9:3-7 Ja '18

Read about the Canby idea—then bring it to your community. B. Ostrolenk. il Banker-F 3:7 Mr '16

Why Air Castle lost the farmer's trade; story. Ohio F 140:406 N 3 '17

See also Agricultural centers; Commission merchants

**Mercuric potassium iodide**

Preservation of plant juices for analysis of sugar content. D. O. Spriesterbach. Am Chem Soc J (Box 505, Washington, D.C. \$6 per yr.) 40:431-6 F '18

**Mergansers**

American merganser. G: D. Bartlett. il Country Life 30:94 O '16

**Merino record association, American and delaine.**

See American and delaine merino record association

**Merremia**

Woody stem in merremia gemella induced by high warm water. F. C. Gates. il Am J Bot 2:86-8 F '15

**Merrill, Fred W.**

Mr Merrill joins Kimball's. por Kimball's D F 16:836 N 1 '18

**Mesa Verde national park**

Mesa Verde and Casa Grande national parks. M. Daniels. il Am For 22:139-45 Mr '16

**Mesembryanthemum.** See Fig-marigolds**Mesoleius tenthredinis.** See Ichneumon flies**Mesopotamia**

Mesopotamia in January. F. K. Ward. Gard Chron (Lond) 61:131 Mr 31 '17

See also Agriculture—Mesopotamia; Irrigation—Mesopotamia; Plants—Mesopotamia

**Mesoxylon**

Structure of mesoxylon multirame. D. H. Scott. bibliog il Ann Bot 32:437-57 J1 '18

**Metabolism**

Axial susceptibility gradients in algae. C. M. Child. bibliog Bot Gaz 62:89-114 Ag '16

Basal katabolism of cattle and other species. H: P. Armsby and others. bibliog J Ag Research 13:43-57 Ap 1 '18; Abstract. Int R Sci & Prac Ag 9,no 5:584-7 My '18

Improved respiration calorimeter for use in experiments with man. C. F. Langworthy and R. D. Milner. bibliog il J Ag Research 5:299-348 N 22 '15

Metabolism of the organic and inorganic compounds of phosphorus. E. B. Forbes and others. Int R Sci & Prac Ag 7,no 10:1465-8 O '16

Mineral metabolism of the milch cow. E. B. Forbes and others. Ohio Ag Exp B 295:323-43 '16; 308:451-81 '17; Same cond. Am Soc Animal Production Pro 1915-1916:1-8, 117-25 '17; Same cond. (pt. 1). Ohio Ag Exp B v 1:186-8 Je '16; Same cond. (pt. 1). Ohio F 138:43 J1 15 '16; Abstract (pt. 2). Ohio Ag Exp B v 2:58-60 F '17

Mineral metabolism of the milch cow; legumes highly essential in feeding for heavy milk production. E. B. Forbes. Ohio Ag Exp B v 3:8-10 Ja '18

Net energy values of feeding stuffs for cattle. H: P. Armsby and J. A. Fries. bibliog J Ag Research 3:435-91 Mr '15

Phosphorus metabolism of lambs fed a ration of alfalfa hay, corn, and linseed meal. E. L. Ross and others. J Ag Research 4:459-73 Ag '15

See also Digestion; Nutrition; Plants, Nutrition of; Translocation

**Bibliography**

Carbon assimilation. G: B. Rigg. Bot Gaz 64: 516-21 D '17

Metachrosis. See Color of animals

**Metal, Scrap**

Save scrap metal. Weekly N L 5:4 O 17 '17

**Metal work**

Wrought metal work by Hunt Diederich; photographs. Country Life 32:51-3 S '17

**Metals in food**

Metals in foods. Assn Offic Ag Chem J 2,no 2,pt 2:171-6 Ag '16

Report on heavy metals in foods, 1916. E. L. P. Treuthardt. Assn Offic Ag Chem J 1, no 4,pt 1:580-9 F '16

Report on heavy metals in foods, 1917. E. L. P. Treuthardt. Assn Offic Ag Chem J 3:43-52 My '17

See also Iron in foods; Tin in foods

**Metaoxytoluic acid**

Presence of some benzene derivatives in soils. E. C. Shorey. J Ag Research 1:353 F '14

**Metchnikoff, Elie, 1845-1916**

Sketch. Am Vet M Assn J 50:5-8 O '16

Work of Elie Metchnikoff. Gard Chron (Lond) 60:51 J1 29 '16

**Meteorology**

Blizzard and its habits. J. C. Alter. il Nat Wool Grower 8:22-5 F '18

Meteorological observations at Wilsey, 1915. E. H. Curtis. Royal Hort Soc J 42,pt 1: 122-32 O '16

Stories of the atmosphere. R. Nunn. il maps U S Ag Yearbook 1915:317-27

Weather observations. W. G. Owens. Pa Ag Dept B 278:116-19 '16

See also Climate; Evaporation; Frost; Rain and rainfall; Snow; Weather

**Bibliography**

Weather; publications of the United States government relating to climate, earthquakes, floods, etc., for sale by superintendent of documents, Washington, D.C. (Price list 48—8th ed) 36p '16 Supt. of doc., Washington, D.C.

Meteorology, Agricultural

Agricultural meteorology. J. W. Smith. (In Pan American scientific congress Pro., 1915, v. 2, p. 75-92) '17

Agricultural meteorology in Canada. R. W. Mills. Ag Gaz of Canada 3:177-8 F '16

Climatic control of cropping systems and farm operations. J. F. Voorhees. (In Pan American scientific congress Pro., 1915, v. 2, p. 127-32) '17

Effect of meteorological factors on the germination capacity of seeds. J. N. Waliden. Int R Sci & Prac Ag 8,no 3:340-2 Mr '17

Effects of meteorological factors on the growth and yield of rice in the Vercelli district, Piedmont, Italy. B. Marcarelli. Int R Sci & Prac Ag 9,no 5:539-41 My '18

**Meteorology, Agricultural—Continued**

- Influence of meteorological factors on the development and yield of the millets *Panicum miliaceum* and *Setaria italica*, in Russia. M. G. Sirusov. *Int R Sci & Prac Ag* 8,no 3:342-5 Mr '17
- Meteorology in relation to agriculture in Canada. R. W. Stupart and E. W. Mills. *Int R Sci & Prac Ag* 7,no 2:177-9 F '16
- Problem in agricultural meteorology. G. Azzi. *Int R Sci & Prac Ag* 9,no 3:277-88 Mr '18; Same. *Ag Gaz of Canada* 5:828-34 Ag '18
- Relation between humidity and yield of winter wheat in western Kansas. *Int R Sci & Prac Ag* 7,no 2:191-2 F '16

\* Relation of the weather to agriculture. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:354-5 D 7 '18

**Meters.** See Leakage meters; Water meters

**Metrosideros collina.** See *Ohia lehua*

**Mexican apple.** See Sapote, White

**Mexican bean weevil.** See Bean weevils

**Mexican boll weevils.** See Boll weevils

**Mexican cotton boll weevil.** See Boll weevils

**Mexican orange maggots**

Mexican orange maggot. A. S. Hoyt. *il Cal State Comm Hort B v* 6:309-11 Jl '17

**Mexico**

Thoughts about Mexico's future. *Irr Age* 32: 69 Mr '17

See also subhead Mexico under special subjects, e.g. Agriculture—Mexico, Botany—Mexico

**Miami valley**

Flood prevention works of Miami conservancy district to be built by day labor. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:509 D 19 '17

**Mice**

Color inheritance in mammals. S. Wright. *J Heredity* 8:373-8 Ag '17

House rats and mice. D: E. Lantz. *il plan Farmers' B* 896:1-23 '17

Mice and moulds; their relationship with paralysis and death in horses. F. E. Place. *J Dept Ag S Australia* 21:27-31 Ag '17

Protection of fruit trees from mice. *J Ag (Quebec)* 21:101 Ja '18

Rats and mice. J: Dougherty. *Ohio F* 139:161 F 3 '17

Rats and mice. C. G. Hewitt. (Crop Protection Leaflet no. 7) 4p '18 Canada Ag

Spray protection from mice. M. A. Blake. *Rural N Y* 76:981 Ag 18 '17

See also Field mice; Mouse-traps; Rodents

**Diseases**

Fungus disease of mice. G. P. Darnell-Smith. *il Ag Gaz of New South Wales* 29:131-2 F '18

**Michaelmas daisies.** See Asters

**Michigan**

See also subhead Michigan under special subjects, e.g. Agriculture—Michigan, Dairy—Michigan

**Agriculture, State board of**

Fifty-fifth annual report of the secretary, and twenty-ninth annual report of the experiment station from July 1, 1915, to June 30, 1916. *il Mich Ag Bd Rep* 1916:1-896

56th annual report of the secretary of the State board of agriculture and 30th annual report of the experiment station from July 1, 1916, to June 30, 1917. *Mich Ag Bd Rep* 1917:1-749

**Dairy and food department**

Proposes a state butter grading service. H. D. Wendt. *N Y Prod R* 44:16 My 2 '17

**Industries and resources**

**Michigan; the land of plenty.** (Immigration pub.) 52p *il maps* '18 Mich. Public domain comm., Lansing

**Markets, Office of**

Annual report of the Office of markets. *Mich Ag Bd Rep* 1917:250-9

**Michigan agricultural experiment station**

55th annual report of the secretary and 29th annual report of the experiment station from July 1, 1915, to June 30, 1916. *il Mich Ag Bd Rep* 1916:1-896

56th annual report of the secretary of the State board of agriculture and 30th annual report of the experiment station from July 1, 1916, to June 30, 1917. *Mich Ag Bd Rep* 1917:1-749

**Michigan association of ice cream manufacturers**

Ice cream manufacturers hold good convention in Detroit. *N Y Prod R* 43:798 Mr 14 '17

12th convention, Saginaw. *N Y Prod R* 45: 612+ F 27 '18

**Michigan butter, poultry and egg shippers' association**

Annual meeting, Detroit. *N Y Prod R* 43: 822-3 Mr 14 '17

Convention, Detroit, Feb. 25-26, 1918. *N Y Prod R* 45:631+ Mr 6 '18

**Michigan dairymen's association**

Adopts new constitution. G. H. Brownell. *Hoard's D* 54:128 Ag 24 '17

Allied dairy associations hold annual convention at Lansing, Dec. 3-5. *N Y Prod R* 47:165+ D 11 '18

Plans laid for a great Michigan organization in Detroit, March 6-8, 1917. *Creamery* 5:50 Ap '17

Present status of the organization explained. G. H. Brownell. *N Y Prod R* 44:622 Ag 15 '17

Reorganization. *Creamery* 5:58 My '17

32d annual convention, Kalamazoo, Mich., February 8-11, 1916. *Creamery* 4:35-7 F '16

33d annual meeting, Detroit, Mar. 6-8, 1917. *N Y Prod R* 43:785+ Mr 14 '17; *Hoard's D* 53:382 Mr 23 '17

34th annual convention, Saginaw. *N Y Prod R* 45:493+ F 13 '18

**Michigan farmers' cooperative association**

Michigan has organized. *Am Coop J* 13:246 F '18

**Michigan hay and grain association**

17th annual meeting, Detroit, August 8. *Coop Manager & F* 8:89-91 S '18

**Michigan improved live stock breeders' and feeders' association**

Annual convention, East Lansing. E. Trangenman. *Hoard's D* 55:138 F 15 '18

Annual convention, East Lansing, Mich. *Breeder's Gaz* 73:209 Ja 31 '18

**Michigan Jersey cattle club**

Annual meeting. G: S. Taylor. *Jersey B* 37: 267 F 20 '18

Meeting, Lansing, Jan. 16-17, 1917. *Jersey B* 36:152 Ja 31 '17

Postponed meeting, August 28. *Jersey B* 37: 1452 S 11 '18

Summer meeting at Oakcroft, June 13, 1917. *Jersey B* 36:999 Je 27 '17

**Michigan milk producers' association**

1st annual meeting, East Lansing, Oct. 17, 1916. *Hoard's D* 52:519 N 3 '16

Meeting to vote on prices, East Lansing, Aug. 21, 1917. W. M. Kelly. *Hoard's D* 54:292 S 28 '17

Milk producers raise money. R. C. Reed. *Hoard's D* 52:102 Ag 18 '16

See also Detroit milk investigation

**Michigan potato growers' association**

3d annual meeting, Escanaba, Nov. 1-3, 1916. C. W. Waid. *Market Growers J* 19:229-30 N 15 '16

4th annual meeting, Michigan agricultural college, Mar. 7-8. C. W. Waid. *Market Growers J* 22:255 Mr 15 '18

**Michigan public domain commission**

Proceedings, 1916-1917. 400p '16 Michigan public domain commission, Lansing.

**Michigan state beekeepers' association**

51st convention, Grand Rapids, Nov. 29-Dec. 1, 1916. E. R. Root. *Gleanings* 44:1173-5 D 15 '16



**Michigan state fair**

- Dairy cattle at the Michigan state fair. W. A. Freehoff. Hoard's D 56:260 S 20 '18  
Michigan state fair at Detroit, Aug. 31-Sept. 9, il Hoard's D 54:218-19 S 14 '17;  
Breeder's Gaz 72:501-2 S 27 '17; Am Sheep B & W 37:679 N '17  
Michigan state fair, Detroit, Sept. 4-13, 1916. Breeder's Gaz 70:486b-486c S 21 '16  
Sheep at the Michigan state fair. il Am Sheep B & W 38:660-1 O '18  
Something about the sheep show at Detroit. Am Sheep B & W 36:523 S '16

**Michigan state horticultural society**

- 46th annual meeting, Grand Rapids, Dec. 5-7, 1916. Fruit-Grower 28:55 Ja 15 '17

**Michigan vegetable growers' association**

- 2d annual meeting, East Lansing, Mar. 6, 1918. Market Growers J 22:231+ Ap 1 '18

**Microbiology. See Micro-organisms**

**Micrometer**

- Angular micrometer and its use in delicate and accurate microscopic measurements. H. E. Pulling. Am J Bot 3:393-406 O '16

**Micro-organisms**

- Bacteriological method useful for the study of other micro-organisms. F. M. Bachmann. il Am J Bot 5:32-5 Ja '18  
Industrial retting of textile plants by microbiological action. G. Rossi. bibliog Int R Sci & Prac Ag 7,no 8:1007-75 Ag '16  
Pectinobacter amylophilum, a new organism which may be of practical importance in flax retting. J. A. Macrinov. Int R Sci & Prac Ag 7,no 7:1025-6 Jl '16  
Use of microorganisms to determine the preservative value of different brands of spices. F. M. Bachmann. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:121-3 F '18  
*See also* Soil microbiology

**Bibliography**

- \* List of references to periodical articles, and also to patents, which have appeared since July 1, 1914, on products of commercial value, produced by microorganisms. 22p typew '18 U.S. Bur. of chemistry library, Washington, D.C.

Contents: Alcoholic fermentation; Glycerin; Acetone; Yeasts; Vinegar; Lactic acid; Foods and feeding-stuffs; Nitrification and fixation of free nitrogen by bacteria; Miscellaneous

**Microscopes and microscopy**

- Angular micrometer and its use in delicate and accurate microscopic measurements. H. E. Pulling. Am J Bot 3:393-406 O '16  
Chloroform as a paraffin solvent in the imbedding process. D. M. Mottier; W. J. G. Land. Bot Gaz 61:251-3 Mr '16  
Control of bacteria in market milk by direct microscopic examination. R. S. Breed and J. D. Brew. N Y State Ag Exp B 443: 717-46 '17; Summarized, by F. H. Hall. (Pop. ed.) 10p '17; Summary. N Y Prod R 45:864 Ap 10 '18  
Handy field and laboratory binocular magnifier. R. S. Woglum. il J Econ Entom 9:370 Je '16  
Rôle of the microscope in the identification and classification of the timbers of commerce; with discussion. I. W. Bailey. il J For 15:176-91 F '17

*See also* Stains and staining (microscopy)

**Microstroma**

- Witches-brooms on hickory trees. F. C. Stewart. il Phyt 7:185-7 Je '17

**Microtomes**

- Freezing device for the rotary microtome. N. L. Gardner. il Bot Gaz 63:236-9 Mr '17  
Modified safety-razor blade holder for temperature control. T. H. Goodspeed. Bot Gaz 66:176-7 Ag '18

**Mid-continent live stock exposition**

- Show at Tulsa, Okla. Breeder's Gaz 71:1072 My 24 '17

**Middlemen. See Commission merchants**

**Mignonette**

- Culture of mignonette. Gard Chron Am 21: 308 Ag '17  
Suggestions for plant growers. Am Flor 46: 1129 Je 17 '16

**Milch goats. See Goats**

**Mildew**

- On forms of the hop (*humulus lupulus* L.) resistant to mildew (*sphaerotheca humuli* (DC.) Burr.). E. S. Salmon. bibliog J Ag Sci 8:455-60 D '17  
*See also* Fruit—Diseases and pests; Fungi; Gooseberry mildew; Grape mildew; Hemp mildew; Hop mildew; Plants—Diseases and pests; Powdery mildew

**Milipede. See Millepedes**

**Military agricultural colonies**

- Military agricultural colonies. Z. Dominguez. il Mexican Review (613 Riggs bldg., Washington, D.C. 10c) 2:5 N '17

**Military training**

- Military training in land-grant colleges. G. Clark; E. J. James. Assn Am Ag Coll & Exp Pro 1917:161-71 '18  
My part in the big war; a country mother's plea for universal training. M. E. Davis. il Country Gent 32:853 My 5 '17  
Obligation of service for the nation in time of danger. L. Wood. Banker-F 3:3 My '16  
Universal training. Wallaces' F 43:1001 Jl 5 '18  
Value of universal military training. Nat Stock & F 42:603 S 28 '18

**Military training camps**

- American training camp activities. J. F. Cunningham. il Ohio F 140:525-6 D 8 '17  
Boys in camp. Wallaces' F 42:341 Je 22 '17  
Chillicothe cantonment. H. M. Powers. Ohio F 140:328 O 13 '17  
Market captured by farmers. A. Hobson. il Hoard's D 55:875+ Je 14 '18  
New draft men's interview plan, by B. A. Schnell. Rural Manhood 9:234-7 Je '18  
Soldiers want dairy products. S. Sosland. il Hoard's D 55:761 My 24 '18  
Tips to the new draft men. Rural Manhood 9:270-1 Je '18  
Uncle Sam as a milkman. E. T. Sadler. Kimball's D F 16:300 Ap 15 '18  
Visiting camp. Wallaces' F 43:253 F 8 '18

**Hostess houses**

- Conserving woman power in war time. M. A. Hopkins. J Home Econ 10:171-3 Ap '18  
Hostess house cafeteria. M. E. Hopkins. J Home Econ 10:463-6 O '18  
Hostesses' houses at camps. R. H. Moulton. il Ohio F 142:466 N 9 '18

**Sanitation**

- Insects and camp sanitation; with discussion. E. P. Felt. J Econ Entom 11:93-106 F '18

**Milk**

- Acceptable milk; form of agreement for adoption by cheese factory patrons. N Y Prod R 43:548 Ja 31 '17  
Amounts of food equivalent in fuel value to one glass of milk, 157 calories. Ia Ag Ext Home Econ C 12 1p '17-18  
\* Attempt to filter the enzymes of milk. J. Piccard and M. Rising. Am Chemical Soc J (Box 505, Washington D.C. \$6 per yr) 40: 1275-81 Ag '18  
Bearing of recent experiments in animal nutrition on the food value of milk. J. F. Lyman. Creamery 6:19-20; 7:30-2 D '17-Ja '18  
Can we afford to use less milk? Jersey B 36: 1988 D 19 '17  
Canned milk vs. can milk. H. S. K. Willcox. Hoard's D 56:5 Jl 26 '18  
Care and handling of milk and cream. Purdue Ag 10:31-2 My '16  
\* Care of milk and cream. (B. 62) il plan 6p '16 Minn. Dairy and food dept., St Paul  
Care of milk and cream on the farm. E. H. Farrington. il Wis Ag Ext C 63:1-16 '16  
Care of milk and cream on the farm. G. L. McKay. Breeder's Gaz 69:1329 Je 29 '16  
Care of milk in the home. Creamery 4:19 Jl '16

## Milk—Continued

- Cause of the loss of nutritive efficiency of heated milk. *Int R Sci & Prac Ag* 7, no 2:291 F '16
- Chemical changes in the souring of milk. L. L. Van Slyke and A. W. Bosworth. *N Y State Ag Exp Tech B* 43:1-12 '16
- Children's bureau of U.S. Department of labor makes special investigation of milk consumption. *Baltimore Municipal J* (Room 26, City Hall 50c per yr.) 6:6 Ap 26 '18
- City milk supplies and the score card system. E. L. D. Seymour. *Country Life* 31:78 N '16
- Civilization and milk. G. A. Morgan. *Hoard's D* 56:159 Ag 30 '18
- Clean, cold, covered; observe the three C's. *J Ag* (Quebec) 20:62 S '16
- Clean milk. K. Trever. *Hoard's D* 54:380 O 12 '17
- Clean milk; its production and importance to producer and consumer. C. W. Larson. *il N Y Ag Dept B* 86:2566-72 Ag '16
- Consumption of milk in the United States. L. B. Cook. *Int Assn Dairy & Milk Inspc Rep* 1916:281-3
- Cow's udder and process of milk production. M. H. Reynolds. *il Hoard's D* 55:552-3 Ap 19 '18
- Daily per capita consumption of milk. H. F. Judkins. *J Dairy Sci* 1:246-9 S '17
- Dairy cows must be conserved. M. D. Munn. *il Country Gent* 82:1259 Ag 11 '17
- Dairying project; four months' practical course in use of Babcock tester and herd record work. C. A. Norcross and V. E. Scott. *il Nev Ag Ext B* 2:1-20 '16
- Disease-resisting influence of milk. *Ohio F* 142:315 O 5 '18
- Disease resisting influence of milk. O. Erf. *Kimball's D F* 16:516 S 15 '18
- Don't let milk spoil. *Creamery* 5:31 Je '17
- Eastern milk situation. L. W. Pyle. *Nat Stock & F* 41:52 Ap 7 '17
- Economy in the use of milk. H. F. Judkins. *Rural N Y* 76:996 Ag 18 '17
- Essentials of safe milk production. *Creamery* 6:23-5 S '17
- Experiment to show effect on quantity and quality of milk produced by cows when milked at equal and unequal periods. *J Dept Ag Victoria* 14:744-51 D '16
- Failure to curdle. *N Y Prod R* 44:560 Ag 1 '17
- Farmer must have more for milk. *J Ag* (Quebec) 21:76 N '17
- Feeding for greater milk production. J. Underwood. *Prac F* 113:377 N 1 '17
- Feeds influence milk. W. H. Underwood. *Jersey B* 37:1558 S 25 '18
- Food administration milk committee makes report. *N Y Prod R* 45:598 F 27 '18
- Food emergency demonstrations; milk and its products. *N H Ag Ext C* 27 4p '18
- Food value of Jersey milk. *Jersey B* 36:1341 Ag 29 '17
- Food value of milk. J. H. Kellogg. *il Hoard's D* 52:758+ D 22 '16
- For education to show merits of milk as food. *Creamery* 5:24 Jl '17
- \* Four essential factors in the production of milk of low bacterial content. *N Y City Dept Health Weekly B n s* 7:207-8 S 28 '18
- Free milk for France. A. Kolbe. *il Hoard's D* 56:1 Jl 26 '18
- Garlic flavor in milk. *Kimball's D F* 14:215 Mr 15 '16
- Garlic flavor in milk. *Weekly N L* 4:1 F 14 '17; Same. *Jersey B* 36:1011 Je 27 '17; Same cond. *Prog F* 32:476 Ap 14 '17
- Germ content of milk as influenced by barn factors. M. J. Prucha and H. M. Weeter. *Creamery* 6:27-31 S '17
- Gradual conversion of colostrum into normal milk. *Int R Sci & Prac Ag* 8, no 10:1378-9 O '17
- Handling milk in summer. *il Ohio F* 141:748 Je 8 '18
- High testing Jersey milk. *Jersey B* 36:1174 Ag 1 '17
- How to secure better milk for cheese factories; discussion. *N Y Ag Dept B* 80:1489-92 F '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1489-92 '17
- Ideas for the cook. *Ohio F* 140:411 N 3 '17
- Importance of milk as food. W. H. Jordan. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:188-90 N '17
- Improving milk for city use. *Ag Digest* 2:791 Ja '18
- Increasing milk production. J. A. Raiser. *Ohio F* 142:76 Jl 27 '18
- Influence of milk and carbohydrate feeding on the character of the intestinal flora. T. G. Hull and L. Rettger. *bioblog J Bact* 2:47-71 Ja '17
- Influence of palm-kernel cake on the production of milk and butter. C. Crowther. *bioblog J Bd Ag* 23:305-20 Jl '16
- Interesting facts about milk. J. Marsh. *Ohio F* 138:620 D 23 '16
- Intervals between milkings and their influence on milk. *Creamery* 5:40 My '17
- Is milk a cheap food? *Ag Digest* 3:17 Jl '18
- Is milk, milk? H. F. Judkins. *Hoard's D* 52:240 S 15 '16
- Keep it clean—keep it cold. *Kimball's D F* 15:351 My 15 '17
- Keep milk clean, cold, and covered. *Hoard's D* 52:624 N 24 '16
- Low counts in milk. *Country Gent* 81:448 F 26 '16
- Making clean milk. W. J. Dougan. *Wis Dairy-men's Assn Rep* 1913-1916:183-9 '17; Same. *Hoard's D* 52:757+ D 22 '16
- Methods of producing clean milk. J. J. Hooper and J. W. Nutter. *Breeder's Gaz* 71:724 Ap 5 '17
- Milk. R. Wheeler. *Ill Univ* (Urbana) B v 15, no 42 4p Je 17 '18
- Milk a cheap food. F. Rose. *bioblog Cornell Reading Course Farm Home* 111:73-86 '17; Same. *il Minn Farmers' Lib Ag Ext B* 63:1-7 '17; Same. *N Y Farms & Markets Dept Ag B* 97:261-70 Jl '17; Same. *Jersey B* 36:1335+ Ag 29 '18; Same. *Mass Ag Ext B* 15:1-15 '17; Excerpt. *J Ag* (Quebec) 21:44 S '17
- Milk, a food for everybody. J. H. Kellogg. *N Y Ag Dept B* 93:19-36 Mr '17
- Milk a great food. *Prog F* 32:680 Je 9 '17
- Milk and butter in the home. A. J. Reed. *N C Ag Ext C* 7:15-20 '16
- \* Milk and its relation to health. (C. 27) 26p *il '17 N.Y. State dept. of health, Albany*
- Milk and skimmed milk. *J Home Econ* 9:277-81 Je '17
- Milk and the human animal. H. Mason. *Ohio F* 142:410 O 26 '18
- Milk as a food. *Weekly N L* 4:6 Ap 18 '17; Same. *Creamery* 5:18 Ap '17; Same. *Hoard's D* 53:525 Ap 13 '17; Same. *Kimball's D F* 15:290 Ap 15 '17; Same. *Jersey B* 36:598 Ap 18 '17; Same. *Wallaces' F* 42:767 My 4 '17; Same. *N Y Prod R* 44:64 My 9 '17
- Milk as a food. J. J. Hooper. *Nat Stock & F* 41:264 Je 2 '17
- Milk as a food. A. L. Marlatt. *Hoard's D* 55:1034 Jl 12 '18
- Milk as a food and a source of fat. F. Rose. *il Hoard's D* 52:769+ D 22 '16
- Milk consumption. L. B. Cook. *N Y Prod R* 44:886 O 3 '17
- Milk-fed Americans; milk a natural necessity to promote growth. *il Rural N Y* 77:891 Jl 20 '18
- Milk food, not mere drink. *Pa Ag Dept Dairy B v* 15:5-7 Ag '17
- Milk for children. L. L. DeBra. *Hoard's D* 54:564 N 9 '17
- Milk for Italian babies. *Jersey B* 37:1433 S 4 '18
- Milk in Iowa. *Wallaces' F* 41:1054 Ag 4 '16
- Milk in the diet of children. *Kimball's D F* 15:646 S 15 '17
- Milk indispensable. *Jersey B* 36:1039 Jl 4 '17
- Milk is a food, not a beverage. *Creamery* 5:15-16 Jl '17
- Milk necessary for the nation's welfare. E. B. Hart and H. Steenbock. *il Wis Ag Exp B* 291:1-20 '18; Same. *Hoard's D* 55:836-9 Je 7 '18; Same. *Jersey B* 37:1117-18+ Jl 17 '18
- Milk production in the lean months. C. C. Hayden. *il Ohio F* 140:93-4 Ag 11 '17
- Milk, sanitary and otherwise. J. Wadden. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 4:155-64 F '17
- Milk sanitation on the farm. L. B. Dunham. *il Ohio F* 139:146 F 3 '17



**Milk—Continued**

- Milk solids and milk prices. T: D. Cutler. N Y Prod R 43:710 F 28 '17
- Milk supply: its conservation and profitable utilisation. J Bd Ag 25:234-6 My '18
- Milk, the best food we have. Creamery 7:48+ Je '18; Same. N Y Prod R 46:510 JI 31 '18
- Milk the indispensable food for children. D. R. Mendenhall. bibliog. (Pub. 35; Care of children ser. no. 4) 32p '18 U.S. Children's bur., Washington, D.C.; Excerpts. Jersey B 37:1405-6 S 4 '18
- Milk, the national drink. E. H. Johnson. Hoard's D 56:153 Ag 30 '18
- Milk; the problem and its solution. W. Sadler. J Ag (Quebec) 19:175, 197 F-Mr '16
- Milk versus eggs. il Ohio F 140:332 O 13 '17
- \* Milky way. R. H. Tetley. English R (19 Garrick st, London, W. C. 18s per yr.) 26:347-55 Ap '18
- Misguided appetite and the high cost of living. A. E. Perkins. il Ohio Ag Exp B v 1: 363-70 D '16; Summarized by J. Marsh. Ohio F 139:291 F 24 '17
- Modern idea in milk advertising. J. Kahn. Jersey B 36:879 Je 6 '17
- Modern milk problem, by J. Scott MacNutt. Review. J Ag (Quebec) 21:92 D '17
- Must teach consumer the food value of milk. D. D. Aitken. Hoard's D 56:383 O 11 '18
- Nation's wartime needs for milk. il Ohio F 142:69 JI 27 '18
- New basis for valuing milk. H. P. Miller. Hoard's D 53:651 My 4 '17
- 1916 B. of A. 1. report. N Y Prod R 43:394 Ja 3 '17
- Northern farmers use cottonseed oil in oleo-margarine. J. T. Ashcraft. Prog F 33:1294 N 23 '18
- Open letter to Mrs Milk Consumer. H. F. Judkins. Hoard's D 53:1003 JI 20 '17
- Overripe or fast milk. N Y Prod R 44:596 Ag 8 '17
- Pasteurized milk for babies. A. D. Burke. Nat Stock & F 40:1052 Ja 13 '17
- Present-day tendencies in market milk—control and production. L. P. Brown. N Y Ag Dept B 93:54-9 Mr '17
- Preventable losses in the separation of milk and cream. M. R. Tolstrup. Am Coop J 11: 519 Ja '16
- Price of milk and the value of babies' lives. L. E. Theiss. Outlook (381 4th av, N.Y. 10c) 117:572 D 5 '17
- \* Problem of safe and pure milk. J: Gaub. Public Health (Mich. State bd. of health, Lansing) n s 6:391-4 N '18
- Problems of milk production and distribution. A. Fluetsch. Creamery 5:24 F '17
- Producers advertising milk. A. Kolbe. Hoard's D 53:646 My 4 '17
- Producing clean milk for babies. A. E. Richter. Prac F 112:325 S 1 '16
- Producing sanitary milk. C: North. Hoard's D 52:13 JI 28 '16
- Production and care of milk and cream. Hoard's D 53:186 F 23 '17
- Production of clean milk. F. H. Bothell. Creamery 7:36-7 My '18
- Production of clean milk for human consumption. H. Munro. J Ag New Zealand 16:27-31 Ja '18
- Production of pure milk; California. Cal State Bd of Health (Sacramento) Spec B 13 12p '16
- Production of sanitary milk. E. J. Hupe. il Furdue Ag 11:34-7 Ap '17
- Production of sanitary milk. C: E. North. N H Ag Dept Rep v 34:63-81 '16
- Publicity for milk. Hoard's D 55:1055 JI 19 '18
- Pure milk and how to get it. Texas Univ (Austin) B 1711:1-7 F 20 '17
- Reaching the housewives of America. K. B. Musser. Hoard's D 56:181 S 6 '18
- Reason well expressed; Jersey milk. Jersey B 35:1680 O 25 '16
- Relation between the quantity of milk formed and that obtained in milking. S. G. Zwart. Int R Sci & Prac Ag 7,no 8:1139-41 Ag '16
- Report of committee on the food value of milk and milk products. L. L. Van Slyke. N Y Farms & Markets Dept Ag B 97:200-3 JI '17
- Report of the governors' tri-state milk commission; the food value of milk in its relation to price. Pa Ag Dept B 287:62-5 '17
- Ropy or stringy milk. A. Maloney. Hoard's D 53:820 Je 8 '17
- Safe and sane milk supply. J: Weinzirl. (In Pan American scientific congress Pro., 1915, v. 10, p. 127-30) '17
- Safe milk; an important food problem. E. A. Sweet. 24p 5c '17 U.S. pub. health service, Washington, D.C.
- Supplement no. 31 to the Public Health Reports, May 25, 1917
- Safeguarding nature's most valuable food. C: E. North. il Hoard's D 51:836-7 Je 16 '16
- Save the seventh baby. C: E. Terry. il Delin-eator (Spring and Macdougall sts, N.Y. 15c) 90:5-7 My; 8-9 Je; 91:13-14 N '17
- Scranton board of trade secures reduction in milk prices. J. S. Gibbons. Am City (Tribune bldg., N.Y. 35c) 17:559 D '17
- Securing clean and safe milk supply. Creamery 6:32a-32b N '17
- Soil fertility and sanitary milk requirements. Creamery 5:15 Ag '17
- Some economics of sanitary milk production; with discussion. L. P. Brown and J. E. Thomson. N Y Farms & Markets Dept Ag B 104:51-62 F '18
- Some of the newer conceptions of milk in its relation to health. L. F. Rettger. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:64-79 JI '17
- Some suggestions in connection with the milk problem. plan Cornell Ag Ext B 12:453-7 '17
- Sources of contamination of the milk supply. N. S. Gibson. Ag J of India 12:473-6 JI '17
- Studies in milk secretion; the effect of nutrition on yield and composition. J. Hammond and J. C. Hawk. J Ag Sci 8:139-46 Mr '17
- Studies in milk secretion; the relation of the glands of internal secretion to milk production. J. Hammond and J. C. Hawk. J Ag Sci 8:147-53 Mr '17
- Studies of the values of different grades of milk in infant feeding. R. M. Washburn and C. H. Jones. bibliog. il Vt Ag Exp B 195:1-134 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16; Same cond. (Popular ed with title: Value of different grades of milk in infant feeding.) B 201:1-32 '16
- Studies of use of milk by families having little children; Baltimore. 4p '18 U.S. Children's bur., Washington, D.C.
- Studies on the creaming ability of milk. B. W. Hammer. il Ia Ag Exp Research B 31:67-91 '16; Summary. Jersey B 35:1351 Ag 30 '16
- Study of certain ferments with a view to determining a method for the differentiation of pasteurized milk from raw milk. R: E. Lee and M. G. Mellon. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:360-7 Ap '17
- Suggestions about the production of sanitary milk. L. S. DiJastra. Hoard's D 52:316 S 29 '16
- Summer care of milk. Ohio F 138:87 JI 29 '16
- Superiority of milk as a food. J: B. Newman. il Field 11 27:445-6 Je '17
- Surplus milk for bread. Kimball's D F 16:265 Ap 1 '18
- Swiss cheese from silage milk. J. L. Sammis. N Y Prod R 45:135 N 28 '17
- Teaching uses of milk. F. J. Koch. Kimball's D F 15:646 S 15 '17
- Thermometer in the dairy. Jersey B 37:362 Mr 6 '18
- Troubles with milk. T. Butler. Prog F 31: 875 JI 15 '16
- Troubles with milk and how to avoid them. E. Butler. Prog F 33:733 Je 22 '18
- Unwarranted fear of milk. Rural N Y 76: 140 F 3 '17
- Use milk abundantly. Kimball's D F 16:293 Ap 15 '18
- Use of milk as food. R. D. Milner. Farmers' B 363:1-40 '16
- Value and payment of milk. R. S. Smith. Int Assn Dairy & Milk Inspec Rep 1916:288-95
- Value of clean milk. D. F. Mattson. N Y Prod R 45:546 F 20 '18

**Milk—Continued**

- Value of Jersey milk as a food. R. M. Washburn. Jersey B 36:382 Mr 14 '17
- Value of milk. E. B. Hart. N Y Prod R 43:542 Ja 31 '17
- Value of milk and its products. R. M. Washburn. Jersey B 36:1825-6 N 21 '17; Same. Kimball's D F 15:856 D 1 '17
- Value of milk in nutrition. E. B. Hart. il Hoard's D 52:756 D 22 '16
- Values of milk and its products. R. M. Washburn. Kimball's D F 16:109 F 15 '18
- War prices and the lack of milk for children. School and Soc (Science Press, Garrison, N. Y. 10c) 6:672-3 D 8 '17
- We must have an abundant supply of milk. H. E. Barnard. Jersey B 36:1947 D 12 '17
- The Welfare departments of the Norton company, the Cadillac company, and the other manufacturing concerns have established milk stations in their plants, and counteract fatigue among their men by giving them a recess twice a day to go out and purchase and drink milk. The usual fatigue points during the day are chosen for these recess periods and the result has been fewer accidents, increased efficiency, and a healthier more contented body of workmen. At the stands absolute sanitary conditions prevail. Like most welfare activities, the milk stations are run at a loss, or at cost.—Business Digest
- What causes ropy milk? Kimball's D F 15:433 Je 15 '17
- What is meant by quality in milk. H. A. Harding and others. Ill Ag Exp C 205:1-16 '17; Same. N Y State Ag Exp B 438:459-75 '17; Same. bibliog J Dairy Sci 1:199-217 S '17; Same. Cornell Ag Ext B 25:118-34 '17
- What is milk? il Jersey B 36:49-50 Ja 10 '17
- Why is milk our cheapest animal food. Ag Digest 2:660 O '17
- Why milk is easily digested. O. F. Hunziker. Country Gent 82:804 Ap 28 '17
- Why save milk? Cornell Countryman 15:140-1 D '17
- Why we should use more milk. C. E. Gapen. il Country Gent 83:3-4+ My 25 '18
- Wide-awake girls learn the care of milk and butter. Mrs W. N. Hutt. Prog F 31:762 Je 10 '16
- Wisconsin winter dairy course lessons. Kimball's D F 15:184 Mr 15 '17
- Yield of cheese from milk. W. H. Cooper. Country Gent 82:1646 O 27 '17
- See also* Butter; Cheese; Cows; Cream; Cream separators; Dairy bacteriology; Dairy law; Dairy products; Dairying; Federal milk investigation; Feeding and feeding stuffs—Milk; Kumiss; Lactose; Whey; also headings beginning Milk and Milking
- Analysis**
- Application of the cryoscopic method for determining added water in milk. J. T. Keister. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:862-5 S '17
- Bacteriological methods for market milk analysis. R. S. Breed. J Dairy Sci 1:380-2 Ja '18
- Calculation of the nutritive value of milk from routine tests. R. S. Smith. Int Assn Dairy & Milk Inspep Rep 1917:185-9
- Comparison of the proximate and mineral analysis of desiccated skim milk with normal cows' milk. E. P. Harding and H. Ringstrom. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:295-7 Ap '18
- Control of public milk supplies by the use of the microscopic method. R. S. Breed and J. D. Brew. bibliog J Dairy Sci 1:259-71 S '17
- Detection of added water in milk. H. Durand. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:44-5 Ja '17
- Detection of added water in milk by means of a simplified molecular concentration constant. L. W. Ferris. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:957-9 O '17
- Rapid volumetric method for approximate estimation of chlorine in milk. B. W. Hammer and D. E. Bailey. Ia Ag Exp Research B 41:337-48 '17
- Report on dairy products. L. I. Nurenberg. Assn Offic Ag Chem J 2,no 1,pt 1:8-22 My '16
- Report on separation of nitrogenous substances (milk and cheese). L. S. Palmer. Assn Offic Ag Chem J 2,no 1,pt 1:1-3 My '16
- Research on the detection of added water in milk. H. Durand and R. Stevenson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:26-30 Ja '18
- So-called neutralization precipitate of cows' milk. L. S. Palmer. Assn Offic Ag Chem J 2,no 1,pt 1:4-8 My '16
- Standard methods of bacteriological analysis of milk. (Reprinted from the Am. J. Pub. Health, v. 6, no. 12) 11p 25c n.d. Am. assn. of public health, 126 Massachusetts av., Boston
- Study of certain ferments with a view to determining a method for the differentiation of pasteurized milk from raw milk. R. E. Lee and M. G. Mellon. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:360-7 Ap '17
- Study of the estimation of fat in condensed milk and milk powders. C. H. Biesterfeld and O. L. Evenson. il J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:111-14 D '17
- Substitute for litmus for use in milk cultures. W. M. Clark and H. A. Lubs. J Ag Research 10:105-11 Jl 16 '17
- System of recording and tabulating the analyses of samples of milk collected by the Massachusetts state department of health; with discussion. H. C. Lythgoe. Int Assn Dairy & Milk Inspep Rep 1916:239-58
- Bacteriology**
- Ability of colon bacilli to survive pasteurization. S. H. Ayres and W. T. Johnson, jr. bibliog J Ag Research 3:401-10 F '15
- Advantages of a carbohydrate medium in the routine bacterial examination of milk. J. M. Sherman. il J Bact 1:481-8 S '16
- Advantages of using milk of low bacterial content in studying the phenomena of lactic fermentation. R. Burri and G. Hohl. Int R Sci & Prac Ag 7,no 4:596-7 Ap '16
- Agglutination test as a means of studying the presence of bacterium abortus in milk. L. H. Cooleedge. J Ag Research 5:871-5 F 7 '16
- Bacteria and bacterial testing. N Y Prod R 44:146-7 My 23 '17
- Bacteria in milk. Hoard's D 54:342 O 5 '17
- Bacteria in milk. G. S. Ellis. Country Gent 81:177 Ja 22 '16
- Bacteria of milk and milk products. D. H. Jones. il Ontario Ag Dept B 265:27-34 '18
- Bacteria of milk freshly drawn from normal udders. C. P. Fitch. Am Vet M Assn J 49:708-9 Ag '16
- Bacterial activities in milk products. H. A. Harding. Pa Ag Dept Dairy B v 15:8-10 O '17
- Bacterial content of milk in winter. J. Vanderleek. J Ag (Quebec) 21:141 Mr '18
- Bacterial testing versus dairy inspection. C. E. North. Hoard's D 55:496 Ap 5 '18
- Bacteriological counts of milk in New York state cities. State bureau of municipal information. Conference of mayors. 8p '17
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 40c)
- Bacteriology of foods. E. O. Jordan. Creamery 5:20-2 Je '17
- Bacteriology of foods. F. H. Slick; E. O. Jordan. Creamery 5:30-1 Jl '17
- Brief note on the use of gentian violet in presumptive tests for b. coli in milk with reference to sporulating anaerobes. I. C. Hall and L. J. Ellefson. bibliog J Bact 3:355-60 Jl '18
- Cheesemakers' biggest problem. C. S. Phelps. Hoard's D 51:866 Je 23 '16
- Colon bacteria and streptococci and their significance in milk. L. A. Rogers and others. Creamery 4:11-15 Mv '16



**Milk—Bacteriology—Continued**

- Comparison of the bacterial count of milk with the sediment or dirt test. H. C. Campbell. *il U S Ag B* 361:1-6 '16
- Control of bacteria in market milk by direct microscopic examination. R. S. Breed and J. D. Brew. *N Y State Ag Exp B* 443:717-46 '17; Summarized by F. H. Hall. (Pop. ed.) 10p '17; Summary. *N Y Prod R* 45:864 Ap 10 '18
- Counting bacteria by means of the microscope. R. S. Breed and J. D. Brew. *il N Y State Ag Exp Tech B* 49:1-31 '16
- Counting the living bacteria in milk—a practical test. W. D. Frost. *J Bact* 2:567-83 S '17
- Creatinine production by *b. coli* and *b. typhi*. H. J. Sears. *bibliog J Bact* 2:187-9 Mr '17
- Dairy inspection. W. H. Bailey. *Am Vet M Assn J* 52:686-92 F '18
- Dairy score card and its relation to milk quality; with discussion. R. S. Breed. *N Y Farms & Markets Dept Ag B* 104:62-75 F '18
- Effects of temperature upon the growth and activity of bacteria in milk. H. S. Reed and R. R. Reynolds. *Va Ag Exp Tech B* 10:1-26 '16
- Factors and methods in the profitable production of sanitary milk. W. D. Nicholls. *il plans Ky Ag Exp B* 206:1-43 '17
- Four essential factors in the production of milk of low bacterial content. S. H. Ayers and others. *bibliog il U S Ag B* 642:1-61 '18; Excerpts. *Creamery* 7:35-7 Je '18; Summary. *Hoard's D* 55:986 J1 5 '18; Summary. *N Y Prod R* 46:450 J1 17 '18
- Germ content of milk as influenced by barn factors. M. J. Prucha and H. M. Weeter. *Creamery* 6:27-31 S '17
- Germ content of milk; as influenced by the utensils. M. J. Prucha and others. *il Ill Ag Exp B* 204:217-57 '18; Abstract. *Kimball's D F* 16:320 Ap 15 '18
- Germ content of milk influenced by utensils. J. Vanderleek. *J Ag (Quebec)* 21:171 My '18
- Germ content of stable air and its effect upon the germ content of milk (B. 409). G. L. A. Ruehle and W. L. Kulp. *bibliog N Y State Ag Exp Rep* 1915:151-206 '16
- \* Inexpensive field plating outfit for bacterial examination of milk. F. O. Tonney and J. L. White. *il Am J Pub Health* (126 Massachusetts av., Boston \$4 per yr.) 8:582-4 Ag '18
- Laboratory milk and meat inspection. J. F. Mitchell. *Am Vet M Assn J* 51:363-73 Je '17
- Large numbers of bact. abortus var. lipolyticus which may be found in milk. A. C. Evans. *J Bact* 2:185-6 Mr '17
- Metallic flavor in dairy products. E. S. Guthrie. *bibliog Cornell Ag Exp B* 373:609-43 '16; Same. *Cornell Ag Exp Rep* 1916:609-43 '17; Same cond. *N Y Prod R* 42:108 My 10 '16
- Methods of making bacterial count. E. G. Hastings. *Hoard's D* 52:62 Ag 11 '16
- Milk-borne infections. *Creamery* 5:37 Je '17
- Milk hygiene. (*In Report*, 1916, p. 27-30) '17
- Oregon state live stock sanitary board, Salem
- \* Milk supply of Dublin: report of a bacteriological investigation of the city of Dublin milk supply. D. Houston. 30p '18 Ireland co-operative reference lib., Dublin
- New studies of germs in milk. H. A. Harding. *O Judd Farmer* 61:3 J1 22 '16
- Number of bacteria in milk. J. D. Brew and W. D. Dotterer. *N Y State Ag Exp B* 439:477-522 '17; Summarized, by F. H. Hall. (Pop. ed.) 11p '17
- Number of colonies allowable on satisfactory agar plates. R. S. Breed and W. D. Dotterer. *N Y State Ag Exp Tech B* 53:1-11 '16
- Observations on causes of high bacterial counts in market milk. H. D. Pease. *Creamery* 4:11-13 J1 '16
- Observations sur l'influence chimique des milieux de culture sur le développement et la production de l'indol par les colibacilles et par les bacilles typhiques. E. Zunz and P. György. *bibliog J Bact* 1:627-61 N '16
- Origin of odors in milk and dairy products. J. Vanderleek. *J Ag (Quebec)* 20:129 D '16
- Origin of some of the streptococci found in milk. L. A. Rogers and A. O. Dahlberg. *J Ag Research* 1:491-511 Mr '14
- Paying for quality in milk. R. H. Schuster. *Hoard's D* 51:663 My 12 '16
- Preliminary note on certain changes in some of the nitrogenous constituents of milk caused by bacteria. G. C. Supplee. *bibliog J Dairy Sci* 1:313-19 N '17
- Preliminary report on a series of cooperative bacterial analyses of milk. R. S. Breed and W. A. Stocking. *J Dairy Sci* 1:19-34 My '17
- Production of clean milk. E. H. Bothell. *Creamery* 7:34-6 Ap '18
- Regulating the quality of market milk. R. S. Breed. *il Ohio F* 137:289+ F 26 '16
- Reliability and significance of the bacteriological analysis of milk; with discussion. H. W. Conn. *Int Assn Dairy & Milk Inspec Rep* 1916:205-31
- Report of committee on bovine diseases—their relation to the milk supply and to the public health. H. Young and others. *Int Assn Dairy & Milk Inspec Rep* 1915:40-3
- Report of committee on human diseases—their relation to the milk supply and to the public health; with discussion. W. H. Price and others. *Int Assn Dairy & Milk Inspec Rep* 1915:44-53
- Report of committee on methods of bacterial analyses of milk and milk products and the interpretation of results. G. E. Bolling. *Int Assn Dairy & Milk Inspec Rep* 1917:85-8
- Safeguarding nature's most valuable food. C. E. North. *il Hoard's D* 51:836-7 Je 16 '16
- Significance of bacteria in milk. L. A. Rogers. *Int Assn Dairy & Milk Inspec Rep* 1915:146-52
- Significance of bacteriological analysis of milk. H. W. Conn. *Creamery* 5:19-23 N '16
- Slimy andropy milk. R. E. Buchanan and B. W. Hammer. *Creamery* 4:16 Ag '16; Same cond. *N Y Prod R* 41:912 Mr 22 '16
- Some bacteriological tests of the milk clarifier. J. M. Sherman. *J Dairy Sci* 1:272-8 S '17
- Standard methods of bacteriological analysis of milk. (Reprinted from the *Am. J. Pub. Health*, v. 6, no. 12) 11p 25c n.d. Am. assn. of public health, 126 Massachusetts av., Boston
- Studies in infectious abortion in cattle. W. Giltner, E. T. Hallman and L. H. Cooledge. *Am Vet M Assn J* 49:336-9 Je '16
- Studies on the formation of gas in milk. B. W. Hammer. *il Ia Ag Exp Research B* 27:1-16 '16
- Studies on the numbers of bacteria in milk showing various changes. B. W. Hammer. *Ia Ag Exp Research B* 29:35-62 '16
- Study of the milk in bovine infectious abortion. W. Giltner and others. *Am Vet M Assn J* 50:157-67 N '16
- Study of the presence of bacterium abortus (Bang) in milk. L. H. Cooledge. *bibliog Mich Ag Exp Tech B* 33:1-37 '16; Same. *Mich Ag Bd Rep* 1917:626-58
- Substitute for litmus for use as an indicator in milk cultures. W. M. Clark and H. A. Lubs. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:182-3 S 22 '17
- Varying bacteriological results obtained by different laboratories. C. H. Kilbourne. *Creamery* 7:54-6 O; 40+ N '18
- When is milk clean? *Country Gent* 81:1648 S 9 '16

See also Lactic acid bacteria; Milk—Pasteurization

**Clarification**

- Clarification is not re-enforced straining. *Creamery* 5:17 Ag '17
- Clarification of milk. *Purdue Ag* 11:31-2 My '17
- Clarification of milk. E. G. Hastings; J. H. Landis. *Creamery* 5:48+ My '17
- Clarification of milk. T. J. McInerney. *bibliog il Cornell Ag Exp B* 389:487-504 '17; Same. *Cornell Ag Exp Rep* 1917:487-504 '18
- Clarification, straining and sediment test. *Creamery* 5:41-3 S '16

**Milk—Clarification—Continued**

Controversy about clarification. Creamery 5: 29-30 My '17

Desirability of clarification and pasteurization. C: Cristadoro. Hoard's D 54:574 N 16 '17

Some bacteriological tests of the milk clarifier. J. M. Sherman. J Dairy Sci 1:272-8 S 17

Studies on the clarification of milk. B. W. Hammer. Ia Ag Exp Research B 28:19-32 '16; Same cond. Creamery 4:15 Ag '16; Same cond. N Y Prod R 42:688 Ag 23 '16

**Composition**

Alcohol test in relation to milk. S. H. Ayers and W. T. Johnson, jr. bibliog U S Ag B 202:1-35 '15

Average composition of morning and evening milk during 1914, 1915 and 1916. P. S. Arup and others (Analyst 42, no. 493 118-24p '17). Exp Sta Record 38, no 3:279 '18

Comparison of the composition of cow's milk, goat's milk, and human milk. A. W. Bosworth and L. L. Van Slyke. Int R Sci & Prac Ag 9, no 5:620-1 My '18

Effect of water in the ration on the composition of milk. W. F. Turner and others. bibliog J Ag Research 6:167-78 Ap 24 '16

Enzymes of milk and butter. R. W. Thatcher and A. C. Dahlberg. bibliog J Ag Research 11:437-50 N 26 '17

Food value of milk. J: H. Kellogg. il Hoard's D 52:758 D 22 '16

Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of overfeeding. C. H. Eckles and L. S. Palmer. Mo Ag Exp Research B 24:1-35 '16

Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of underfeeding. C. H. Eckles and L. S. Palmer. il Mo Ag Exp Research B 25:1-107 '16

Influence of the age of the cow on the composition and the properties of milk and milk fat. C. H. Eckles and L. S. Palmer. bibliog J Ag Research 11:645-58 D 17 '17

Influence of the stage of gestation on the composition and properties of milk. L. S. Palmer and C. H. Eckles. bibliog J Dairy Sci 1:185-98 S '17

Milk and its constituents. H. C. Troy. il Cornell Rural School Leaflet v 11, no 1:92-6 '17

Relation of the fat in milk to the solids-not-fat. L. P. Brown and C. V. Ekroth. Int Assn Dairy & Milk Inspect Rep 1916:126-33

Some new constituents of milk: a new protein, soluble in alcohol. T. B. Osborne and A. J. Wakeman (J. Biol. Chem. 33, no. 2: 243-251 '18). Exp Sta Record 38:611-12 My '18

Value of butterfat. G. L. McKay. Hoard's D 51:51 F 4 '16

Variations in the fat, solids-not-fat, and total solids in cow's milk. G: C. White and H: F. Judkins. bibliog Conn Storrs Ag Exp B 94:251-307 '18; Summary. N Y Prod R 46: 304 Je 19 '18

See also Butterfat; Milk—Fat content

**Costs**

Analysis of milk production data. S. W. Mendum. Hoard's D 51:994 J1 21 '16

Approximate cost of milk production. Hoard's D 54:462 O 26 '17

Britain studying milk production costs. Jersey B 35:237-8 F 16 '16

Case of the milkman. F. W. Woll. Hoard's D 53:559 Ap 20 '17

Chicago milk commission errs. E. Davenport. Kimball's D F 16:160+ Mr 1 '18; Same. Hoard's D 55:234-5 Mr 1 '18; Excerpts. O Judd Farmer 64:14 Mr 9 '18

Chicago situation. B. H. Hibbard. Jersey B 37:391 Mr 13 '18

Consumer vs. the dairyman. A. D. Burke. Ohio F 140:289 O 6 '17

Controversy on milk prices. Creamery 6:53, 58-64 O '17

Cost consideration in feeding. H. H. Dean. Prac F 112:220 My 15 '16

Cost of food in the production of milk. C. Crowther and A. G. Ruston. Int R Sci & Prac Ag 7, no 10:1475-8 O '16

Cost of milk. J. M. McKee. Nat Stock & F 41:537 S 1 '17

Cost of milk and fat production in Vermont in 1911 and 1912. G. M. Nelson. Vt Ag Exp B 202:25-39 Mr '17

Cost of milk production. Ag Digest 1:216 D '16

Cost of milk production. Kimball's D F 14: 726 N 15 '16; Same. Hoard's D 52:584 N 17 '16

Cost of milk production. Kimball's D F 15: 855 D 1 '17

Cost of milk production. N Y Prod R 46:766 S 25 '18

Cost of milk production. Ohio Ag Exp B v 2: 193-7 Je '17; Same. Ohio F 140:8 J1 8 '17

Cost of milk production. O. Erf. Ohio F 140:168 S 1 '17

Cost of milk production. L. S. Gillette. Kimball's D F 15:244 Ap 1 '17

Cost of milk production. C. W. Larson. Nat Stock & F 40:1021 Ja 6 '17

Cost of milk production. J. B. Lindsey. Mass Ag Ext B 11:1-8 '16

Cost of milk production. J. Mackintosh. J Bd Ag 23:sup53-71 S '16

Cost of milk production. H. P. Miller. Ohio F 141:620 My 4 '18

Cost of milk production. F. W. Peck and A. Boss. map Minn Ag Exp B 173:1-36 '18; Same cond. Minn Ag Ext Spec B 19:1-12 '18

Cost of milk production. J. E. Ryan. Kimball's D F 16:629 Ag 15 '18

Cost of milk production in Massachusetts. W. H. Bronson. map Mass Ag Ext B 19:1-20 '18

Cost of milk production in New England. (In Milk question in New England, p. 8-20) '17 Boston chamber of commerce

Cost of milk production in New England. A. W. Gilbert. Mass Ag Bd Yearbook 1917, pt 2:51-65 '18

Cost of milk production in the counties of Kent and Surrey. G. H. Garrad. Int R Sci & Prac Ag 7, no 3:425-6 Mr '16

Cost of producing market milk in 1916-17 on 212 Vermont farms. G. F. E. Story and W. J. Tubbs. Vt Ag Exp B 209 (Ext. C. 7): 1-24 '17

Cost of producing milk. Hoard's D 56:512 N 8 '18

Cost of producing milk. W. B. Barney. Wallaces' F 42:1592 N 23 '17

Cost of producing milk. R. W. Bird. Wallaces' F 43:139 Ja 25 '18

Cost of producing milk. J. Wilson. J Dept Ag Ireland 17, no 2:218-24 '17

Cost of producing milk in New England. F. Rasmussen. Hoard's D 52:621 N 24 '16

Cost of producing milk on 174 farms in Delaware county, New York (B. 364). A. L. Thompson. il maps Cornell Ag Exp Rep 1916:115-79 '17

Cost of producing quality milk. C. O. Hayden. Hoard's D 51:869 Je 23 '16

Cost of production as affected by the amount produced. C: L. Allen. Hoard's D 52:374 O 6 '16

Cost of summer feeding in milk production. G. H. Garrad. J Bd Ag 23:321-32 J1 '16

Dairy cattle being sold for slaughter. Creamery 5:16 Je '17

Dairymen before commission show cause why price of milk should be higher. O Judd Farmer 63:3 D 22 '17

Dairymen's league directors adopt Warren formula for finding cost of production of milk. Hoard's D 56:324 O 4 '18

Detailed costs of milk production in New England. Hoard's D 54:656 N 30 '17

Determining cost of milk production. F. A. Pearson. Creamery 6:35 N '17

Don't blame it on the cows. R. G. Miller. il Kimball's D F 16:657 S 1 '18

Factors influencing the cost of milk. W. M. Kelly. Ohio F 140:601-2 D 29 '17

Fairview farm milk production costs. Jersey B 37:590 Ap 17 '18

Feed cost in milk production. C. W. Larson. il Field 11 26:837-8 O '16



**Milk—Costs—Continued**

- Financial factors in production of market milk. F. Rasmussen. Creamery 5:35-7 Mr '17
- Getting a price for milk. S. B. Cleland. Kimball's D F 15:462 J1 1 '17
- Great changes in dairying. F. H. Higgins. il O Judd Farmer 63:1+ Ag 4 '17
- Hoover's job. Jersey B 37:186 F 6 '18
- How long is a stick? price of milk. E. Davenport. il Country Gent 83:10-11 Ja 5 '18
- Important factors in milk production. W. A. Linklater. Western Wash Ag Exp B v 6:78-9 S '18
- Investigation of the cost of milk production in western Washington. F. W. Rader. Western Wash Ag Exp B v 6:63-9 Ag '18
- Manurial values of concentrated foods in relation to cost of food in the production of milk. J. Mackintosh. J Bd Ag 23:209-24 Je '16
- Milk cost survey for the week Nov. 26 to Dec. 2, 1917. 42p '17 Md. Council of defense, 703 Union trust bldg., Baltimore
- Milk costs. Nat Stock & F 42:427 Ag 3 '18
- Milk costs in England. T. Reece. Kimball's D F 14:114 F 15 '16
- Milk producer's problem. W. L. Nelson. Hoard's D 54:580-1 N 16 '17
- Milk production costs. C. I. Hudson. Kimball's D F 16:38 Ja 15 '18
- Milk production in war time. J Bd Ag 22:981-6 Ja '16
- Milking the cow or milking the farmer. il Am Coop J 13:83-4 N '17
- Misleading computations in dairy bulletins and cow-testing association reports. H. Mertz. Purdue Ag 11:37-9 F '17
- New data on cost of milk production. Hoard's D 55:622 Ap 26 '18
- Pennsylvania dairyman's figures. C. D. Dayton. Rural N Y 75:1139 Ag 26 '16
- Production cost of Cleveland's milk. P. L. Dunham. il Kimball's D F 14:653+ O 15 '16
- Production, distribution and food value of milk; a report by the milk committee. 41p '18 U.S. Food administration, Washington, D.C.
- Supply exhausted
- Progress report on the production and distribution of milk. E. Mead. Cal Ag Exp C 175:1-16 '17
- Real profits from the dairy business as measured by cost accounting. G. F. Warren. N Y Ag Dept B 86:2328-31 Ag '16
- Report of the governors' tri-state milk commission; production costs. map Pa Ag Dept B 287:1-28 '17
- Report of the Mayor's committee on milk. 85p '17 N.Y. city Bur. of public health educ., Dept. of health
- Retailer should answer charges made that high price of milk is due to feed. Coop Manager & F 7:80 Ja '18
- Roughages for milk production; legume hays may replace much high-priced grain. C. C. Hayden. Ohio Ag Exp B v 2:387-90 D '17
- St Louis milk conditions. F. W. Schroeder. O Judd Farmer 60:9 My 27 '16
- Shall dairymen earn costs? Non-Partisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:11 D 10 '17
- Studies from the survey on the cost of market milk production. K. B. Musser and others. Conn Ag Coll Ext B 7:1-28 '17
- Studies in the cost of market milk production. A. C. Anderson and F. T. Riddell. Mich Ag Exp B 277:1-38 '16; Same. Mich Ag Bd Rep 1917:417-52
- Study in the cost of producing milk on four dairy farms, located in Wisconsin, Michigan, Pennsylvania, and North Carolina. M. O. Cooper and others. bibliog il U S Ag B 501:1-35 '17
- Warren formula explained. Hoard's D 56:554 N 15 '18; Same. J Ag (Quebec) 22:95 D '18
- What are the dairyman's feed bills? Prac F 113:358 O 15 '17
- What milk costs the farmer. B. H. Hibbard. Hoard's D 55:10 Ja 25 '18
- Who gets the money? H. F. Judkins. Hoard's D 54:121 Ag 24 '17

Winter milk must be three dollars. O Judd Farmer 63:1 Ag 18 '17

See also Milk—Prices

**Bibliography**

Working bibliography of the cost of producing milk. H. E. Horton. 13p typew '17 H. E. Horton, Agricultural comr., American steel and wire co., 208 S. La Salle st, Chicago

**Distribution**

- Cheapening milk delivery. il System on the Farm 1:384 D '17
- Co-operative milk delivery. N Y Prod R 47:224 D 18 '18
- \* Co-operative milk delivery experience. Municipal Reference Lib Notes (Room 512, Municipal bldg., N. Y. 5c) 5:110-11 N 27 '18
- Co-operative milk production. Creamery 5:29 Ap '17
- Cost of distributing milk. L. P. Jefferson. Kimball's D F 15:310 My 1 '17
- Cost of distributing milk. A. G. Morrell. il Country Gent 81:1540 Ag 19 '16
- Cost of distributing milk in six cities and towns in Massachusetts. A. E. Cance and R. H. Ferguson. il Mass Ag Exp B 173:1-54 '17; Same cond. Mass Ag Ext B 14:1-8 '17; Excerpt. N Y Prod R 45:168 D 5 '17
- Dairymen's league and milk prices. Rural N Y 76:490 Mr 31 '17
- Economy in milk distribution. Wallaces' F 42:1504 N 2 '17
- Investigation of the cost of distributing milk in Boston. (In Milk question in New England, p. 21-31) '17 Boston chamber of commerce
- London to have \$20,000,000 milk combine. (Commerce Reports no. 257) p 456-7 (N 2) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Milk and its distribution in Philadelphia. T. B. Harbison. 12p il Educational committee, Chamber of commerce, Philadelphia
- Milk distribution a public utility. Survey (112 E. 19th st., N.Y. 10c) 37:605-6 F 24 '17
- Milk distribution costs. O Judd Farmer 61:10 D 2 '16
- Milk producer, the distributor, and the consumer. B. Watson. Hoard's D 54:616 N 23 '17
- Milk situation analyzed. Rural N Y 76:1377 D 1 '17
- More economic distribution and delivery of milk. W. O. Nance. Creamery 7:16-19 Ja '18
- My experience as a distributor of milk. E. L. Bradford. Mass Ag Bd Yearbook 1916, pt 2:135-40 '17
- My experience as a distributor of milk. L. Horton. N Y Ag Dept B 93:44-54 Mr '17
- New York dealers favor noon delivery of milk. A. Kolbe. Hoard's D 53:498 Ap 6 '17
- Now for the Towner-Smith bill. Rural N Y 76:557 Ap 14 '17
- Problem of milk distribution. Rural N Y 77:561 Ap 13 '18
- Production and distribution of milk as it concerns our public health service. H. E. Egan. Ohio Pub Health Journal (Ohio State Bd of Health, Columbus) 7:315-21 Ag '16
- Profit in distributing milk. A. G. Morrell. Country Gent 81:1578 Ag 26 '16
- Progress report on the production and distribution of milk. E. Mead. Cal Ag Exp C 175:1-16 '17
- Public opinion focused on milk delivery. Creamery 5:30-1 Ja '17
- Report of the governors' tri-state milk commission; distribution. map Pa Ag Dept B 287:29-46 '17
- Report on the more economic distribution and delivery of milk in the city of Chicago. (B. 8) 15p '18 Municipal reference library, 1005 City hall, Chicago; Same abr. Creamery 7:16-19 Ja '18
- Senator Towner and the milk bill. Rural N Y 76:587 Ap 21 '17
- Some up-to-date first hand data as an argument for municipal milk stations. Town (Baltimore, Md. 5c) 3:5 Ap 13 '18
- Support the Towner milk bill. Rural N Y 76:421 Mr 17 '17
- Towner milk market bill. Rural N Y 76:289 F 24 '17

**Milk—Distribution—Continued**

- Traveling milk store. Hoard's D 55:191 F 22 '18  
 Trucks for milk pick-up and delivery. *il* Creamery 5:13-15 Ap '17  
 Universal city delivery system. W: H. Timm. Creamery 6:33-4 N '17  
 Viewpoint of the milk distributor. *il* Hoard's D 55:224 Mr 1 '18  
 When milk gets to town. C. E. Gapen. *il* Country Gent 82:1965- D 15 '17  
 Will milk delivery system be improved? J. M. Carroll. Hoard's D 54:649 N 30 '17

**Exhibits**

- Preparation of market milk for exhibit. L. S. Hanning. Purdue Ag 11:28 O '16

**Expansion**

- Studies in the expansion of milk and cream. H. W. Bearce. J Ag Research 3:251-68 D '14

**Fat content**

- Butterfat and commercial milk. Hoard's D 51:1 Ja 28 '16  
 Butter fat and income. Weekly N L 5:5 Ag 8 '17  
 Butter fat as a basis for fixing the value of commercial milk; with discussion. L. L. Van Slyke. N Y Ag Dept B 80:1462-78 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1462-78 '17  
 Butter fat or camouflage? C. N. McArthur. Jersey B 37:1119 Jl 17 '18  
 Butterfat premium system of buying milk. H. F. Judkins. Hoard's D 55:840 Je 7 '18  
 Butterfat standard. N. W. Hepburn. N Y Prod R 42:356+ Je 21 '16  
 Correlation between the percentage of fat in cow's milk and the yield. E. Roberts. J Ag Research 14:67-96 Jl 8 '18  
 Cow in calf deserves more honor. J. J. Hooper. *il* J Heredity 9:250-2, 287 O '18  
 Daily variation in the composition of milk. D. Ananda Rao. Ag J of India 13:82-5 Ja '18  
 For a better balanced basis of chemical standards for milk. Creamery 5:29-31 Ag '17  
 Influence of palm kernel cake upon the composition of milk-fat. C. Crowther and H. Woodhouse. J Ag Sci 8:451-4 D '17  
 Influence of prickly pear upon percentage of butterfat. T. E. Woodward. Hoard's D 52:579 N 17 '16  
 Influence of the age of the cow on the composition and properties of milk and milk fat. C. H. Eckles and L. S. Palmer. bibliog J Ag Research 11:645-58 D 17 '17  
 Is the fat basis of calculation fair? M. O. Maughan. Hoard's D 55:210 F 22 '18  
 New basis for valuing milk. H. P. Miller. Hoard's D 53:651 My 4 '17  
 Per cent of butter fat in milk cannot be changed by feeding. T. Butler. Prog F 33:435 Ap 6 '18  
 Premiums for butterfat in market milk. Creamery 5:18 Je '17  
 Price based on butterfat and corn. B. H. Hibbard. Hoard's D 55:186 F 22 '18  
 Testing for butterfat in condensed and powdered milk—a revised method of more complete separation. C. H. Bresterfeld and L. O. Evenson. N Y Prod R 46:416-17 Jl 10 '18  
 Variation in fat test. H: F. Judkins. Hoard's D 55:883 Je 14 '18  
*See also* Butterfat; Cow testing

**Grading**

- Boston report on grading and labeling. Creamery 5:46-7 S '16  
 Business of dairying. I. J. Mathews. Country Gent 82:1688 N 3 '17  
 Control of bacteria in market milk by direct microscopic examination. R. S. Breed and J. D. Brew. N Y State Ag Exp B 443:717-46 '17; Summarized, by F. H. Hall. (Pop. ed.) 10b '17; Summary. N Y Prod R 45:864 Ap 10 '18  
 Experience of New York city in grading market milk. L. P. Brown. Creamery 4:11-14 Ag '16  
 Grade A milk in New York city. Creamery 4:14 Ap '16  
 Grades of milk. H. E. Ross. *il* Cornell Rural School Leaflet v 11, no 1:87-92 '17

- Grading and labeling milk and cream. Am City (Tribune bldg., N.Y. 35c) 16:81 Ja '17  
 Grading and labeling of milk and cream. 24p *il* '16 Boston Chamber of commerce; Same cond. Creamery 5:30-3 S '16; Same cond. N Y Prod R 42:872 S 27 '16  
 Grading of milk. (*In* Report, Mass. Special milk board, 1915, p. 190-205) '16 Mass. State dept. of health, Boston  
 Grading of milk. E. Kelly. *il* Hoard's D 52:1+ Jl 28 '16  
 Grading of milk in small communities. L. R. Williams. Creamery 5:31-2+ N '16  
 Market milk regulation standards. Hoard's D 53:514 Ap 13 '17  
 Milk grading system. C. B. Harpster. Creamery 4:11-12 Ap '16  
 Milk quality as determined by the present dairy score cards (B. 398). J. D. Brew. N Y State Ag Exp Rep 1915:125-50 '16  
 Milk we consume. M. R. Tolstrup. Am Coop J 11:636 F '16  
 Modern tendencies and the milk trade. Country Life 29:47 Ja '16  
 Pasteurization and grading. N Y Prod R 44:232+ Je 6 '17  
 Plan for grading milk as used by the New York city health department; with discussion. O. Salthe. Int Assn Dairy & Milk Inspe Rep 1916:140-53  
 Preliminary report of the effect of the sanitary milk code upon the milk supply of the state. L. R. Williams. N Y Ag Dept B 80:1613-18 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1613-21 '17  
 Proposed market milk regulation standards. Creamery 5:17-18 My '17  
 Report of the governors' tri-state milk commission; grading. Pa Ag Dept B 287:52-61 '17  
 Requirements for grading and standards of milk—taken from milk ordinances of various cities thruout the U. S. Business and munic. lib., Minneapolis. 10p tables '16  
 Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew \$1)  
 Special milk. Creamery 4:17 Ja '16; Same. Hoard's D 51:96 F 11 '16

**Handling**

- Present practicability of federal standards for milk handling. H. A. Harding. Creamery 4:19-23 My '16

*See also* Milk—Distribution

**Marketing**

- Advertising milk. C. B. Martin. Creamery 7:38-9 My '18  
 Cooperative marketing of milk. R. B. Swift. Breeder's Gaz 70:198 Ag 10 '16  
 Discussion of milk marketing. (*In* Nat. conf. on marketing and farm credits, 1916, p 421-9) \$2 '17 C. W. Holman, sec., Madison, Wis. Grand Rapids milk producers considering a co-operative city plant. N Y Prod R 41:914 Mr 22 '16  
 Holding customers. C. A. Cameron. System on the Farm 3:226-7 D '18  
 In the heart of a milk country; organized selling. W. H. Main. *il* Rural N Y 75:392 Mr 4 '16  
 It pays to advertise. E: M. Prewitt. Hoard's D 55:854 Je 7 '18  
 Market milk problems. W: E. Dana. N Y Ag Dept B 80:1608-13 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1608-13 '17  
 Marketing dairy products; interesting consideration of the milk marketing problem. R. C. Potts. N Y Prod R 43:350+ D 27 '16  
 Marketing milk and cream. E. L. Bradford. Mass Ag Bd Yearbook 1916, pt 2:162-7 '17  
 Marketing milk in New England. N Y Prod R 42:766 S 6 '16  
 Marketing milk in the Elgin district. F. H. McCampbell. Purdue Ag 12:228-30 Ja '18  
 Marketing Wisconsin milk. B. H. Hibbard and H. E. Erdmann. *il* maps Wis Ag Exp B 285:1-71 '17  
 Milk at noon lunches. G. L. Graff. Ohio F 138:87 Jl 29 '16  
 Milk production and co-operation. M. R. Tolstrup. *il* Hoard's D 55:602+ Ap 26 '18



**Milk—Marketing—Continued**

- Needs of milk producers. Rural N Y 75:561 Ap 1 '16  
 New England milk case. Hoard's D 51:702 My 19 '16  
 Producers' problem in marketing milk. R. C. Potts. Ag Digest 1:375 Ap '17  
 Results of an investigation of marketing whole milk. H. E. Horton. (*In* Nat. conf. on marketing and farm credits, 1916, p. 401-8) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Selling cream versus making butter. J. Underwood. il Prac F 114:229 J1 1 '18  
 Selling whole milk. W. S. Tomlinson. Ohio F 140:530 D 8 '17  
 Single use dairy products containers. il Creamery 4:27-8 Mr '16  
 Solve milk selling problem. il O Judd Farmer 61:1+ J1 22 '16  
 Solve Streater milk problem. O Judd Farmer 60:14 My 6 '16  
 Standardization must precede advertising. A. L. Tichane. Hoard's D 55:557 Ap 19 '18  
 Systems of buying milk. Creamery 4:31 Ja '16; Same. Hoard's D 51:107 F 11 '16  
 Wholesaling bottled milk. il Wallaces' F 41: 1591 D 8 '16  
*See also* Dairymen's associations; also names of associations

**Bibliography**

- \* Marketing of milk; a contribution to a bibliography. E. D. Orr, comp. 23p (Je) '18 Univ. of Wisconsin library school, Madison Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Typew 1.15)

**Nitrogen content**

- Preliminary note on certain changes in some of the nitrogenous constituents of milk caused by bacteria. G. C. Supplee. bibliog J Dairy Sci 1:313-19 N '17

**Pasteurization**

- Ability of streptococci to survive pasteurization. S. H. Ayers and W. T. Johnson, jr. J Ag Research 2:321-30 J1 '14  
 Biorization of milk. F. Kunst; E. G. Hastings. il Hoard's D 52:240 S 15 '16  
 California legislation; pasteurization defined. F. W. Andreason. N Y Prod R 41:624 F 9 '16  
 Clean milk for the baby. M. P. Connolly. il Country Gent 81:1388 J1 15 '16  
 Commercial pasteurization of milk and cream. (*In* Report, Mass. Special milk board, 1915, p. 105-9) '16 Mass. State dept. of health, Boston  
 Compulsory pasteurization. N Y Prod R 46:84 My 15 '18  
 Cooling hot-bottled pasteurized milk by forced air. S. H. Ayers and others. U S Ag B 420:1-38 '16; Abstract. Creamery 5:47+ N '16; Summary. N Y Prod R 43:110 N 15 '16  
 Cost of pasteurizing milk and cream. J. T. Bowen. U S Ag B 85:1-12 '14  
 Courts uphold order requiring all milk to be pasteurized before it can be sold. Ohio Pub Health J (Columbus) 8:350-4 Ag '17  
 Dangers of modern pasteurisation. J. Vanderleek. il J Ag (Quebec) 20:15 J1 '16  
 Desirability of clarification and pasteurization. C. Cristadoro. Hoard's D 54:574 N 16 '17  
 Detroit's experience in enforcing compulsory pasteurization of its milk supply. E. C. Krehl. Int Assn Dairy & Milk Inspec Rep 1915:181-4  
 Does high pasteurization temperature injure the character of milk? J. M. Kitchen. Hoard's D 53:942 J1 6 '17  
 Don't give the children raw milk. Creamery 4:23-4 J1 '16  
 Effect of pasteurization on mold spores. C. Thom and S. H. Ayers. J Ag Research 6: 153-66 Ap 24 '16  
 Efficient operation of a pasteurizing plant. Hoard's D 56:496 N 1 '18  
 Electric process of pasteurization. C. C. Johnson. Ohio F 137:301 F 26 '16  
 Electrical sterilization of milk. Hoard's D 51: 331 Mr 17 '16

- Experiments in Sweden on the prolonged pasteurisation of milk. Int R Sci & Prac Ag 7,no 1:143-6 Ja '16  
 How to pasteurize is important to know. W. C. Davis. Creamery 5:44 Ja '17  
 Influence of pasteurization on chemical content of milk. H. C. Lythgoe and others. (*In* Report, Mass. Special milk board, 1915, p. 273-92) '16 Mass. State dept. of health, Boston  
 Loss of the cream-line in pasteurised milk. J. Vanderleek. J Ag (Quebec) 21:91 D '17  
 Methods of pasteurizing. Ohio F 137:464 Mr 25 '16  
 Milk and pasteurisation. W. Sadler. J Ag (Quebec) 19:265 Je '16  
 Milk pasteurization. J Ag (Quebec) 20:110 N '16  
 Modern pasteurisation at low temperature. J. Vanderleek. Ag Gaz of Canada 4:614-19 J1 '17  
 Necessity for the pasteurization of all milk. H. Lloyd. Int Assn Dairy & Milk Inspec Rep 1917:173-7  
 New method for the destruction of bacteria in large volumes of milk by means of electricity. F. C. Lewis. il J Bd Ag 22:1229-38 Mr '16  
 Pasteurization. O. F. Hunziker. N Y Prod R 42:150 My 17 '16  
 Pasteurization and bovine tuberculosis. G. L. Ogle. Purdue Ag 10:33 My '16  
 Pasteurization and grading. N Y Prod R 44: 232+ Je 6 '17  
 Pasteurization as a public health measure. C. E. Hilliard. J Home Econ 8:307-12 Je '16  
 Pasteurization best as a disease destroyer. B. W. Hammer. Creamery 5:75 S '16  
 Pasteurization in Denmark. J. J. Dunne. Hoard's D 53:556 Ap 20 '17  
 Pasteurization in safeguarding milk infected with tubercle bacilli. J. Traum and G. H. Hart. Am Vet M Assn J 49:678-98 Ag '16  
 Pasteurization is not a substitute for dairy hygiene. L. A. Klein. Am Vet M Assn J 49: 49-53 Ap '16  
 Pasteurization of market milk. O. F. Hunziker. Mass Ag Bd Yearbook 1916, pt 2:97-108 '17; Same. Mass Ag Bd C 68:1-14 '17  
 Pasteurization of market milk. O. F. Hunziker. N Y Prod R 42:194+, 234-5 My 24-31 '16; Same. Creamery 4:11-17 Je '16; Same Hoard's D 51:835, 868 Je 16-23 '16  
 Pasteurization of milk for cheese-making. C. Stevenson and W. Grant. il J Ag New Zealand 12:440-5 Je '16  
 Pasteurization of milk in small plants. A. J. Hauser. Creamery 4:20-1 Mr '16  
 Pasteurization of milk in the bottle. Int R Sci & Prac Ag 7, no 10:1534-6 O '16  
 Pasteurization of milk supply. J. A. Boudouin. Pub Health J (169 Bay st, Toronto 20c) 9:11-16 Ja '18  
 Read before the annual meeting of the Canadian public health assn., Ottawa, Sept. 27-28, 1917  
 Pasteurization question. J. I. Murray. Hoard's D 53:140 F 16 '17  
 Pasteurize in compliance with the law. C. P. Norgord. Hoard's D 55:764 My 24 '18  
 Pasteurized milk. Hoard's D 51:252 Mr 3 '16  
 Pasteurized milk for cheesemaking. J. J. Dunne. Hoard's D 55:466 Ap 5 '18  
 Pasteurizing milk. Hoard's D 54:426 O 19 '17  
 Pasteurizing milk at creamery. C. J. Marshall. Hoard's D 51:869 Je 23 '16  
 Pasteurizing milk in bottles and bottling hot milk pasteurized in bulk. S. H. Ayers and W. T. Johnson, jr. bibliog il U S Ag B 240: 1-27 '15  
 Present status of the pasteurization of milk. S. H. Ayers. bibliog U S Ag 342:1-16 '16; Same. Creamery 4:11-19 F '16  
 Process to purify milk is explained by expert. H. H. McIntyre. Creamery 5:34 My '17  
 Reason and rule in market milk pasteurization. W. C. Davis. Creamery 5:63 S '16  
 Sterilisation of milk by the Lecomte method; tests made in Holland. Int R Sci & Prac Ag 8,no 11:1146-7 N '17  
 Sterilized milk. J. Vanderleek. J Ag (Quebec) 19:151 Ja '16

**Milk—Pasteurization—Continued**

Supervision of pasteurizing dairies. W. P. Palmer. Int Assn Dairy & Milk Inspec Rep 1915:186-7  
 Temperature control a factor in milk plant operation. Creamery 4:26 Mr '16  
 Work at Purdue; pasteurization experiments. N Y Prod R 42:56 My 3 '16

See also Milk—Clarification

**Prices**

Abstract of the report of the Mayor's committee on milk. N Y (city) Dept Health Weekly B n s v 7:1-3 Ja 5 '18  
 Another milk conference; dealers and producers confer with food officials. N Y Prod R 44:1147 O 31 '17  
 Another side of the milk question. J. H. McKenney. Prac F 114:149 Ap 1 '18  
 April milk prices. Kimball's D F 16:350+ My 1 '18  
 April milk prices. F. A. Koenig. Kimball's D F 16:304 Ap 15 '18  
 August & Sept. milk prices; Dairymen's league sets prices and federal milk commission approves. N Y Prod R 46:482 Jl 24 '18  
 Basis for making milk prices. O. Erf. Ohio F 138:520 N 25 '16  
 Basis for making milk prices. H. P. Miller. Ohio F 139:448 Mr 24 '17  
 Basis for milk prices. N Y Prod R 44:556 Ag 1 '17  
 Basis for purchasing market milk. Hoard's D 53:482 Ap 6 '17  
 Basis for purchasing market milk. M. H. Gardner. Hoard's D 53:501, 821 Ap 6, Je 8 '17  
 Battle for milk prices goes on. Rural N Y 75:1263 S 30 '16  
 Boost in retail milk prices. Rural N Y 76:203 F 10 '17  
 Borden's 3-way milk delivery. Rural N Y 76:967 Ag 11 '17  
 Boston producers get eight cents per quart. J. T. Bartlett. Hoard's D 54:547 N 9 '17  
 Butterfat premium system of buying milk. H. F. Judkins. Hoard's D 55:840 Je 7 '18  
 Canadian milk situation. F. E. Ellis. Hoard's D 56:367 O 11 '18  
 Cheese factory milk prices. N Y Prod R 42:948 O 4 '16  
 Cheese milk payments. N Y Prod R 41:576 F 2 '16  
 Chicago dairymen called trust. O Judd Farmer 63:1 O 13 '17  
 Chicago fights milk prices. J. M. Carroll. Kimball's D F 15:759 O 15 '17  
 Chicago milk commission. Breeder's Gaz 72:986 N 29 '17  
 Chicago milk prices for July. J. M. Carroll. Hoard's D 55:1018 Jl 12 '18  
 Chicago milk prices too low. H. S. Stone. Kimball's D F 16:122 F 15 '18  
 Chicago milk producers ask \$3.42. O Judd Farmer 63:3 O 6 '17  
 Chicago milk reduced to \$3.22. J. M. Carroll. Hoard's D 54:586 N 16 '17  
 Chicago milk strike. N Y Prod R 42:2 Ap 26 '16  
 Chicago milk strike and how it was won. R. B. Swift. Hoard's D 51:897+ Je 30 '16  
 Chicago producers will ask for three-dollar milk. J. M. Carroll. Hoard's D 54:217 S 14 '17  
 City milk prices. H. A. Harding. Purdue Ag 12:272+ F '18  
 Commission to fix Chicago milk prices. J. M. Carroll. Hoard's D 54:695 D 7 '17  
 Condensing competition; how should prices paid by condensers and cheese factory be compared? N Y Prod R 44:700 Ag 29 '17  
 Consolidation and co-operation is essential in the milk trade; work of the Wicks committee. C. H. Kilbourne. Creamery 5:16-19 Ja '17  
 Consumer vs. the dairyman. A. D. Burke. Ohio F 140:289 O 6 '17  
 Consumer's interest in maintaining a living price for milk. L. B. Dunham. Hoard's D 52:811 D 29 '16  
 Controversy on milk prices. Creamery 6:53, 58-64 O '17  
 Co-operation and milk prices. C. E. Lee. Ohio F 139:663 My 12 '17

Correct payment for cheese factory milk by the Babcock test. J. L. Sammis. Wis Ag Exp B 276:1-42 '17; Summary. Creamery 5:28-30 F '17; Summary (pt. 1). Hoard's D 53:513 Ap 13 '17; Abstract. Wis Ag Exp B 275:41-4 '17; Abstract. Kimball's D F 15:199 Mr 15 '17  
 Correct payments for milk. J. L. Sammis. il Kimball's D F 15:638 S 15 '17  
 Correspondence with a milk boycotter. J. Kahn. Kimball's D F 15:30 Ja 15 '17  
 Cost of producing milk. F. D. Spencer. Rural N Y 75:1055 Ag 5 '16  
 Dairy farmers fighting for better prices throughout Pennsylvania, New Jersey, Delaware and Maryland. Breeder's Gaz 70:982 N 23 '16  
 Dairy farmers want justice. E. B. Fussell. Nonpartisan Leader (Box 941, Fargo, N.D. \$2.50 per yr) 5:6-7 N 15 '17  
 Dairymen in the Pittsburgh district. W. Jack. Hoard's D 52:575 N 17 '16  
 Dairymen secure better prices at Grand Rapids and Champaign. O Judd Farmer 62:3 Ja 27 '17  
 Dairymen's league fixes prices. N Y Prod R 42:785 S 13 '16  
 Dairymen's league; history of its growth as related before Wicks investigating committee. N Y Prod R 42:1002 O 11 '16  
 Dealers meet league demands. N Y Prod R 44:868 O 3 '17  
 Dillon on milk problem. H. H. Lyon. Hoard's D 54:846 Ja 4 '18  
 Dividing the consumer's dollar. B. H. Hibbard. Hoard's D 54:662 N 30 '17  
 Dividing the milk consumer's dollar. B. H. Hibbard. il Kimball's D F 15:743 O 15 '17  
 Don't blame it on the cows. R. G. Miller. il Kimball's D F 16:657 S 1 '18  
 Economy in milk production. J Bd Ag 24:817-6 N '17  
 Effect of war on milk. W. A. Evans. Int Assn Dairy & Milk Inspec Rep 1917:132-9  
 Facing the facts of milk prices. Creamery 5:17-18 Ap '17  
 Facts and bunk on milk supply. O Judd Farmer 64:3+ Ja 19 '18  
 Fair deal for Jersey breeders. W. Macmonnies. Jersey B 36:633 Ap 25 '17  
 Federal authorities and the Chicago milk price. J. M. Carroll. Hoard's D 54:504 N 2 '17  
 Fight for better milk prices in the New York dairy district. G. Bush. (In Nat. conf. on marketing and farm credits, 1916, p. 409-18) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Fight for twenty-two cents. C. E. Gapen. il Country Gent 81:1063-4 My 20 '16  
 Figures vs. guesswork. T. E. McLaughlin. Kimball's D F 14:820 Ja 1 '17  
 Financial factors in production of market milk. F. Rasmussen. Creamery 5:35-7 Mr '17  
 Fixing milk prices at condensery. Hoard's D 56:192 S 6 '18  
 Food price of milk. H. F. Judkins. Rural N Y 76:271 F 24 '17  
 Future work for producers. R. Omann. O Judd Farmer 60:13 Ap 29 '16  
 General outlook for the dairy industry. O Erf. Ohio F 140:315 O 13 '17  
 Getting adequate milk returns. O Judd Farmer 63:7 O 27 '17  
 Great changes in dairying. F. H. Higgins. il O Judd Farmer 63:1+ Ag 4 '17  
 Health commissioner's views. J. D. Robertson. O Judd Farmer 60:13 Ap 29 '16  
 Hylan asks milk price inquiry. N Y Prod R 47:114 N 27 '18  
 Illinois milk prices too low. O Judd Farmer 62:1+ Ja 20 '17  
 Increased cost of milk and its influence on infant mortality. (Monthly Report) p 575-81 O '17 Dept. of public health, Toronto  
 Investigating why New York dairy farmers are not making money. G. W. Harrison. Kimball's D F 14:524 S 1 '16  
 Is the dairyman a profiteer? C. E. Gapen. il Country Gent 82:1719-20 N 10 '17  
 Is the fat basis of calculation fair? M. O. Maughan. Hoard's D 55:210 F 22 '18  
 July milk prices everywhere. Kimball's D F 16:605 Ag 1 '18



Milk—Prices—Continued

- June prices to producers. Kimball's D F 16: 500 Je 15 '18
- Less milk in Chicago. J. M. Carroll. Hoard's D 55:200 F 22 '18
- Louisiana producers propose to set prices. R. G. Miller. Jersey B 37:1816 O 30 '18
- Market bill progress; milk dealers protest and criticize. N Y Prod R 43:1022 Ap 18 '17
- Market milk prices. N Y Prod R 44:785, 834 S 19-26 '17
- Market milk situation. N Y Prod R 42:878 S 27 '16
- Market milk situation in Wisconsin. Hoard's D 54:587 N 16 '17
- Marketing of milk in Twin Cities dairy district. K. A. Kirkpatrick. (In Nat. conf. on marketing and farm credits, 1916, p. 418-21) \$2 '17 C. W. Holman, sec., Madison, Wis.
- May milk price. N Y Prod R 45:925 Ap 24 '18
- Methods of purchasing market milk. Hoard's D 53:483 Ap 6 '17
- Milk and cream in 1917. J. Gordon. N Y Prod R 43:202+ N 29 '16
- Milk conditions in New York. E. W. Gage. Kimball's D F 15:794 N 1 '17
- Milk dealers offer higher prices. Rural N Y 75:1545 D 16 '16
- Milk fight comes to a head. Rural N Y 75: 1135 Ag 26 '16
- Milk (prices) order, 1916. J Bd Ag 24:680-3 S '17
- Milk (summer prices) order, 1918. J Bd Ag 25:110-14 Ap '18
- Milk (winter prices) order, 1918. J Bd Ag 25: 894-8 O '18
- Milk price again boosted in New York city. A. H. Kolbe. Hoard's D 56:621 N 29 '18
- Milk price agitation. N Y Prod R 42:821 S 20 '16
- Milk price agitation in New York city, 1917. N Y Prod R 44:1014 O 17 '17
- Milk price controversy. N Y Prod R 44:980 O 10 '17
- Milk price controversy in the West. Hoard's D 54:466 O 26 '17
- Milk prices. Ag Digest 2:661 O '17
- Milk prices. Creamery 7:13-16 F; 18-19 Ag; 20-1 S '18
- Milk prices and dairy labor. H. H. Lyon. Hoard's D 54:330 O 5 '17
- Milk prices fixed again. O Judd Farmer 64:5 Ap 6 '18
- Milk prices for Pennsylvania. Kimball's D F 16:77 F 1 '18
- Milk prices in Des Moines. Wallaces' F 43: 1610 N 1 '18
- Milk prices in Great Britain. Rural N Y 76: 1231 O 27 '17
- Milk prices in Michigan. J. N. McBride. Hoard's D 51:691 My 19 '16
- Milk prices in New York. Creamery 6:36-7 N '17
- Milk prices in September. Creamery 7:51 O '18
- Milk prices in October; tabulation. Creamery 7:21-3 N '18
- Milk prices in November. Creamery 7:24-7 D '18
- Milk prices in the United States. J Ag (Quebec) 21:140 Mr '18
- Milk prices must rise. J. T. Williams. Breeder's Gaz 72:172 Ag 9 '17
- Milk producer, the distributor, and the consumer. B. Watson. Hoard's D 54:616 N 23 '17
- Milk producer's story. R. B. Swift. Breeder's Gaz 69:868 Ap 20 '16
- Milk producers' strike. H. T. Morgan. Kimball's D F 14:301 My 1 '16
- Milk profit in Canada. Wallaces' F 43:692 Ap 19 '18
- Milk profits and losses in the Chicago district. Wallaces' F 43:88 Ja 18 '18
- Milk situation. Rural N Y 77:1141 O 5 '18
- Milk situation analyzed; what must be done to save it. Rural N Y 76:1353 N 24 '17
- Milk situation in New England. A. E. Proctor. Hoard's D 52:476 O 27 '16
- Milk situation in New York state. M. G. Feint. Nat Stock & F 41:306 Je 16 '17
- Milk situation; investigations of the League. Rural N Y 76:1183 O 13 '17
- Milk situation; 3d increase in price in 10 months. Rural N Y 76:879 Jl 14 '17
- Milk sold direct to consumers; farmers buy city plants. Rural N Y 76:1267 N 3 '17
- Milk strike on in New York. N Y Prod R 42: 910 O 4 '16
- Milk strike progress. N Y Prod R 42:994+ O 11 '16
- Money in milk. A. G. Morrell. il Country Gent 81:727-8 Ap 1 '16
- More on the New York milk situation. H. H. Lyon. Hoard's D 53:480 Ap 6 '17
- New England milk situation. A. E. Proctor. Hoard's D 52:588 N 17 '16
- New milk prices. Kimball's D F 14:765 D 1 '16
- New York city milk prices reduced. A. H. Kolbe. Hoard's D 55:694 My 10 '18
- New York dairy farmers take action for better milk prices. A. H. Kolbe. Jersey B 35:1472 S 20 '16
- New York dairymen suggest a city milk market. A. Kolbe. Hoard's D 54:333 O 5 '17
- New York milk price. A. R. Eastman. Nat Stock & F 42:10 Mr 30 '18
- New York milk price to 17 cents. Creamery 7: 27 D '18
- New York milk prices. C: H. Kilbourne. Creamery 7:20 Ja '18
- New York milk prices. H. H. Lyon. Hoard's D 51:468; 52:354 Ap 7, O 6 '16
- New York milk producers prepare for fight. H. H. Lyon. Hoard's D 52:33 Ag 4 '16
- New York milk situation. Rural N Y 76:1241 O 27 '17
- New York milk situation. H. H. Lyon. Hoard's D 54:219 S 21 '17
- New York milk situation; dairymen name their prices. Rural N Y 75:1241 S 23 '16
- New York October milk price reduced. Hoard's D 56:412 O 18 '18
- New York price fixed. H. H. Lyon. Hoard's D 54:922 Ja 18 '18
- Northern Ohio milk war. J: Gould. Hoard's D 52:878 Ja 12 '17
- Notes on the milk situation. Rural N Y 76: 1473 D 29 '17
- November milk price. N Y Prod R 47:12 N 6 '18
- October milk prices; Dairymen's league sends out schedule. N Y Prod R 46:785 S 25 '18
- Patriotism and milk production. C: E. Gapen. Country Gent 82:1870-1 D 1 '17
- Paying for milk. N Y Prod R 41:516 Ja 19 '16
- Paying for milk in cheesemaking. H. C. Troy. Hoard's D 53:647 My 4 '17
- Paying for quality in milk. R. H. Schuster. Hoard's D 51:663 My 12 '16
- Peoria producers talk prices. C: A. Atwood. O Judd Farmer 62:11 Mr 17 '17
- Philadelphia milk price. Hoard's D 53:645 My 4 '17
- Philadelphia milk prices. Kimball's D F 16: 124 F 15 '18
- Pittsburgh milk situation. J. D. Hervey. Nat Stock & F 41:484 Ag 18 '17
- Pittsburgh milk situation; Pennsylvania commission hearings. J. D. Hervey. Ohio F 140: 194 S 8 '17
- Plan for reorganizing the milk business. J: J. Dillon. Rural N Y 75:1007 Jl 22 '16
- Playing square with the farmer. Wallaces' F 43:342 F 22 '18
- Premiums for butterfat in market milk. Creamery 5:18 Je '17
- Present milk situation. Prac F 113:437-8 D 15 '17
- Prevailing milk prices. Hoard's D 56:700 D 13 '18
- Price based on butterfat and corn. B. H. Hibbard. Hoard's D 55:186 F 22 '18
- Price of milk. H. H. Lyon. Hoard's D 51:771 Je 2 '16
- Price of milk. G. F. Warren. Cornell Countryman 15:129-32+ D '17
- Price of milk in England. J Bd Ag 23:358-60 Jl '16
- Producers' associations prices. F. A. Koenig. Kimball's D F 16:260 Ap 1 '18
- Producers' milk markets. Kimball's D F 16: 400 My 15 '18
- Producers' milk prices. Kimball's D F 16: 452 Je 1 '18
- Producers should organize. M. D. Campbell. Kimball's D F 16:403 My 15 '18

## Milk—Prices—Continued

- Production, distribution and food value of milk: a report by the milk committee. 41p '18 U.S. Food administration, Washington, D.C.
- Supply exhausted
- Progress report on the production and distribution of milk. E. Mead. Cal Ag Exp C 175: 1-16 '17
- Prosecution of Dairymen's league officials. W. P. Belden. Rural N Y 77:140 F 2 '18
- Province of the dairy instructors in helping to solve the problem of the price of milk. H. E. Van Norman. J Dairy Sci 1:433-6 Ja '18
- Raising milk prices to meet rising costs of production. H. V. Stanley; C. A. Hall. il System on the Farm 1:108-10 My '17
- Regulating milk prices. N Y Prod R 42:1126 O 25 '16
- Reorganizing dairy profits. H. Myrick. O Judd Farmer 64:8 Ja 12 '18
- Report of the Mayor's committee on milk. 85p '17 N.Y. city Bur. of public health educ., Dept. of health
- Review of the milk situation in New York. J. J. Dillon. Hoard's D 52:550 N 10 '16
- Rise in New York milk prices starts inquiries. A. Kolbe. Hoard's D 51:457 O 26 '17
- St. Louis dealers and producers in dead-lock. B. E. Coffin. Hoard's D 54:332 O 5 '17
- Selling milk or cream. Hoard's D 54:450 O 26 '17
- Setting prices in New England. J. T. Bartlett. Breeder's Gaz 72:668 O 18 '17
- Seven-cent milk for New York. Rural N Y 77:813 Je 22 '18
- Seven cent milk in New York. Creamery 7:16-18 Jl '18
- Seven cents for Boston milk. Rural N Y 76: 839 Je 30 '17
- Sliding scale for milk prices. Ohio F 140:372 O 27 '17
- Statistics of milk cows and prices of milk and butter. Creamery 7:30-1 Mr '18
- Still hunting Chicago milk trust. O Judd Farmer 63:1 O 20 '17
- Strategy of seven milk producers. H. H. Lyon. Hoard's D 54:618 N 23 '17
- Summer milk production outlook. O Judd Farmer 64:593 Je 8 '18
- Surplus milk plan for New England. O. A. Jamison. Kimball's D F 16:587+ Ag 1 '18
- Testimony of milk men: what the committee found. W. H. Main. Rural N Y 75:1188 S 9 '16
- Try-out of a new milk plan. Rural N Y 77: 795 Je 15 '18
- Twin Cities milk prices. K. A. Kirkpatrick. Kimball's D F 15:321 My 1 '17
- Twin City milk producers' organization project. K. A. Kirkpatrick. Kimball's D F 15: 12 Ja 15 '17
- Value of cheese factory milk at present prices. J. L. Sammis. Hoard's D 54:200 S 7 '17; Same. N Y Prod R 44:808 S 19 '17
- Variation in monthly costs. Hoard's D 55:648 My 3 '18
- Viewpoint of the milk distributor. il Hoard's D 55:224 Mr 1 '18
- What is a fair price for milk? J. E. Pickett. il Country Gent 83:3-4 Ap 13 '18
- What will be the cost of milk and cream in 1917? J. Gordon. Creamery 5:20-2 D '16
- Who gets the lion's share? Jersey B 36:1034 Jl 4 '17
- Who gets the milk money. T. J. Owens. Rural N Y 75:1388 N 4 '16
- Who gets the money? H. F. Judkins. Hoard's D 54:121 Ag 24 '17
- Why not graded milk. R. I. Grady. Ohio F 140:319 O 13 '17
- Will Chicago milk price stand. J. M. Carroll. Hoard's D 54:416 O 19 '17
- Winter milk must be three dollars. O Judd Farmer 63:1 Ag 18 '17
- Work of the Wicks committee. Creamery 5: 19 Ja '17
- Work of the Wicks committee. C. W. Wicks. N Y Ag Dept B 42:135-47 F '17
- See also Chicago milk investigation; Detroit milk investigation; New York milk investigation

## Standards

- Adulteration of milk. Jersey B 35:1197 Ag 2 '16
- Bacteria & bacterial testing. N Y Prod R 44: 146-7 My 23 '17
- British milk standard and prosecutions. T. Reece. Hoard's D 51:1000 Jl 21 '16
- Commission on milk standards; third report of the commission appointed by the New York milk committee. (Reprint no. 386 Pub. health reports) 28p '17 U. S. Public health service, Washington, D. C.
- Dairy farm score card. E. Kelly. J Dairy Sci 1:400-8 Ja '18
- Federal milk commission; text of bill. Creamery 4:43 Je '16
- Food officials adopt standards. Creamery 6:32-3 S '17
- For a better balanced basis of chemical standards for milk. Creamery 5:29-31 Ag '17
- Hearing on standards; condensed and dried milks considered. N Y Prod R 42:146+ My 17 '16
- How may an inspector know when milk is good. H. A. Harding. Mass Ag Bd Yearbook 1917, pt 2:74-84 '18
- Legalizing standardized milk. H. H. Lyon. Hoard's D 55:931 Je 21 '18; Same. N Y Prod R 46:486 Jl 24 '18
- Market milk regulation standards. Hoard's D 53:514 Ap 13 '17
- Milk standard hearing. N Y Prod R 42:128 My 10 '16
- Milk standards. C. E. North. Am Pub Health J (126 Massachusetts av., Boston, Mass. 50c) 8:228 Mr '18; Same. Creamery 7:29 Ap '18
- Milk standards in New York state. G. A. Smith and H. E. Ross. N Y Ag Dept B 86: 2352-4 Ag '16
- New state milk regulations to improve supplies in Indianapolis, Ind. Municipal J (243 W. 39th st., N.Y. 10c) 43:518-19 N 22 '17
- Premiums for butterfat in market milk. Creamery 5:18 Je '17
- Proposed market milk regulation standards. Creamery 5:17-18 My '17
- Regulations for milk and cream for manufacturing purposes. B. L. Purcell. Int Assn Dairy & Milk Inspec Rep 1915:110-12
- Relation of the fat in milk to the solids-not-fat. L. P. Brown and C. V. Ekroth. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:297-9 Mr '17; Discussion. 9:416-17 Ap '17
- Report of the committee on legislation and legal limits for the control of milk and cream. Int Assn Dairy & Milk Inspec Rep 1916:60-70
- Requirements for grading and standards of milk—taken from milk ordinances of various cities throught the U. S. Business and munic. lib., Minneapolis. 10p tables '16
- Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Type \$1)
- Solids not fat in milk as a standard of purity. C. H. Kilbourne. Creamery 4:26 My '16
- Standard commission report. N Y Prod R 44: 112 My 16 '17
- Standard for imported milk. Creamery 4:22 Ja '16
- Standardization of market milk. L. L. Van Slyke. J Dairy Sci 1:361-70 N '17; Same. Creamery 7:25-8 Ap '18; Same. N Y Farms & Markets Dept Ag B 104:140-51 F '18
- Standardization of milk. O Judd Farmer 61: 11 N 25 '16
- Standardizing of herd milk. H. F. Judkins. Rural N Y 76:684 My 12 '17
- Sweetened condensed milk, condensed skimmed milk, sweetened condensed skimmed milk, dried milk, dried skimmed milk, and malted milk. D. F. Houston. (F. I. D. 170) 2p '17 U.S. Dept. of agriculture, Washington, D.C.; Same. N Y Prod R 44:556 Ag 1 '17; Same. Creamery 6:20 S '17
- Uniformity of standards. L. B. Cook. Int Assn Dairy & Milk Inspec Rep 1915:174-7
- Why not graded milk? R. I. Grady. Ohio F 140:319 O 13 '17



**Milk—Standards—Continued**

Why standards for milk are necessary to the welfare of the dairy industry. J. F. Anderson. *Int Assn Dairy & Milk Inspe* Rep 1915:96-103

See also Milk—Grading; National commission on milk standards

**Sterilization**

See Milk—Pasteurization

**Testing**

- Alcohol test in relation to milk. S. H. Ayers and W. T. Johnson, jr. *bibliog U S Ag B* 202: 1-35 '15
- Babcock test. C. E. Newlander. *il Mich Ag Ext B* 2:1-11 '16
- Babcock test, and testing problems. H. C. Troy. *il Cornell Reading Course* 118:119-44 '16
- Be fair with your creameryman. Kimball's *D F* 14:57 *F* 1 '16
- Canadian milk case. *N Y Prod R* 41:423 *Ja* 5 '16
- Cause of variation in milk test. Hoard's *D* 52:579 *N* 17 '16
- Cheese factory and butter-fat test; discussion. *N Y Ag Dept B* 80:1494-1501 *F* '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1494-1500 '17
- Composite samples, their value to the dairy plant. T. Mojonnier. *Creamery* 7:32d-32e *D* 18
- Composite versus one-day sampling of milk for the Babcock test. W. H. Eaton. *il N C Ag Exp B* 240:1-8 '18
- Correct payment for cheese factory milk by the Babcock test. J. L. Sammis. *Wis Ag Exp B* 276:1-42 '17; Summary. *Creamery* 5: 28-30 *F* '17; Summary (pt. 1). Hoard's *D* 53:513 *Ap* 13 '17; Abstract. *Wis Ag Exp B* 275:41-4 '17; Abstract. Kimball's *D F* 15:199 *Mr* 15 '17
- Creamery and testers' license law; with list of licensed testers in Indiana. O. F. Hunziker and G. L. Ogle. *map plan Ind Ag Exp C* 55:1-34 '16
- Creamery testing rules. *N Y Prod R* 44:626-7 *Ag* 15 '17
- Crooked competition. *N Y Prod R* 42:758 *S* 6 '16
- Detection of added water in milk in India. J. W. Leather. *Int R Sci & Prac Ag* 7,no 4:599 *Ap* '16
- Determining the quality of milk receipts. *Creamery* 4:21 *Ag* '16; Same. *Jersey B* 35: 1315 *Ag* 23 '16
- Directions for testing and sampling milk and cream by Babcock method under New York law. *N Y Prod R* 45:778 *Mr* 27 '18
- Dr Babcock's gift to the industry. *Field* 11 27: 754 *O* '17
- Few simple tests for use of dairy farmers, dairymen, and students. R. Osborne. *Ag J of India* 13:333-46 *Ap* '18
- How to keep a record of the dairy herd. C. H. Staples and C. W. Radway. *il Ia Ag Ext C* 19:1-12 '17
- \* How to operate the Babcock test. (B. 61) *Sp* 1 '16 *Minn. Dairy and food dept., St Paul*
- How to run a Babcock test. H. H. Dean. *Prac F* 112:349 *S* 15 '16
- Jersey milk proven most valuable as food for infants and young animals in several years' tests. W. Macmonnies. *il Jersey B* 36:421-2 *Mr* 21 '17
- Licensing testers. *N Y Prod R* 42:906 *O* 4 '16
- Licensing testers where milk or cream is bought by Babcock test. *N Y Prod R* 41: 502+ *Ja* 19 '16
- Milk and cream contests. E. Kelly and others. *U S Ag B* 356:1-23 '16
- Mojonnier fat test. J. C. Marquardt. Hoard's *D* 56:341 *O* 4 '18
- New testers license law. New York; text. *N Y Prod R* 44:302 *Je* 20 '17
- Notes on the tests of milk and cream. O. E. Dalaire. (*In* Report, Quebec Dairymen's assn., 1916, p. 339-43) '17
- Patrick milk test. W. A. Cordes. Hoard's *D* 52:64 *Ag* 11 '16
- Paying for milk at cheese factory. Hoard's *D* 51:157 *F* 18 '16

- Payment for cheese milk according to the yield of cheese. J. L. Sammis. *N Y Prod R* 41:468+ *Ja* 12 '16
- Points on testing milk. B. E. Rogers. Hoard's *D* 52:11 *Jl* 28 '16
- Practical milk testing for dairymen. W. E. Evans. 16p *il* '18 *Supplee-Wills-Jones milk co., Philadelphia*
- Problem of the milk test. H. H. Lyon. *Rural N Y* 75:1111 *Ag* 19 '16
- Reading Babcock tests. H. A. Ayres. *N Y Prod R* 42:836 *S* 20 '16
- Reading tests of milk and cream in factories selling sweet cream. *N Y Prod R* 42:1046 *O* 18 '16
- Report on dairy products. L. I. Nurenberg. *Assn Offic Ag Chem J* 2,no 3,pt 1:145-60 *N* '16
- Sediment test at a cheese factory. *N Y Prod R* 41:964 *Mr* 29 '16
- Simplified molecular constant and its application to milk from the Yonne district, France. M. Sirot and G. Joret. *Int R Sci & Prac Ag* 8,no 5:790-2 *My* '17
- Specifications and directions for testing milk and cream for butterfat. O. F. Hunziker. *J Dairy Sci* 1:38-44 *My* '17
- Square deal on milk testing. F. G. Helyar. *Rural N Y* 75:1441 *N* 18 '16
- Standardizing milk and cream. Hoard's *D* 52: 404 *O* 13 '16
- Standardizing milk and cream. H. F. Judkins. *Wallaces' F* 41:280 *F* 18 '16
- Studies on the market milk of Iowa; with tabulated results. B. W. Hammer and A. J. Hauser. *Ia Ag Exp B* 164:311-80 '16
- Testing for butterfat in condensed and powdered milk—a revised method of more complete separation. C. H. Eresterfeld and O. L. Evenson. *N Y Prod R* 46:416-17 *Jl* 10 '18
- Testing milk and cream. *il Hoard's D* 52:560 *N* 10 '16
- Testing milk and cream. O. F. Hunziker. *N Y Prod R* 42:690+ *Ag* 23 '16
- Testing milk and cream. M. R. Tolstrup and M. Mortensen. *il Ia Ag Exp C* 32:1-8 '16; Same. Kimball's *D F* 15:230+ *Ap* 1 '17; Same. *N Y Prod R* 44:150+ *My* 23 '17
- Testing milk and cream for butter-fat. R. E. Caldwell and others. *il Ind Ag Exp C* 78:1-15 '18
- Variations in milk and cream tests. S. C. Thompson. *Maine Ag Dept B v* 18:67-81 *Je* '18
- Variations in the test of milk. G. W. Shaw. Hoard's *D* 51:284 *Mr* 10 '16
- Wisconsin curd test in cheese factory work. *N Y Prod R* 41:588-9 *F* 2 '16
- See also Cow testing; also Babcock, Stephen Moulton

**Transportation**

- Boston milk hearing. *Rural N Y* 75:446 *Mr* 11 '16
- Care of milk in transportation. *Creamery* 7: 27-9 *Ja* '18
- Cost of transportation. *il Kimball's D F* 16: 303 *Ap* 15 '18
- Dealers and farmers talk milk. *Rural N Y* 75:496 *Mr* 18 '16
- Handling milk with motor trucks. *Creamery* 5:19-20 *F* '17
- Important milk rate case. *N Y Prod R* 42: 599 *Ag* 2 '16
- Important milk rate decision. *N Y Prod R* 44: 533 *Ag* 1 '17
- Making the dairy farm pay. A. H. Kolbe. *il Hoard's D* 51:869 *Je* 23 '16
- Milk and cream rate hearing before the interstate commerce commission. O. Erf. *Ohio F* 137:712 *My* 20 '16
- Milk producers hunting facts. *Rural N Y* 75: 389 *Mr* 4 '16
- Milk rate hearing. *N Y Prod R* 43:16 *N* 1 '16
- Milk rate matters. *N Y Prod R* 42:916 *O* 4 '16
- Milk transportation and markets. L. K. Whelan. *il Purdue Ag* 11:23-7 *My* '17
- Milk waste charged to railroads. *Creamery* 4:27 *My* '16
- New England milk case. Investigation and suspension docket no. 725. Milk and cream investigation no. 8558. 699-741p '16 *U. S. interstate commerce commission, Washington, D. C.*

**Milk—Transportation—Continued**

New plan for can transportation; the trip of a milk truck. *il Rural N Y* 77:1153-4 O 12 '18

Rehearing asked. *N Y Prod R* 44:675 Ag 22 '17  
Report of committee on care of milk in transportation. J. O. Jordan. *Int Assn Dairy & Milk Inspe* Rep 1917:114-21; Same. *Creamery* 7:27-9 Ja '18

Shipping milk in summer. *Jersey B* 37:232 F 13 '18

Uneconomical milk delivery. C. H. Sapp. *Ohio F* 139:364 Mr 10 '17

**Weighing**

Weighing in milk. *N Y Prod R* 41:730+ Mr 1 '16

**Milk, Artificial**

Bean milk at Changsha. N. T. Johnson. *N Y Prod R* 42:918 O 4 '16

New process for manufacture of artificial milk. *Scientific Am* (233 Broadway, N.Y. 10c) 116:109 Ja 27 '17

Vegetable milk. *Jersey B* 35:1807 N 15 '16

**Milk, Certified**

Big dairy with a big purpose. A. L. Tichane. *il Jersey B* 37:2021-2 D 4 '18

Certified milk—its production and value. *Purdue Ag* 11:29-31 D '16

Certified milk—its production and value. V. C. Cripe. *il Purdue Ag* 11:30-3 Ja '17

Fresh-air-cold-figure farm; Wood Brook farm. M. C. Telfer. *il Hoard's D* 55:979+ J1 5 '18

Medical milk commissions and certified milk. E. Kelley. *U S Ag B* 1:138 '15

Practical production of certified milk. J. R. Wardle. *Creamery* 7:37-8 Ap '18

Producing certified milk economically. C. M. Baker. *Hoard's D* 55:43 F 1 '18

Production of certified milk. O. C. Cunningham. *il Ohio F* 137:338 Mr 4 '16

Some possibilities for certified milk producers. G. H. Walker. *Creamery* 4:13-16 Ja '16

Whys and hows of certified milk. T. J. Arnold. *il Field* 11 27:357 My '17

See also Certified milk producers' association

**Milk, Condensed**

Condensed goats' milk. *N Y Prod R* 45:342 Ja 9 '18

Condensed milk as a side line or department in the buttermaking business. *N Y Prod R* 45:46 N 14 '17

Condensed milk booming. *N Y Prod R* 45:426 Ja 30 '18

Condensed milk export trade. *N Y Prod R* 46:178 My 29 '18

Condensed milk manufacturers face a serious crisis. *Jersey B* 37:728 My 8 '18

Condensed milk on small scale. *Rural N Y* 76:950 Ag 4 '17

Condensed milk problem after the war. *Ag Digest* 2:967 My '18

Condensed milk queries. *Hoard's D* 51:699 My 19 '16

Condensed milk situation. *N Y Prod R* 46:292 Je 19 '18

Condensed skim milk. *Country Gent* 81:2114 D 9 '16

Evaporated milk; control of its chemical and physical properties. T. Mojonner. *N Y Prod R* 44:196+ My 30 '17; Same. *Creamery* 5:52-8 My '17

Exportation of condensed milk. *Hoard's D* 54:730 D 14 '17

Exports of condensed milk. *Hoard's D* 54:350 O 5 '17

Federal authorities watch making of condensed milk. *Weekly N L* 6:15 S 4 '18; Same. *O Judd Farmer* 65:237 S 21 '18

Fishiness in evaporated milk. B. W. Hammer. *il la Ag Exp Research B* 38:235-46 '17

Hearing on standards; condensed and dried milks considered. *N Y Prod R* 42:146+ My 17 '16

Hebe in California; dairy commissioner of that state worried over sale of condensed milk substitute. A. R. Bates. *N Y Prod R* 46:384 J1 3 '18

New demand for condensed milk. F. F. Frankenberg. *Hoard's D* 54:815 D 28 '17

New York condensed milk situation critical. H. H. Lyon. *Hoard's D* 55:1050 J1 19 '18

Our condensed milk trade. *N Y Prod R* 41:642 F 16 '16

Producing canned milk. *il Wallaces' F* 42:891 Je 8 '17

Statistics on condensed milk. *Hoard's D* 54:225 S 14 '17

Study of condensed and evaporated milks. I. A. Bengston. *J Home Econ* 8:29-32 Ja '16

Sugar and condensed milk. *N Y Prod R* 46:994 O 23 '18

Swiss condensed milk industry. *N Y Prod R* 42:695 Ag 23 '16

War orders and our dairymen. W: H. Dean. *il Country Gent* 81:1607-8 S 2 '16

When the cow goes dry. M. H. Talbott. *Country Gent* 81:191 Ja 22 '16

See also Condenseries

**Analysis**

Correction required in applying the Babcock formula to the estimation of total solids in evaporated milk. O. L. Evenson. *J Industrial & Eng. Chemistry* (Easton, Pa. 60c) 9:499-501 My '17

Evaporated milk. *Maine Ag Exp Off Inspe* 76:9-20 '16

**Statistics**

Census of manufactures: 1914; butter, cheese, and condensed milk. B: J. McNulty. 23p '17 U.S. Bur. of census, Washington, D.C.

Commercial stocks of condensed and evaporated milk, July 1. *U S Food Surveys* 2:16-20 Ag 31 '18

Commercial stocks of condensed milk, Jan. 1. *U S Food Surveys* 1:21-3 Je 22 '18

Commercial stocks of miscellaneous animal food products in the United States on August 31, 1917; hams, bacon and shoulders, salt pork, salt beef, salt fish, and condensed milk. *U S Ag C* 101:1-19 '18

**Milk, Cooling of.** See Milk cooling

**Milk, Desiccated**

\* Dried milk powder; a review of British experience. *U S Pub Health Rep* (U.S. Bur. of public health, Washington, D.C.) 33:1052-5 Je 28 '18

Economy in dried milk. *N Y Prod R* 45:818 Ap 3 '18

Powdered milk. *il N Y Prod R* 44:882+ O 3 '17

Powdered milk. J. H. McKenney. *Nat Stock & F* 40:1353 Mr 10 '17

Powdered milk for starter. *N Y Prod R* 41:437 Ja 5 '16

**Statistics**

Commercial stocks of dried milk, Jan. 1. *U S Food Surveys* 1:14 Je 22 '18

Commercial stocks of dried milk, July 1. *U S Food Surveys* 2:9-10 Ag 31 '18

**Milk, Dried.** See Milk, Desiccated

**Milk, Evaporated.** See Milk, Condensed

**Milk, Ewes'**

Ewes' milk; its fat content and relation to the growth of lambs. E. G. Ritzman. *bibliog J Ag Research* 8:29-36 Ja 8 '17; Same cond. *Int R Sci & Prac Ag* 8,no 4:622-4 Ap '17

**Milk, Fermented**

Chemical comparison between two fermented milk products: the laben raieb of Egypt and the micuriatu of Sardinia. A. Sanna. *Int R Sci & Prac Ag* 7,no 6:878-80 Je '16

Fermented milks. L. A. Rogers. *bibliog U S Ag B* 319:1-30 '16; Same. *Creamery* 4:22-3 F '16

Study of some factors concerned in the preparation of milk fermented with *b. bulgaricus* and *bact. lactis acidii*. R. Finkelstein. *J Dairy Sci* 1:250-8 S '17

**Milk, Goats'**

Condensed goats' milk. *N Y Prod R* 45:342 Ja 9 '18

Goats' milk for babies. I. B. Matthews. *Am Sheep B & W* 36:368 Je '16

Goats' milk for infant feeding. *N Y Prod R* 41:800 Mr 8 '16



**Milk, Goats'—Continued**

Goat's milk for infant feeding. W. H. Jordan and G. A. Smith. *il N Y State Ag Exp B* 429:1-20 '17; Summarized by F. H. Hall. (Goat milk good for babies). *B 429 Popular ed 7p*; Excerpts. *N Y Ag Dept B* 96:140-5 *Je* '17; Summary. *Hoard's D* 56:8 *Jl* 26 '18  
Method for detecting the admixture of goat's milk to the milk of cows. N. A. Brodrick-Pittard. *Int R Sci & Prac Ag* 7,no 3:131-2 *Mr* '16

**Composition**

Casein and salts of goat's milk (Tech B. 46). A. W. Bosworth and L. L. Van Slyke. *N Y State Ag Exp Rep* 1915:369-81 '16  
Studies on goat's milk: the casein of goat's milk; the soluble and insoluble compounds of goat's milk. A. W. Bosworth and L. L. Van Slyke. *Int R Sci & Prac Ag* 9,no 5:619-20 *My* '18

**Milk, Homogenized**

Homogenized milk. *N Y Prod R* 41:758 *Mr* 1 '16  
Milk for our soldiers. E. H. Leiendecker. *Purdue Ag* 13:31 *O* '18

**Milk, Human**

Human milk (Tech B. 43). A. W. Bosworth. *N Y State Ag Exp Rep* 1915:366-8 '16  
Value of human milk analysis. H. Lloyd. *Int Assn Dairy & Milk Inspe* *Rep* 1917:178-81

**Milk, Manure in**

Experiments on determination of cow manure in milk; moisture content and solubility of cow manure. G. B. Taylor. *il J Dairy Sci* 1:303-12 *N* '17

**Milk, Reconstructed. See Milk, Homogenized**

**Milk, Skimmed**

Conserving skim-milk. C. Du Bose. *Kimball's D F* 16:80 *F* 1 '13  
Disposing of by-products in the creamery. *N Y Prod R* 41:462+ *Ja* 12 '16  
Estimating skim milk yield. S. W. Mendum. *Hoard's D* 51:346 *Mr* 17 '16  
Good food wasted. *Jersey B* 36:628 *Ap* 25 '17  
How to use skim milk. *Weekly N L* 4:3 *F* 7 '17; Same. *Creamery* 5:18-19 *Jl* '17; Same. *Hoard's D* 53:1004 *Jl* 20 '17; Same. *Jersey B* 36:1176 *Ag* 1 '17  
Manufacture of casein from buttermilk or skim milk. A. O. Dahlberg. *il U S Ag B* 661:1-32 '18; Excerpt. *N Y Prod R* 46:222 *Je* 5 '18  
Milk and skimmed milk. *J Home Econ* 9:277-81 *Je* '17  
Notions about skim milk. *Nat Stock & F* 40:776 *O* 28 '16  
Practical economy of skim milk. J. M. Kerr. *J Dept Ag Victoria* 14:162-7 *Mr* '16  
Production, sale and value of skim milk products. J. P. Street. *Creamery* 5:51 *O* '16  
Profit from skim milk. M. O. Lerrigo. *Country Gent* 81:1778 *S* 30 '16  
Prohibiting skim-milk. O. W. Mapes. *Rural N Y* 76:20 *Ja* 6 '17  
Resumed sale of skimmed milk brings relief. C. L. Taylor. *Am City—City ed* (Tribune bldg., N. Y. 35c) 17:506 *D* '17  
Sale of skim-milk. H. F. Judkins. *Rural N Y* 76:1028 *S* 1 '17  
Shall skim milk be used for human food? R. W. Washburn. *Hoard's D* 54:178 *S* 7 '17; Same. *Creamery* 6:68-9 *O* '17  
Skim milk as a human food. J. P. Street. *Assn Am Dairy Food & Drug Offic Pro* 1916:205-9; Same cond. *N Y Prod R* 42:728 *Ag* 30 '16; Same cond. *Hoard's D* 53:11 *Ja* 26 '17  
Skim-milk as human food. R. M. Washburn. *Kimball's D F* 16:557 *O* 1 '18  
Skim milk cheese. *J Bd Ag* 24:175-9 *My* '17  
Skim milk for human food. (A. I. 31) 2p '18 *U S Ag*  
Skim-milk for protein. *Wallaces' F* 42:1139 *Ag* 17 '17  
Skimmed milk is being sold. *Rural N Y* 76:121 *Ja* 27 '17  
Skim milk; its value as a food. *N Y Prod R* 44:976 *O* 10 '17  
Utilizing skim milk. *Creamery* 7:21 *My* '18  
Value of milk as food. W. C. Jeffries. *Ohio F* 137:840 *Je* 24 '16  
Value of skim-milk. F. X. Mahoney. *Kimball's D F* 15:583 *S* 1 '17

Value of skimmilk as food. T. T. Frankenberg. *Hoard's D* 56:234 *S* 13 '18

*See also* Feeding and feeding stuffs—Milk

**Composition**

Variations in skim milk. J. Marsh. *Ohio F* 138:469 *N* 11 '16  
Variations in the composition of skimmilk. A. E. Perkins. *Ohio Ag Exp B v* 1:304-6 *O* '16

**Pasteurization**

Pasteurization of dairy by-products (B. 412). W. D. Dotterrer and R. S. Breed. *bibliog N Y State Ag Exp Rep* 1915:207-36 '16  
Pasteurization of dairy by-products, by R. S. Breed; Pasteurization of skim milk and whey, by A. L. Brockway, with discussion. *N Y Ag Dept B* 80:1507-13, 1513-27 *F* '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1507-13, 1513-27 '17  
Pasteurization of skim milk and whey as food for calves. V. A. Moore. *bibliog N Y Ag Dept B* 81:1780-97 *Mr* '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1780-97 '17; Same. *Am Vet M Assn J* 49:365-80 *Je* '16  
Pasteurize skim milk. *Prac F* 112:258 *Je* 15 '16  
Pasteurized skim milk. *Creamery* 4:24 *Je* '16; Same. *N Y Prod R* 42:274 *Je* 7 '16

**Milk, Sour**

\* Survival of typhoid bacilli in sour milk. P. Marsh. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:590-3 *Ag* '18  
Uses of sour milk. *la Ag Ext Home Econ C* 15:1-4 '17-18

**Milk, Substitutes for**

Good milk with cows 10,000 miles away. *Sci Am* (233 Broadway, N. Y. 10c) 119:295 *O* 12 '18

**Milk as a feeding stuff. See Feeding and feeding stuffs—Milk**

**Milk as carrier of infection**

Diphtheria; an epidemic, probably of milk origin, at Newport, Rhode Island, and vicinity. G. W. McCoy and others. (Reprint no. 430 Pub. health reports) 20p map '17 *U.S. Public health service, Washington, D.C.*  
Infantile scurvy. A. F. Hess. (*In Pan American scientific congress Pro.*, 1915, v. 10, p. 48-51) '17  
Milk-borne infections. *Creamery* 5:37 *Je* '17  
Milk does not carry infantile paralysis. *Creamery* 5:24 *Ag* '17  
Milk sickness to be investigated. *Creamery* 7:57-8 *O* '18  
Observation on trembles (milk sick) in cows, transmitted to man by milk and milk products. H. R. Schwarze. *Am Vet M Assn J* 53:236-9 *My* '18  
\* Relation of streptococci to bovine mastitis and septic sore throat. D. J. Davis. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:40-6 *Ja* '18  
Relationship between cow's milk and the public health. (*In Report, Mass. Special milk board.* 1915, p. 126-89) '16 *Mass. State dept. of health, Boston*  
United States public health service and its interest in a better milk supply. A. F. Stevenson. *Creamery* 5:25-7 *Ag* '17  
Unusual outbreak of milk poisoning. *Creamery* 4:20 *F* '16

**Milk as culture medium**

Note on the reaction of the paratyphoids, alpha and beta, in litmus milk. P. B. Hadley. *J Bact* 2:263-7 *My* '17  
Substitute for litmus for use in milk cultures. W. M. Clark and H. A. Lubs. *J Ag Research* 10:105-11 *Jl* 16 '17

**Milk bacteriology. See Milk—Bacteriology**

**Milk bottle exchanges**

Milwaukee's bottle exchange. E. B. Moak. *il Kimball's D F* 15:183 *Mr* 15 '17

**Milk bottle washing machines**

Rapid bottle washers: soaking, sterilizing, washing. (B. 155) 8p *il Rapid bottle washer co., Delphos, Ohio*

**Milk bottles**

Care of milk bottles. L. L. DeBra. *Hoard's D* 52:345 *O* 6 '16

**Milk bottles—Continued**

- Consumers increase milk costs. A. D. Burke. Ohio F 140:268 S 29 '17  
 Glass vs. paper milk bottles. R. M. Ross. Scientific Am (233 Broadway, N. Y. 10c) 117:157 S 1 '17; Discussion. 117:207 S 22 '17  
 Labeling milk bottles. Creamery 4:25-6 F '16  
 Local milk bottle shortage. N Y Prod R 41:891 Mr 15 '16  
 Making milk bottles of paper. il Scientific Am (233 Broadway, N.Y. 10c) 116:275 Mr 17 '17  
 Making sanitary containers for milk from waste sawdust. Am Gas Eng J (42 Pine st, N.Y. 10c) 108:150 F 16 '18  
 Milk bottles. Purdue Ag 11:32-3 Je '17  
 Milk bottles from garbage dumps. C. E. Potter. Hoard's D 51:331 Mr 17 '16  
 Modern bottle making plant; Thatcher manufacturing company, Elmira, N.Y. il Engineer (33 Norfolk st., Strand, London, W. C. 2) 123:578-9, 588 Je 29 '17  
 Paper bottles for infectious disease. Creamery 5:17 Ag '17  
 Reducing losses on milk bottles. System on the Farm 1:257-8 S '17  
 Reducing my biggest loss. H. V. Stanley. il System on the Farm 2:12-13 Ja '18  
 Seamless paper bottles. Creamery 6:49 O '17  
 To secure return of milk bottles. Creamery 7:13-14 Jl '18

See also Milk bottle washing machines; Milk containers

**Milk can emptying machines**

- Milk can emptying machine. il Int R Sci & Prac Ag 7,no 8:1161-2 Ag '16

**Milk cans**

- Care of cans on patrons' farms. N Y Prod R 42:204 My 24 '16; Excerpt. Hoard's D 52:229 S 8 '16  
 Care of milk cans. N Y Prod R 42:801 S 13 '16  
 Care of milk cans. H. C. Adams. Hoard's D 54:513 N 2 '17  
 Checking cans. N Y Prod R 42:830 S 20 '16  
 Cleaning and steaming cans. N Y Prod R 42:306 Je 14 '16  
 Conservation of milk cans. Creamery 6:25 S '17  
 Conserve the milk cans. N Y Prod R 44:518 Jl 25 '17  
 Forming milk-can handles on a power press. E. A. Walters. Machinery (140 LaFayette st., N.Y. 20c) 24:41-2 S '17  
 Important facts related to washing milk cans. Creamery 4:25 Je '16  
 Invents sanitary milk can. il Jersey B 37:171 Ja 30 '18  
 Retinning; is it economical in the case of milk cans and cheese factory equipment? N Y Prod R 44:484 Jl 18 '17  
 Rinsing cans and utilizing rinsings. N Y Prod R 41:794+ Mr 8 '16  
 Taking care of containers. Creamery 5:54 Ag '17  
 Tri-state dairy association and railroad men meet; discuss cans and freight rates. Nat Stock & F 41:840 D 1 '17  
 Washing milk cans. N Y Prod R 42:436 Jl 5 '16; Same. Jersey B 35:1316 Ag 23 '16; Same. Hoard's D 52:243 S 15 '16  
 Will save cream cans. Jersey B 36:1776 N 7 '17

See also Milk can emptying machines

**Milk commission, Federal. See Federal milk commission****Milk commissioners, American association of medical. See American association of medical milk commissioners****Milk commissions**

- Medical milk commissions and certified milk. E. Kelley. U S Ag B 1:1-38 '15

**Milk condenseries. See Condenseries****Milk containers**

- Single use dairy products containers. il Creamery 4:27-8 Mr '16

**Milk contests**

- Connecticut milk and butter scoring. H. F. Judkins. N Y Prod R 41:918 Mr 22 '16  
 High-grade milk pays. Weekly N L 4:3 Jl 4 '17

- Improving the milk and cream supply by means of contests. M. Dey. Creamery 5:67-9 S '16

- Iowa educational market milk contest. B. W. Hammer and A. J. Hauser. Ia Ag Exp C 30:1-4 '16

- Milk and cream contests. Creamery 4:14 Mr '16; Same Jersey B 35:392 Mr 15 '16; Same. N Y Prod R 41:856 Mr 15 '16; Same. Hoard's D 51:437 Mr 31 '16

- Milk and cream contests. E. Kelly and others. U S Ag B 356:1-23 '16

- Milk record contest. Kimball's D F 16:16 Ja 1 '18

- Preparing milk for show. D. F. Mattson. Ohio F 138:280 S 23 '16

- Prize contests; their value in improving our milk supplies. A. W. Lombard. Int Assn Dairy & Milk Inspec Rep 1915:104-9

- Simple system of grading city milk, or city milk contests. J. A. Gamble. Creamery 5:23-4 Je '17

**Milk cooling**

- Application of refrigeration to the handling of milk. J. T. Bowen. map U S Ag B 98:1-88 '14  
 Care of cream on the farm. Creamery 4:16 My '16

- Care of cream on the farm. J. D. Jarvis. (In De Laval dairy hand book, p 43-6) il '16 De Laval separator co., New York

- Cooling cream. N Y Prod R 45:776 Mr 27 '18

- Cooling cream on the farm. Hoard's D 52:912 Ja 19 '17

- Cooling cream on the farm. il Hoard's D 53:1004 Jl 20 '17

- Cooling cream on the farm. O. F. Hunziker and others. il Ind Ag Exp B 188:1087-1118 '16; Same cond. Creamery 5:43 S '16; Same cond. N Y Prod R 42:805, 1086+ S 13, O 18 '16; Excerpts. J Ag (Quebec) 21:27 Ag '17

- Cooling hot-bottled pasteurized milk by forced air. S. H. Ayers and others. U S Ag B 420:1-38 '16; Abstract. Creamery 5:47+ N '16; Summary. N Y Prod R 43:110 N 15 '16; Summary. Country Gent 81:2114 D 9 '16

- Cooling milk. H. E. Ross and T. J. McInerney. il Cornell Ag Exp Rep 1916, v 2:1133-48 '17; Abstract. Cornell Countryman 15:457-9 My '18

- Cooling milk and cream on the farm. J. A. Gamble. il maps Farmers' B 976:1-16 '18

- Cooling milk at the farm. Creamery 5:29 S '16

- Cooling milk on the farm. H. F. Judkins. Conn Ag Coll Ext B 1:1-19 '16; Same cond. Rural N Y 75:1017, 1038, 1053 Jl 22-Ag 5 '16

- Cooling tanks and milk houses as factors in cream improvement. J. H. Frandsen. il Neb Ag Exp C 3:4-12 '17

- Cooling tanks for cream. J. H. Frandsen. Wallaces' F 41:932 Je 30 '16

- Keep milk cool. il Hoard's D 53:1003 Jl 20 '17

- Keeping milk sweet in hot weather. R. Wylie. Ohio F 141:796 Je 22 '18

- Milk-cooler fixed on a trolley. Int R Sci & Prac Ag 8,no 11:1129-30 N '17

- Production of first grade cream. R. C. Potts. Okla Ag Exp B 108:8-10 '16; Same. N Y Prod R 42:476 Jl 12 '16

- Shipping milk in summer. Jersey B 37:232 F 13 '18

- Value of cooling cream. H. C. Mills. il Kimball's D F 15:309 My 1 '17

- Why milk should be kept cold. Prog F 31:519 Ap 8 '16

- Milk depots

- Case for municipal milk. H. W. Harris. 19th Century (249 W. 13th st., N.Y. 50c) 80:1292-1300 D '16

- Essentials of a modern milk plant. S. M. Heulings. Creamery 6:16-18 D '17

- Exhaust steam for heating water and for pasteurizing. U. S. Dairy division letter. Creamery 6:88 O '17; N Y Prod R 44:952 O 10 '17; Hoard's D 54:503 N 2 '17

- Favors co-op. city plant at Beaumont, Texas. J. L. Thomas. N Y Prod R 42:29 Ap 26 '16

- Milk sold direct to consumer; farmers buy city plants. Rural N Y 76:1267 N 3 '17

- Modern milk plant; economical equipment, arrangement and operation. S. M. Heulings. N Y Prod R 45:310-11 Ja 2 '18



**Milk depots—Continued**

Municipal milk plants in Kansas. N Y Prod R 42:920 O 4 '16  
 New milk plant of D. H. Ewing's Sons, Louisville, Kentucky. il Creamery 7:32g-33 D '18  
 Proper handling of a large city milk supply. E. C. Krehl. Creamery 7:27-9 Mr '18  
 Report of committee on city milk plant inspection. Int Assn Dairy & Milk Inspec Rep 1916:54-9  
 State milk monopoly recommended. N Y Prod R 41:1090 Ap 19 '16

See also Union dairy company, Chicago

**Laws and regulations**

Now for the Townner-Smith bill. Rural N Y 76:557 Ap 14 '17  
 Regulations governing cream and milk stations. 4p '17 Ia. Dairy and food comm., Des Moines  
 Support the Townner milk bill. Rural N Y 76:421 Mr 17 '17  
 Townner milk market bill. Rural N Y 76:289 F 24 '17

**Management**

Checking goods handled in the plant. Creamery 5:47 O '16  
 Country and city milk plant operating economies. C. R. Lindback. Creamery 6:52-4 N '17  
 Goods returned by route salesmen. Creamery 5:25-6 Ap '17  
 Keeping down the losses at the city milk plant; milk plant letter no. 34. Creamery 5:26 N; 23 D '16

**Sanitation**

Milk-plant sanitation. Jersey B 35:58 Ja 12 '16  
 Report of committee on city milk plant inspection. E. C. Krehl and others. Int Assn Dairy & Milk Inspec Rep 1915:63-9

**Ventilation**

Creamery and milk plant ventilation. L. Klima. Creamery 5:27-8 Ap '17

**Milk depots, Cooperative**

Cooperative creamery. J. M. Ham. N Y Ag Dept B 81:1178-80 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1178-80 '17  
 Co-operative dairying. E. L. Brigham. Mass Ag Bd B 69:7-12 '17; Same. Creamery 5:42+ Ap '17  
 Co-operative milk industry in Connecticut. N. L. McBride. il Rural N Y 77:974 Ag 17 '18  
 Getting all the profit; Brockton, Mass., milk supply. A. C. Brett. il Rural N Y 77:181 F 9 '18  
 Protect the co-operative milk creameries. Rural N Y 77:289 F 23 '18  
 Story of a co-operative milk plant. H. H. Lyon. il Hoard's D 56:545 N 15 '18  
 Successful cooperative milk distributing plant. A. T. Kearney. Nat Stock & F 42:740 N 16 '18

**Milk fever.** See Cows—Diseases and pests

**Milk flow.** See Lactation

**Milk houses**

Bottled milk dairy. il plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2234:43 Mr 9 '18  
 Construction of the dairy house. H. A. Ruehe. plans III Ag Exp C 188:1-8 '16; Same abridged. Field II 27:455 Je '17  
 Cooling tanks and milk houses as factors in cream improvement. J. H. Frandsen. il plans Neb Ag Exp C 3:14-18 '17  
 House for ice and milk. R. C. Miller. plan Country Gent 82:1853 N 24 '17  
 Milk house. plan J Ag (Quebec) 19:175 F '16  
 Milk house and bottling plant. J. A. Machovee. plans Hoard's D 52:205 S 8 '16  
 Milk house for Texas. L. Rhodes. il Tex Ag Exp C 15:1-7 '16  
 Model farm dairy. O. Howell. il plan Field II 27:676 S '17  
 Plan for a small dairy house. il plan Prog F 32:324 Mr 10 '17  
 Plans and suggestion for the arrangement and construction of a modern milk house. 32p plans '16 Borden's condensed milk co., 108 Hudson st., New York

Practical milk house. E. T. Leavitt. il plans Hoard's D 55:425 Mr 29 '18  
 Sanitary milk houses. H. C. Campbell. il Farm Eng 4:3 J1 '16  
 Small milk-house for farm. C. M. Beem and W. W. Denman. Ohio F 139:808 Je 23 '17

**Milk houses, Concrete**

Cement block dairy house. W. E. Frudden. il Kimball's D F 15:150 Mr 1 '17  
 Cement milk house. R. A. Rhoades. il Country Gent 81:838 Ap 15 '16  
 Concrete milk house will prevent losses. C. E. Smith. il Jersey B 37:1367 Ag 28 '18

**Milk industry and trade**

As the distributor sees it. C. A. Weiant. N Y Farms & Markets Dept Ag B 104:161-72 F '18  
 Case of the milkman. F. W. Woll. Hoard's D 53:559 Ap 20 '17  
 Chicago milk prices. T. J. Delohery. Hoard's D 51:469 Ap 7 '16  
 Condensed milk export trade. N Y Prod R 46:178 My 29 '18  
 Consolidation and co-operation is essential in the milk trade; work of the Wicks committee. C. H. Kilbourne. Creamery 5:16-19 Ja '17  
 Crisis in the milk business. Rural N Y 76:1209 O 20 '17  
 Dairymen ready for change. O Judd Farmer 63:9 N 3 '17  
 Educational dairy campaign. il Ag Digest 1:96-7 S '16  
 Greater efficiency and enhanced profits without internal strife. C. H. Kilbourne. Creamery 5:38-40 S '16  
 How to operate a milk business on a cash basis. Creamery 5:16-17 Ap '17  
 Ice cream and milk business. C. G. Morris. N Y Prod R 44:594 Ag 8 '17  
 Keeping down the losses. N Y Prod R 43:240 D 6 '16  
 Market bill progress; milk dealers protest and criticize. N Y Prod R 43:1022 Ap 18 '17  
 Marketing Wisconsin milk. B. H. Hibbard and H. E. Erdmann. il maps Wis Ag Exp B 285:1-71 '17  
 Milk and milk prices. H. H. Lyon. Hoard's D 51:551 Ap 21 '16  
 Milk business—present and future. W. C. Davis. Creamery 5:30-1 N '16  
 Milk producers and Chicago dealers. Hoard's D 51:468 Ap 7 '16  
 Milk question in New England; an investigation of the cost of producing milk in New England and its distribution in Boston. 57p '17 Boston chamber of commerce; Excerpts. Kimball's D F 16:66+ F 1 '18  
 Milk situation. Rural N Y 77:1141 O 5 '18  
 My experience as a distributor of milk. L. Horton. N Y Ag Dept B 93:44-54 Mr '17  
 New move in the milk trade. Rural N Y 76:775 Je 9 '17  
 Plea for idealism in the milk business. Mrs G. Lambert. Creamery 5:25-6 Je '17  
 Problems now before the milk dealer. Creamery 5:23-4 Ja '17  
 Producers should advertise milk. D. D. Aitken. Hoard's D 55:426 Mr 29 '18  
 Profiteering in milk. Rural N Y 77:1261 N 9 '18  
 Report of the governors' tri-state milk commission. Pa Ag Dept B 287:1-70 '17  
 Review of a milk failure. Rural N Y 77:239 F 16 '18  
 Trouble with the milk business. C. E. Gapen. il Country Gent 82:579-80, 634, 683 Mr 24-Apr 7 '17  
 What organization has done for the milk business. R. Pattee. Mass Ag Bd C 79:1-12 '18  
 What shall the public pay. Ag Digest 2:705, 749, 837, 881 N-D '17, F-Mr '18  
 When all lift together. E. L. Vincent. Hoard's D 54:60 Ag 10 '17

See also Dairymen's associations; Milk—Distribution; Milk—Prices; Milk supply and references under that subject; also names of dairymen's associations. e.g. Chicago milk producers' association, Dairymen's league, Milwaukee milk and cream shippers' association, Twin City milk producers' association

Milk industry and trade—*Continued*

## Accounting

Uniform cost accounting for milk distributors.  
E: A. Kracke. J Accountancy (20 Vesey st,  
N.Y. 30c) 24:424-9 D '17

## Bibliography

List of references on the milk industry.  
H. H. B. Meyer. Special Libraries (Indianap-  
olis, Ind. 25c) 8:10-22 Ja '17

## Regulation

Effect of the new milk ordinance upon the  
milk supply of Baltimore, Md. Municipal  
Journal (Baltimore, Md.) 5:12 N 30 '17  
Elyria, Ohio, milk regulations. Ohio Pub  
Health J (Columbus) 8:355-6 Ag '17  
Existing milk laws; digest of city ordinances  
regulating the production and sale of milk  
in Toledo. Toledo City J (412 Valentine  
bldg., Toledo, O. 5c) 2:3 N 24 '17  
For uniform and up-to-date milk regulations.  
Creamery 7:29-32 S '18  
Guide for formulating a milk ordinance. U S  
Ag B 585:1-4 '17  
Hylan asks milk price inquiry. N Y Prod R  
47:114 N 27 '18  
Milk and milk products—production, care,  
and sale. (In Municipal ordinances, 1916,  
p. 106-79) '17 U.S. Pub. health service,  
Washington, D.C.  
Milk factories (restriction) order, 1917. J Bd  
Ag 24:904-6 N '17  
Milk (amendment) order, 1917. J Bd Ag 24:  
1138-40 Ja '18  
Milk regulation in Indiana. Toledo City J  
(Commission of publicity & efficiency, To-  
ledo, O. 5c) 3:2 Ja 5 '18  
Milk regulations suggested by Association of  
American dairy food and drug officials com-  
mittee. Kimball's D F 16:525 S 15 '18  
Milk supervision and its control. J. A. Gam-  
ble. Am J Pub Health (126 Massachusetts  
av., Boston 50c) 7:953-5 N '17  
New milk rules for Indiana. Jersey B 36:1854  
N 21 '17; Same. Creamery 6:31 D '17  
Ordinance concerning the keeping, use and  
sale of milk and the products thereof in  
Sacramento, Cal. Official Gazette (Saca-  
mento, Cal.) 4:2-3 N 5 '17  
Ordinance no. 271; an ordinance concerning  
the keeping, use and sale of milk in Sacra-  
mento. Official Gazette (Sacramento Cal.)  
3:4-6 My 7 '17  
Present status of milk supervision in the  
cities of Ohio. F. G. Boudreau. Ohio Pub  
Health J (Ohio State Bd of Health, Colum-  
bus) 8:76-80 F '17  
Proyecto de ordenanza reglamentaria del  
comercio de leche de consumo de Buenos  
Aires, Argentina. R. S. Laspiur. (In Pan  
American scientific congress Pro., 1915, v.  
10, p. 130-66) '17  
Regulating the sale of milk in cities. (Rep.  
273) 5p '17 N.Y. State Bur. of Munic. In-  
formation  
Obtainable only thru Public affairs in-  
formation service, 958-964 University av.  
N.Y. (Typew 25c)  
Report of the committee on statistics of milk  
and cream regulations. Int Assn Dairy &  
Milk Inspecc Rep 1916:71-125; Same. J Dairy  
Sci 1:45-83 My '17  
*See also* Chicago milk investigation; De-  
troit milk investigation; Federal milk in-  
vestigation; New York milk investigation

## Statistics

Milk prices in September. Creamery 7:51 O  
'18

**Milk inspection.** See Dairy inspection

**Milk of human kindness.** J. L. Jones. Hoard's  
D 52:755+, 801 D 22-29 '16

## Milk pails

Milk pails. M. E. Underwood. Kimball's D F  
15:520 Ag 1 '17  
Small-mouthed milk pail. Rural N Y 75:1296  
O 7 '16

**Milk plants.** See Creameries; Milk depots

**Milk producers' association (Chicago).** See Chi-  
cago milk producers' association

**Milk producers' association, Certified.** See Cer-  
tified milk producers' association

**Milk producers' associations.** See Dairymen's  
associations

**Milk secretion.** See Lactation

**Milk separators.** See Cream separators

**Milk shows.** See Dairy shows

## Milk silk

Milk silk. Jersey B 36:1273 Ag 15 '17

**Milk standards, National commission on.** See  
National commission on milk standards

**Milk sugar.** See Lactose

## Milk supply

April milk prices. F: A. Koenig. Kimball's D F  
16:304 Ap 15 '18

Better milk supplies. Wallaces' F 41:804 My  
26 '16

Case for municipal milk. H. W. Harris. 19th  
Century (249 W. 13th st., N.Y. 50c) 80:1292-  
1300 D '16

City milk and the public health. H. A. Hard-  
ing. Ill Farmers Inst Rep 1917:52-8 '17

City's milk supply. L. W. Rowles. il Country  
Gent 81:22 Ja 1 '16

Common sense about milk. H. Quick. il Coun-  
try Gent 81:1143-4 Je 3 '16

Consumer's lack of interest. Creamery 4:23  
Jl '16

Control of public milk supplies by the use of  
the microscopic method. R. S. Breed and  
J. D. Brew. bibliog J Dairy Sci 1:259-71 S  
'17

Decrease in milk supply; its effect on infant  
mortality. J. S. Neff. bibliog Int Assn Dairy  
& Milk Inspecc Rep 1917:140-5; Same. Cream-  
ery 7:23-4 F '18

Ice cream supply. E. S. Thompson. N Y Prod  
R 43:72 N 8 '16

Improving milk quality. N Y Prod R 41:552  
Ja 26 '16

Management of creamery patron. O. F. Hun-  
ziker. N Y Prod R 43:58+ N 8 '16

Milk dealer's laboratory. A. Petittlar. C.  
Creamery 5:52+ O '16

Milk situation. Rural N Y 75:1476 N 25 '16

Milk supervision and its control. J. A. Gam-  
ble. Hoard's D 51:95 F 11 '16

Milking stool. J. Jones. Nat Stock & F 42:198  
My 13 '18

Model milk ordinance. Hoard's D 51:376+ Mr  
24 '16

More about the milk situation. A. D. Burke.  
Ohio F 140:348 O 20 '17

Plan for controlling the milk supply of the  
small town. P. Werner, jr. J Dairy Sci 1:  
284-9 S '17

Present milk situation. Prac F 113:437-8 D 15  
'17

Problems in milk production. H. E. Cook. Am  
Vet M Assn J 49:796-801 S '16

Problems of supply and demand. R. S. Smith.  
Int Assn Dairy & Milk Inspecc Rep 1915:198-  
200

Producers' milk prices. Kimball's D F 16:452  
Je 1 '18

Production, distribution and food value of  
milk; a report by the milk committee. 41p  
'18 U.S. Food administration, Washington,  
D.C.

## Supply exhausted

Proper handling of a large city milk supply.  
E. C. Krehl. Creamery 7:27-9 Mr '18

Pure milk problem in town and small city.  
C. F. Whitney. Assn Am Dairy Food &  
Drug Offic Pro 1916:231-3

Relationship of milk supplies to typhoid fe-  
ver. W. H. Frost. Pub Health Repts (U. S.  
Public Health Service, Washington, D. C.;  
5c Supt. of doc.) 31:3291-3302 D 1 '16

Reorganizing dairy profits. H. Myrick. O Judd  
Farmer 64:8 Ja 12 '18

Report of the governors' tri-state milk com-  
mission; the surplus milk supply. Pa Ag  
Dept B 287:47-51 '17

Standard for imported milk. Hoard's D 51:98  
F 11 '16

Standardizing the dairy. J. Mappelbeck. il  
Country Gent 81:1823-4 O 14 '16

State surveys as means of improving muni-  
cipal milk supplies. D: Klein. Assn Am  
Dairy Food & Drug Offic Pro 1916:229-31



**Milk supply—Continued**

United States public health service and its interest in a better milk supply. A. F. Stevenson. Int Assn Dairy & Milk Inspec Rep 1916: 191-9

Why milk will be scarcer and higher. A. G. Morrell. il Country Gent 82:1346-7 S 1 '17

*See also* Federal milk investigation; Milk depots; also names of associations, e.g. Milwaukee milk and cream shippers' association, Twin City milk producers' association

**Baltimore**

Figures vs guesswork. T. E. McLaughlin. Kimball's D F 14:820 Ja 1 '17

**Boston**

Boston milk regulations. Creamery 5:35 Je '17  
Seven cents for Boston milk. Rural N Y 76: 839 Je 30 '17

*See also* New England milk producers' association

**Burlington**

Concerning the Burlington milk supply. J. E. Carigan and W. T. Abell. Vt Ag Exp B 202:41-7 Mr '17

**California**

\* California pure milk law. M. M. Webster. Cal State Bd Health (Sacramento) Monthly B v 13:526-8 Je '18

Milk situation on the Pacific coast. C. L. Roadhouse. il Cal State Bd of Health (Sacramento) Monthly B v 7 p 318-22 Ja '16  
Progress report on the production and distribution of milk. E. Mead. Cal Ag Exp C 175:1-16 '17

**Canada**

Canadian milk situation. F. E. Ellis. Hoard's D 56:367 O 11 '18

Report of the Milk committee appointed by the Food controller for Canada, to investigate milk supplies for urban municipalities; including a plan for the reorganization of milk distribution. 19p '17 Food controller for Canada, Ottawa

**Chicago**

Chicago fights milk prices. J. M. Carroll. Kimball's D F 15:759 O 15 '17

Chicago milk inquiry. C. S. Duncan. J Political Econ (Univ. of Chicago Press 35c) 26: 321-46 Ap '18

Chicago milk producers ask \$3.42. O Judd Farmer 63:3 O 6 '17  
Getting adequate milk returns. O Judd Farmer 63:7 O 27 '17

History of milk inspection in Chicago and future of municipal milk inspection. W. A. Evans. Assn Am Dairy Food & Drug Office Pro 1918:34-41

Less milk in Chicago. J. M. Carroll. Hoard's D 55:200 F 22 '18

More economic distribution and delivery of milk. W. O. Nance. Creamery 7:16-19 Ja '18

Report on the more economic distribution and delivery of milk in the city of Chicago. (B. 8) 15p '18 Municipal reference library, 1005 City hall, Chicago; Same abr. Creamery 7: 16-19 Ja '18

Summer milk production outlook. il O Judd Farmer 64:593 Je 8 '18

What happens before the milk man comes. il Creamery 5:19-24 My '17

*See also* Chicago milk investigation; Chicago milk producers' association

**Cleveland**

Consumer's interest in maintaining a living price for milk. L. B. Dunham. Hoard's D 52:811 D 29 '16

Northern Ohio milk war. J. Gould. Hoard's D 52:878 Ja 12 '17

Production cost of Cleveland's milk. P. L. Dunham. il Kimball's D F 14:653 O 15 '16

**Detroit, Michigan**

Market milk business of Detroit, Mich., in 1915. C. F. Clement and G. P. Warber. il maps U S Ag B 639:1-28 '18

*See also* Detroit milk investigation

**Europe**

City milk supplies in Europe. Creamery 4:21 Je '16

**Great Britain**

Milk factories (restriction) order, 1917. J Bd Ag 24:904-6 N '17

Milk shortage. Town (Baltimore, Md. 5c) 3: 4+ Mr 9 '18

Organisation of the milk supply. J Bd Ag 22: 1307-8 Mr '16

Report of committee on production and distribution of milk. J Bd Ag 24:1133-5 Ja '18

Report of the subcommittee of the committee on production and distribution of milk. J Bd Ag 25:452-4 Jl '18

**Illinois**

St Louis producers hold out. O Judd Farmer 60:14 Ap 29 '16

**Iowa**

Studies on the market milk of Iowa; with tabulated results. B. W. Hammer and A. J. Hauser. Ia Ag Exp B 164:311-80 '16

**Kansas**

Improving a state's milk supply. L. A. Congdon. il Country Gent 81:1403 Jl 22 '16

**Louisiana**

Louisiana producers propose to set prices. R. G. Miller. Jersey B 37:1816 O 30 '18

**Maryland**

Milk cost survey for the week Nov. 26 to Dec. 2, 1917. 42p '17 Md. Council of defense, 763 Union trust bldg., Baltimore

**Massachusetts**

Cost of distributing milk in six cities and towns of Massachusetts. A. E. Cance and R. H. Ferguson. Mass Ag Exp B 173:1-54 '17; Same cond. Mass Ag Ext B 14:1-8 '17; Excerpt. N Y Prod R 45:168 D 5 '17

Cost of milk production in Massachusetts. W. H. Bronson. map Mass Ag Ext B 19:1-20 '18

Report of the special milk board of the Mass. State dept. of health. 358p map '16 Mass. State dept. of health, Boston

Serious aspects of the milk situation in Massachusetts. H. C. Lythgoe. Int Assn Dairy & Milk Inspec Rep 1917:94-105

Summary of report of milk board; with statement of conclusions and draft of proposed act relative to the inspection of milk. Pub Health (State dept. of health, Boston, Mass.) B v 3 27-45p F '16

**Michigan**

*See also* Michigan dairymen's association

**Montreal**

Methods employed in improving the milk supply of the city of Montreal, Canada. R. G. Mayotte. Int Assn Dairy & Milk Inspec Rep 1915:160-8

**New England**

Milk question in New England; an investigation of the cost of producing milk in New England and its distribution in Boston. 57p '17 Boston chamber of commerce; Excerpts. Kimball's D F 16:66+ F 1 '18

Milk situation in New England. A. E. Proctor. Hoard's D 52:738 D 15 '16

New England milk situation. A. E. Proctor. Hoard's D 52:588 N 17 '16

Surplus milk plan for New England. O. A. Jamison. Kimball's D F 16:587+ Ag 1 '18

**New Orleans**

Louisiana dairymen win. Kimball's D F 15: 466 Jl 1 '17

**New York city**

Abstract of the report of the Mayor's committee on milk. N Y (city) Dept Health Weekly B n s v 7:1-3 Ja 5 '18

Another milk conference; dealers and producers confer with food officials. N Y Prod R 44:1147 O 31 '17

**Milk supply—New York city—Continued**

August & Sept. milk prices; Dairymen's league sets prices and federal milk commission approves. N Y Prod R 46:482 J1 24 '18  
 Borden's and the Dairymen's league. C. A. Weiant. Rural N Y 77:795 Je 15 '18  
 Chemical quality of New York City market milk. L. P. Brown and C. V. Ekroth. Int Assn Dairy & Milk Inspect Rep 1916:134-40  
 Country milk company; discussion of the milk situation. Rural N Y 77:623, 651 Ap 27-My 4 '18  
 Discussion of milk situation in Greater New York. J. D. Miller. Hoard's D 56:521 N 8 '18  
 Experience of New York city in grading market milk. L. P. Brown. Creamery 4:11-14 Ag '16  
 Further remarks on the milk situation. Rural N Y 77:495 Mr 30 '18  
 Grade A milk in New York city. Creamery 4:14 Ap '16  
 Hylan asks milk price inquiry. N Y Prod R 47:114 N 27 '18  
 Mayor's committee report. Hoard's D 55:439 Mr 29 '18  
 Milk investigation in New York concluded. Jersey B 35:1432 S 13 '16  
 Milk price again boosted in New York city. A. H. Kolbe. Hoard's D 56:621 N 29 '18  
 Milk problems in and about New York. C. H. Kilbourne. Creamery 5:35 My '17  
 Milk situation. Rural N Y 75:1399 N 4 '16  
 Milk situation analyzed. Rural N Y 76:1323 N 17 '17  
 Milk sold direct to consumer; farmers buy city plants. Rural N Y 76:1267 N 3 '17  
 Milk supply of New York city—a lesson in municipal sanitation. L. M. Steckel. Creamery 4:20-1 J1 '16; Same. Am Vet M Assn J 49:669-77 Ag '16  
 New York milk news. H. H. Lyon. Hoard's D 56:704 D 13 '18  
 New York milk price to 17 cents. Creamery 7:27 D '18  
 New York milk prices. C. H. Kilbourne. Creamery 7:20 Ja '18  
 New York milk situation. Rural N Y 76:465 Mr 24 '17  
 New York milk situation critical. H. H. Lyon. Hoard's D 54:362 O 12 '17  
 New York milk topics. C. H. Kilbourne. Creamery 6:34-5 S '17  
 New York October milk price reduced. Hoard's D 56:412 O 18 '18  
 Notes on the milk situation. Rural N Y 76:1473 D 29 '17  
 October milk prices; Dairymen's league sends out schedule. N Y Prod R 46:785 S 25 '18  
 Progress in the milk business, especially in New York city. C. H. Kilbourne. Creamery 4:15-19 Mr '16  
 Report of the mayor's committee on milk, 1917; excerpts. Town (Women's civic league, Baltimore) 3:sup2-6 F 23 '18  
 Review of the milk situation in New York. J. J. Dillon. Hoard's D 52:550-1 N 10 '16  
 Seven cent milk in New York. Creamery 7:16-18 J1 '18  
 Ten years of work, 1907-1916; report of the New York milk committee, 33p il '16 N.Y. milk com., 105 E. 22d st. N.Y.  
 Try-out of a new milk plan. Rural N Y 77:795 Je 15 '18  
 Wicks committee and the big dealers. Rural N Y 75:1597 D 30 '16  
 Will cut milk supply if prices lower. A. H. Kolbe. Hoard's D 53:438 Mr 30 '17  
*See also* Dairymen's league; New York city Mayor's milk committee; New York milk investigation

**New York state**

Investigating why New York dairy farmers are not making money. G. W. Harrison. Kimball's D F 14:524 S 1 '16  
 Meeting the milk situation in New York state. M. G. Feint. Prac F 114:265 Ag 1 '18  
 Milk conditions in New York. E. W. Gage. Kimball's D F 15:794 N 1 '17  
 Milk regulation in New York. J. I. Mc Clumpha. Rural N Y 75:164 Ja 29 '16

Milk strike progress. N Y Prod R 42:994+ O 11 '16  
 New York dairy notes. H. H. Lyon. Hoard's D 55:236 Mr 1 '18  
 New York milk situation reviewed. H. H. Lyon. Hoard's D 52:577 N 17 '16

**Ohio**

Ohio milk situation. W. I. Chamberlain. Nat Stock & F 40:1393 Mr 17 '17  
*See also* Northern Ohio dairymen's protective league

**Paris**

Milk supply of Paris before the war and after. F. M. Mansfield. Jersey B 35:1731 N 1 '16

**Pennsylvania**

What can be done to improve the milk supply in Pennsylvania? L. A. Klein. Am Vet M Assn J 50:350-6 D '16

**Philadelphia**

Dairy farmers fighting for better prices. Breeder's Gaz 70:982 N 23 '16  
 Milk and its distribution in Philadelphia. T. B. Harbison. 12p il Educational committee, Chamber of commerce, Philadelphia  
 Milk prices for Pennsylvania. Kimball's D F 16:77 F 1 '18  
 Philadelphia milk conference. Prac F 112:409 N 1 '16  
 Philadelphia milk prices. Kimball's D F 16:124 F 15 '18  
 Philadelphia milk situation. F. P. Willits. Prac F 113:108 Mr 1 '17  
 Philadelphia milk supply. Prac F 114:198 My 15 '18  
 Well managed milk producers' association. Hoard's D 55:860 Je 7 '18

**Pittsburg**

Dairymen in the Pittsburg district. W. Jack. Hoard's D 52:575 N 17 '16  
 Pittsburg milk situation. J. D. Hervey. Ohio F 140:138 Ag 25 '17  
 Pittsburg milk situation; Pennsylvania commission hearings. J. D. Hervey. Ohio F 140:194 S 8 '17

**Portland, Oregon**

Milk on a quality basis. E. C. Callaway. il Country Gent 81:1862 O 21 '16

**Rhode Island**

Rhode Island new scheme for marketing milk. Rural N Y 75:601 Ap 8 '16  
 State monopoly of milk. O Judd Farmer 60:7 Mr 11 '16

**St Louis**

*See also* Southern Illinois milk producers' association

**Sweden**

Law has been passed requisitioning all supplies of milk. The local authorities are empowered to put this law into effect whenever such action is necessary, and thereafter milk will be sold only against coupons issued by the government to individuals

**Switzerland**

Arrêté du conseil fédéral concernant l'alimentation du pays en lait et en produits laitiers. Int Yearbook Ag Leg 1916:311-16 '17

**United States**

Outlook for eastern milk producers. E. P. Willits. Prac F 114:251 J1 15 '18

**Wisconsin**

Marketing Wisconsin milk. B. H. Hibbard and H. E. Erdmann. il maps Wis Ag Exp B 235:1-71 '17

**Milk trade.** See Milk industry and trade

**Milk utensils.** See Dairy utensils

**Milk veins.** See Mammary veins

**Milk vetch**

Poisonous properties of the two-grooved milk vetch. O. A. Beath and E. H. Lehnert. il Wyo Ag Exp B 112:59-67 '17



**Milk-wagon drivers**

Systems of paying milk-wagon drivers. Creamery 6:26 S '17; Same. Hoard's D 54:583 N 16 '17

**Milking**

Experiment to show effect on quantity and quality of milk produced by cows when milked at equal and unequal periods. J Dept Ag Victoria 14:744-51 D '16  
Harvesting grain compared with milking cows. G. R. Hushour. Hoard's D 54:327 N 2 '17  
How to feed the dairy cow. H. G. Van Pelt. il Kimball's D F 15:461, 496-7 J 1-15 '17  
Intervals between milkings and their influence on milk. Creamery 5:40 My '17  
Labor conditions in the South. S. M. Emery. Hoard's D 56:446 O 25 '18  
Milkers and milking. E. A. Grombacher. Jersey B 35:1993; 36:94 D 20 '16, Ja 17 '17  
Milking problems. P. H. Eaton. Hoard's D 52:663 D 1 '16  
Milking; some general advice for patrons. N Y Prod R 45:154-5 D 5 '17  
Pretty girls milk in California. J. P. Hertel. il Jersey B 37:77 Ja 16 '13  
Relation between the quantity of milk formed and that obtained in milking. S. G. Zwart. Int R Sci & Prac Ag 7:no 8:1139-41 Ag '16  
Temperament and the milking time. W. H. Underwood. Jersey B 37:1280 Ag 14 '18  
To produce certified and inspected grades of milk. System on the Farm 1:151-3 Je '17  
Where the dairyman's profits go. J. J. Ricketts. J Ag Victoria 15:506-8 Ag '17; Same. Jersey B 37:1204 J 1 31 '18

**Milking machines**

Advocates single unit for mechanical milker. W. Jack. Hoard's D 53:59 F 2 '17  
Amo milking machine on trial in Holland. J. Vanderleek. il J Ag (Quebec) 20:212 Ap '17  
Buying a milking machine. W. H. Cooper. il Kimball's D F 14:790 D 15 '16  
Care of the milking machine. Wallaces' F 42:1187 Ag 31 '17  
Care of the milking machine. C. Larsen. il Hoard's D 56:357+ O 11 '18  
Cleaner milk and less drudgery; a milking machine experience. L. S. Clymer. Prac F 113:174 Ap 15 '17  
Cow and machine milking. C. Larsen. il Hoard's D 56:317+ O 4 '18  
Dairy mechanics. R. H. Denman. Farm Eng 5:11 O '17  
-Does the milking machine pay? L. M. Sashman. Country Gent 83:38 Ap 6 '18  
Economy of using milking machine. Power F 27:40 Je '18  
Eliminating the obstacles in dairying. D. E. Andrews. Prac F 112:262 J 1 '16  
Eureka milking machine. J. Vanderleek. il J Ag (Quebec) 20:174 F '17  
Experience with a milking machine. Wallaces' F 41:369 Mr 3 '16  
Experience with the mechanical milker; symposium. il Ohio F 138:21-2 J 1 8 '16  
Factors affecting machine milking. Hoard's D 52:230 S 8 '16  
Factors making for the efficient use of milking machines. Jersey B 36:169 Ja 31 '17  
Farm management and the milking machine. A. H. DeGraff. Hoard's D 53:866 Je 15 '17  
Gas engine and the milking machine. W. Jack. Hoard's D 53:927 Je 29 '17  
How to select a milking machine. J. Vanderleek. J Ag (Quebec) 21:14 J 1 '17  
How to use and clean the milking machine. G. W. Muir. J Ag (Quebec) 21:124 F '18  
-Important factors affecting machine milking. C. Larsen. il S D Ag Exp B 166:394-421 '16  
-Labor requirements of dairy farms as influenced by milking machines. H. N. Humphrey. il map U S Ag B 423:1-17 '16; Same cond. Kimball's D F 15:4+ Ja 15 '17; Same cond. Hoard's D 52:924 Ja 19 '17  
Machine milking a necessity. J. Vanderleek. J Ag (Quebec) 19:243 My '16  
Machine milking satisfactory. Kimball's D F 16:114 F 15 '18  
Management of dairy herds; milking machines. E. V. Ellington. Idaho Ag Exp B 102:39-40 '17

Measure of the milking machine. A. G. Morrell. il Country Life 29:46 F '16  
Mechanical milker. Hoard's D 54:696 D 7 '17  
Mechanical milker. J. Mappelbeck. Country Gent 82:1030 Je 16 '17  
Mechanical milker. B. J. Ruetenik. il Country Gent 81:155 Ja 22 '16  
Milking by machinery. D. E. Andrews. Fruit-Grower 27:347 J 1 '16  
Milking by machinery. J. J. Hopper and J. W. Nutter. il plan Field 11 27:755+ O '17  
Milking machine advantageous. S. O. Tjosvold. O Judd Farmer 60:13 Je 17 '16  
Milking machine as a factor in the production of sanitary milk. G. L. A. Ruehle and others. Am J Pub Health 126 Massachusetts av., Boston 30c 7:849-6 O '17  
Milking machine comments. il Kimball's D F 15:784 N 1 '17  
Milking machine in India. H. St John. Ag J of India 12:291-4 Ap '17  
Milking machine makes a saving of \$1200 a year. R. Morgan. il System on the Farm 1:23 Mr '17  
Milking machine on an Ayrshire farm. B. J. Ruetenik. il Hoard's D 51:577 Ap 28 '16  
Milking machine points. E. L. Vincent. Ohio F 142:53 J 1 20 '18  
Milking-machine problems. B. J. Ruetenik. Country Gent 82:1646 O 27 '17  
Milking machine saves labor cost. W. M. Rider. Field 11 28:168 Mr '18; Same. Hoard's D 55:380 Mr 22 '18  
Milking machines. Creamery 7:38-9 Ap '18  
Milking machines. Hoard's D 54:874 Ja 11 '18  
Milking machines. H. F. Depew. Purdue Ag 11:47-8 Mr '17  
Milking machines. W. L. Hanning. il Purdue Ag 10:31-3 Ap '16  
Milking machines. M. S. Libbert. Purdue Ag 10:30 Ja '16  
Milking machines and general dairying. G. Rothwell. (In Reports, Dairymen's assns., 1916, p. 11-13) '17 Ontario ag. dept., Toronto  
Milking machines and labor problems. H. N. Humphrey. il Kimball's D F 15:619 S 15 '17  
Milking machines and the help problem. W. Jack. Prac F 112:221 My 15 '16  
Milking machines; as a source of bacteria in milk; methods of maintaining in a bacteria-free condition. G. L. Ruehle and others. il N Y State Ag Exp B 450:113-81 '18; Summarized by F. H. Hall. (Control of bacteria in milking machines). B 450 Popular ed 15p  
Milking machines most efficient when used in large herds. Weekly N L 4:4 Ja 24 '17  
Milking machines prove worth. O Judd Farmer 64:26 F 2 '18  
Milking machines that milk. P. S. Rose. il Country Gent 83:10-11 Ap 20 '18  
Milking with mechanical power. C. C. White. Power F 27:48 Ag '18  
More work with less help. il Kimball's D F 16:599 Ag 1 '18  
New butter defect arising from improper care of milking machines. A. D. Lynch. N Y Prod R 47:112 N 27 '18  
Omega milking machine and its influence on the yield and quantity of the milk experiments at the federal dairying station of Liebefeld (Berne), Switzerland. J. Kappeli. Int R Sci & Prac Ag 8:no 5:789-90 My '17  
Our milking machine experiences. Mrs. C. E. Boyd. Prac F 114:112 Mr 15 '18  
Pointers in the use of milking machines. Jersey B 36:1071 J 1 11 '17; Same. N Y Prod R 44:514 J 1 25 '17  
Practicability of milking machines. C. Larsen. Hoard's D 51:867+ Je 23 '16  
Practical operation of milking machines. F. E. Robertson. Hoard's D 52:800 D 29 '16  
Practical use of the mechanical milker. C. Van Vuren. Hoard's D 54:690 D 7 '17  
Sanitary advantages of the milking machine. J. A. McClintock. Kimball's D F 14:264 Ap 15 '16  
Selling milking machines. J. Vanderleek. J Ag (Quebec) 20:228 My '17  
Shall we milk by hand or machine? A. G. Morrell. il Prac F 112:243+ Je 15 '16  
Sharpless milking machine on trial in Holland. J. Vanderleek. il J Ag (Quebec) 20:154 Ja '17

**Milking machines—Continued**

- Study of milking machines. Country Gent 81: 1685 S 16 '16  
 Success of the milking machine. M. T. Harrison. Penn State F 10:7+ Ja '17  
 Using the milking machine. C. Larsen. Kimball's D F 14:139 Mr 1 '16; Same cond. Ag Digest 1:30 My '16  
 War-time milker. Kimball's D F 16:656 S 1 '18  
 What American inventors have done for dairying. A. Levin. Creamery 5:21-2 Ja '17  
 Which milking machine is best? C. Larsen. Hoard's D 56:547 N 15 '18

**Milking shorthorn breeders' associations.** See American milking shorthorn breeders' association; American milking shorthorn cattle club

**Milking suits**

- Common sense milking suit. F. E. Ellis. il Hoard's D 51:541 Ap 21 '16

**Milkweeds**

- American milkweeds. R. W. Shufeldt. il Am For 23:21-8 Ja '17  
 Common milkweed and its grim plan for perpetuating itself; photographs. Country Life 32:48-9 S '17  
 \* Flower that catches insects; little-known characteristic of the common milkweed. A. J. Eldredge. il Sci Am (233 Broadway, N.Y. 10c) 119:64 Jl 27 '18  
 New poisonous plant; the whorled milkweed. G. H. Glover and others. il map Colo Ag Exp B 246:1-16 '18  
 Pollination of asclepias cryptoceras. E. Payson. il Bot Gaz 61:72-4 Ja '16  
 Too-perfect milkweed. il J Heredity 8:460-3 O '17

**Milky way;** a story of how a farmer got the cream. E. Baird. il Am Coop J 13:386-8 My '18

**Millepedes**

- Hothouse milliped. E. N. Cory and F. H. O'Neill. il Md Ag Exp B 206:233-94 '17; Same. Md Ag Exp Rep 1916-1917 '17; Same cond. Am Flor 49:53 Jl 28 '17  
 Scale-feeding habits of a Porto Rican millipede. R. T. Cotton. J Dept Ag Porto Rico 1:175-6 Jl '17

**Miller, Charles C., 1831-**

- Dr. C. C. Miller's personal recollections. pors Am Bee J 56:10-11, 50-1, 85-6 Ja-Mr '16  
 Visit to the sage of Marengo. E. G. Le Sturgeon. Am Bee J 56:16 Ja '16

**Miller, John H.**

- Portrait. Breeder's Gaz 70:719 O 19 '16

**Miller, Robert**

- Portrait. Breeder's Gaz 70:7 Jl 6 '16

**Millers**

- Licensed millers of corn, corn starch, barley, oats, rice; compiled to Feb. 1, 1918. (Ser. M) 40p '18 U.S. Food administration, Washington, D.C.  
 This list has been compiled chiefly with a view to assisting wholesalers, retailers, bakers and other licensees in securing wheat flour substitutes, as required by the wheat conservation rules

See also Fraternity of operative millers of America

**Millet**

- Breeding millet and sorgo for drought adaptation. A. C. Dillman. il U S Ag B 291:1-19 '16  
 Influence of meteorological factors on the development and yield of the millets panicum miliaceum and setaria italica, in Russia. M. G. Sirinsov. Int R Sci & Prac Ag 8,no 3:342-5 Mr '17  
 Influence of temperature and moisture on the growth of millet. C. A. Bielov. Int R Sci & Prac Ag 8,no 8:1093-4 Ag '17  
 Japanese millet for silage. B. G. Southwick. Rural N Y 77:611 Ap 27 '18  
 Millet for silage. B. G. Southwick. Hoard's D 55:604 Ap 26 '18  
 Millets—their culture and utilization in New York. H. N. Vinall. il N Y Ag Dept B 87:2812-31 S '16  
 Milo maize and kafir corn club lessons and instructions for 1918. O. Beaty and W. T. Conway. N M Ag Ext C 29:1-11 F '18

New strains of sorgo and millet. Country Gent 81:260 F 5 '16

Roughage from small grain and millet. H. G. Van Pelt. Kimball's D F 14:344 My 15 '16

Sorghum and millet. F. A. Welton. il Ohio Ag Exp B v 1:168-74 Je '16

Work in connection with millet in 1915. B. G. C. Bolland. Egypt Ag Tech & Sci B 8:1-3 '16 (5c)

See also Feeding and feeding stuffs—Millet; Pearl millet; Proso

**Diseases and pests**

See also Millet smut

**Laws**

- Ordonnance n. 5296 concernant la sarrasin et le millet en Allemagne. Int Yearbook Ag Leg 1916:56-60 '17

**Seed**

- German millet in Missouri and Kansas. U S Seed Rep 1:5 D '17  
 Tabulation of reports from shippers of sorghums and millets under date of December 31, 1917. U S Seed Rep 1:3 F '18

**Varieties**

Foxtail millet; its culture and utilization in the United States. H. N. Vinall. il map Farmers' B 793:1-28 '17

Maize and broom millet experiments, 1916-17. H. Wenholz. Ag Gaz of New South Wales 28:645-9 S '17

**Millet meal**

Experiments in the determination of the digestibility of millets. C. F. Langworthy and A. D. Holmes. U S Ag B 525:1-9 '17

See also Feeding and feeding stuffs—Millet

**Millet smut**

Millet smuts and their control. H. E. Vasey. il map Colo Ag Exp B 242:1-22 '18

**Millinery**

Conservation of clothing. A. M. Zollman. J Ag (Quebec) 22:47 S '18

**Milling**

See also Grain milling; Peanut milling; Rice milling; Wheat—Milling and baking tests; Wheat milling

**Million acre wheat committee**

Letter from the million-acre wheat committee. M. W. Cole. Rural N Y 76:1209 O 20 '17

Millionaire farmers; story. H. Ayres. Rural N Y 77:240 F 16 '18

Millepedes. See Millepedes

Mills. See Flour mills; Sawmills

**Milwaukee milk and cream shippers' association**

Milwaukee incorporates. O Judd Farmer 60: 14 Ap 29 '16  
 Producers organize agency. O Judd Farmer 60:8 Ap 22 '16

**Mimicry (biology)**

Flowers, feathers and fins. R. W. Shufeldt. il Am For 23:669-73 N '17

Mimicry in butterflies, by R. C. Punnett. Review. il J Heredity 7:463-8 O '16

**Mimosa**

Studies in the permeability of the pulvinus of mimosa pudica. V. H. Blackman and S. G. Paine. bibliog Ann Bot 32:69-85 Ja '18

**Minch, Walter L., and Minch, Willard**

Best farmer in New Jersey; Minch brothers use 1800 acres in fifteen farms. J. R. McMahon. il Country Gent 83:10-11 S 14 '18

**Mine timbering**

Rocky Mountain mine timbers. N. D. Betts. U S Ag B 77:1-34 '14

Mineral content of plants. See Plants—Mineral content

**Minerals (food)**

Mineral metabolism of the milch cow; legumes highly essential in feeding for heavy milk production. E. B. Forbes. Ohio Ag Exp B v 3:8-10 Ja '18



**Minerals (food)—Continued**

Mineral nutrients in practical human food. E. B. Forbes. *J Home Econ* 8:122-30 Mr '16; Same cond. *Ohio Ag Exp B* v 1:123-8 Ap '16  
Minerals in nutrition. H. Mason. *Ohio F* 139:334 Mr 3 '17

See also Iron in foods; Metals in food; Tin in foods

**Miners**

Garden insurance against strikes. H. S. Stabler. *il Country Gent* 81:1020-1 My 13 '16

See also United mine workers

**Ministers**

Birth rate of Methodist clergymen. *J Heredity* 8:455-9 O '17

**Minks**

Breeding of mink in captivity. E. L. MacDonald. (*In Report*, 1917, p. 300) '17 Canada Comm. of conservation, Ottawa  
Cheekes, the thief. C. J. Hawkins. *il Country Life* 29:94 Ap '16  
How to trap mink and coon. A. R. Harding. *Nat Stock & F* 41:998 Ja 12 '18  
Mink. E. S. Jones. *Ohio F* 141:16 Ja 5 '18  
Talks to young trappers. G. J. Thiessen. *il Country Gent* 82:2026 D 22 '17  
Trapping the mink and the weasel. G. J. Thiessen. *Farm Eng* 4:84 N '16

**Minneapolis, Minnesota**

City full of gardens. A. Fearing. *il Country Life* 30:90 My '16

**Minnesota**

See also subhead Minnesota under special subjects, e.g. Agriculture—Minnesota, Dairying—Minnesota

**Dairy and food commissioner, State**

16th biennial report, 1917. 114p il '17 Minn. State dairy and food comr., St Paul

**Entomologist, State**

Sixteenth report for the years 1915 and 1916. F. L. Washburn. 189p il maps '16 Minn. ag. exp. station, St Paul

**Minnesota agricultural experiment station**

Report of Northeast demonstration farm and experiment station Duluth 1916. *Minn Ag Exp Rep* (Duluth) 1916:1-12 '17  
Report of progress of work and guide to experimental plots; North central experiment station, Grand Rapids. *il Minn Ag Exp* 64p '17  
Report of the superintendent, Northwest experiment station, 1910-1916. *Minn Ag Exp Rep* (Crookston ser., v 10, no. 1) 102p '17  
Report of West Central experiment station, 1917. *il Minn Ag Exp Rep* 1917:1-40 '18  
24th annual report, July 1, 1915 to June 30, 1916. *Minn Ag Exp Rep* 1916:1-83 '17  
25th annual report, July 1, 1916 to June 30, 1917. *Minn Ag Exp Rep* 1917:1-89 '17

**Minnesota dairy council**

Constitution of Minnesota dairy council. Hoard's D 55:999 Jl 5 '18  
Meeting of all dairy interests, St Paul, June 13. F. W. Merrill. Kimball's D F 16:533 Jl 1 '18

Minnesota dairymen's association. See Minnesota state dairymen's association

**Minnesota farmers' grain dealers' association**

9th annual convention, Minneapolis, Feb. 23-25, 1916. *Am Coop J* 11:707-13 Mr '16  
10th annual convention, Minneapolis, Feb. 14-16, 1917. *Am Coop J* 12:506-10 Mr '17; *Coop Manager & F* 6:32-49 Mr '17  
11th annual convention, Minneapolis, Feb. 19-21, 1918. *Am Coop J* 13:292-4, 296-7 Mr '18; *Coop Manager & F* 7:50-68 Mr '18

**Minnesota Jersey cattle club**

How a state club can boost the Jersey. C. R. Brackett. *Jersey B* 37:426 Mr 20 '18

**Minnesota live stock breeders' association**

Minnesota breeders' association meeting. W. A. McKerrrow. Kimball's D F 15:192 F 15 '17

Minnesota live stock breeders' meeting. Hoard's D 55:15 Ja 25 '18

Minnesota milk producers' association. See Twin City milk producers' association

**Minnesota state butter and cheese makers' association**

Annual convention, St Paul, Nov. 6-8. N Y Prod R 45:37+ N 14 '17

**Minnesota state dairymen's association**

Junior dairymen's day at the 39th annual convention, Lake City, Jan. 16-18, 1917. E. J. Trospen. *il Kimball's D F* 15:133 Mr 1 '17  
38th annual convention, Rush City, Jan. 18-20, 1916. Kimball's D F 14:86+ F 15 '16  
39th annual convention, Lake City, Jan. 16-19, 1917. Hoard's D 53:58 F 2 '17

**Minnesota state fair**

Breaks all records, Sept. 2-7, 1918. Wallaces' F 43:1298-1300 S 13 '18; Hoard's D 56:252-3 S 20 '18

Dairy interests at Minnesota fair. *il Kimball's D F* 15:716-17 O 1 '17

57th annual state fair. *il Breeder's Gaz* 70:413-18 S 14 '16; Wallaces' F 41:1210-11 S 15 '16; Kimball's D F 14:628+ O 1 '16

Horticulture at the Minnesota state fair. A. W. Latham. *il Minn Hort* 46:353-6 O '18

Horticulture at the Minnesota state fair, 1917. A. W. Latham. *il Minn Hort* 45:395-9 O '17

Minnesota had a practical fair. *Am Sheep B & W* 37:608 O '17

Minnesota state fair hog show. R. Davis. *Swine World* 6:21-2 O '18

Minnesota state fair Jersey show; with list of awards. *Jersey B* 35:1456 S 20 '16

Minnesota's fair a record-breaker. *Breeder's Gaz* 72:386-9 S 13 '17; Hoard's D 54:222-3 S 14 '17; Wallaces' F 42:1247-8+ S 14 '17

**Minnesota state federation of farmers' clubs**

Farmers' club federation. R. P. Speer. *Country Gent* 81:598 Mr 11 '16

**Minnesota state fruit breeding farm**

Annual examination of Minnesota state fruit-breeding farm for 1916. J. F. Harrison. *il Minn Hort* 45:56-8 F '17

Annual examination of state fruit-breeding farm. F. M. Kimball and G. A. Anderson. *il Minn Hort* 46:48-9 F '18

Fruit-breeding work in Minnesota. W. R. Selden. *J Ag New Zealand* 12:165-7 F '16

Midsummer reports, 1917, of the state fruit-breeding farm and trial stations. *il Minn Hort* 45:276-87 Jl '17

Midsummer reports, 1918, of various stations. *Minn Hort* 46:257-68 Jl '18

Minnesota state fruit-breeding farm in 1916; with discussion. C. Haralson. *il Minn Hort* 44:445-8; 45:49-55 D '16. F '17

New fruits originated at Minnesota fruit-breeding farm. C. Haralson. *il Minn Hort* 44:79-83 F '16

Report of committee, 1915. O. M. Huestis and F. H. Gibbs. *il Minn Hort* 44:24-6 Ja '16

**Minnesota state Holstein breeders' association**

Annual meeting, Stillwater, Minn., May 18-19, 1916. Hoard's D 51:782 Je 2 '16

Winter meeting, University Farm, St Paul, Jan. 7, 1916. Hoard's D 51:14 Ja 28 '16

**Minnesota state horticultural society**

Annual convention, Minneapolis, Dec. 3-8. Mrs P. Wyman. Green's *Am Fruit Grower* 38:9 Ja '18

Annual meeting, Minneapolis, 1915; with list of awards. A. W. Latham. *Minn Hort* 44:3-13 Ja '16

Award of premiums, annual meeting, 1917. *Minn Hort* 46:66-9 F '18

Building proposed for Minn. state horticultural society. A. W. Latham. plan *Minn Hort* 45:6-10 Ja '17

50th annual meeting, Minneapolis; with list of awards. A. W. Latham. *Minn Hort* 45:1-5, 23-7 Ja '17

51st annual meeting, Minneapolis, Dec. 3-8, 1917. A. W. Latham. *Minn Hort* 46:3-34 Ja '18

Mission of the Minnesota state horticultural society. S. P. Crosby. *Minn Hort* 46:379-84 O '18

Secretary's annual report, 1916. A. W. Latham. *Minn Hort* 45:74-6 F '17

Secretary's annual report, 1917. A. W. Latham. *Minn Hort* 46:330-6 S '18

- Minnesota state horticultural society**—*Cont.*  
Semi-centennial anniversary, Minneapolis, Dec. 7, 1916. *Minn Hort* 45:409-48 N '17  
Summer meeting, June 28, 1916; with list of awards. A. W. Latham. *il Minn Hort* 44: 266-75 J1 '16  
Summer meeting, 1918. A. W. Latham. *il Minn Hort* 46:279-82 J1 '18
- Minnesota state vegetable growers' association**  
2d annual meeting. Market Growers J 22:132 F 15 '18  
Vegetable session of the Minnesota state horticultural society meeting. Minneapolis, Dec. 5, 1917. F. H. Gibbs. *Market Growers* J 22:8 Ja 1 '18
- Minorcas (poultry)**  
Black Minorcas as I know them. F. McGrann. *il Am P J* 47:458 Mr '16  
Buff Minorca. W. R. Mortimer. *Am P J* 49: 640 Je '18  
Minorca family. W. H. Card. *il Country Gent* 81:1379 J1 15 '16  
Single comb black Minorcas as a utility fowl. C. M. Weikert. *Prac F* 112:136 Mr 15 '16  
Single comb black Minorcas at Syracuse. *Am P Advocate* 26:595 O '18  
Value of rose comb black Minorcas. O. M. Allen. *Am P J* 49:642 Je '18  
Why I bred single comb black Minorcas. H. D. Barto. *Am P J* 47:112 Ja '16
- Mirabilis**  
Abscission in mirabilis jalapa. F. E. Lloyd. *il Bot Gaz* 61:213-30 Mr '16
- Miracle wheat.** See Wheat—Varieties
- Miridae**  
Synoptical keys to the genera of the North American miridae. E. P. Van Duzee. *Cal Univ Pub Entomology* v 1, no 3 199-216p '16 (15c)
- Miris dolabratus.** See Meadow plant bugs
- Mirrors**  
How to resilver a mirror. F. D. Crane. *Rural N Y* 77:123 N 2 '18  
See also Dressing glasses
- Misbranding**  
Barkley bill on misbranding. *Am Sheep B & W* 36:296 My '16
- Miscible oil spray**  
Miscible oil versus fish oil soap sprays for the control of Florida aleoerodids. E. A. Back and S. S. Crossman. *bibliog J Econ Entom* 10:453-8 O '17
- Missions**  
**India**  
Letter from India. S. Higginbottom. *Nat Stock & F* 42:424 Ag 3 '18  
Twenty-four-hour-a-day club. *Rural Manhood* 9:57 F '18  
Villager of India and his boys. D. Swamidoss. *Rural Manhood* 9:281-3 S '18  
**Lapland**  
My first service to the Lapps. Prince Bernadotte. *il Rural Manhood* 9:231-3 Je '18
- Mississippi.** See subhead Mississippi under special subjects, e.g. Agriculture—Mississippi, Dairying—Mississippi
- Mississippi agricultural and mechanical college**  
They're deposing Mississippi's king. *il Country Gent* 81:1869 O 21 '16
- Mississippi-Alabama fair**  
Annual fair, Meridian, Miss., Oct. 15-21. *Prog F* 32:1125 O 27 '17; *Kimball's D F* 15:786 N 1 '17  
Mississippi-Alabama fair. H. Jenkins. *Jersey B* 35:1714 N 1 '16  
Mississippi glories in Jerseys. J. R. Moore. *il Jersey B* 37:1819 O 30 '18
- Mississippi creamerymen's association**  
2d annual convention, Jackson, Feb. 28, 1917. *Creamery* 5:56 Mr '17; *Jersey B* 36:388 Mr 14 '17; *N Y Prod R* 43:846 Mr 21 '17  
3d annual meeting, Jackson, Miss., Jan. 16-17. *N Y Prod R* 45:474 F 6 '18
- Mississippi state fair**  
Mississippi state fair. *Breeder's Gaz* 70:936 N 16 '16
- Mississippi valley**  
Mississippi valley; centers of production and population. C. Thorne. map Wallaces' F 41: 764 My 19 '16
- Missouri**  
See also Morgan county, Missouri; also subhead Missouri under special subjects, e.g. Agriculture—Missouri, Dairying—Missouri  
**Agriculture, State board of**  
Missouri year book of agriculture: forty-eighth annual report; a review of the work of 1915. *il Mo Ag Bd Yearbook* 1916:1-598  
Missouri year book of agriculture; 49th annual report. maps *Mo Ag Bd Yearbook* 1917:1-314  
**Dairying, State bureau of**  
Report of state dairy commissioner. E. G. Bennett. *il Mo Ag Bd Yearbook* 1916:45-57  
State bureau of dairying. E. G. Bennett. *Mo Ag Bd Yearbook* 1917:96-105  
**Grain inspection and weighing department**  
Summary 4th annual report, 1916. 17p Grain warehouse comr., Kansas City, Mo.  
**Poultry board, State**  
Biennial report of secretary-treasurer for 1915-16. (B. 12) 79p *il '16 Missouri state poultry board, Mountain Grove*  
Poultryman's guide; annual report of the State poultry board of Missouri, January 1, 1916. C. T. Patterson, comp. & ed. 97p '16  
Mo. state poultry exp. station, Mountain Grove  
**Missouri agricultural experiment station**  
How the station works. F. B. Mumford. *il Mo Ag Exp B* 151:1-68 '17  
Work and progress for the year ended June 30, 1916. F. B. Mumford. *il map Mo Ag Exp B* 147:1-64 '17  
Work and progress of the agricultural experiment station. F. B. Mumford. *il map Mo Ag Exp B* 141:1-58 '16  
**Missouri botanical garden**  
Missouri botanical garden. *il Parks & Recreation* (Seattle, Wash. 25c) 1:47-50 O '17  
Missouri botanical garden. G. T. Moore. *il Gard Chron Am* 20:235-7 My '16; *Am Flor* 47:158-9 Ag 12 '16  
Missouri botanical garden. G. T. Moore. *Mass Hort Soc Trans* 1916, pt 1:25-9 '16; Same. *Am Flor* 51:181-2 Ag 17 '18  
**Missouri car lot shippers' association**  
Spring meeting, St Louis, March 12-13, 1917. *N Y Prod R* 43:833+ Mr 21 '17  
10th annual convention, Kansas City, March 4-5. *N Y Prod R* 45:679+ Mr 13 '18  
**Missouri conference on food and defense**  
War-time farming in Missouri. *Mo Ag Bd B v* 15:1-61 Ag '17  
**Missouri corn growers' association**  
State corn show, farmers' week, Jan. 1-5. *Mo Ag Bd Yearbook* 1917:223-5  
13th annual meeting, Columbia, June 5, 1916. *Mo Ag Bd Yearbook* 1916:571-9  
**Missouri country life conference**  
Missouri country life conference, 1917. *Mo Ag Bd B v* 15:1-99 F '17  
**Missouri draft horse breeders' association**  
7th annual meeting, Columbia, Mo., Jan. 4, 1916. *Mo Ag Bd Yearbook* 1916:170-81  
**Missouri farmers' exchange**  
Farmers' exchange. W. L. Nelson. *Country Gent* 82:340 F 17 '17  
**Missouri fluffs (poultry)**  
New breed—Missouri white fluffs. *Fruit-Grower* 27:141 F 15 '16  
**Missouri grain dealers' association**  
3d annual convention held at St Joseph, Jan. 30-31. *Coop Manager & F* 6:59-9 Mr '17  
4th annual convention, St Louis, Feb. 26-27. *Coop Manager & F* 7:40-2 Ap '18  
**Missouri home makers' conference**  
Minutes of proceedings. Columbia, Jan. 3, 1916, with papers. *Mo Ag Bd Yearbook* 1916: 559-70  
**Missouri horticultural society**  
Meeting, Kansas City, Dec. 5-7, 1916. *Fruit-Grower* 28:26 Ja 1 '17



**Missouri livestock producers' association**

Meeting during farmers' week at Columbia. Ag Digest 2:829-30 F '18  
Organization meeting, Columbia, Jan. 6, 1916; with constitution. Mo Ag Bd Yearbook 1916: 545-8

**Missouri Odd Fellows' home**

Jerseys at the Missouri Odd Fellows' home. E. M. Alexander. Jersey B 35:395 Mr 15 '16

**Missouri saddle horse breeders' association**

Report of annual meeting. Mo Ag Bd Yearbook 1916:155-69

**Missouri sheep breeders' and feeders' association**

Report of annual meeting. il Mo Ag Bd Yearbook 1916:132-54

**Missouri state dairy association**

Annual meeting, Columbia, Mo., Jan. 17. Jersey B 37:187 F 6 '18

Annual meeting, Columbia, Mo., Jan. 17. A. C. Ragsdale. Hoard's D 55:60 F 1 '18

**Missouri state fair**

Sheep at the Missouri state fair. Am Sheep B & W 38:603 S '18

16th annual state fair. Breeder's Gaz 70:603-5 O 5 '16; Wallaces' F 41:1304-5+ O 6 '16

17th annual state fair, Sedalia. il Wallaces' F 42:1340-2 O 5 '17; Breeder's Gaz 72:608-9 O 11 '17

18th annual state fair, Sedalia. Breeder's Gaz 74:271-2 Ag 22 '18; Wallaces' F 43:1195-7 Ag 23 '17

**Missouri state poultry experiment station**

Experimenting with poultry. C. N. Crotsenburg. il Fruit-Grower 28:82 F 1 '17

In Missouri's poultry school. H. L. Kempster. il Fruit-Grower 27:122 F 15 '16

Work of the Missouri station. C. T. Patterson. il Breeder's Gaz 69:367-8 F 17 '16

**Missouri university**

**College of agriculture**

Missouri farm college; views. Country Gent 81:739 Ap 1 '16

**Mistletoe**

Effects of mistletoe on young conifers. J. R. Weir. il J Ag Research 12:175-18 Mr 18 '13

Experimental investigations on the genus *razoumofskyia*. J. R. Weir. il Bot Gaz 66: 1-31 Jl '18

Larch mistletoe: some economic considerations of its injurious effects. J. R. Weir. il U S Ag B 317:1-25 '16

Mistletoe in history and legend. W. M. Tait. Hoard's D 52:754 D 22 '16

Mistletoe injury to conifers in the Northwest. J. R. Weir. bibliog il U S Ag B 360:1-39 '16

On the trail of the mistletoe. R. S. Walker. il Country Life 31:51 D '16

Romance of the mistletoe. J. W. Chamberlin. Gard M 24:173 D '16

Some suggestions on the control of mistletoe in the national forests of the Northwest. J. R. Weir. For Quar 14:567-77 D '16

South African mistletoes and their hosts. Int R Sci & Prac Ag 7,no 1:159 Ja '16

**Diseases and pests**

Wallrothiella arceuthobii. J. R. Weir. il J Ag Research 4:369-78 Jl '15

**Mrs Cora Bradley—patriot; story. M. A. Bartlett. Ohio F 142:200-1 Ag 31 '18**

**Mites**

Mites injurious to various wild and cultivated plants in Sweden. Int R Sci & Prac Ag 7, no 3:463-4 Mr '16

New species of economic mites. H. E. Ewing. il J Econ Entom 10:497-501 O '17

Notes on mites attacking orchard and field crops in Utah. R. W. Doane. Science (Science Press, Garrison, N.Y. 15c) n s 46:192 Ag 24 '17

See also Chaff-mites; Cheese mites; Chigoes; Cyclamen mites; Leaf blister mites; Privet mites; Red spiders

**Mitochondria**

Nature and function of mitochondria. R. C. Friesner. Bot Gaz 66:383-5 O '18

**Moccasin flowers**

Cypripedium acaule albino. il Am Flor 49:206 Ag 18 '17

Flowers and other studies for the summer of 1918. R. W. Shufeldt. il Am For 24:433-8 Jl '18

Hardy cypripediums. Gard Chron Am 21:400 N '17

State flower and state flag of Minnesota. E. A. Smith. il Minn Hort 44:233-6 Je '16

**Moccasins**

Study of Canadian moccasins. Mrs J. H. Peck. J Ag (Quebec) 21:160; 22:15 Ap, Jl '18

**Mock orange**

Philadelphus. Am Flor 47:478 S 16 '16

**Mockingbirds**

Mockingbird family. A. A. Allen. il Am For 23:539-42 S '17

**Models, Forest. See Forest models**

**Models, Plant. See Plant models**

**Mohair**

Adapting mohair to many new uses. S. B. Hollings. Am Sheep B & W 36:241 Ap '16

Agreement with the government. S. B. Hollings. Am Sheep B & W 38:353-4 My '18

America as a likely buyer. S. B. Hollings. Am Sheep B & W 38:531 Ag '18

America forcing the mohair pace. S. B. Hollings. Am Sheep B & W 36:433 Jl '16

America's opportunity for mohair. S. B. Hollings. Am Sheep B & W 37:379 Je '17

Big boom in mohair is imminent. S. B. Hollings. Am Sheep B & W 36:304 My '16

British mills absorbing more mohair. S. B. Hollings. Am Sheep B & W 36:494 Ag '16

Call to American mohair growers. S. B. Hollings. Am Sheep B & W 37:443 Jl '17

Consumption of mohair unabated—sales steady. S. B. Hollings. Am Sheep B & W 36:560 S '16

Dodo's breeder comments on mohair standards. H. V. Kniffen. Am Sheep B & W 36: 114 F '16

English mohair conditions. S. B. Hollings. Am Sheep B & W 37:697 N '17

Exceedingly bright future for mohair. S. B. Hollings. Am Sheep B & W 36:370 Je '16

Further reductions in mohair. S. B. Hollings. Am Sheep B & W 37:506 Ag '17

Kemp in mohair: what it means to the grower and the spinner. S. B. Hollings. Am Sheep B & W 37:561 S '17

Mohair as a saver of wool. S. B. Hollings. Am Sheep B & W 38:57 Ja '18

Mohair boasts triumphant year. S. B. Hollings. Am Sheep B & W 37:59-60 Ja '17

Mohair in Turkey. Am Sheep B & W 37:377 Je '17

Mohair machinery making record runs. S. B. Hollings. Am Sheep B & W 36:113 F '16

Mohair market. S. B. Hollings. Am Sheep B & W 37:183 Mr '17

Mohair stocks at low level. Am Sheep B & W 37:571 S '17

Mohair trade. S. B. Hollings. Am Sheep B & W 36:176 Mr '16

Mohair versus alpaca. S. B. Hollings. Am Sheep B & W 38:354 My '18

Momentous month for mohair. S. B. Hollings. Am Sheep B & W 36:690 N '16

No export of raw mohair from England. S. B. Hollings. Am Sheep B & W 36:756 D '16

Outlook for the mohair clip. S. B. Hollings. Am Sheep B & W 37:252 Ap '17

Shearing mohair and preparation of the fleece. T. R. Arkell and H. V. Bent. Am Sheep B & W 36:242-3 Ap '16

Value and use of mohair. Fla Ag Dept Quar B v 28:23-5 O '18

War spectre shadows mohair trade. S. B. Hollings. Am Sheep B & W 36:41 Ja '16

Will American mohair be shipped to Bradford? S. B. Hollings. Am Sheep B & W 37:763 D '17

**Molasses**

New process for the recovery of sucrose from final molasses. Scientific Am (233 Broadway, N.Y. 10c) 116:110 Ja 27 '17

See also Feeding and feeding stuffs—Molasses

**Molasses—Continued****Statistics**

- Commercial stocks of molasses, Jan. 1. U S Food Surveys 1:8-10 Je 14 '18  
Commercial stocks of molasses, July 1. U S Food Surveys 1:8-10 Je 14; 2:7-9 S 18 '18

**Molasses as fertilizer**

- Molasses as a fertilizer. W. E. Cross. Am Fert 48:74 Ja 19 '18

**Molds (botany)**

- Cause of mold. F. L. Odell. N Y Prod R 45:274 D 26 '17  
Development of *thraustotheca*, a peculiar water-mould. W. H. Weston. bibliog il Ann Bot 32:155-73 Ja '18  
Effect of pasteurization on mold spores. C. Thom and S. H. Ayers. J Ag Research 6: 153-66 Ap 24 '16  
Mice and moulds; their relationship with paralysis and death in horses. F. E. Place. J Dept Ag S Australia 21:27-31 Ag '17  
Moldiness in butter. C. Thom and R. H. Shaw. bibliog J Ag Research 3:301-10 Ja '15  
Molds of cigars and their prevention. R. H. True. U S Ag B 109:1-8 '14  
Molds that injure paper. P. Sée. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:315 My 19 '17  
Precautions that should be taken to prevent its appearance in tub butter. N Y Prod R 42:650 Ag 16 '16  
Production of carbon dioxide by molds inoculated into sterile soil. R. S. Potter and R. S. Snyder. il Soil Sci 5:359-77 My '18  
Seeing molds grow. M. B. Judd. J Home Econ 8:491-2 S '16

See also *Aspergillus*; *Myxomycetes*; *Penicillium*

**Mole cricket, West Indian.** See Changas**Mole plows**

- Revival of the mole plow. E. R. Jones and others. Am Soc Ag Eng Trans 11:175-9 '18

**Mole traps**

- Destroying moles. il Prog F 31:621 My 6 '16

**Moles**

- Concerning moles. Western Wash Ag Exp B v 5:57-60 Jl '17  
Ground moles of the United States. C. F. Wegner. Gard Chron Am 22:179 Je '18  
Killing moles. Wallaces' F 41:873 Je 16 '16  
Killing the common mole. il Rural N Y 77:43 Ja 12 '18  
Moles and thrift stamps. T. H. Scheffer. il Western Wash Ag Exp B v 6:57-8 Jl '18  
Paying market for mole skins. Wallaces' F 42:1215 S 7 '17  
Trapping moles and utilizing their skins. T. H. Scheffer. il map Farmers' B 832: 1-13 '17  
Trapping moles for market. G. F. Sykes. il Ore Ag Ext B 158:1-4 '17  
Way of the mole. E. T. Martin. il Country Life 29:108 F '16  
Wholesale slaughter of moles. Rural N Y 76: 571 Ap 14 '17

See also *Mole traps*

**Money**

- Loi n. 25 relative au système monétaire en Egypte. Int Yearbook Ag Leg 1916:416-17 '17  
Weights measures and money of the various countries with their English equivalents. Int R Sci & Prac Ag 9,no 1:ix-xi Ja '18

**Mongoose**

- Mongoose. il Cal State Comm Hort B v 6:318 Jl '17  
Open season for the mongoose. F. Maskew. il Cal State Comm Hort B v 5:95-7 Mr '16

**Monkeys**

- Observations on monkeys; striking affinities apparent between homo and simia. R. W. Shufeldt. il J Heredity 9:182-6 Ap '18

**Monocotyledones**

- Further notes on intrafascicular cambium in monocotyledons. A. Arber. il Ann Bot 32:87-9 Ja '18  
Morphology of the monocotyledonous embryo and of that of the grass in particular. W. C. Worsdell. bibliog il Ann Bot 30:509-24 O '16

- On the occurrence of intrafascicular cambium in monocotyledons. A. Arber. bibliog Ann Bot 31:41-5 Ja '17

- Phyllode theory of the monocotyledonous leaf, with special reference to anatomical evidences. A. Arber. bibliog Ann Bot 32:465-501 O '18

**Monroe doctrine**

- Monroe doctrine. W. F. Purdue. Ohio F 141: 628 My 4 '18

**Monsters**

- Latest Siamese twins on record. pors J Heredity 7:239 My '16

**Montana**

See also *Glacier national park*; also sub-head *Montana under special subjects*, e.g. *Agriculture—Montana*, *Irrigation—Montana*

**Industries and resources**

- Resources and opportunities of Montana. 1916 & 1917 eds. 2 pts 140; 191p il map '16-'17  
Montana Dept. of ag., Helena

**Live stock sanitary board**

- Report of the Montana live stock sanitary board and state veterinary surgeon, 1915-1916. 49p n.d. Live stock sanitary board, Helena, Mont.

**Sheep commissioners, Board of**

- Biennial report, 1915-1916. 14p n. d. Mont. Bd. of sheep comrs., Helena

**State entomologist**

- 14th annual report. Mont Ag Exp B 112:55-76 '16

**Montana agricultural experiment station**

- Report of the work of the horticultural sub-station. O. B. Whipple. il Mont Ag Exp B 114:103-23 '16

- 23d annual report for the fiscal year ending June 30, 1916. Mont Ag Exp Rep 193p '17

**Montana farming corporation**

- Biggest wheat farm in the world; 200,000 acres of Indian land backed by millions of dollars. P. S. Rose. il Country Gent 83:6-7+ O 26 '18

**Montana state fair**

- Montana advances her farm resources. R. V. Hoffman. Field 11 26:936-7+ N '16  
Montana state fair, Helena, Sept. 24-29. Breeder's Gaz 72:678 O 18 '17

**Montana state grain laboratory**

- Third annual report of the State grain laboratory of Montana. il Mont Ag Exp B 113: 79-100 '16

**Montana stock growers' association**

- Convention at Great Falls, April 16-17. Breeder's Gaz 73:869 Ap 25 '18

**Monteith demonstration farm**

- Report of the Monteith demonstration farm, 1916. 40p il '17 Ontario dept. of agriculture, Toronto, Canada

**Monthly bulletin of agricultural intelligence and plant diseases.** See *International institute of agriculture***Montreal, Canada.** See *Milk supply—Montreal***Montreal school of comparative medicine and veterinary surgery**

- Report, 1917. (In Report, 1917, p. 54-6) '17  
Quebec ag. dept., Quebec

**Moong bean.** See *Mung beans***Moonlight schools.** See *Night schools***Moore cooperative cheese and creamery company**

- Selling milk together. C: Edward. Country Gent 82:769 Ap 21 '17

**Morality.** See *Ethics***Morals.** See *Ethics***Morasses.** See *Marsh lands***Morel, Vivand, 1843-1916**

- Sketch. Gard Chron (Lond) 59:186 Ap 1 '16

**Morgan county, Missouri**

- Rural survey of Morgan county, Missouri. W. L. Nelson. il Mo Ag Bd B v 14:1-51 F '16  
Survey of a Missouri county. W. L. Nelson. Breeder's Gaz 72:227 Ag 16 '17



**Morgans (horses)**

- Morgan as a hill-farm horse. G: M. Rommel. Breeder's Gaz 71:121 Ja 18 '17  
Morgans at the Vermont state fair. il Field 11 26:934 N '16

**Mormonism**

- Mormon spirit. Am Sheep B & W 38:103-4 F '18

**Morning-glories**

- Combating morning-glories. Wallaces' F 41: 973 J1 14 '16  
Heredit studies in the morning-glory. E. E. Barker. bibliog il Cornell Ag Exp B 392:1-38 '17  
Morning-glories and morning-glories. Wallaces' F 41:1092 Ag 18 '16  
Spraying for the control of wild morning-glory within the fog belt. G: P. Gray. Cal Ag Exp C 168:1-7 '17

**Morocco**

- French protectorate of Morocco; the reform of Habours property. Int R Ag Econ 71:94-100 N '16  
See also Agriculture—Morocco; Agriculture, Cooperative—Morocco

**Agriculture, commerce and colonization, Department of**

- Organisation of agricultural services in the French zone of the empire of Morocco. M. Malet. Int R Sci & Prac Ag 7,no 11:1565-70 N '16

**Morphology (animals)**

- Morphology of normal pigs' blood. C. C. Palmer. J Ag Research 9:131-40 Ap 30 '17

**Morphology (plants).** See Botany—Morphology

**Morris, Nelson**

- Packers are people; brief biographical sketch. L. L. Heller. il por Field 11 28:562 Ag '18

**Morris dances**

- Morris dance comes to America. H: W. Lanier. il Country Life 33:45-9 D '17

**Mortgage associations.** See Land credit associations

**Mortgage banks**

- Advantages of the land bank. Rural N Y 75: 561 Ap 1 '16  
Agricultural banks in India: a rejoinder. A. C. Chatterjee. Ag J of India 12:599-613 O '17  
Argentine Republic; Franco-Argentine mortgage bank in 1915-1916. Int R Ag Econ 75: 68-72 Mr '17  
Bank of the landschaft of eastern Prussia at Koenigsberg in 1915-1916. Int R Ag Econ 73: 74-8 Ja '17  
Business of the Franco-Argentine mortgage bank in 1917. Int R Ag Econ 9,no 2:150-1 F '18  
Décret portant création d'une section hypothécaire à la Banque internationale à Costa-Rica. Int Yearbook Ag Leg 1916:963-7 '17  
Land bank of Egypt in 1914-15. Int R Ag Econ 63:92-4 Mr '16  
Land bank of South Africa in 1916: Int R Ag Econ 79:28-32 J1 '17  
Land bank of the state of New York. Int R Ag Econ 64:68-9 Ap '16  
Land bank of the state of New York. Rural N Y 77:289 F 23 '18  
Land settlement and the provision of credit in western Australia. J. W. Paterson. Int R Ag Econ 73:79-89 Ja '17  
Mortgage bank and its activity in relation to land credit in 1915-1916, Uruguay. Int R Ag Econ 73:65-9 Ja '17

- Mortgage credit in Costa Rica. Int R Ag Econ 72:79-82 D '16

- Operations of the land bank of Egypt in 1916. Int R Ag Econ 76:73-4 Ap '17

- Provincial institutions for mortgage advances at the 31st December 1913 in Austria-Hungary. Int R Ag Econ 65:65-73 My '16

- Russia; the activity of the state land bank for the nobility in 1915. Int R Ag Econ 78:48-59 Je '17

- Swiss mortgage banks. Int R Ag Econ 63:67-84 Mr '16

- Work of the peasants' land bank of Russia in 1914. Int R Ag Econ 64:71-5 Ap '16

See also Agricultural credit; Federal farm land banks; Peasants' land bank

**Mortgage insurance.** See Insurance, Mortgage

**Mortgages**

- Amortization methods for farm mortgage loans. L. E. Truesdell and C. W. Thompson. U S Ag C 60:1-12 '16; Same. Fla Ag Dept Quar B v 26:32-52 J1 '16  
Annual report of the Bureau of industries for the province of Ontario 1916; pt 1, Agricultural statistics; pt 2, Chattel mortgages. 47p '17 Ontario ag. dept., Toronto  
Arrêté n. 5238 concernant la mise en valeur des droits afférents aux hypothèques, aux dettes hypothécaires et aux charges foncières en Allemagne. Int Yearbook Ag Leg 1916:1036-9 '17  
Bonds or mortgages as investments. J. R. Milligan. Ohio F 138:246 S 16 '16  
\* Chattel mortgages in Ontario. (In Report, Bur. of industries, 1917, p. 47) '18 Ontario ag. dept., Toronto  
Costs and sources of farm-mortgage loans in the United States. C. W. Thompson. map U S Ag B 384:1-16 '16  
Division of mortgaged lands. Int R Ag Econ 9,no 2:153-4 F '18  
Experiences with mortgages. M. L. Hayward. System on the Farm 1:386 D '17  
Farmers paying mortgages. W. I. Chamberlain. Nat Stock & F 42:652 O 19 '18  
Killing off mortgages. (C. no. 7) 16p '17 Federal farm loan board, Washington, D.C.; Excerpts. Ag Digest 2:563-4 Ag '17  
Land credit of Buenos Aires and the Argentine provinces in 1915. Int R Ag Econ 66: 100-2 Je '16  
Life insurance investments with special reference to farm mortgages. Int R Ag Econ 68:47-56 Ag '16  
Loi sur l'administration du droit en justice au Danemark. Int Yearbook Ag Leg 1916: 1126-40 '17  
Mortgage establishments in Hungary in 1915. Int R Ag Econ 69:98-100 S '16  
Mortgage movement in Prussia up to 1913, analysed according to occupations of the mortgagors. Int R Ag Econ 68:57-62 Ag '16  
Mortgages explained to boys. Wallaces' F 41: 1128 Ag 25 '16  
New mortgages for old; a story illustrating the practical application of the federal farm loan act. 2d ed (C. no. 3) '17 U.S. Federal farm loan board, Treasury dept., Washington, D.C.  
Prorogation of mortgage debts from 31 July 1914 to 31 December 1916. Int R Ag Econ 81: 56-8 S '17  
Value of property and the amount of mortgage indebtedness in Argentina. Int R Ag Econ 63:90-2 Mr '16  
What is your farm worth? C: M. Harger. il Country Gent 81:378 F 19 '16
- Morton, John, 1862-1916**  
Life and work. por Am Sheep B & W 36:358 Je '16
- Mosaic disease**  
Cucumber mosaic disease. W. W. Gilbert. il Phyt 6:143-4 Ap '16  
Distribution of the virus of the mosaic disease in capsules, filaments, anthers, and pistils of affected tobacco plants. H. A. Allard. il J Ag Research 5:251-6 N 8 '15  
Effect of dilution upon the infectivity of the virus of the mosaic disease of tobacco. H. A. Allard. J Ag Research 3:295-9 Ja '15  
Effects of various salts, acids, germicides, etc., upon the infectivity of the virus causing the mosaic disease of tobacco. H. A. Allard. J Ag Research 13:619-37 Je 17 '18  
Experiments with the cucumber mosaic disease. I. C. Jagger. Phyt 6:148-51 Ap '16  
Further studies of the mosaic disease of tobacco. H. A. Allard. il J Ag Research 10:615-32 S 17 '17  
Hosts of the white pickle mosaic disease of cucumber. I. C. Jagger. Phyt 8:32-3 Ja '18  
Insecticide tests with diabrotica vittata. N. F. Howard. J Econ Entom 11:75-9 F '18

**Mosaic disease—Continued**

- Mosaic disease in beet. J. Lind. *Int R Sci & Prac Ag* 7, no 5:747 My '16
- Mosaic disease of cucumbers. Market Growers J 19:34 JI 15 '16; Same cond. *Am Flor* 46:1164 Je 17 '16
- Mosaic disease of *phytolacca decandra*. H. A. Allard. *il Phyt* 8:51-4 F '18
- Mosaic disease of potatoes. P. A. Murphy. *il Ag Gaz of Canada* 4:345-9 My '17
- Mosaic disease of tobacco. H. A. Allard. *il U S Ag B* 40:1-33 '14
- Mosaic disease of tobacco. G. H. Chapman. *il Mass Ag Exp B* 175:73-117 '17
- Mosaic disease of tobacco and tomatoes. Gard Chron (Lond) 59:172 Mr 25 '16
- Mosaic disease of tomatoes and petunias. H. A. Allard. *il Phyt* 6:328-35 Ag '16
- New infectious mosaic disease of cucumber. S. P. Doolittle. *Phyt* 6:145-7 Ap '16
- Peanut mosaic. J. A. McClintock. *Science* (Science Press, Garrison, N.Y. 15c) n s 45: 47-8 Ja 12 '17; Same. *Int R Sci & Prac Ag* 8, no 5:802-3 My '17
- Properties of the virus of the mosaic disease of tobacco. H. A. Allard. *bibliog il J Ag Research* 6:649-74 JI 24 '16
- Specific mosaic disease in *nicotiana viscosum* distinct from the mosaic disease of tobacco. H. A. Allard. *il J Ag Research* 7:481-6 D 11 '16
- Studies of the mosaic diseases of plants. G. W. Freiberg. (Reprint from *Annals*, Ap '17) 175-232p *il* 68c '17 Missouri botanical garden, St Louis, Mo.
- Varieties of beans susceptible to mosaic. D. Reddick and V. B. Stewart. *Phyt* 8:530-4 O '18
- Moscow higher school of agriculture.** See Agronomic institute of Moscow
- Mosquitoes**
- Anopheles punctipennis*; a note on its ability to serve as a host for plasmodium falciparum. M. B. Mitzmain. (Reprint no. 407 Pub. health reports) 4p '17 U.S. Public health service, Washington, D.C.
- Anticipating the fly and the mosquito. W. C. O'Kane. *il Country Life* 29:30-1 Ap '16
- Anti-mosquito work in Connecticut in 1916. W. E. Britton and B. H. Walden. *il Conn State Ag Exp Rep* 1916, pt 2:126-37 '17
- Biological study of the more important of the fish enemies of the salt-marsh mosquitoes. F. E. Chidester. *bibliog il N J Ag Exp B* 300:1-16 '16
- Catechism on the mosquito and malaria. D. B. Tucker. *Okla Ag Ext C* 47 4p '17
- Common mosquitoes of Minnesota. C. W. Howard. (*In* Report State entomologist, 1915-1916, p. 73-92) *il* '16 Minn. ag. exp. station, St Paul
- Demonstration in mosquito control. C. W. Howard. *J Econ Entom* 10:517-21 D '17
- Effects of petroleum oils on mosquito larvae. S. B. Freeborn and R. F. Atsatt. *J Econ Entom* 11:299-308 Je '18
- Facts about malaria. L. O. Howard. *il Farmers' B* 450:1-11 '16
- Flight of mosquitoes; studies on the distance of flight of *Anopheles quadrimaculatus*. J. A. A. Le Prince and T. H. D. Griffiths. (Reprint no. 396 Pub. health reports) 6p '17 U.S. Public health service, Washington, D.C.
- Household and camp insects. E. P. Felt. *N Y State Museum (Albany) B* 194:25-33 F '17
- Importance of malaria to agriculture and studies on malarial soil. G. Rossi. *bibliog Soil Sci* 5:323-32 Ap '18
- Influence of salinity on the development of certain species of mosquito larvae and its bearing on the problem of the distribution of species. F. E. Chidester. *bibliog N J Ag Exp B* 299:1-16 n.d.
- Malaria mosquito survey of irrigation areas in the Murray river district. F. H. Taylor. (Service Pub. no. 12) 32p *il* maps '17 Australia Quarantine service, Melbourne
- Malaria parasite in the mosquito. M. B. Mitzmain. (Reprint no. 422 Public health reports) 16p '17 U.S. Public health service, Washington, D.C.
- Mosquito work in Connecticut during 1917. B. H. Walden. *Conn State Ag Exp B* 203: 345-56 '18
- Mosquitoes of Colorado. T. D. A. Cockerell. *J Econ Entom* 11:195-200 Ap '18
- Problem of mosquito control. T. J. Headlee. (*In* Report, Entom. Soc. of Ontario, 1917, p. 49-59) map '18 Ontario ag. dept., Toronto
- Recent anti-mosquito work in Connecticut. W. E. Britton. *J Econ Entom* 10:109-11 F '17
- Relation between hatching of the eggs and the development of the larvæ of *stegomyia fasciata* (aedes calopus), and the presence of bacteria and yeasts. E. E. Atkin and A. Bacot. *Int R Sci & Prac Ag* 8, no 10:1343-4 O '17
- Remedies and preventives against mosquitoes. L. O. Howard. *Farmer's B* 444:1-15 '16
- Report of the mosquito work for 1916. T. J. Headlee. maps N J Ag Exp Rep 1916:521-57 '17
- Rice fields as a factor in the control of malaria. S. B. Freeborn. *bibliog J Econ Entom* 10:354-9 Je '17
- Some blood-sucking flies of Saskatchewan. A. E. Cameron. *il Ag Gaz of Canada* 5:556-61 Je '18; Same. *Am Vet M Assn J* 53:632-8 Ag '18
- Some recent advances in knowledge of the natural history and the control of mosquitoes. T. J. Headlee. *il N J Ag Exp B* 306:1-26 '17
- State-wide malaria-mosquito survey of California. W. B. Herns. *J Econ Entom* 10: 359-70 Je '17
- Western newt or water-dog (*Notophthalmus torosus*) a natural enemy of mosquitoes. A. C. Chandler. *bibliog il Ore Ag Exp B* 152: 1-24 '18
- Mosses**
- Archegonium of catharinea angustata* brid. (*atrichum angustatum*). G. S. Bryan. *bibliog il Bot Gaz* 64:1-20 JI '17
- Direct assimilation of organic carbon by *Ceratodon purpureus*. W. J. Robbins. *bibliog il Bot Gaz* 65:543-51 Je '18
- Mosses collected by the Smithsonian African expedition 1909-10. H. N. Dixon. (*Misc. coll. v. 69, no. 2*; Pub. 2494) 28p *bibliog il* '18 Smithsonian inst., Washington, D. C.
- Uganda mosses collected by R. Dümmer and others. H. N. Dixon. (*Misc. coll. v. 69, no. 8*; Pub. 2522) 10p *il* '18 Smithsonian inst., Washington, D. C.
- See also Lichens; Sphagnum moss
- Mothers**
- Are mothers really selfish. Z. I. Davis. *Green's Fruit Grower* 36:12 D '16
- Babies in the curriculum. A. E. Hamilton. *J Heredity* 7:387-94 S '16
- Child study for mothers. E. Morris. *Country Gent* 81:1055 My 13 '16
- Educating the mothers. *Breeder's Gaz* 69:368 F 17 '16
- Efficient maternity. Mrs M. L. Carpenter. *il Ohio F* 137:636 Ap 29 '16
- Mothercraft; education of girls. M. L. Read. *J Heredity* 7:339-42 Ag '16
- Young mother. *J Heredity* 8:394-6 S '17
- Mothers' day**
- Brief history. *Am Flor* 48:685 Ap 14 '17
- History of foundation. *Am Flor* 46:721-2 Ap 22 '16
- May's second Sunday. Y. Cardigan. *Ohio F* 139:674 My 12 '17
- Mothers' day. R. Kift. *Am Flor* 50:718 Ap 27 '18
- Mothers' day, Sunday, May 13; publicity campaign. F. Lautenschlager. *Am Flor* 48:737 Ap 21 '17
- What it has done for the trade. *Am Flor* 46: 825 My 6 '16
- Mother's garden;** story. G. Gillas. *Nat Stock & F* 40:430-1 JI 22 '16
- Moths**
- Coccid-feeding moth. E. O. Essig. *il J Econ Entom* 9:369-70 Je '16
- Fighting moths with parasites. *Am Flor* 45: 1298 Ja 1 '16



**Moths—Continued**

- Household and camp insects; clothes moths. E. P. Felt. N Y State Museum (Albany) B 194:49-52 F '17  
Life history of common moths. Country Life 30:68 S '16  
Results of the first systematic campaign against clothes-moth. Current Opinion (63 W. 36th st, N. Y. 25c) 64:112-13 F '18  
See also Brown-tail moths; Bud moths; Caterpillars; Cecropia moths; Codling moths; Cutworms; Ermine moths; Flour moths; Gipsy moths; Grass moths; Hickory tiger-moths; Leopard moths; Oriental peach moths; Pine moths; Potato tuber moths; Prometheus moths; Silkworms; White-marked tussock moths

**Motion pictures. See Moving pictures**

**Motor boats**

- At home on a motor cruiser. A. F. Loomis. il plan Country Life 30:19-21 Ag '16  
Getting one's bearings afloat. A. F. Loomis. Country Life 30:58 Ag '16  
What the war is doing for the motor boat. L. Perry. il Country Life 34:59-61 Je '18

**Motor cycles**

- How a motorcycle replaces men. il System on the Farm 3:222-3 D '18  
Motorcycle. D. Porter. Farm Eng 3:153 Ja '16  
Motor cycle for the bee business. A. H. Bowen. il Gleanings 44:368 My 1 '16  
Motorcycle in the country. E. W. Yelruc. Country Gent 82:292 F 10 '17  
Motorcycle on the farm. Wallaces' F 41:735 My 12 '16  
Motorcycles on the farm. J. R. Kuntz. il Country Gent 82:1377-8 S 8 '17  
Some experiences with a motorcycle. R. C. Wilcox. Gleanings 44:369 My 1 '16  
Use of motorcycles in forest patrols. J. L. Cobbs, jr. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:507-8 D '17

**Motor plows. See Plows**

**Motor trucks**

- Advantage of motor trucks shown in farming reports. Weekly N L 6:1 O 30 '18; Same. Power F 27:50 D '18  
Advantages of motor trucks in the dairy industry. Creamery 4:30 Ja '16  
Auto delivery car. Am Flor 47:1281 D 30 '16  
Auto trucks help farmers. J. Day. Prac F 114:230 Jl 1 '18  
Auto trucks on the farm. il Am Coop J 13:434 Jl '18  
Automobiles, trailers and motor trucks. G. H. Alford. Prog F 33:442 Ap 6 '18  
Charges for farm motor trucks. Rural N Y 76:210 F 10 '17  
Cut the hauling costs. Ag Digest 2:805 Ja '18  
Economies with trucks and tractors. System on the Farm 1:350; 2:24, 218; 3:20, 202 N '17, Ja, Je-Jl, N '18  
Electric truck for ice cream delivery. A. L. Parkhurst. N Y Prod R 43:434+ Ja 10 '17  
Encouraging rural motor truck routes. Wallaces' F 43:1776 D 6 '18  
\* Factors which will govern future road-surface design. E. L. Viets. il Eng News-Record (10th av at 36th st, N.Y. 15c) 81:970-5 N 28 '18  
Farm truck. Wallaces' F 43:1008 Jl 5 '18  
Farm truck in action. il Wallaces' F 42:1551 N 16 '17  
Farmer's auto truck. R. W. DeBaun. il Country Gent 82:745 Ap 14 '17  
From farm to town by motor truck. H. H. Shepard. il Country Gent 82:1480 S 29 '17  
\* Gasoline consumption tests demonstrate value of hard, smooth-surfaced roads. A. N. Johnson. il Eng News-Record (10th av at 36th st, N.Y. 15c) 81:843-50 N 7 '18  
Gasoline truck for ice cream delivery. J. G. Lewis. N Y Prod R 43:504+ Ja 24 '17  
Hauling to market by motor truck. il O Judd Farmer 60:5 My 6 '16  
\* Highways and truck loads they can economically sustain. H. E. Breed. Eng News-Record (10th av at 36th st, N.Y. 15c) 81:975-7 N 28 '18  
How to determine whether to use truck or tractor. System on the Farm 2:64+ F '18  
Ice cream delivery. H. B. Graham. N Y Prod R 43:116 N 15 '16  
Many profitable uses for the motor truck. D. R. A. Drummond. il Power F 27:8 My '18  
Marketing by motor truck. S. R. Winters. il Field II 28:492-3 Jl '18  
More business for the honeybee: how the automobile is used as conveyance and extracting-house. A. Marple. il Gleanings 46:470-1 Ag '18  
Motor service aids farmer shippers. J. Day. Prac F 114:205 Je 1 '18  
\* Motor truck hauling in Black Hawk county, Iowa. W. H. Root. Good Roads (150 Nassau st, N.Y. 10c) n s 16:133-4 O 5 '18  
Motor truck on the country estate. A. Johnston. il Country Life 30:72 S '16  
Motor truck on the farm. il Farm Eng 5:19 N '17  
Motor truck on the farm. il Scientific Am (233 Broadway, N.Y. 10c) 118:76 Ja 19 '18  
Motor trucks for farmers' use and interurban transportation. il O Judd Farmer 61:5 Jl 8 '16  
Motor trucks for hauling farm produce. A. H. Pulver. il Rural N Y 76:1415 D 15 '17  
Motor trucks for hauling vegetables. Rural N Y 75:1068 Ag 12 '16  
Motor trucks for marketing vegetables; symposium. il Market Growers J 20:291-300 Ap 1 '17  
Motor trucks needed on the farm. C. C. McKinney. il Power F 27:18 Ap '18  
Motor truck's next task. P. S. Rose. il Country Gent 83:6-7 Ja 5 '18  
Motor trucks on the farm. F. M. White. il Hoard's D 53:924 Je 29 '17  
Motor trucks that save help. il System on the Farm 3:96-7 S '18  
Motor trucks; their adaptability for cream gathering—gasoline vs. the horse. N Y Prod R 46:440 Jl 17 '18  
Motor trucks used in rural mail service. il Power F 27:58 Je '18  
New motor-truck attachment. A. Marple. il Country Gent 83:19 O 5 '18  
New plan for can transportation; the trip of a milk truck. il Rural N Y 77:1153-4 O 12 '18  
Overloading of motor trucks. Rural N Y 76:1201 O 20 '17  
Peddler and motor truck. Rural N Y 76:377 Mr 10 '17  
Power transportation and cultivation. C. E. Stone. il Field II 26:814 S '16  
Requisites in engine operation. I. W. Dickerson. il O Judd Farmer 60:4 Ap 1 '16  
Saving money with the motor truck. il Kimball's D F 14:500 Ag 15 '16  
70% saving on hauling. W. B. Ellsworth. System on the Farm 3:100 S '18  
Speeding production by motor. J. Brinker. il Field II 28:822-3 N '18  
Teams and auto-trucks. Breeder's Gaz 69:1163 Je 1 '16  
There's a reason for motor trucks. J. R. Stone. il Power F 26:21 S '17  
To market by motor truck; fast transportation saves beans and rice. R. E. Jones. il Country Gent 83:5 D 14 '18  
Truck and tractor farming. H. W. Fegley. il Fruit-Grower 27:257-8 Ap 15 '16  
Truck boosts apple profits. C. N. Crotsenburg. il Fruit-Grower 28:5 Ja 1 '17  
Trucks and airplanes for parcel post. J. E. Pickett. il Country Gent 83:8-9+Mr 9 '18  
Trucks speed up work. il Green's Am Fruit Grower 38:21 Ja '18  
Using an automobile truck for cutting down hauling costs. C. Anderson. System on the Farm 1:218 Ag '17  
War benefits for motor truck industry. il Ag Digest 1:317 F '17  
See also Rural motor express

Mottled poplar and willow borers. See Poplar and willow borers

Mould. See Molds (botany)

**Mount Rainier national park**

- \* General information regarding Mount Rainier national park. 43p bibliog maps '18 U.S. Nat. park service, Washington, D.C.

**Mount Ranier national park—Continued**

Mount Rainier national park. M. Daniels. il  
Am For 22:529-36 S '16

**Mount Vernon, Virginia**

Country home of George Washington. P.  
Wilstach. il plan Country Life 29:23-6 Ap  
'16

Domestic life at Mount Vernon. P. Wilstach.  
il Country Life 30:35-7 My '16

English yew planted at tomb of Washing-  
ton. Gard Chron Am 21:209 My '17

George Washington as a planter and country  
gentleman. P. Wilstach. il map Country  
Life 30:31-3 Je '16

Knot over Washington's tomb. G. T. K. Nor-  
ton. il Am For 23:351-2 Je '17

Social life at Mount Vernon in Washington's  
day. P. Wilstach. il Country Life 30:29-31 S  
'16

**Mountain ash**

Beautiful native tree. C. S. Paine. Rural N Y  
75:815 My 27 '16

**Mountain flora.** See Alpine plants**Mountain fringe**

Mountain fringe. E. M. Beals. il Country Gent  
81:270 F 5 '16

**Mountain laurel**

Kalmia latifolia—mountain laurel. il Gard  
Chron Am 22:123 Ap '18

**Diseases and pests**

Leafblight of kalmia latifolia. E. M. A. En-  
lows. bibliog il J Ag Research 13:199-212 Ap  
15 '18

**Mountain rats.** See Pack rats**Mountaineering**

Pike's Peak by burro. A. Wallace. il Wal-  
laces' F 41:1671 D 22 '16

Recreation in the federal forest reserves.  
I. A. Baker. il Am For 23:459-64 Ag '17

Snow-blinded on the summit. E. A. Mills. il  
Country Life 33:41-4 F '18

**Mountains.** See names of mountains, e.g. Bear's  
Breast Peak, Rocky mountains**Mourning cloak butterflies.** See Spiny elm cater-  
pillars**Mourning doves.** See Pigeons**Mouse-traps**

Simple form of mouse-trap for use on farms.  
il Ag Gaz of New South Wales 29:133 F '18

**Moving pictures**

Country movies paid for by the state. Sur-  
vey (112 E. 19th st., N.Y. 25c) 39:402-3 Ja 5  
'18

Fruit growing by motion pictures. E. A.  
Dench. Green's Am Fruit Grower 38:4 Ja  
'18

Hearts and Jerseys; story of new A. J. C. C.  
film. Jersey B 37:1237-8 Ag 7 '18

How boys grow prize pigs. Weekly N L 5:5  
Ja 2 '18

Motion picture in agriculture. S. C. Johnston.  
Ag Gaz of Canada 5:365-7 Ap '18

Moving pictures a rural asset. B. A. Aughin-  
baugh. il Ohio F 141:453 Mr 30 '18

**Moving pictures in education**

Development of the motion picture and its  
place in educational work. G. A. Coleman.  
J Econ Entom 10:371-3 Je '17

**\* Movies as a rural community organizer in  
North Carolina.** F. A. Olds. il Am City—  
Town and County ed (Tribune bldg., N.Y.  
35c) 19:364-6 N '18

What the motion picture bureau hopes to do  
in Ontario agriculture. S. C. Johnston. (In  
Report, Ontario ag. & exp. union, 1917, p.  
46-8) '18 Ontario ag. dept., Toronto

Will coordinate U.S. work in making motion  
pictures. Weekly N L 6:11 D 4 '18

**Moving pictures in extension work**

Livestock in the movies. C. G. Starr. il Coun-  
try Gent 82:349 F 17 '17

Moving picture as a means of distributing  
agricultural information. E. C. Johnson.  
Assn Am Ag Coll & Exp Pro 1917:311-15  
'18

Will issue more movies on agricultural themes.  
Weekly N L 6:1 O 16 '18

**Moving pictures in industry**

Making of a moving picture. R. M. Gow. il  
Jersey B 37:1673-5 O 9 '18

**Mowing machines**

Alignment of mower important. C. O. Reed. il  
O Judd Farmer 60:6 Je 3 '16

Making the mowing machine mow. Prog F  
33:614 My 18 '18

Mower hints worth heeding. C. O. Reed. il  
Country Gent 81:1156 Je 3 '16

Mowing hay with a tractor. E. R. Wiggins.  
il Country Gent 82:1135 Jl 14 '17

Practical pointers about mowing machines.  
C. O. Ormsbee. il O Judd Farmer 60:4 Je 3  
'16

Selection and care of the mower. R. H. Smith.  
il Rural N Y 75:931, 951 Jl 1-8 '16

Tuning up the mower. C. O. Reed. O Judd  
Farmer 60:2 My 27 '16

**Moyer, Lycurgus R., 1848-1917**

Sketch. por Minn Hort 45:193-5 My '17

**Muck beetles.** See Carrot beetles**Muck soils.** See Soils, Muck**Muffins**

Muskoka muffins. O Judd Farmer 64:26 Ja 26  
'18

**Mulberry**

Economical production of mulberry leaves.  
Int R Sci & Prac Ag 7,no 1:79-80 Ja '16

Mulberries. S: Fraser. il Country Gent 81:573  
Mr 11 '16

Mulberry in London. A. D. Webster. il Gard  
Chron (Lond) 64:41 Ag 3 '18

**Diseases and pests**

Canker and die-back disease of mulberry.  
E. S. Salmon and H. Wormald. il Gard  
Chron (Lond) 60:95 Ag 26 '16

On the causes of root rot of the mulberry and  
protective measures in Piedmont, Italy. P.  
Voglino. Int R Sci & Prac Ag 8,no 7:1060-2  
Jl '17

Prospaltella berleseii against diaspis penta-  
gona in Piedmont in 1915. P. Voglino. Int R  
Sci & Prac Ag 7,no 6:905-6 Je '16

**Mulching**

Blackberries benefitted by mulching. L. T.  
Powers. Green's Fruit Grower 37:18 My '17

Growing a strawberry mulch. Country Gent  
81:1542 Ag 19 '16

Mulch for winter wheat. Country Gent 81:740  
Ap 1 '16

Mulching. M. R. Conover. Ohio F 140:115 Ag  
18 '17

Mulching. W. F. Massey. Ohio F 138:23 Jl 8  
'16

Mulching experiences. Market Growers J 19:72  
Ag 1 '16

Mulching—successful and otherwise. E. L.  
Kirkpatrick. il Gard M 26:167 D '17

Mulching the fruit plantations, by A. W. Bray-  
ton; Fertilizing the orchard, by H. M. Dun-  
lap. Ill State Hort Soc Trans 1917:377-81,  
401-6 '18

Mulching the orchard with sweet clover.  
Gleanings 44:816 S 1 '16

Mulching vegetable crops. R. L. Watts.  
Country Gent 82:120 Ja 20 '17

Nature's factory—the seedbed. C. A. Bacon.  
il Power F 25:12 Je '16

Orchard mulch problem. G: F. Jordon. il  
Green's Fruit Grower 37:2 S '17

Orchard rejuvenation in southeastern Ohio.  
F. S. Ballou. il Ohio Ag Exp B 301:1-40 '16;  
Excerpts. Ohio Ag Exp B v 1:313-18, 344-7  
O-N '16; Excerpts. Fruit-Grower 28:80-1,  
124 F 1-15 '17; Excerpts. Green's Fruit  
Grower 37:2 S '17; Excerpts. Ag Digest  
2:715 N '17

Producing mulch material in apple orchards.  
F. H. Ballou. il Ohio Ag Exp B v 1:344-7  
N '16

Purpose of mulching. Gard Chron Am 20:66  
F '16

Sampling tubes for manure, alfalfa or other  
organic materials. A. D. Shamel. il Cal  
State Comm Hort B v 6:255-8 Je '17; Same.  
Rural N Y 76:668 My 12 '17



**Mulching—Continued**

- Sod mulch vs. tillage for apple orchards. W. D. Auchter. *il N Y Ag Dept B 79:pt 1: 803-10 Ja '16*; Same. *N Y Ag Dept Rep 1916, pt 2:803-10 '17*  
 Sod-mulched orchards. J. C. Whetten. *Country Gent 83:11 F 23 '18*  
 Soil mulching. L. E. Call and M. C. Sewell. *bibliog Am Soc Agron J 9:49-61 F '17*  
 Strawberry mulching cheapened. C. A. Le-Claire. *Green's Fruit Grower 36:15 Ag '16*  
 Winter protection; cold less injurious than loss of moisture. C. L. Meller. *il Gard M 26:135 N '17*

**Mules.** See Asses and mules

**Mung beans**

- Mung bean again. W. F. Massey. *Prog F 31: 36 Ja 8 '16*

**Municipal bonds**

- Municipal bonds. J. R. Milligan. *Ohio F 138: 83 Jl 29 '16*

**Municipal forests.** See Forests, Municipal

**Municipal markets.** See Markets, Municipal

**Musca domestica.** See Flies

**Musci.** See Mosses

**Museums.** See Agricultural museums; National museum (Brazil)

**Mushrooms**

- Agaricaceae of tropical North America. W: A. Murrill. *Mycol 10:15-33, 62-85 Ja-Mr '18*  
 Be sure of mushrooms. A. D. Selby. *il Ohio F 140:438 N 10 '17*  
 Common edible mushrooms. A. A. Hansen. *il Scientific Am (233 Broadway, N.Y. 10c) 116: 370-1 Ap 14 '17*  
 Cultivation of mushrooms. H. N. Legate. *il Mass Ag Bd B 5:162-78 '16*  
 This article appears only in the second edition of Vegetable growing (Mass Ag Bd B 5)  
 Development of agaricus arvensis and a. comtulus. G: F. Atkinson. *il Am J Bot 1: 3-22 Ja '14*  
 Development of some exogenous species of agarics. G. E. Douglas. *bibliog il Am J Bot 5:36-54, 1-7pl Ja '18*  
 Development of some species of agarics. A. W. Blizzard. *bibliog il Am J Bot 4:221-40 Ap '17*  
 Edible and poisonous mushrooms. *il Rural N Y 76:1265 N 3 '17*  
 Growing mushrooms for profit. S: H. Garekol. *Gard M 28:98 O '18*  
 Growing mushrooms out of doors. *il Gard Chron Am 21:236 Je '17*  
 Growing of mushrooms. T. M. Chapman. *Rural N Y 77:284 F 23 '18*  
 How to distinguish poisonous mushrooms. *J Ag (Quebec) 21:vii S '17*  
 Hymenomyces of New South Wales. J. B. Cleland and E. Cheel. *il Ag Gaz of New South Wales 27:97-106 F '16*  
 Hypophoma aggregatum and h. delineatum. E: T. Harper. *il Mycol 10:231-4 S '18*  
 Knowing the mushrooms. J: N. Brown. *il Country Life 30:35-8 Jl '16*  
 Mushroom culture. *Am Flor 49:418 S 8 '17*  
 Mushroom culture. *Gard Chron Am 20:395 S '16*  
 Mushroom culture. *Gard Chron Am 22:55 F '18*  
 Mushroom culture. W: Allan. (*In Report, Horticultural societies of Ontario, 1917, p. 73-7*) '18 Ontario ag. dept., Toronto  
 Mushroom-culture. C. Craigie. *J Ag New Zealand 14:22-3 Ja '17*  
 Mushroom culture. E. J. Weaver. *Rural N Y 75:1471 N 25 '16*  
 Mushroom growers warned. *Am Flor 46:706 Ap 15 '16*; Same. *Market Growers J 18:286 Ap 15 '16*  
 Mushroom growing by J. Bancroft, Wayne, Pa. *Am Flor 50:458 Mr 16 '18*  
 Mushrooms. A. Middleton. *il Country Gent 81: 2050 N 25 '16*  
 Mushrooms and forestry. *For Quar 14:124-7 Mr '16*  
 Mushrooms and other common fungi. F. W. Patterson and V. K. Charles. *il U S Ag B 175:1-64 '15*

- Mushrooms and preparedness. E. B. Sherman. *Nation (20 Vesey st., N.Y. 10c) 104:663-5 My 31 '17*  
 Mushrooms for every home. R. W. De Baun. *il Rural N Y 77:342-407 Mr 2, 16 '18*  
 Mushrooms for home supplies. *il Rural N Y 77:33 Ja 12 '18*  
 Mushrooms in the cellar. W: A. Boyd. *il Country Gent 81:422 F 19 '16*  
 Mushrooms of Ontario. R. E. Stone. *il Ontario Ag Dept B 263:1-24 '18*  
 Mushrooms—to eat and to avoid. C. A. Ludwig. *il Country Gent 81:1148 Je 3 '16*  
 New poisonous mushroom. T. Ichimura. *il Bot Gaz 65:109-11 Ja '18*  
 Nutritive value of edible fungi. *J Bd Ag 24: 416-19 Jl '17*  
 Origin and development of the lamellae in coprinus. G: F. Atkinson. *bibliog il Bot Gaz 61:89-130 F '16*  
 Peck testimonial exhibit of mushroom models. H. D. House. *Mycol 9:313-14 S '17*  
 Safety in mushrooms. *Weekly N L 4:7 Jl 4 '17*  
 Some common edible and poisonous mushrooms. F. W. Patterson and V. K. Charles. *il Farmers' B 796:1-24 '17*  
 Some edible and poisonous mushrooms. W. B. McDougall. (B. v. 11, Article 7) 413-54p *il 50c '17* Ill. state laboratory of nat. history, Urbana  
 Some mushroom experiences. *Country Gent 81:62 Ja 8 '16*  
 Success with mushrooms. *Am Flor 46:350 Mr 4 '16*  
 Taxonomy of the agaricaceae. W: A. Murrill. *Am J Bot 4:315-26 Je '17*  
 Two parasitic mushrooms; volvaria Loweiana and pilosae algeriensis. E: T. Harper. *il Mycol 8:65-72 Mr '16*  
 Velvet-stemmed collybia—a wild winter mushroom. F. C. Stewart. *il N Y State Ag Exp B 448:79-98 '18*  
 Wild mushrooms. W: A. Murrill. *il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:264-6 O 27 '17*  
*See also* Cortinari; Fungi; Lactaria; Russula

**Diseases and pests**

- Mushroom pests and how to control them. C. H. Popenoe. *il Farmers' B 789:1-13 '17*  
 Mycogone disease of mushrooms and its control. F. J. Veihmeyer. *bibliog il U S Ag B 127:1-24 '14*

**Music**

- Community music. W: D. Chenerv. *Il Farmers Inst Household Sci 1917:111-25 '18*  
 Community music. E. Richardson. *Furdue Ag 13:124-5 D '18*  
 Community music and community plays. *Prog F 32:1336 D 22 '17*  
 Cow likes music. *Nat Stock & F 42:446 Ag 10 '18*  
 Farmers' reading and music. F. M. Wood. *il Ohio F 137:312 F 26 '16*  
 Increased food production and music. M. Schoen. *J of Educ (6 Beacon st., Boston 6c) 86:540-1 N 29 '17*  
 Music in the farm home; symposium. *Prac F 114:33 Ja 15 '18*  
 Organ music for the rural community. P. P. Claxton. *Rural Manhood 8:214-15 My '17*  
 Phonograph music; selecting and classifying records. D: P. Jackson. *Ohio F 142:37 Jl 13 '18*  
 What do you sing? M. K. Dunne. *Country Gent 81:2240 D 30 '16*

*See also* Bands (music)

**Musical education**

- Musical ability. Mrs E. F. Copp. *il J Heredity 7:297-305 Jl '16*

**Musicians**

- Great American musicians. R. Christen. *Ohio F 142:15 Jl 6 '18*

**Muskmelons**

- Growing and marketing muskmelons in Minnesota. J. V. Bailey. *il Minn Hort 46:199-201 My '18*  
 Growing and marketing of squashes, melons and cucumbers. H: M. Howard. *Mass Ag Bd B 5:116-25 '18* (3d ed. rev.)

**Muskmelons —Continued**

Quality of muskmelons. J. R. Hepler. Country  
Gent 81:1303 Jl 1 '16

See also Cantaloupes

**Marketing**

Marketing and distribution of western muskmelons in 1915. O. W. Schleussner and C. W. Kitchen. U S Ag B 401:1-38 '16

**Muskrat weed.** See Water hemlock

**Muskrats**

How to trap the muskrat. D. Prowant. Ohio  
F 137:144 Ja 29 '16

Muskrat as a fur bearer; with notes on its use as food. D. E. Lantz. il Farmers' B 869:1-22 '17

Muskrat as a source of food. Rural N Y 76: 426 Mr 17 '17

Muskrat (fiber zibethicus) injurious to fish and aquatic birds in Bavaria and Bohemia. G. Koff and H. N. Maier. Int R Sci & Prac Ag 8,no 4:628-30 Ap '17

Muskrat trapping. A. R. Harding. il Kimball's D F 15:191 Mr 15 '17

Muskrat trapping explained. G. J. Thiessen. Ohio F 138:500 N 18 '16

On the trail of the muskrat. C. A. Green. Green's Fruit Grower 36:17 Mr '16

Talks to young trappers. G. J. Thiessen. il Country Gent 83:48 Ja 12 '18

To trap and skin muskrats. il O Judd Farmer 63:4 D 8 '17

Trapping muskrat. G. J. Thiessen. Ohio F 142:380 O 19 '18

Trapping the muskrat. C. H. Chesley. O Judd Farmer 61:17 D 30 '16

**Musquash-root.** See Water hemlock

**Mustard**

Common medicinal plants. A. Retlas. Ohio F 138:290 S 23 '16

**Seed**

Growing of mustard seed. J Bd Ag 22:1134-6 F '16

**Mustard, White****Seed**

Controlling influence of carbon dioxide on the production of secondary dormancy in seeds of brassica alba. F. Kidd and C. West. bibliog il Ann Bot 31:457-87 Jl '17

**Mustard, Wild**

Eradicating wild mustard. Rural N Y 77:274 F 23 '18

Wild mustard control. O. W. Newman. il Cal State Comm Hort B v 6:217-24 Je '17

**Seed**

Chloral hydrate test for brassica arvensis. L. M. Allen. Assn Offic Seed Analysts Pro 1916-1917:28-30 '17

**Mustard beetles**

Bad attack by the mustard beetle on watercress. A. Roebuck. il J Bd Ag 23:238-41 Je '16

**Mutation (biology).** See Variation (biology)

**Mutton**

Canned mutton and the European armies. Am Sheep B & W 36:294 My '16

Freezing sheep in Australia. R. H. Harrowell. il Nat Wool Grower 7:15-16 My '17

Meat product of sheep. W. H. Tomhave. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:43+ D 2 '16

Mutton and the army. J. E. Poole. Nat Wool Grower 8:17 N '18

Mutton as it affects producer and consumer. W. H. Tomhave. Am Sheep B & W 36:732+ D '16; Same. Prac F 112:469 D 15 '16

Revolution in the sheep business. C. T. Conklin. il Field 11 26:512+ Je '16

Slaughtering and marketing mutton and lamb. K. J. Seulke. il N Y Ag Dept B 96:115-27 Je '17

Value of mutton as a food. I. S. Harrington. N Y Ag Dept B 96:129-34 Je '17

**Statistics**

Commercial stocks of mutton. U S Food Surveys 1:10-12 Je 29 '18

**Mutuelle chevaline suisse**

Cattle insurance societies and companies in Switzerland. Int R Ag Econ 62:52-4 F '16

**My greatest asset; story.** E. Baird. Ohio F 142: 124-5 Ag 10 '18

**My neighbor's garden.** C. D. Stuart. il Am Bee J 58:57, 91, 160, 201-2, 303 F-Mr, My-Je, S '18

**Mycetophilid flies.** See Sciara flies

**Mycogone**

Mycogone disease of mushrooms and its control. F. J. Veihmeyer. bibliog il U S Ag B 127:1-24 '14

**Mycology.** See Fungi

**Mycorrhiza**

On stigeosporium marattiacearum and the mycorrhiza of the marattiaceae. C. West. bibliog il Ann Bot 31:77-99 Ja '17

On the mycorrhizas of forest trees. W. B. McDougall. bibliog il Am J Bot 1:51-74 F '14

Significance of mycorrhizae in the life of trees. E. R. Hodson. Soc Am For Pro 11:353-5 Jl '16

**Myopia hunt club**

Myopia hunt club. E. L. D. Seymour. il Country Life 29:30-2 Ja '16

**Myxobacteriaceae**

Chondryomycetes thaxteria, a new myxobacterium. J. H. Faull. bibliog il Bot Gaz 62: 226-32 S '16

**Myxomycetes**

Myxomycetes from South America. W. C. Sturgis. Mycol 8:34-41 Ja '16

Myxomycetes of the Curtis herbarium. W. C. Sturgis. Mycol 8:199-213 Jl '16

Notes on new or rare myxomycetes. W. C. Sturgis. il Mycol 9:323-32 N '17

Plant or animal? S. L. Bastin. il Sci Am Sup (233 Broadway, N. Y. 10c) 86:149 S 7 '18

Some observations on the formation of the capillitium and the development of physarella mirabilis Peck and stemonitis fusca Roth. G. R. Bisby. il Am J Bot 1:274-88 Je '14

See also Clubroot; Crown gall; Didymium

**Myzus ribis.** See Plant lice

**N****Names**

Unnatural history; many of the names we use that aren't at all correct. H. R. Walmsley. il Country Gent 83:34 Ja 5 '18

**Names, Geographical**

Celtic elements in place names. R. W. Freudenberger. Country Life 29:80 Ap '16

What is in a name? Am Bee J 57:405 D '17

**Nan of Music mountain; story.** F. H. Spearman. See weekly numbers of Wallaces' farmer

December 7, 1917-April 26, 1918

**Naphthalene**

Naphthalene as an insecticide. A. F. Bonney. Am Bee J 56:19 Ja '16

**Napier's fodder grass**

Elephant grass or Napier's fodder grass. E. Breakwell. il Ag Gaz of New South Wales 27:692-3 O '16

Elephant or Napier's fodder grass. E. Breakwell. il Ag Gaz of New South Wales 28:457-60 Jl '17

Elephant or Napier's fodder grass; experiments during 1917-1918. E. Breakwell. Ag Gaz of New South Wales 29:575-8 Ag '18

**Narcissus**

Abundance of outdoor narcissus. M. G. Kains. O Judd Farmer 63:22 O 27 '17

My experiences with some newer daffodils. S. R. Duffy. il Gard M 24:50-1 S '16

Narcissus Irene Copeland. il Gard Chron (Lond) 63:175 Ap 27 '18

Prepare now for hyacinths and narcissii when the ground is white. Weekly N L 6:4 N 6 '18



**Narcissus—Continued**

**Diseases and pests**

Lecture on narcissus disease. J. K. Ramsbottom. Gard Chron (Lond) 61:207, 217, 226 My 19-Je 2 '17

**Narcotics**

Narcotic plants and stimulants of the ancient Americans. W. E. Safford. il Smithsonian Inst Rep (Washington, D. C.) 1916:387-424

**Narras plant**

Narras, acanthosicyos horrida. il Gard Chron (Lond) 64:128 S 28 '18

**Nasturtiums**

Breeding of nasturtiums. il N J Ag Exp Rep 1916:443-4 '17

**Diseases and pests**

Bacterium causing a disease of sugar-beet and nasturtium leaves. N. A. Brown and C. O. Jamieson. il J Ag Research 1:189-210 D '13

Nasturtium wilt caused by bacterium solanacearum. M. K. Byran. il J Ag Research 4: 451-8 Ag '15

**Natal grass**

More about Natal hay. Reliable P J 23:243+ Ap '16

Natal grass: a southern perennial hay crop. S. M. Tracy. il map Farmers' B 726:1-16 '16

**National agricultural and live stock advisory committee.** See Advisory committee of agricultural and live stock producers

**National agricultural labor office, France**

Organized constitution of the National agricultural labour office. Int R Ag Econ 62:123-31 F '16

**National agricultural organization society**

Announcement; with constitution and bylaws. (In Nat. conf. on marketing and farm credits, 1916, p. 492-504) \$2 '17 C. W. Holman, sec., Madison, Wis.; Same. 15p n.d. The society, Washington bldg., Madison, Wis.

First aid to farming business. C: W. Holman. 15p '16 Nat. organization soc., Washington bldg., Madison, Wis.; Same. (In Nat. conf. on marketing and farm credits, 1916, p. 477-91) \$2 '17 C. W. Holman, sec., Madison, Wis.

National organization society. O Judd Farmer 60:15 Mr 11 '16

National service institution for farmers. C: A. Lyman. (In Nat. conf. on marketing and farm credits, 1916, p. 470-7) \$2 '17 C. W. Holman, sec., Madison, Wis.; Same. (C. 8) 9p n.d. The society, Washington bldg., Madison, Wis.

Provisional constitution and by-laws. Wallaces' F 41:765 My 19 '16

Resolutions adopted by delegates to the fourth National conference on marketing and farm credits. (C. 3) 15p n.d. The society, Washington bldg., Madison, Wis.

Society to aid cooperation. Breeder's Gaz 69: 1211 Je 8 '16

Unhyphenated cooperation. Am Coop J 11:922 My '16

**National agricultural society**

Agricultural mobilization convention, Washington, D.C., April 10, 1917. Ag Digest 1: 412-32 My 1 '17

Agriculture; the neglected industry. J. Wilson. Ag Digest 1:74 Je '16

Co-ordinating our agricultural relations. T. N. Vail. Ag Digest 1:74 Je '16

National agricultural society. il Ag Digest 1: 53-5 Je '16

National agricultural society program for production. il Ag Digest 2:962 My '18

Organization; with list of officers and directors. J. W. Darrow. Hoard's D 51:671 My 12 '16

**National apple growers**

Apple growers set pace; National apple growers plan to solve marketing problem. O Judd Farmer 61:7 Ag 19 '16

Apple industry of U.S. to be placed upon strong foundation. P. C. Stark. Fruit-Grower 27:356 Jl 15 '16

Apple shippers combine. O Judd Farmer 61:11 Jl 15 '16

1st convention, St Louis, Aug. 2-3, 1916. E. H. Favor. Fruit-Grower 27:389+ Ag 15 '16

New marketing organization. Fruit-Grower 27: 343 Jl 1 '16

Possibilities of the association. W: S. Forgey. Fruit-Grower 27:424 S 15 '16

**National apple show**

9th National apple show at Spokane, Nov. 20-25, 1916. Better Fruit 11:7 S '16

9th National apple show at Spokane, Nov. 25, 1916. R. S. Phillips. il Better Fruit 11:7-8 Ja '17

10th National apple show. R. H. Rice. Better Fruit 12:18 O '17

10th National apple show, Spokane, Washington. R. H. Rice. il Better Fruit 12:7-8 Ja '18

**National association of Audubon societies**

Brief sketch of its origin, progress, and accomplishments. E. Ingersoll. Ag Gaz of Canada 3:182-3 F '16

New field headquarters at Amston, Mass. il Country Life 31:56-7 Je '18

Report for 1916. il map Bird Lore (Harrisburg, Pa. 30c) 18:405-514 N '16

Report for 1917. il Bird Lore (Harrisburg, Pa. 30c) 19:377-504 N '17

**National association of commissioners of agriculture**

National organization formed. O Judd Farmer 60:14 My 20 '16

Organization, Washington, D. C., May 4, 1916. Mo Ag Bd Yearbook 1916:427-32

**National association of county agricultural agents**

2d annual meeting, Chicago. Wallaces' F 43: 1839 D 13 '18

**National association of gardeners**

Annual convention, Washington, D.C., Dec. 5, 1916. Gard Chron Am 20:520-5 D '16; Am Flor 47:1158-9 D 16 '16

Convention held in Chicago, Dec., 1917. M. C. Ebel. Am Flor 50:150 F 9 '18

Gardeners' conference at Boston. Am Flor 50:756 Ap 27 '18

Gardeners' co-operative movement. R: Vincent. Gard Chron Am 21:409 N '17

Meeting of the national cooperative committee, New York, Nov. 9. Am Flor 49:919 N 17 '17

New York conference, March 15. Gard Chron Am 22:93 Mr '18; Am Flor 50:530 Mr 30 '18

Organization and co-operation. M. L. Davey. Gard Chron Am 22:25-7 Ja '18

President's message; list of officers and committees. Gard Chron Am 21:28-9 Ja '17

7th annual convention, Chicago, Dec. 4-6. Gard Chron Am 21:445-52 D '17; il Am Flor 49: 1088-9 D 8 '17

**National association of grain dealers.** See Grain dealers' national association

**National association of ice cream manufacturers**

Annual convention, Columbus, Ohio, Oct. 17-18. Creamery 7:46 D '18

New spirit of the National association of ice-cream manufacturers. Creamery 5:27-9 N '16

16th annual convention and trade exhibit, Atlantic City, Oct. 10-13, 1916. L. O. Thayer. N Y Prod R 42:944 O 4 '16

Work of National assn. N Y Prod R 42:624 Ag 9 '16

**National association of managers**

5th annual convention, Kansas City, Mo., May 25-27, 1916. F. M. Myers. Am Coop J 11: 1010-11 Je '16

**National bank of Italian rural credit societies**

First results; by-laws and operation. Int R Ag Econ 66:19-23 Je '16

**National beekeepers' association**

46th annual meeting, Chicago, Feb. 22-24, 1916. Gleanings 44:258-9 Ap 1 '16

47th annual convention, Madison, Wis., Feb. 6-8, 1917. F. Jager. Am Bee J 57:133 Ap '17

Meeting at Burlington. Am Bee J 58:133 Ap '18

National meeting, Madison, Wis., Feb. 6-8, 1917. Am Bee J 57:82 Mr '17

**National Berkshire congress association**

Annual meeting and sale, Purdue university, LaFayette, Ind., Feb. 20-22, 1917. Ohio F 139: 330 Mr 3 '17

Recent annual gathering in central Florida. Breeder's Gaz 73:433 F 28 '18

10th annual congress, New Brunswick, N.J., Feb. 22-24, 1916. Field II 26:224-5+ Mr '16

10th annual meeting and sale, New Brunswick, Feb. 22-24, 1916. F. C. Minkler. Rural N Y 75:504 Mr 18 '16

12th annual meeting, Orlando, Fla., Feb. 13-15. Swine World 5:34 Mr '18

12th annual meeting, Orlando, Florida, Feb. 13-15. F. C. Minkler. Field II 28:245 Ap '18

**National board of farm organizations**

Big farm bodies unite. Coop Manager & F 7: 49 S '17

Farm organizations unite. Hoard's D 54:96 Ag 17 '17

\* Farmers win the war program. 34p '18 National bd. of farm organizations, Woodward bldg., Washington, D.C.

Great farmers' meeting in Washington; important resolutions adopted. S. R. Church. Prog F 33:1061 S 28 '18

Seven national farm bodies organize at Washington, July 20. Breeder's Gaz 72:149 Ag 2 '17

**National breeders' and feeders' show**

National breeders' and feeders' show at Fort Worth. Breeder's Gaz 69:674-5 Mr 23 '16

Sheep at the National feeders' and breeders' show. J. M. Jones. il Am Sheep B & W 36: 200-1 Ap '16

**National bureau of poultry information**

National bureaus of poultry information now proposed for several leading cities. Reliable P J 24:499-500+ Ag '17

**National chamber of agriculture**

Bill to establish the National chamber of agriculture for the purpose of promoting the equitable distribution of farm products; text. Mo Ag Bd Yearbook 1916:428-32

Charles H. Thorne, chairman of the newly created commission. W. C. Barnes. Breeder's Gaz 69:964 My 4 '16

National chamber of agriculture; hearing before the U.S. joint committee on agriculture and forestry on S. 5973: a bill to establish the national chamber of agriculture; and H. J. Res. 100: a joint resolution authorizing and requesting the president to appoint a national marketing commission. 64p '16 Apply to congressmen

**National chamber of commerce**

Report of councillor in Chamber of commerce of United States to the American fertilizer association. W. Prescott. Am Fert 45:78+ Jl 22 '16

**National commercial apple growers' association.**

See National apple growers

**National commission on milk standards**

Work of National commission on milk standards. Jersey B 36:526 Ap 4 '17

**National conference of social work**

Discussion of the relationship between home economics and social service. E. A. Winslow. J Home Econ 9:411-14 S '17

**National conference on honey production**

Conference at Washington, April 23, 1917. Am Bee J 57:172 My '17

War conference. Am Bee J 57:199 Je '17

**National conference on marketing and farm credits**

Facts about marketing and farm credits. C: W. Holman. Am Coop J 12:109-10 O '16

4th annual conference, 1916, Chicago. P. V. Collins. Outlook (381 4th av., N.Y. 10c) 114:854+ D 20 '16

Marketing and farm credits: a collection of papers and documents read at the 4th annual session, Chicago, Dec 4-9, 1916 (with by-laws and list of delegates). 546p \$2 '17 C. W. Holman, sec., Madison, Wis.

Meat producers demand inquiry at open hearing in Chicago conference. Hoard's D 52:798 D 29 '16

Milk producers organize at Chicago conference. Hoard's D 52:805 D 29 '16

New crops grown by the market conference. Survey (112 E. 19th st., N.Y. 10c) 37:334-6 D 23 '16

Resolutions adopted by 4th National conference on marketing. (C. 3) 15p n.d. Nat. ag. organization soc., Washington bldg., Madison, Wis.

**National congress of horticulture**

Joint session with the American pomological society. Ohio F 140:454 N 17 '17

New horticultural society. Prac F 112:459 D 15 '16

Organization effected in Washington, D.C., Nov. 17, 1916. E. R. Lake. Fruit-Grower 27: 508 D 1 '16; Same. Better Fruit 11:11 Je '17

**National council of farmers' co-operative associations**

Annual conference, Chicago, June 18, 1918. Am Coop J 13:418+ Jl '18

Annual meeting, Des Moines, Iowa, May 23, 1916. Am Coop J 11:1002-3 Je '16; Breeder's Gaz 69:1211 Je 8 '16

National council and the railroads. Am Coop J 14:20+ S '18

**National creamery buttermakers' association**

19th annual convention, Minneapolis, Minn., Nov. 14-16, 1916. Creamery 5:57-8 N '16; N Y Prod R 43:133 N 22 '16; Hoard's D 52: 662 D 1 '16

20th annual convention, Milwaukee, Oct. 9-11. N Y Prod R 44:993+ O 17 '17; Hoard's D 54:463 O 26 '17; Creamery 6:44 N '17

**National dairy association**

Organization at 1917 annual meeting of the National dairy show association. il Hoard's D 55:568 Ap 19 '18; Same. Jersey B 37:633 Ap 24 '18; Same. Creamery 7:34-5 My '18; Same. Kimball's D F 16:431 My 15 '18

**National dairy conference.**

See Dairy conference, Chicago

**National dairy council**

Annual meeting, Chicago, Dec. 5. Hoard's D 56:701 D 13 '18

Dairy mass meeting at National dairy show. N Y Prod R 44:1135 O 31 '17

General aims. N Y Prod R 42:1010 O 11 '16

Long needed cooperation in the dairy industry. Country Life 30:96 Je '16

Objects and plans. Kimball's D F 16:659 S 1 '18

Preparedness and plans for our commercial progress. J. Kahn. Creamery 5:35-7 S '16

Trouble with the milk business. C. E. Gapen. Country Gent 82:683 Ap 7 '17

What is wrong with the dairy industry? Hoard's D 51:621 My 5 '16

Work of the National dairy council. J. Kahn. N Y Ag Dept B 92:98-104 F '17

**National dairy show**

Appropriation for premiums at the National dairy show. R. M. Gow. Jersey B 37:1636 O 9 '18

Banquet given by the National dairy show directors, Springfield, Mass., Feb. 24, 1916. Ag Digest 1:9-10 My '16

Behind the scenes at the National; personalities who have helped to teach the farmers of America the lesson of the dairy cow. R. V. Hoffman. il Field II 28:711-14+ O '18

National dairy show. W. E. Skinner. Kimball's D F 16:514 S 15 '18

National dairy show. W. E. Skinner. N Y Ag Dept B 81:1808-16 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1808-16 '17

Result of the National dairy show. A. L. Tichane. Jersey B 36:799 My 23 '17

W. E. Skinner tells of progress. N Y Prod R 41:529 Ja 26 '16

**National dairy show, 1916**

Admirable exhibit, splendid attendance and fruitful meetings. Creamery 5:23 O '16

Arrangements made to hold it at Springfield, Mass. N Y Prod R 41:506 Ja 19 '16

Awaking of the East. R. M. Gow. Jersey B 35:159 F 2 '16

Boys and girls invited to the National dairy show. W. E. Skinner. Hoard's D 52:329 S 29 '16

Canadian Ayrshires at the National dairy show. J Ag (Quebec) 20:125 D '16



**National dairy show, 1916—Continued**

Cattle exhibits at Springfield. O Judd Farmer 61:8 O 7 '16  
 Contenders at the National. il Field II 26:833-4 O '16  
 Dairy products premium list. N Y Prod R 42: 533 JI 26 '16  
 Dairy show and exposition. Country Gent 81: 632 Mr 18 '16  
 Eastern states agricultural and industrial exposition, Springfield, Mass., Oct. 12-21, 1916. il N Y Prod R 42:981+ O 11 '16  
 Eastern states exposition to be held at Springfield, Mass., in October. Field II 26: 16-17 Ja '16  
 Efforts to stimulate agricultural enthusiasm among the young folks. J: Scheuerle. N Y Prod R 42:802 S 13 '16  
 Exhibit of dairy cattle. il Field II 26:932-3+ N '16  
 Guernseys at the National. A. G. Morrell. il Prac F 112:395 N 1 '16  
 Holsteins at the National. A. G. Morrell. il Prac F 112:469 D 15 '16  
 Jersey prizes at the National. Jersey B 35: 1304 Ag 23 '16  
 List of awards. Wallaces' F 41:1410+ O 27 '16  
 Model exposition plants. W. A. Parcellle. il Field II 26:839-40 O '16  
 1916 National dairy show. W. E. Skinner. il Kimball's D F 14:567 S 15 '16  
 New England sees the cow show. C: E. Gapen. il Country Gent 81:1995-6 N 18 '16  
 1916 National dairy show. il Creamery 5:27-9 S '16  
 1916 National dairy show. R. M. Gow. Jersey B 35:1519 S 27 '16  
 1916 National dairy show. W. E. Skinner. Jersey B 35:1349 Ag 30 '16  
 1916 National dairy show. H. E. Van Norman. Int Assn Dairy & Milk Inspep Rep 1916: 37-44  
 1916 National dairy show, Springfield, Mass., October. Kimball's D F 14:28 Ja 15 '16  
 1916 National dairy show to be held at Springfield, Mass., Oct. 12 to 21. W. E. Skinner. Hoard's D 51:158 F 18 '16  
 Ready for the National. O Judd Farmer 61:6 S 30 '16  
 Review of the dairy show exposition. il Creamery 5:29-40 O '16  
 10th National dairy show. N Y Prod R 42: 1037, 1117+ O 18-25 '16; Jersey B 35:1671-5+ O 25 '16; Breeder's Gaz 70:776-82 O 26 '16; Nat Stock & F 40:766 O 28 '16; Ohio F 138:412 O 28 '16; Kimball's D F 14:691-2+ N 1 '16; Hoard's D 52:543 N 10 '16

**National dairy show, 1917**  
 Annual meeting of the stockholders, Chicago, Nov. 24. Kimball's D F 15:899 D 15 '17  
 Big National on at Columbus. il Jersey B 36:1664-5 O 24 '17  
 Climax of exhibits of cattle and machinery at Columbus, O. Breeder's Gaz 72:788-90+ N 1 '17  
 Columbus and the National. il Field II 27: 745-7 O '17  
 Dairy show was splendid. A. C. Page. O Judd Farmer 63:9 N 3 '17  
 11th great dairy exposition, Columbus, Oct. 18-27. Creamery 6:21-2 S '17; N Y Prod R 44: 1049+ 1113+ O 24-31 '17; Nat Stock & F 41:741 N 3 '17; Creamery 6:20-32, 48b-51 N '17; Hoard's D 54:536-7 N 9 '17; Wallaces' F 42:1537 N 9 '17; Jersey B 36:1796 N 14 '17; Kimball's D F 15:816-17 N 15 '17; Cornell Countryman 15:137-8 D '17  
 Great success with great crowd of Jersey enthusiasts present. il Jersey B 36:1701-5 O 31 '17  
 Last annual session, Columbus, O., Oct. 18-27, 1917. il Ohio F 140:391+ N 3 '17  
 Many important meetings at National dairy show. il N Y Prod R 44:993 O 17 '17  
 Milk show of the National dairy show. Creamery 6:37-9 N '17  
 National dairy show. L. S. Gillette. Hoard's D 54:75 Ag 10 '17  
 National dairy show. R. V. Hoffman. il Field II 27:939-41+ D '17

National dairy show, 1917. W. E. Skinner. il Kimball's D F 15:616 S 15 '17  
 Progress of dairy industry shown at National exhibition. il Ag Digest 2:697-8 N '17  
 Tentative program of 1917 national dairy show. Hoard's D 54:328 O 5 '17  
 To be held at Columbus, Ohio, Oct. 18-27, 1917. Creamery 5:20-3 JI '17  
 Trip to the National dairy show and camp Sherman. Nat Stock & F 41:776 N 10 '17  
 Will be held Oct. 18-27 at Columbus, Ohio. Creamery 6:45-7 O '17

**National dairy show, 1918**  
 Features of the great exhibition. Creamery 7:42-5 O '18  
 Milk and cream exhibit. il Creamery 7:24b-31+ N '18  
 National and the Jersey. il Jersey B 37:1717-18 O 16 '18  
 1918 National dairy show, Columbus, October 10-19. il N Y Prod R 46:907, 971+ O 16-23 '18; Jersey B 37:1767-9+ O 23 '18; Nat Stock & F 42:673+ O 26 '18; Hoard's D 56:471-3+, 486 N 1 '18; Kimball's D F 16:827-8 N 1 '18; Ohio F 142:391, 399+ O 19-26 '18; J Ag (Quebec) 22:93 D '18  
 Office now in Columbus. Creamery 7:21 S '18  
 Rules and prize list. Creamery 7:27-9 Ag '18  
 Scope of the great exposition to be held at Columbus in October. N Y Prod R 46:582 Ag 14 '18  
 What is coming in the dairy industry. O Judd Farmer 65:372 O 26 '18

**National dairy union**  
 Appeals for financial support to protect dairy interests. N Y Prod R 45:156 D 5 '17

**National dairy war council**  
 Dairy industry war council. Breeder's Gaz 72:149 Ag 2 '17  
 Hoover and dairymen confer; with proclamation. Kimball's D F 15:493 JI 15 '17; Same (proclamation). Jersey B 36:1079 JI 11 '17; Same (proclamation). N Y Prod R 44:438 JI 11 '17  
 Meeting of the central committee, Washington, D. C., July 17-18, 1917. Creamery 5:22 Ag '17  
 Recent conference in Washington. Hoard's D 54:160 Ag 31 '17  
 Work of National dairy war council. Jersey B 36:1212 Ag 8 '17

**National Duroc-Jersey record association**  
 New breed record building; home of the National Duroc-Jersey association. il Breeder's Gaz 71:59 Ja 11 '17

**National emergency food garden commission**  
 Enlisting soldiers of the soil. il Am For 23: 334-9 Je '17  
 Million and more food gardens. il Am For 23: 263-8 My '17

**National farm and live stock show**  
 1st annual show, New Orleans, La., Nov. 11-19, 1916. Breeder's Gaz 70:1292 D 28 '16  
 2d annual, New Orleans, Nov. 10-19. Kimball's D F 15:860 D 1 '17

**National farm loan associations**  
 Borrowers' interest in the farm loan banks. D. N. Barrow. Prog F 32:569 My 5 '17  
 Borrowing from Uncle Sam. J: R. McMahon. Country Gent 83:17+ Mr 2 '18  
 Credit unions and National farm loan associations. W: R. Camp. (In Nat. conf. on marketing and farm credits, 1916, p. 50-8) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Does the farmer incur risk in joining a federal farm loan association. E. D. Durand. (In Minnesota farmers' institute annual, 1916, p. 81-4) '16 Extension division, University Farm, St Paul  
 Farm loan associations. B. Y. Lad. il Kimball's D F 15:146 Mr 1 '17  
 Federal farm loan act; text. (C 4) p 7-12 '16  
 U. S. Federal farm loan board, Washington, D. C.: Same. (In Minnesota farmers' institute annual, 1916, p. 141-3) '16 Extension division, University Farm, St Paul; Same. Mo Ag Bd B v 15:60-4 Ja '17; Same (in French). Int Yearbook Ag Leg 1916:978-83 '17

**National farm loan associations—Continued**

How farmers may form a national farm loan association. (C 2) 8p '16 U. S. Federal farm loan board, Washington, D. C.; Same. (*In* Minnesota farmers' institute annual, 1916, p 94-102) '16 Extension division, University Farm, St Paul; Abstract. Hoard's D 52:274 S 22 '16

How to borrow money. W: H. Dean. Country Gent 82:989-90 Je 9 '17

National farm loan associations; organization, management, powers, and limitations. (C. 1) 4p '17 Federal farm loan bureau, Treasury dept., Washington, D.C.

National farm loan associations; what they are—how they may be formed, the benefits to be derived. A. E. Cance and R. M. Rutledge. Mass Ag Ext B 13:1-15 '17; Same cond. Ag Digest 1:335-6 Mr '17

New mortgages for old; a story illustrating the practical application of the federal farm loan act. 2d ed (C. no. 3) U.S. Federal farm loan board, Treasury dept., Washington, D.C.

Spread of the farm loan. F: J. Haskin. il Irr Age 33:111-12 Je '18; Same cond. Prog F 33:739 Je 22 '18

**Accounting**

Complete accounting system and record for national farm loan associations. 49p '17 Corey & McKenzie ptg. co., 1407 Harney st, Omaha, Neb.

**National farm school**

20th annual report, 1917. 76p '17 Nat. farm school, Bucks county, Pa.

**National farmers' educational and cooperative union**

Iowa farmers' union organized at Des Moines. Wallaces' F 42:1386 O 12 '17

**National federation of milk producers. See National milk producers' federation****National federation of shippers**

National shippers' federation. Wallaces' F 42:1241 S 14 '17

Shippers organize national federation. Am Coop J 13:4 S '17

**National fertilizer association**

Activities and list of names and committees. (*In* Am. fertilizer hdbk., 1917, p. 9-16) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

History of the association; the president's address. H. Bowker. Am Fert 49:64+ Ag 3 '18

Midwinter meeting, Baltimore, Md., Jan. 22, 1917. Am Fert 46:21-4 F 3 '17

Officers and committees, 1916-1917. Am Fert 45:120-1 Jl 22 '16

Proceedings of the 23d annual convention, Hot Springs, Va., July 10-15, 1916. il Am Fert 45:39-136 Jl 22 '16

Proceedings, 24th annual convention, White Sulphur Springs, W. Va., July 9-12, 1917. il Am Fert 47:43-95 Jl 21 '17

Soil improvement committee; a year of war-time work. (*In* Am. fertilizer hdbk., 1918, p. 38-40) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia

25th annual convention, Atlantic City, N.J., July 15-19. Am Fert 49:59-138s Ag 3 '18

**Soil improvement committee**

Story of a year's work. (*In* Am. fertilizer hdbk., 1917, p. 68-70) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

**National flower show**

4th National flower show, Philadelphia, Pa., Mar. 25-April 2, 1916. J: Young. Am Flor 46:168-70 F 12 '16

4th National flower show, Philadelphia, Pa., Mar. 25-April 2, 1916; with list of awards. il Am Flor 46:521-9, 577-87 Ap 1-8 '16

5th National flower show, St Louis, Mo. J: Young. Am Flor 49:650 O 13 '17

National flower show postponed. J: Young. Am Flor 50:49 Ja 26 '18

**National flowers**

\* Choice of a national flower. il Independent (119 W. 40th st, N.Y. 10c) 96:132+ O 26 '18

National floral emblem: columbine. A. A. Hansen. Science (Science Press, Garrison, N. Y. 15c) n s 47:365-7 Ap 12 '18

Question of a national flower. Ag Gaz of Canada 5:389-91 Ap '18

Questions of a national flower. R. P. Graham. Ag Gaz of Canada 5:517-19 My '18

**National foreign trade convention**

4th National foreign trade convention, Pittsburgh, Jan. 25-27, 1917. Am Fert 46:28-9 F 3 '17

**National forest reservation commission**

Appalachian forest purchases. J: W. Weeks. Am For 22:542 S '16

**National forests. See Forest reserves****National fruit and cider institute**

Research and advisory report for the year ended 30th September, 1917. J Bd Ag 25:316-22 Je '18

**National grain dealers' association. See Grain dealers' national association****National grange of the patrons of husbandry**

50th national grange meeting, Washington, D.C., Nov. 15-24, 1916. Ohio F 138:557 D 2 '16

Journal of proceedings, 50th annual session, Washington, D.C., Nov. 15-24, 1916. 224p '16

C. M. Freeman, sec., Tippecanoe City, Ohio

Journal of proceedings, 51st annual session, St Louis, Mo., Nov. 14-23, 1917. 221p '17

C. M. Freeman, sec., Tippecanoe City, Ohio

Meeting, Syracuse, N.Y. Nat Stock & F 42:791 N 30 '18

National grange at Syracuse, N.Y.; what the grange stands for. Rural N Y 77:1359, 1385 D 7-14 '18

National grange; extracts from the master's address. O. Wilson. Nat Stock & F 40:877 N 25 '16

**National hay dealers' association**

Shady spots in the hay trade; National hay association against dishonest practices. S: Sosland. il Country Gent 81:1106+ My 27 '16

Trade rules and grades of National hay association. Coop Manager & F 7:86 My '18

24th annual convention, Chicago, July 24-26. Coop Manager & F 6:86-93 Ag '17

25th annual convention, Cleveland, O., July 9-11. Coop Manager & F 7:81-7 Ag '18

**National honey producers' association**

New National honey-producers' association. W. Foster. Gleanings 44:659-60 Ag 1 '16

**National horse show**

Classifications at National horse show. A. H. Godfrey. Breeder's Gaz 70:839 N 2 '16

National horse show. Breeder's Gaz 70:981 N 23 '16

National horse show and its auxiliaries. P. M. Babcock. Field il 26:1022 D '16

National horse show; its influence upon the breeding industry and its relation to product and market values. A. H. Godfrey. il Field il 26:927-9+ N '16

New York horse show. A. H. Godfrey. il Field il 27:958+ D '17

New York National horse show. A. H. Godfrey. Breeder's Gaz 72:985 N 29 '17

Sponsors of the horse show. A. H. Godfrey. Field il 28:815-19+ N '18

**National implement and vehicle association**

Farm wagon makers meet, Chicago, Feb. 23 and Mar. 1. Power F 27:56 Ap '18

N.I.V.A. asks priority order. Power F 26:50 Ag '17

N. I. V. A. service. Power F 27:50 Ag '18

**National institute of credit for cooperation, Italy**

Institute of credit for co-operative societies and the National bank of Italian rural credits in 1916. Int R Ag Econ 79:8-13 Jl '17

Second financial year, 1915. Int R Ag Econ 66:53-5 Je '16

**National league of commission merchants of the United States**

25th annual convention, Philadelphia, Jan. 10-12, 1917. 144p n.d. National league of commission merchants, 90 W. Broadway, N.Y.



- National live stock association, American.** See American national live stock association
- National live stock exchange**  
26th annual convention, Cincinnati, May, 1916. Breeder's Gaz 69:1119 My 25 '16
- National live stock shippers' protective league**  
National shippers' protective league organized. Breeder's Gaz 70:57 Jl 13 '16
- National milk and dairy farm exposition**  
Dairy exposition open. N Y Prod R 46:117 My 22 '18
- National dairy exposition, to be held at Grand Central Palace, N.Y., week of May 20. N Y Prod R 45:896: 46:22 Ap 17, My 1 '18; Creamery 7:25 My '18; Hoard's D 55:694 My 10 '18; Kimball's D F 16:404 My 15 '18
- New York milk show. H. H. Lyon. il Hoard's D 55:847+ Je 7 '18
- New York milk show, Grand Central Palace, May 20-25. N Y Prod R 46:157+ My 29 '18; Creamery 7:19-21 Je '18; Jersey B 37:908-9 Je 5 '18; Kimball's D F 16:510 Je 15 '18
- National milk producers' federation**  
Bylaws of the National milk producers' federation. (*In* Nat. conf. on marketing and farm credits, 1916, p. 430-2) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Milk producers organize at Chicago conference. Hoard's D 52:805 D 29 '16
- Organization formed at fourth marketing conference. Kimball's D F 14:833 Ja 1 '17
- National milk week**  
Why not national milk week? H. S. K. Wilcox. Hoard's D 55:1009 Jl 12 '18
- National museum (Brazil)**  
Décret n. 11.896 portant nouveau règlement du Musée national. Int Yearbook Ag Leg 1916:769-71 '17
- National non-partisan league**  
Adjournment of common sense. A. P. Haines. New Republic (421 W. 21st st, N.Y. 10c) 16:158-60 S 7 '18
- Agrarian movement in the Northwest. J. E. Boyle. Am Econ Review (Ithaca, N.Y. \$1.25) 8:505-21 S '18
- East learns the truth; a review of the newspaper articles concerning visit of President Townley. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:4-5 D 17 '17
- Eastern non-partisan league. Survey (112 E. 19th st, N.Y. 10c) 39:295 D 8 '17
- Farmer and the war. New Republic (421 W. 21st st, N.Y. 10c) 13:8-9 N 3 '17
- Farmers mob the mobbers. R. McKaig. Public (122 E. 37th st, N.Y. 10c) 21:1241-2 S 28 '18
- Farmers' non-partisan league. F. G. R. Gordon. Am Industries (30 Church st, N.Y. 10c) 18:14-15 F '18
- Farmers organizing politically. C. M. Harger. Financial World (29 Broadway, N.Y. 15c) 30:10 Mr 23 '18
- Fight in North Dakota. E. B. Fussell. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:4-5 D 24 '17
- Grangers indorse the league. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:8 D 24 '17
- Great upheaval. B. W. Currie. Country Gent 82:675-6, 716-17, 760-1, 798-9, 830-1, 867 Ap 7-May 12 '17
- Grievance of the spring wheat growers. F. O'Hara. Catholic World (120-122 W. 60th st, N.Y. 25c) 106:380-7 D '17
- Handing politicians a lemon. R. Harmon. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:9-10 N 22 '17
- \* In and out of the yoke. C. E. Russell. 32p n.d. Nat. nonpartisan league, St Paul
- Lawlessness in Minnesota by public officials. Public (122 E. 37th st, N.Y. 10c) 21:876-8 Jl 13 '18
- Marketing problems of northwestern grain growers. L. J. Frazier. (*In* Nat. conf. on marketing and farm credits, 1916, p 309-21) \$2 '17 C. W. Holman, sec., Madison, Wis.
- Menace of the Non-partisan league. W. H. Barr. Iron Age (239 W. 39th st, N.Y. 20c) 101:1141+ My 2 '18
- National nonpartisan league conducted a conference on the high cost of living in St Paul Sept. 18-20, 1917. Speakers included Gov. Frazier and Representative Baer of North Dakota, A. C. Townley, president of the league, Senators Gronna, La Follette and Borah, and Congresswoman Rankin. A declaration was adopted recommending conscription to pay for the war, control by the government of retail prices of bread as well as price of wheat to the farmer, a general land tax of 2 per cent, an income tax to make it impossible for any individual income to be more than \$100,000 a year, public ownership of mines and railroads, increase in the common soldiers' pay on active service, government operation of industries impeded by strikes for the duration of the war, co-operation between farmers and labor unions, restriction of immigration and direct legislation
- National nonpartisan league; origin, purpose and method of operation. 28p '18 Nat. nonpartisan league, St Paul, Minn.
- New Minnesota despotism. R. McKaig. Public (122 E. 37th st, N.Y. 10c) 21:465-7 Ap 13 '18
- New York (state)—Farmers' nonpartisan league of the state of New York was formed at a meeting of farmers and labor representatives at New York, Nov. 26, 1917. The league will work for the formation of a legislative program which shall benefit both the producer and the wage earner. The farmers came to New York city at the request of John J. Dillon, chief of the state bureau of foods and markets
- Non-partisan league. O. L. Dudley. Nat Stock & F 42:149 My 4 '18
- \* Non-partisan league. A. B. Gilbert. Nat Municipal R (North American bldg., Philadelphia \$1) 7:379-83 Jl '18
- Non-partisan league. F. Plachy, jr. Nation (20 Vesey st, N.Y. 10c) 107:92-3 Jl 27 '18
- Non-partisan league; with discussion. C. E. Russell. (*In* Am. sociological soc., Pub. v. 11, p. 31-46)
- Nonpartisan league and the loyalty issue. A. P. Haines. New Republic (421 W. 21st st, N.Y. 10c) 16:187-90 S 14 '18
- \* Non-partisan league in politics. F. G. Moorhead. Nation (20 Vesey st, N.Y. 10c) 107:364-5 O 5 '18
- Non-partisan league meeting at St Paul. Ag Digest 2:647-8 O '17
- Non-partisan league of North Dakota. Rural N Y 75:1329 O 21 '16
- Non-partisan program. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 12:354 Mr 16 '18
- North Dakota politics in New York. D. C. Smith. Rural N Y 76:188 F 10 '17
- Origin and aim of the Farmers' non-partisan league. C. E. Russell. Community Center (70 5th av., N.Y. 10c) B no 3 p20-1 Mr 17 '17
- Peculiar political movement. W. P. Davies. Am Coop J 11:922 My '16
- Political revolt in the Northwest. C. Merz. New Republic (421 W. 21st st, N.Y. 10c) 13:15-17, 44-6, 71-3, 121-3 N 3-17, D 1 '17
- Prairie fire. J. E. Pickett. il Country Gent 83:3-4+ My 13; 13-14 My 25; 13-14+ Je 1; 13-14+ Je 8; 13-14 Je 15; 13-14+ Je 22 '18
- Revolt of a state. North Dakota. D. Anderson. La Follette's Mag (115 W. Main st., Madison, Wis. 10c) 9:6-7 Ag '17
- Townley campaigns in the East. Ag Digest 2:738-9 D '17
- \* Where the people rule: North Dakota, a state where democracy is safe. 26p n.d. Nat. nonpartisan league, St Paul
- Why should farmers pay dues? 24p n.d. Nat. nonpartisan league, St Paul, Minn.
- National park service**  
National park service organized. Am For 23:437 Jl '17
- National parks**  
Doctor mountain. M. Daniels. il Am For 23:657-62 N '17
- National parks as an asset. F. K. Lane. il Am For 22:22-3 Ja '16

**National parks—Continued**

National parks portfolio. various paging il maps '17 U.S. Dept. of interior, Washington, D.C.

Contains: Yellowstone national park; Yosemite national park; Sequoia national park; Mount Rainier national park; Crater Lake national park; Mesa Verde national park; Glacier national park; Rocky Mountain national park; Grand Canyon national monument

New national parks and their administration. Am For 22:366 Je '16

Our new national parks. C: F: Carter. il Review of Reviews (30 Irving Place, N. Y. 25c) 57:638-42 Je '18

Picture story of our principal national parks. R. S. Yard. il Country Life 34:45-68 Jl '16

Preparedness and the national parks. il Country Life 30:48-9 Je '16

Progress in the development of the national parks. S. T. Mather. 39p bibliog map '16 U.S. Dept. of interior, Washington, D.C.

Recreational use of public forests in New England. A. Chamberlain. Soc Am For Pro 11:271-80 Jl '16

Report of the director of the National park service for the fiscal year ended June 30, 1917. 258p il maps '17 U.S. Dept. of interior, Washington, D.C.

Report on the proposed Sand Dunes national park, Indiana. S. T. Mather. 113p maps '17 U.S. Nat. park service, Washington, D.C.

See also Forest reserves; also Casa Grande national park; Crater lake national park; Glacier national park; Mesa Verde national park; Mount Rainier national park; Rocky Mountain national park; Sequoia national park; Yellowstone national park; Yosemite national park

**Bibliography**

Bibliography of books and magazine articles on national-park subjects. Sept. 1916-Oct. 1917; Mount McKinley national park, National park publications. (In Report, Director of national parks, 1917, p. 231-49) '17 U.S. Dept. of interior, Washington, D.C.

**National (American) polled Hereford association**

Annual meeting, Des Moines, Jan. 30, 1917. Wallaces' F 42:245 F 9 '17

**National potato association.** See Potato association of America

**National poultry, butter and egg association**

Annual convention, Chicago. N Y Prod R 42: 1037+ O 18 '16

Annual meeting, Chicago, Oct. 15-17. N Y Prod R 44:1049+ O 24 '17; Creamery 6:45 N '17

12th annual meeting, Chicago, Oct. 7-8. N Y Prod R 46:907+ O 16 '18

**National poultry conference, Chicago, 1918**

National poultry conference at Chicago. P. T. Woods. Am P J 49:524-6 My '18

Opening session. G. M. Curtis. Reliable P J 25:165 Ap '18

Report of important meeting, Chicago, March 29-30. N Y Prod R 45:898 Ap 17 '18; Nat Stock & F 42:110 Ap 20 '18; Am P Advocate 26:404-5 My '18; Reliable P J 25:287-9+ My '18

**National rose society (English)**

Annual meeting. Gard Chron (Lond) 63:26 Ja 19 '18

**National rural teachers' reading circle**

Organization and purpose. School and Soc (Science Press, Garrison, N.Y. 10c) 8:249 Ag 31 '18

**National scalemen's association**

Terminal grain weighmasters and committee on grain weighing of the National scalemen's association hold joint conference. Coop Manager & F 8:38-40 N '18

**National sheep and wool bureau**

Additional endorsements of the ovine alliance. Am Sheep B & W 36:650 N '16

\* Annual meeting, Chicago, June 17. Textile World J (461 8th av at 34th st, N.Y. \$3 per yr.) 53:6211+ Je 22 '18

Constitution. Am Sheep B & W 37:482 Ag '17

National sheep and wool bureau; outcome of big sheep and wool conference. Am Sheep B & W 36:717-19 D '16

Ovine alliance inaugurated. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52: 220-1 D 16 '16

Program of sheep and wool bureau. Am Sheep B & W 37:688 N '17

Suggestions to sheep bureau. W. T. Ritch. Am Sheep B & W 37:626 O '17

Who's for an ovine alliance? Am Sheep B & W 36:577-88 O '16

**National shippers' conference**

Decision saves \$750,000 every day to producers and consumers. H. B. Anderson. Am Coop J 12:715 Jl '17

**National shorthorn congress show and sale**

Show and sale, Chicago, Feb. 19-22. il Breeder's Gaz 73:430-2 F 28 '18; Wallaces' F 43: 419+ Mr 1 '18; Field II 28:240-1+ Ap '18

**National society for the orphans of peasants killed in war**

Italy; care of children of peasants killed in the war. Int R Ag Econ 63:53-7 Mr '16

**National society for the promotion of industrial education**

Aims and work. C. Murtland. J Home Econ 8:10-16 Ja '16

**National society of record associations**

Annual meeting, Chicago, Dec. 7, 1916. Nat Stock & F 40:983 D 23 '16; Ohio F 138:619 D 23 '16; Kimball's D F 14:828 Ja 1 '17

Annual meeting, Chicago, Dec. 6, 1917. Breeder's Gaz 72:1102 D 13 '17; Kimball's D F 16:21 Ja 1 '18

Meeting, Washington, D.C., May 5-6, 1916. Breeder's Gaz 69:1025 My 11 '16; Field II 26:521 Je '16

**National stockman and farmer (periodical)**

Friends since the beginning. Nat Stock & F 41:1+ Mr 31 '17

This issue is devoted to 40th anniversary, 1877-1917, of the National stockman & farmer

Teacher's experience. O. Adams. Nat Stock & F 41:421 Jl 28 '17

**National swine growers' association**

National swine growers; organization. Country Gent 81:389 F 19 '16

**National swine show**

America's greatest swine achievement. M. S. McFadden. il Swine World 6:8 N '18

Annual banquet at the swine show. M. S. McFadden. Swine World 6:13 N '18

Annual convention, Cedar Rapids, Ia. il Wallaces' F 43:1468-9+ O 11 '18

Berkshires at the National swine show; list of awards. J. A. Frost. Swine World 6:29 N '18

Breeds of many colors at the National swine show; list of awards. Swine World 6:36+ N '18

First National swine show. C. E. Gapen. il Country Gent 81:1965+ N 11 '16

1st National swine show, Omaha, Neb. Breeder's Gaz 70:659-61 O 12 '16; Wallaces' F 41: 1331+ O 13 '16

Items and awards at Cedar Rapids. O Judd Farmer 65:320 O 12 '18

John Stinson's hog Chautauqua. Swine World 6:12 N '18

National swine show. il Ohio F 142:374 O 19 '18

National swine show a big success. il Wallaces' F 42:1424+ O 19 '17

National swine show, 1918. W. M. McFadden. Swine World 6:9 N '18

New model National swine show. M. S. McFadden. Swine World 6:21 S '18

1918 National swine show and exposition, to be held at Cedar Rapids, Iowa, Sept. 30-Oct. 5. il Swine World 5:3-4 Ap '18

1918 National swine show, Cedar Rapids, Ia., Sept. 30-Oct. 5. O Judd Farmer 65:352 O 19 '18

1918 rules as adopted by show committee. Swine World 5:12 Jl '18

Poland China show at the National; list of awards. M. S. McFadden. il Swine World 6:15-17 N '18



**National swine show—Continued**

- Prospects for the 1918 National swine show. J. T. Stinson. *Swine World* 5:13 Je '18  
2d annual show, Omaha. *Swine World* 5:7 S '17; *Breeder's Gaz* 72:617 O 11 '17; *Wallaces' F* 42:1395 O 12 '17; *Swine World* 5:5-18 N '17  
Swine awards at South Omaha. *Breeder's Gaz* 72:678-9 O 18 '17  
3d annual National swine show. *Nat Stock & F* 42:647 O 12 '18  
Visit to the National swine show. H. Fergus. *Prac F* 112:429 N 15 '16

**National union of dairy societies, Italy.** See *Unione nazionale delle latterie sociali*

**National vegetable growers' association**

- Things of interest seen and heard at 10th annual convention, Springfield, Mass., Oct. 10-13, 1917. F. L. Gerten. *Minn Hort* 46:187-9 My '18

**National vegetable show**

- First National vegetable show. L. D. Kelsey. *Market Growers J* 21:144 O 1 '17  
First National vegetable show big success. *Market Growers J* 21:200-1 N 1 '17  
Rules for Springfield vegetable show. *Market Growers J* 20:454 Je 15 '17

**National war emergency poultry federation**

- Executive committee meeting, Philadelphia, July 27, 1918. *Am P Advocate* 26:557 S '18  
1st convention, Chicago, July 16-18. *Am P Advocate* 26:523+ Ag '18; *Reliable P J* 25:519-21+ Ag '18  
Meeting, Chicago, June 10-11. *Reliable P J* 25:455-6+ Jl '18  
Organization. *N J Ag Exp Hints to Poultrymen* v 6 4p Je '18  
Poultry federation in 1919. C. L. Opperman. *Country Gent* 83:32 D 21 '18  
Poultrymen organize at last. H. A. Roberts. *il Country Gent* 83:8 S 21 '18  
War emergency poultry federation. *Am P J* 49:720 Ag '18

**National war garden commission**

- America's awakening. *Gard M* 27:177 My '18

**National western live stock show**

- Beef breeding classes at Denver. *il Field II* 28:158-9 Mr '18  
Denver show, Jan. 19-26. H. G. Van Pelt. *Kimball's D F* 16:112 F 15 '18  
National western stock show. *Breeder's Gaz* 71:219+ F 1 '17  
National western stock show, Denver, Jan. 17-22, 1916; with list of awards. *Breeder's Gaz* 69:185+, 276 Ja 27-F 3 '16  
Successful dairy show in Denver. *il Jersey B* 36:231-2 F 14 '17  
12th annual stock show in Denver, Jan. 19-26. *Breeder's Gaz* 73:260-1 F 7 '18; *Jersey B* 37:306 F 27 '18

**National wool growers' association**

- 52d annual convention, Salt Lake City, Utah, Jan. 13-15, 1916. *Am Sheep B & W* 36:25-6 Ja '16; *Breeder's Gaz* 69:189 Ja 27 '16  
53d convention, Salt Lake City. *Am Sheep B & W* 37:19 Ja '17  
54th annual convention, Salt Lake City, Utah, Jan. 17-19. *Breeder's Gaz* 73:207 Ja 31 '18  
54th annual convention, Salt Lake City, Jan. 19; with resolutions. *Am Sheep B & W* 38:73-8 F '18  
Resolutions adopted by the 53d annual convention of the National wool growers' association, Salt Lake City, Utah, Jan. 13, 1917. *Nat Wool Grower* 7:19-20 Ja '17  
Resolutions adopted by 54th annual convention, Salt Lake City, Utah, Jan. 19, 1918. *Nat Wool Grower* 8:25-8 Ja '18

**Native races.** See *Ethnology*

**Natural selection**

- Evolution of species in Ceylon, with reference to the dying out of species. J. C. Willis. *Ann Bot* 30:1-23 Ja '16

See also *Evolution*; *Species*

**Nature**

- Skirmish line of spring. W. P. Eaton. *il Country Life* 31:41-4 Mr '17  
Solitude: being leaves from a hermit's log-book. R. Wade. *il Country Life* 32:45-7 Je '17

**Nature study**

- Agricultural stories for children. W. H. Barton. *S C Ag Ext B* 14:1-30 '16 (rev)  
Exercises with plants and animals for southern rural schools. E. A. Miller. *bibliog il U S Ag B* 305:1-63 '15  
Midsummer nature study. E. E. Shaw. *Country Life* 30:70 Ag '16  
Nature and the home. Mrs F. R. Flower. *O Judd Farmer* 63:27 O 6 '17  
Nature study or stories in agriculture. *il Ontario Ag Dept B* 243:1-70 '16  
Nature study with corn (maize). H. Wenholz. *Ag Gaz of New South Wales* 28:111-20 F '17  
Nature study with wheat. J. T. Pridham. *il Ag Gaz of New South Wales* 28:719-25 O '17  
Outdoors in midwinter. *il Country Life* 29:42-3 F '16  
Subject matter for 1917-1918 in natural history, agriculture, and home making, based on the New York state syllabus for elementary schools. *il Cornell Rural School Leaflet* v 11 no 1:1-320 '17  
See also *Bird study*; *Botany*; *School gardens*

**Naval education**

- How Uncle Sam makes sea-fighters. R. H. Moulton. *Ohio F* 141:438 Mr 23 '18  
Naval training camp. *Wallaces' F* 43:826 My 17 '18  
Visiting the Jackies. *Wallaces' F* 43:984 Je 28 '18

**Navel ill.** See *Horses—Diseases and pests*

**Nebraska**

- Sand-hill forest. R. P. Crawford. *il Country Life* 32:100 O '17  
See also *subhead Nebraska under special subjects, e.g. Agriculture—Nebraska, Dairying—Nebraska*

**Agriculture, State board of**

- Annual report, 1917. *il maps Neb Ag Bd B* 245:1-383 '18

**Industries and resources**

- Potash from sand-hill lakes. R. P. Crawford. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:167 F 17 '17  
See also *Horticulture—Nebraska*

**Nebraska agricultural experiment station**

- 30th annual report, 1916. *Neb Ag Exp Rep* 1916:i-iii '17  
31st annual report, 1917. *Neb Ag Exp Rep* 1917:i-liv '18

**Nebraska dairymen's association.** See *Nebraska state dairymen's association*

**Nebraska farmers' cooperative grain and live stock association**

- Big convention at Omaha. *Am Coop J* 14:112-14 D '18  
Convention. Omaha. Nov. 13-15. *Am Coop J* 13:152-60 D '17; *Coop Manager & F* 7:30-4+ D '17  
13th annual convention, Omaha, Neb., Dec. 15-17, 1915. *Am Coop J* 11:470-85 Ja '16  
14th annual convention, Omaha, Nov. 21-23, 1916. *Am Coop J* 12:299-305 D '16

**Nebraska farmers' union**

- Nebraska farmers' union urges co-operation. *Ag Digest* 1:300 F '17

**Nebraska state dairymen's association**

- Annual meeting, January 17, 1917. *Jersey B* 36:204 F 7 '17; *Hoard's D* 53:98 F 9 '17  
Nebraska dairymen meet. B. H. Thompson. *il Kimball's D F* 15:111 F 15 '17  
31st annual meeting at Lincoln, Jan. 19-21. *Jersey B* 35:201 F 9 '16  
31st annual meeting, Lincoln, Jan. 19-21, 1916. R. P. Crawford. *Hoard's D* 51:140 F 18 '16  
33d annual convention, Lincoln, Jan. 16-18. *Hoard's D* 55:56 F 1 '18

**Nebraska state fair**

- 48th annual fair. *Breeder's Gaz* 70:425-7 S 14 '16; *Wallaces' F* 41:1202-3+ S 15 '16  
Great show at Lincoln. *Breeder's Gaz* 72:384-6 S 13 '17; *Wallaces' F* 42:1243-5+ S 14 '17  
Jerseys at the Nebraska state fair, 1916. *Jersey B* 35:1464 S 20 '16

**Nebraska state fair—Continued**

- Lessons from Nebraska fair. J. H. Frandsen.  
Kimball's D F 14:635 O 1 '16  
Nebraska has a real hog show. R. Davis.  
Swine World 6:25-6 O '18  
Nebraska state fair. R. P. Crawford. Hoard's  
D 54:297 S 28 '17  
Nebraska state fair. W. V. Dobbins. il  
Hoard's D 56:287 S 27 '18  
Nebraska state fair, 1918. il Wallaces' F 43:  
1294-7 S 13 '18

**Nebraska state forestation commission**

- Nebraska's forestation commission. W. Ball.  
Am For 23:212 Ap '17  
Second bi-ennial report, 1915-1916. 19p '16  
Neb. state forestation comm., Valentine

**Nebraska state horticultural society**

- 47th annual report; proceedings of the annual  
meeting, Lincoln, Jan. 18-20, 1916. (Nebraska  
Horticulture v. 6, no. 12) 300p il (F) '17 Neb.  
state hort. soc., Lincoln

**Nebraska university****Agricultural extension service**

- Annual report, 1916. Neb Ag Exp Rep 1916:  
xxxi-xlix '17  
Annual report, 1917. Neb Ag Exp Rep 1917:  
xxii-xlix '18

**College of agriculture**

- Agricultural engineering; what Nebraska is  
doing to develop this science. L. W. Chase.  
il plans Farm Eng 4:8-9 Jl '16  
Nebraska's farm college; views. Country Gent  
81:837 Ap 15 '16

**Nectar secretion**

- Environmental influences on nectar secretion.  
L. A. Kenoyer. bibliog Bot Gaz 63:249-65 Ap  
'17; Same. la Ag Exp Research B 37:219-32  
'16

**Nectaries. See Glands (botany)****Nectria dilissima. See Apple canker****Needlework**

- What odd-minute pick-up work will do for  
the homemaker. M. K. Dunne. Country Gent  
81:2100 D 2 '16

See also Crocheting; Dressmaking; Em-  
broidery; Knitting; Mending; Samplers;  
Sewing

**Negroes as farmers**

- Agricultural extension work among negroes  
in South. (In Cooperative extension work,  
1916, pt. 2, p. 24-5) il '17 U S Ag  
Cotton hands that stay. J. Roland. il Country  
Gent 82:2661 D 29 '17  
Negro farmer of the cotton belt. O. W. Fer-  
guson. Southern Workman (Hampton In-  
stitute, Hampton, Va. 10c) 46:33-9 Ja '17  
Negro farmers of Alabama; a phase of Tus-  
kegee's extension work. C. Richardson. il  
Southern Workman (Hampton normal and  
industrial institute, Hampton, Va. 10c)  
383-90 Jl '17  
Negro farmers of Virginia. W: A. Aery.  
(Hampton B. v. 13, no. 4) 7p il '17 Hampton  
normal and agricultural institute, Hampton,  
Va.  
Negro, the boll weevil and farm management.  
Prog F 31:98 Ja 15 '16

**Negroes in the United States**

- Credit problems of the southern plantation  
system. L. C. Gray. (In Nat. conf. on mar-  
keting and farm credits, 1916, p. 59-72) \$2  
'17 C. W. Holman, sec., Madison, Wis.  
Draining the South of labor. H. S. Stabler.  
il Country Gent 82:1371-2 S 8 '17  
Legislation needed by our rural interests. C.  
Poe. Prog F 31:153 Ja 29 '16  
Migration of negroes. Rural N Y 76:938 Ag 4  
'17  
Mind of the negro. J Heredity 8:153-4 Ap  
'17

**Education**

- Rural education of the negro. 97-114p '17 U.S.  
Bur. of educ., Washington, D.C.  
Reprint from Bulletin, 1916, no. 38. Not  
available for general distribution  
Some colored schools of the South. K. B.  
Vaughn. J Home Econ 8:588-91 N '16

- Suggested course of study for county training  
schools for negroes in the South (Trustees  
J: F. Slater Fund Occas. Papers, no. 18 73p.  
'17). Exp Sta Record 38:397-8 Mr '18

**Neighborhood improvement**

- Rural parks and playgrounds. L. B. Pierce.  
Ohio F 137:758 Je 3 '16

**Nellie's scientific baby; story. H. C. Bennett.**

- il Country Gent 83:18-19 Mr 9 '18

**Nematodes**

- Anthelmintic treatment for nematode infesta-  
tions in dogs. M. C. Hall. Am Vet M Assn  
J 52:342-5 D '17  
Black currant eelworm. A. M. Taylor. il J Ag  
Sci 8:246-75 Mr '17  
Citrus-root nematode. N. A. Cobb. il J Ag  
Research 2:217-30 Je '14  
Control of root-knot by calcium cyanamide  
and other means. J. R. Watson. il Fla Ag  
Exp B 136:147-60 '17  
Ear cockles in wheat. W. Somerville. il J Bd  
Ag 25:850-3 O '18  
Eelworm in daffodils. A. J. Bliss. Gard  
Chron (Lond) 60:83 Ag 19 '16  
Eelworm parasites of plants. P. Frandsen.  
il Cal State Comm Hort B v 5:60-3 F '16  
Experiments on the control of the root-knot  
nematode. J. A. McClintock. Mich Ag Bd  
Rep 1916:414-34  
Farmers asked to report eelworms in their  
wheat. Weekly N L 6:1 O 23 '18  
Life history and habits of two new nematodes  
parasitic on insects. J. H. Merrill and A. L.  
Ford. il J Ag Research 6:115-27 Ap 17 '16  
Mononchs; genus of free-living predatory  
nematodes. N. A. Cobb. bibliog il Soil Sci  
3:431-86 My '17  
Nematode disease control. Am Flor 48:741,  
1153 Ap 21, Je 16 '17  
Nematode galls as a factor in the marketing  
and milling of wheat. D. A. Coleman. il map  
U S Ag B 734:1-16 '18  
\* Nematode pests. Nature (St Martin's st, Lon-  
don, W.C. 6d) 101:94-5 Ap 4 '18  
\* Nematodes on marketable fishes. H. P. K.  
Agersborg. Science (Science Press, Garrison,  
N.Y. 15c) n s 48:493-5 N 15 '18  
New parasitic nema found infesting cotton and  
potatoes. N. A. Cobb. il J Ag Research  
11:27-33 O 1 '17  
New science of nematology. A. Salsbury. il  
Scientific Am Sup (233 Broadway, N.Y.  
10c) 82:380-1 D 9 '16  
Occurrence of the giant nematode, diocto-  
thyme renale in the United States and Can-  
ada. bibliog W: A. Riley. Am Vet M Assn  
J 49:801-9 S '16  
Parasitic nematodes in the Belgian Congo. A.  
Raillet and A. Henry. Int R Sci & Prac Ag  
9,no 4:466-7 Ap '18  
Physaloptera from the dog, with a note on  
the nematode parasites of the dog in North  
America. M. C. Hall and M. Wigdor. bib-  
liog il Am Vet M Assn J 53:733-44 S '18  
Potato eelworm. A. L. Lovett. il Ore Ag Ext  
B 198:1-4 '17  
Serious eelworm or nematode disease of  
wheat; control the disease by use of clean  
seed—crop rotation—sanitary measures.  
L. P. Byars. il U S Ag C 114:1-5 '18  
Study of the root-nematode (heterodera rad-  
icicola) and its control. W. P. Duruz. bibliog  
il Soil Sci 4:481-92 D '17  
Tylenchus or eel-worm infection: a sugges-  
tion. H. E. Durham. Gard Chron (Lond) 62:  
116 S 22 '17  
Tylenchus similis, the cause of a root disease  
of sugar cane and banana. N. A. Cobb. J  
Ag Research 4:561-8 S '15  
See also Ascaris; Lungworms; Strongyli-  
dosis; Sugar-beet nematodes; Trichina and  
trichinosis

**Nematospora. See Saccharomycetes****Nematus erichsonii. See Larch sawflies****Neopeckia**

- Spore variation in neopeckia coulteri. J. S.  
Boyce. Phyt 6:357-9 Ag '16

**Neotoma fuscipes mohajensis. See Pack rats****Nephrolepis. See Ferns**



**Nerines**

Nerines. il Gard Chron (Lond) 62:117 S 22 '17

**Nerves**

You must loosen the strings before they snap.  
il Country Gent 81:1243 Je 17 '16

**Nests**

Among the winged builders with a camera.  
S. M. Kane. il Country Life 30:62 Jl '16  
Bird architecture. C. J. Stanwood. il Country Life 29:43 Ap '16  
Bird craftsman. C. J. Stanwood. il Country Life 29:84 Mr '16  
Nesting of the birds. A. A. Allen. il Am For 22:354-8 Je '16  
Paper-making in the insect world. R. W. Shufeldt. il Am For 23:431-2 Jl '17  
Providing nests. Wallaces' F 41:1052 Ag 4 '16  
Some problems with everyday birds. A. A. Allen. il Am For 22:718-22 D '16  
Trap nests and egg production. Prac F 112:233 Je 1 '16

See also Trap nesting

**Netherlands**

Alkmaar's unequaled cheese fairs. C. S. Ellis. Ohio F 137:634 Ap 29 '16  
Cheese-making in Holland. N. Tourneur. Ohio F 138:144 Ag 19 '16

See also Central bureau of social intelligence, Netherlands; also subhead Netherlands under special subjects, e.g. Dairying—Netherlands, Horticulture—Netherlands

**Nettle fiber**

Textile substitute: experiment with nettle fibre. Ag J of India 13:522-6 Jl '18

**Nettle trees**

Nettle tree considered from the points of view of forestry, food and industry. M. Degli Atti. Int R Sci & Prac Ag 8,no 11:1102-3 N '17

**Nettles**

Hairs of nettles. il J Heredity 8:240 My '17  
Nettles, Horse. See Horse nettles

**Neuritis**

Neuritis. E. Mellen. O Judd Farmer 63:14 Jl 14 '17

**Nevada**

See also subhead Nevada under special subjects, e.g. Agriculture—Nevada, Irrigation—Nevada

**Stock commissioners, State board of**

Biennial report of the state board of stock commissioners, 1915-1916. 23p '17 Nevada  
State board of stock comrs., Carson City

**Nevada agricultural experiment station**

Annual report of the board of control for the fiscal year ending June 30, 1916. 56p il '17 Nevada ag. exp. station, Reno  
Annual report of the board of control for the fiscal year ending June 30, 1917. il Nev Ag Exp Rep 1917:1-79 '18

**New Brunswick**

See also subhead Canada under main divisions

**Crown land department**

57th annual report for the year ended 31st October, 1917. 206p il map '18 New Brunswick Crown land dept., Fredericton

**Forest service**

New Brunswick forest service is inaugurated. Am For 24:693 N '18

**New England**

Gov. Hoard on family breeding. W. D. Hoard. Rural N Y 76:109 Ja 27 '17

See also subhead New England under special subjects, e.g. Agriculture—New England, Dairying—New England

**Description and travel**

Car door observations of an Ohio stockman. W. A. Martin. Ohio F 139:821 Je 30 '17  
Seeing New England from horseback. G. M. Stack. il map Country Life 30:78 Je '16

**Education**

Rural school supervision in New England. L. A. Averill. Education (120 Boylston st, Boston 35c) 38:361-73 Ja '18

**Industries and resources**

See also Forests and forestry—New England

**New England Ayrshire breeders' association**

11th annual meeting, Boston, Dec. 5, 1916. Kimball's D F 14:830 Ja 1 '17

**New England milk producers' association**

Boston producers get eight cents per quart. J. T. Bartlett. Hoard's D 54:547 N 9 '17

Meeting, Boston, Jan. 10-11, 1917. Rural N Y 76:76 Ja 20 '17

New England milk producers' association. A. E. Proctor. Hoard's D 53:4 Ja 26 '17

New England milk producers organize. Hoard's D 53:144 F 16 '17

Seven cents for Boston milk. Rural N Y 76:839 Je 30 '17

What organization has done for the milk business. R. Pattee. Mass Ag Bd Yearbook 1917,pt 2:44-53 '18

**New England poultry producers' exchange**

Organization, objects and membership. Reliable P J 25:461-2 Jl '18

Poultrymen organize at last. H. A. Roberts. il Country Gent 83:8 S 21 '18

New, fresh field; story. H. W. Ashby. Wallaces' F 43:1787 D 6 '18

**New Hampshire**

See also subhead New Hampshire under Agricultural credit, Agriculture, Dairying, Sheep, Wheat

**Agriculture, Department of**

Report of the Department of agriculture for the two years ending Aug. 31, 1916. il N H Ag Dept Rep v 34:1-192 '16

**Description and travel**

New Hampshire farms. 42p il map '16 N.H. State dept. of ag., Concord

**Forestry department**

\* Personnel of the Forest fire service, rev ed (C. 8) 63p '18 N. H. Forestry comm., Concord

**New Hampshire college of agriculture and the mechanic arts**

With the farm boys of New Hampshire; views. Country Gent 81:2005 N 18 '16

**New Hampshire dairymen's association. See Granite state dairymen's association**

**New Hampshire horticultural society**

Abstract of the ninth annual report, being the report of the twenty-second annual meeting, Keene, N. H., Oct. 25-27, 1916. N H Ag Dept Rep v 34:151-92 '16

**New Hebrides. See Cotton—New Hebrides**

**New Jersey**

See also subhead New Jersey under special subjects, e.g. Agriculture—New Jersey, Apple culture—New Jersey

**Agriculture, Department of**

Address at convention of N.J. state agricultural society. A. Agee. N J Ag Dept B 11:436-42 '18

Bureau reports for 1916. N J Ag Dept B 6:173-213 '17

2d annual report, 1917. N J Ag Dept B 9:295-359 '17

3d annual report, 1918. N J Ag Dept B 17:77-152 '18

**Conservation and development, Department of**

Annual report for the year ending October 31, 1917. 141p il map '18 N. J. Dept. of conservation & development, Trenton

Contains: Report of the Board of conservation and development; Report of the State forester; Report on undeveloped lands; Report of the State firewarden

**New Jersey agricultural experiment station**

Report of the director for 1916. J. G. Lipman. N J Ag Exp B 298:1-51 '16

Report of the director for 1917. J. G. Lipman. N J Ag Exp B 317:1-55 '17

**N. J. agricultural experiment station—Cont.**

37th annual report of the New Jersey state agricultural experiment station and the 29th annual report of the New Jersey agricultural college experiment station for the year ending October 31, 1916. *il N J Ag Exp Rep* 1916:1-625 '17

**Poultry husbandry, Department of**

Our state department of poultry husbandry, its organization and activities. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 5 4p F '17

**New Jersey mosquito association**

3d annual meeting, Feb. 17-18, 1916. *J Econ Entom* 9:314-15 Ap '16

**New Jersey state agricultural college****Extension, Division of**

Report of the division of extension in agriculture and home economics, 1916. *il N J Ag Exp Rep* 1916:249-97 '17

2d annual report of division of extension for year ending October 31, 1915. A. Agee. *N J Ag Ext B v* 1, no 8:1-40 '16

3d annual report of division of extension for the year ending October 31, 1916. *N J Ag Ext B v* 1, no 10 71p '16

4th annual report of division of extension for year ending Oct. 31, 1917. *N J Ag Ext B* 1:1-94 N '17

**New Jersey state agricultural society**

Official proceedings of second annual agricultural convention together with some agricultural addresses. *N J Ag Dept B* 5:117-66 '17

Official proceedings of the third annual agricultural convention together with some addresses. *N J Ag Dept B* 11:401-77 '18

**New Jersey state alfalfa association**

Report of the proceedings of the State dairy-men's association and the State alfalfa association. *N J Ag Dept B* 12:485-67 '18

**New Jersey state chamber of commerce**

State chamber of commerce's program of service. G. H. Viehmann. *N J Ag Dept B* 5:160-6 '17

**New Jersey state dairymen's association**

Report of the proceedings of the State dairymen's association and the State alfalfa association. *N J Ag Dept B* 12:485-567 '18

**New Jersey state fair**

Jerseys triumph at Trenton. A. L. Tichane. *Jersey B* 37:1719 O 16 '18

New Jersey state fair. *il Hoard's D* 54:361 O 12 '17

**New Jersey state horticultural society**

41st annual convention, Freehold, Nov. 30-1 Dec 2, 1915. D. T. Hendrickson. *Fruit-Grower* 27:16 Ja 1 '16

42d annual meeting, Burlington, Dec. 12-14. *Nat Stock & F* 40:996 D 30 '16; *Rural N Y* 75:1595 D 30 '16

43d annual meeting, Newark, Dec. 10-12, 1917. R. W. DeBaun. *Market Growers J* 22:10 Ja 1 '18; *Rural N Y* 77:9 Ja 5 '18

Proceedings at its 42d annual session held at Burlington, N.J., Dec. 12-14, 1916. 180p '17 H. G. Taylor, sec., Riverton, N.J.

Summer meeting, Glassboro, July 24. *Rural N Y* 77:956, 979 Ag 10-17 '18

**New Jersey state potato association**

Organized for reasons as set forth in constitution. R. W. DeBaun. *Market Growers J* 22:419 Je 15 '18

**New Mexico. See subhead New Mexico under special subjects, e.g. Agriculture—New Mexico, Dairying—New Mexico****New Mexico agricultural experiment station**

27th annual report, 1915-1916. *N M Ag Exp Rep* 1915-1916:1-64 '17

28th annual report, 1916-1917. *il N M Ag Exp Rep* 1916-1917:1-92 '17

**New Mexico range caterpillars**

New Mexico range caterpillar (hemileuca oliviae) and its control. V. L. Wildermuth and D. J. Caffrey. *il U S Ag B* 443:1-12 '16

**New Orleans, Louisiana**

*See also* Milk supply—New Orleans

**Description**

Floriculture of New Orleans. *il Gard Chron Am* 20:396-7 S '16

**New South Wales**

*See also* subhead Australia under special subjects

**Agricultural bureau**

*See* Agricultural bureau of New South Wales

New year's eve at Gnadenhutten; story. A. Boynton. *Ohio F* 140:614 D 29 '17

**New York (city)**

*See also* Central park, New York city; also subhead New York city under Food control; Food supply; Milk supply

**Streets**

Street tree system for New York city. *il map N Y State Coll For B v* 16, no 8:1-89 '16

**New York (state)**

*See also* subhead New York under special subjects, e.g. Agriculture—New York, Dairying—New York

**Agriculture, Department of**

Educational policy of the agricultural department. C. S. Wilson. *N Y Ag Dept B* 81:1761-4 Mr '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1761-4 '17

Foods and markets bill. *N Y Prod R* 43:637+ F 21 '17

Functions and purposes of the Department of agriculture. C. S. Wilson. *N Y Ag Dept B* 86:2258-64 Ag '16

Hearing on the Wicks bill. *Rural N Y* 76:495 Mr 31 '17

Market bill completed; food and market bill in New York legislature. *N Y Prod R* 43:597+ F 14 '17

Market bill progress; milk dealers protest and criticize. *N Y Prod R* 43:1022 Ap 13 '17

Market commission's report; recommendations for N.Y. state legislation. *N Y Prod R* 43:412 Ja 3 '17

New markets bill being prepared to take the place of Wicks-Grant measure. *N Y Prod R* 43:961 Ap 11 '17

Plain words to the public: the Wicks and Perkins report. *Rural N Y* 76:45 Ja 13 '17

Reorganization of New York Department of agriculture. A. M. Loomis. *Hoard's D* 54:832 Ja 4 '18

Revised Wicks bill at Albany. *Rural N Y* 76:557 Ap 14 '17

Second Wicks bill. *Rural N Y* 76:587 Ap 21 '17

24th annual report for year ending Sept. 30, 1916. *il maps plans N Y Ag Dept Rep* 1916, pts 2 & 3:1-981, 982-2164 '17

We are opposed to the Wicks bill because. *Rural N Y* 76:421 Mr 17 '17

Where are we at: on New York market legislation? *Rural N Y* 76:81 Ja 20 '17

Wicks bill features. *N Y Prod R* 43:868-9 Mr 21 '17

Wicks bill hearing. *N Y Prod R* 43:760 Mr 7 '17

Wicks bill hearing; local trade goes to Albany to protest. *N Y Prod R* 43:833 Mr 21 '17

Wicks committee bill, a cumbersome political measure. *Rural N Y* 76:337 Mr 3 '17

**Census**

Agricultural census for 1918. *il Univ of the State of N Y B v* 4, no 7 Ja 15 '18:1 sheet

Farm census by school children. *Breeder's Gaz* 70:27 Jl 6 '16

Farm census for New York state. *Rural N Y* 75:199 F 5 '16

Farm census in five days. W. D. Lane. *Survey* (112 E. 19th st., N.Y. 10c) 38:155-6 My 19 '17

Farm census of New York state taken by the children in the rural schools. *N Y Ag Dept B* 89:1-32 N '16

New York farm census. A. Kolbe. *Hoard's D* 55:388 Mr 22 '18



**New York (state)—Census—Continued**

- New York state agricultural census. Cornell Countryman 15:330+ Mr '18
- New York's farm census. Nat Stock & F 41: 1275 Mr 9 '18
- New York's hurry-up census. Country Gent 82:971 Je 2 '17
- Preliminary report of the census of the agricultural resources of New York state. (B. 2) 18p My 22 '17 New York state food supply commission, Albany

**Description and travel**

- Farmer's vacation. J: W. Hills. Breeder's Gaz 74:13 Jl 4 '18

**Farms and markets, Department of**

- Act in relation to farms and markets, constituting chapter sixty-nine of the consolidated laws. (Ch. 802, P. L. 1917) 39p '18 N.Y. Dept. of farms and markets, Albany
- Backing the foods and markets department. Rural N Y 75:247 F 12 '16
- Destruction of the foods and markets department. Rural N Y 76:1445 D 22 '17
- Endorses the foods and markets dept. C: G. Porter. Rural N Y 75:119 Ja 22 '16
- Farms and markets law. N Y Farms & Markets Dept Ag B 108:13-49 Je '18
- Governor Whitman and the foods and markets department. C: S. Whitman. Rural N Y 75:1331 O 21 '16
- New York food council. Rural N Y 76:1299 N 10 '17
- Profiteers win in New York. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:23 D 24 '17
- Review of co-operative work. Rural N Y 76: 203 F 10 '17
- State market department. N Y Prod R 41: 493+ Ja 19 '16
- 3d annual report for year ending Dec. 31 1916. 26p '17 N. Y. Dept. of foods and markets, Albany
- Work of the Department; with discussion. J: J. Dillon. N Y Ag Dept B 81:1683-1712 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1683-1712 '17
- Work of the Department. H. A. Emerson. N Y State Fruit Growers' Assn Pro 1916:33-61

**Highways, State commissioner of**

- \* Report, 1916. 917p il map '17 N.Y. State comr. of highways, Albany

**Industries and resources**

See also Forests and forestry—New York

**Law**

- Important nursery tree case. Rural N Y 75: 180 F 5 '16
- Test case in nursery stock. G: C. McMillan. O Judd Farmer 60:31 Mr 18 '16
- New York agricultural conference**
- Farmers' meeting at Albany. Rural N Y 75: 1590 D 30 '16
- New York agricultural conference. H. H. Lyon. Hoard's D 52:886 Ja 12 '17
- New York butter and egg exchange**
- Rules governing transactions on the New York butter and egg exchange, inc. 37p '17 The exchange, New York City
- New York city Mayor's milk committee**
- Report of the Mayor's committee on milk. 85p '17 N.Y. city Bur. of public health educ., Dept. of health
- New York dairymen's league.** See Dairymen's league
- New York federation of agriculture.** See New York state federation of agriculture
- New York florists' club**
- 1st meeting, Jan. 10, 1916. Am Flor 45:1360-1 Ja 15 '16
- Meeting, May 12. Am Flor 50:870 My 18 '18
- New York florists' club. Am Flor 50:53 Ja 26 '18
- Regular meeting, March 11. Am Flor 50:408 Mr 16 '18
- New York food distributors' association**
- Activities of the most extensive organization of food trade. N Y Prod R 45:858 Ap 10 '18

- Distributor's assn. organized. N Y Prod R 45: 112 N 28 '17
- Report of the nominating committee. N Y Prod R 45:215 D 12 '17
- To oppose city competition; resolutions. N Y Prod R 45:846 Ap 10 '18

**New York Guernsey breeders' association**

- Meeting, New York city, May 5, 1917. Hoard's D 53:794 Je 1 '17

**New York mercantile exchange**

- Annual meeting, Jan. 2, 1917. N Y Prod R 43: 376-7 Ja 3 '17
- Looking into exchange calls; federal food administration confers with butter men. N Y Prod R 45:425 Ja 30 '18
- New rules for call sales. N Y Prod R 45:6 N 7 '17
- N. Y. mercantile exchange, 1915. N Y Prod R 41:420-1 Ja 5 '16
- Referee O'Malley's report on the evidence concerning the New York mercantile exchange and others. N Y Prod R 42:297+ Je 14 '16
- Reports of officers and executive committee for the year 1917. N Y Prod R 45:338-9 Ja 9 '18

**New York milk committee**

- Ten years of work, 1907-1916; report. 38p il '16 New York milk com., 105 E. 22d st., N.Y.

**New York milk investigation**

- Federal milk commission report. Rural N Y 77:201 F 9 '18
- Milk price fixed; federal commission for New York City district announces January figures. N Y Prod R 45:336 Ja 9 '18
- New York dairymen present their case. Nat Stock & F 41:912 D 22 '17
- New York milk price investigation. H. H. Lyon. Hoard's D 54:801 D 28 '17
- Personnel of commission. Jersey B 36:1920 D 5 '17
- Price for March fixed at \$3.10 per hundred. Rural N Y 77:383 Mr 9 '18
- Regional milk tribunals; plan of federal food administration to settle market milk prices. N Y Prod R 45:120 N 28 '17
- Report of the federal milk commission. Rural N Y 77:45 Ja 12 '18

**New York retail feed dealers' association**

- Feed dealers and dairymen. W. H. Main. Rural N Y 75:1246 S 23 '16

**New York state agricultural experiment station**

- Director's report for 1916. W. H. Jordan. N Y State Ag Exp B 428:531-58 '16
- Director's report for 1917. W. H. Jordan. N Y State Ag Exp B 445:821-44 '17
- 34th annual report, 1915. N Y State Ag Exp Rep 1915:1-994 '16

**New York state agricultural society**

- Annual convention, Albany, Jan. 15-16. Rural N Y 77:121 Ja 26 '18
- Annual meeting, Albany, Jan. 16-17, 1917. Nat Stock & F 40:1131 Ja 27 '17; Rural N Y 76: 121 Ja 27 '17
- Annual meeting, Albany, Jan. 19, 1916. Rural N Y 75:161 Ja 29 '16
- Annual meeting at Albany. H. H. Lyon. Hoard's D 53:230 Mr 2 '17
- New York agricultural society meeting. H. H. Lyon. Hoard's D 51:239 Mr 3 '16
- New York agriculturists meet. H. H. Lyon. Hoard's D 55:140 F 15 '18
- Proceedings of the 1916 annual meeting. il N Y Ag Dept B 81:1649-1871 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1649-1871 '17
- Proceedings of the 85th annual meeting. N Y Ag Dept B 92:1-175 F '17
- Proceedings of the 86th annual meeting, 1918. il N Y Farms & Markets Dept Ag B 105: 1-227 Mr '18

**New York state breeders' association**

- Annual meeting, Syracuse. Breeder's Gaz 73:161 Ja 24 '18
- Annual meeting, Syracuse, Jan. 8-10, 1917. Nat Stock & F 40:1101 Ja 20 '17; Rural N Y 76:126, 169 Ja 27-F 3 '17
- Annual meeting, Syracuse, Jan. 8-10, 1917. H. G. Gulliver, il Field il 27:98-9 F '17
- New York breeders' meeting in January. H. H. Lyon. Hoard's D 53:96 F 9 '17

**New York state breeders' assn.—Continued**

- New York dairymen meet; joint session of Dairymen's association and state breeders' association, Rochester, Dec. 14-17, 1915. E. E. Reynolds, Ohio F 137:8 Ja 1 '16
- New York state breeders meet. H. H. Lyon. Hoard's D 55:57 F 1 '18
- Proceedings of the annual meeting, Rochester, N. Y., Dec. 14-17, 1915; with by laws and list of members. N Y Ag Dept B 80:1435-1641 F '16; Same. N Y Ag Dept Rep 1916, pt 3: 1439-1641 '17
- Proceedings of the annual meeting, Syracuse, N. Y., Jan. 8-10, 1917. N Y Ag Dept B 94: 1-69 Ap '17

**New York state college of agriculture.** See Cornell university—New York state college of agriculture

**New York state college of forestry.** See Syracuse university—New York state college of forestry

**New York state dairymen's association**

- Annual session, Syracuse, December. H. H. Lyon. Hoard's D 54:870-1+ Ja 11 '18
- By-laws. N Y Farms & Markets Dept Ag B 104:184-6 F '18
- Dairymen and breeders meet at Rochester. Hoard's D 51:1+ Ja 28 '16
- 40th annual convention and exhibition, Syracuse, Nov. 14-16, 1916. N Y Prod R 43:133+ N 22 '16; Jersey B 35:1877 N 29 '16; Nat Stock & F 40:866 N 25 '16
- 40th annual meeting, Syracuse, Nov. 14-16, 1916. E. E. Reynolds, Ohio F 138:544 D 2 '16
- 41st annual convention, Syracuse, Dec. 11-13. N Y Prod R 45:221+ D 19 '17; Ohio F 140: 608 D 29 '17
- 42d annual meeting, Syracuse, Dec. 10-12. N Y Prod R 47:201+ D 18 '18; Nat Stock & F 42:873 D 21 '18
- Improving milk for city use. Ag Digest 2:791 Ja '18
- New York dairymen meet. H. H. Lyon. Hoard's D 52:806 D 29 '16
- New York dairymen meet; joint session of Dairymen's assn. and State breeders' assn., Rochester, Dec. 14-17, 1915. E. E. Reynolds, Ohio F 137:8 Ja 1 '16
- New York state dairymen's association. Rural N Y 75:1504, 1519, 1550 D 2-16 '16
- Proceedings of the annual meeting, 1916, with list of members. N Y Ag Dept B 93:1-99 Mr '17
- Proceedings of the annual meeting, Rochester, N. Y., Dec. 14-17, 1915; with list of members. N Y Ag Dept B 80:1435-1641 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1439-1641 '17
- Proceedings of the forty-first annual meeting, Syracuse, Dec. 11-13, 1917. N Y Farms & Markets Dept Ag B 104:1-92 F '18
- Summer meeting, Warsaw, N. Y., July 25, 1916. Jersey B 35:1230 Ag 9 '16

**New York state draft horse breeders' club**

Work of club. il Field II 27:951 D '17

**New York state fair**

- Another great exhibit of poultry at New York state fair. L. J. Brosemer. il Reliable P J 23:864-5+ N '16
- Great Syracuse fair. N. W. Sanborn. Am P Advocate 25:646-9 O '17
- History of fruit exhibits at state fair. H. B. Knapp. il N Y Ag Dept B 79, pt 1:694-705 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:694-705 '17
- Horses at the New York state fair. H. S. Wende. il N Y Ag Dept Rep 1916, pt 2:193-206 '17
- From N Y Ag Dept Bulletin 76
- Jerseys dominate Syracuse show. A. L. Tichane. il Jersey B 37:1539 S 25 '18
- Large exhibit of all dairy products; work in poultry and egg field. N Y Prod R 44:785+ S 19 '17
- New York state fair. H. H. Lyon. il Hoard's D 56:320-1 O 4 '18
- New York state fair, 1916. N. W. Sanborn. Am Sheep B & W 37:607 O '17
- New York state fair, 1916. N. W. Sanborn. Am P Advocate 24:771-3, 808-9 O '16

- New York state sheep show. il Am Sheep B & W 38:659 O '18
- 1918 state fair. il Field II 28:730-1+ O '18
- Pet stock at New York state fair. H. C. Gilbert. Am P Advocate 26:614 O '18
- Poultry at the fair; list of awards. Am P Advocate 26:606 O '18
- Poultry at the 1918 state fair at Syracuse. A. O. Schilling. Reliable P J 25:661-3 O '18
- 76th annual show Syracuse, N. Y. Breeder's Gaz 70:485-6b S 21 '16
- 77th state fair, Sept. 10-15. Breeder's Gaz 72: 438-41 S 20 '17; Ohio F 140:256 S 22 '17; Hoard's D 54:288+ S 28 '17
- Sheep at the New York state fair. F. D. Ward. N Y Ag Dept B 96:107-14 Je '17
- Sheep show at Syracuse. Am Sheep B & W 36:525 S '16
- Single comb black Minorcas at Syracuse. Am P Advocate 26:595 O '18
- Syracuse sets the pace. H. G. Gulliver. Field II 26:847-9+ O '16
- Week at Syracuse. H. G. Gulliver. il Field II 27:762-3+ O '17

**Laws**

- Manual of laws pertaining to the Department of farms and markets; state fair. N Y Farms & Markets Dept Ag B 108:173-9 Je '18
- New York state federation of agriculture**
- Agricultural federation. G. Hammond; S. J. T. Bush. N Y State Fruit Growers' Assn Pro 1918:101-5
- By-laws. Rural N Y 77:839 Je 29 '18
- Federation of agriculture organized, Albany, June 7; constitution. Rural N Y 77:813 Je 22 '18
- For agricultural union; federation officers resign. N Y Prod R 46:220 Je 5 '18
- Important resolutions. Rural N Y 77:455 Mr 23 '18
- Meeting at Syracuse, Feb. 20. Rural N Y 77:335, 374 Mr 2-9 '18; Ohio F 141:376 Mr 9 '18
- New York agricultural federation. H. H. Lyon. Hoard's D 55:393 Mr 22 '18
- N. Y. state federation of agriculture. Rural N Y 77:943 Ag 3 '18
- New York state federation of agriculture was organized in Syracuse, Feb. 20, 1918, by representatives of farmers' associations of every kind thruout the state. The federation is patterned on the American federation of labor and aims to secure a more adequate representation of farmers' interests, especially in the legislature. A farmers' platform will be framed and work begun to put fifty farmers in the legislature next year. S. J. T. Bush, sec., Monroe, N. Y.
- What causes opposition to it? Rural N Y 77: 983 Ag 17 '18
- New York state food supply commission**
- Act creating the New York state food supply commission. (B. 3) p 13-14 (Je 9) '17 New York State food supply commission, Albany
- Food commission loans tractor. Wallaces' F 42:1012 J1 13 '17
- Mr Betts goes Geo. Ward one better. Rural N Y 77:15 Ja 5 '18
- New York food commission. N Y Prod R 44: 24 My 2 '17
- Prepared and stable rural organization. M. C. Burritt. Cornell Countryman 14:715-16 Je '17
- Program for reducing crop losses from plant diseases and insect pests. A. R. Mann. (B. 3) p 7-9 (Je 9) '17 New York state food supply commission, Albany
- Report of the conference, Syracuse, July 5-6, 1917, for consideration of the problems incidental to the present food crisis. (B. 4) 39p '17 N. Y. State food supply commission, Albany
- Statement of the present plans and activities, under chapter 205 (Act of 1917). (B. 1) 11p (My) '17 The commission, Albany
- United States food administration act and food conservation act of August 10, 1917; New York state food commission law of August 29, 1917; and Agreement for a Federal food board for New York state of November 27, 1917. 53p '17 N. Y. State food supply comm., Agricultural hall, Albany



**New York state fruit growers' association**

- Account of meetings and work. E. C. Gillett. N Y Ag Dept B 79.pt 1:727-30 Ja '16; Same. N Y Ag Dept Rep 1916.pt 2:727-30 '17  
Annual meeting, Rochester, Jan. 3-5, 1917. Rural N Y 76:79, 113, 149, 197 Ja 20-F 10 '17; Nat Stock & F 40:1090 Ja 20 '17; Green's Fruit Grower 37:15 F '17  
Annual meeting, Rochester, Jan. 3-5, 1917. W. H. Jenkins. Fruit-Grower 28:61 Ja 15 '17  
Annual summer meeting, Geneva experiment station, Aug. 31. Ohio F 142:246 S 14 '18  
Convention at Rochester, Ohio F 137:106 Ja 22 '16; Fruit-Grower 27:90 F '16  
Meeting, Rochester, Jan. 9-11. Ohio F 141:110 Ja 26 '18; Rural N Y 77:110, 154, 189, 235 Ja 26-F 16 '18; Green's Am Fruit Grower 38:13 F '18  
Proceedings of the 14th annual eastern meeting, Poughkeepsie, N.Y., Feb. 16-18. N Y State Fruit Growers' Assn Pro 1916:177-333  
Proceedings of the 15th annual meeting, Rochester, N.Y. Jan. 5-7. N Y State Fruit Growers' Assn Pro 1916:1-176  
Proceedings of the 16th annual eastern meeting, Poughkeepsie, N.Y., March 6-8. N Y State Fruit Growers' Assn Pro 1918:133-242  
The association, E. C. Gillett, sec., Penn Yan, N.Y.  
Proceedings of the 17th annual meeting, Rochester, N.Y., Jan. 9-11. N Y State Fruit Growers' Assn Pro 1918:1-131  
The association, E. C. Gillett, sec., Penn Yan, N.Y.  
Summer meeting of the New York state fruit growers. Rural N Y 76:1007 Ag 25 '17

**New York state grange**

- Annual meeting, Jamestown, Feb. 1-4, 1916. J. W. Darrow. Rural N Y 75:304 F 19 '16  
44th annual meeting, Oneonta, Feb. 6-9, 1917. Rural N Y 76:274 F 24 '17  
New York state grange convenes. Nat Stock & F 41:1226 F 23 '18; Rural N Y 77:276 F 23 '18

**New York state Guernsey breeders' association**

- Annual meeting, New York, May 9, 1916. Kimball's D F 14:371 Je 1 '16  
Milepost in Guernsey progress. E. A. Onsrud. il Hoard's D 56:441 O 25 '18

**New York state potato growers' association**

- Annual meeting, Ithaca, Feb. 11-15. E. E. Reynolds. Ohio F 141:312 Mr 2 '18  
New York state potato association. Market Growers J 21:174 O 15 '17  
3d annual convention. Ithaca, Feb. 12-16, 1917. Ohio F 139:322 Mr 3 '17; Market Growers J 20:317 Ap 1 '17

**New York state vegetable growers' association**

- Convention, Ithaca, Feb. 13-15, 1917. P. Work. Market Growers J 20:199-200 Mr 1 '17  
6th annual session, Ithaca, Feb. 8-11. P. Work. il Market Growers J 18:165-6 Mr 1 '16  
8th annual meeting, Ithaca, Feb. 12-14. E. L. Kirkpatrick. Market Growers J 22:184-5 Mr 1 '18

**New York state veterinary medical society**

- 27th annual meeting, Ithaca, N.Y., Aug. 2-4, 1916. Am Vet M Assn J 49:867-74 S '16

**New Zealand**

See also subhead New Zealand under special subjects, e.g. Agriculture—New Zealand, Dairying—New Zealand

**Industries and resources**

Agricultural implements and machinery in Australia and New Zealand. J. Homs. (Special agents ser.—no. 166) 195p il 25c '18  
U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**New Zealand flax grubs. See Flax grubs**

**New Zealand honey-producers' association**

Co-operation in New Zealand. E. G. Ward. Gleanings 44:657 Ag 1 '16

**New Zealand Jersey cattle breeders' association**

Work of the association. R. M. Gow. il Jersey B 36:1110 Jl 18 '17

**New Zealand spinach**

New Zealand spinach. M. G. Kains. Country Gent 81:697 Mr 25 '16

Summer spinach. F. E. Daggett. Market Growers J 19:6 Jl 1 '16

**Newark shade tree commission**

13th annual report 1916. 66p il Shade tree comm., Newark, N.J.

**Newfoundland. See Botany—Newfoundland**

**Newspaper clippings. See Clippings**

**Newspapers**

- Business survey of Iowa country newspapers; relating to prices and business methods. F. W. Beckman. Ia Ag Coll B v 16,no 41: 1-22 Mr 13 '18  
Newspaper—its relationship and duties toward the development of farm and rural communities. C. P. J. Mooney. (In Agricultural extension, p 93-6) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago  
Our home-town weekly. Ohio F 140:460+ N 17 '17  
Rural press and community service. B. Adams. Cornell Countryman 14:654-6 My '17

**Newts**

Western newt or water-dog (notophthalmus torosus) a natural enemy of mosquitoes. A. C. Chandler. bibliog il Ore Ag Exp B 152: 1-24 '18

**Nezara viridula. See Green soldier bugs**

**Niagara falls**

Niagara preservation difficulties. Am Flor 46:114-15 F 5 '16

**Nicotiana**

- Abnormalities in nicotiana. H. A. Allard. il Bot Gaz 65:175-85 F '18  
Abscission of flowers and fruits in the solanaceae, with special reference to nicotiana. J. N. Kendall. bibliog il Cal Univ Pub Botany v 5,no 12 347-428p, 49-53pl '18 (85c)  
Factors influencing flower size in nicotiana with special reference to questions of inheritance. T. H. Goodspeed and R. E. Clausen. bibliog il Am J Bot 2:332-74 Jl '15  
Nature of the F<sub>1</sub> species hybrids between nicotiana sylvestris and varieties of nicotiana tabacum; with special reference to the conception of reaction system contrasts in heredity. T. H. Goodspeed and R. E. Clausen. bibliog il Cal Univ Pub Botany v 5 no 11 301-46p, 37-48 pl '17 (45c)  
Nicotiana sylvestris. il Gard Chron (Lond) 63:194 My 11 '18  
On the partial sterility of nicotiana hybrids made with n. sylvestris as a parent. T. H. Goodspeed and A. H. Ayres. bibliog il Cal Univ Pub Botany v 5, no 9 273-92p '16 (20c)  
On the partial sterility of nicotiana hybrids made with n. sylvestris as a parent; an account of the mode of floral abscission in the F<sub>1</sub> species hybrids. T. H. Goodspeed and J. N. Kendall. bibliog Cal Univ Pub Botany v 5, no 10 293-9p '16 (5c)  
Significant accuracy in recording genetic data. E. M. East. Am J Bot 3:211-22 My '16  
Specific mosaic disease in nicotiana viscosum distinct from the mosaic disease of tobacco. H. A. Allard. il J Ag Research 7:481-6 D 11 '16  
Studies of teratological phenomena in their relation to evolution and the problems of heredity; a study of certain floral abnormalities in nicotiana. O. E. White. bibliog il Am J Bot 1:23-36 Ja '14

**Nicotine spray. See Tobacco spray**

**Night herons**

Visiting a night heron colony. E. L. Jack. il Country Life 30:39 Ag '16

**Night schools**

Progress of the moonlight school movement. C. Poe. Prog F 31:17 Ja 1 '16

**Nighthawks**

Night-hawks and whip-poor-wills. A. A. Allen. il Am For 24:615-18 O '18

Our bird friends. E. S. Jones. Ohio F 137: 192 F 5 '16

**Nipa palm**

\* Nipa palm, new source of alcohol. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:313 Ap '18

**Niter cake**

Utilization of nitre cake in the manufacture of superphosphate. F. T. Shutt and O. E. Wright. *Ag Gaz of Canada* 5:1040-5 N '18

**Nitrate industry**

Apropos of South America. J. E. Pogue. *il Stone & Webster J* (Stone & Webster bldg., Boston \$1 per yr) 21:324-9 N '17

Beginning of the atmospheric nitrate industry in America. O. P. Austin. *Am Fert* 48:33-5 My 11 '18

Brazil and nitrate production. *Pan Am Magazine* (70 5th av, N.Y. 25c) 26:247-8 Mr '18

Government aid to Chilean nitrate producers. L. J. Keena. (*Commerce Reports* no. 252) p 370 (O 27) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Nitrate industry. E. Cuevas. (*In Pan American scientific congress Pro.*, 1915, v. 8, p. 37-68) '17

Production and sale of inorganic nitrates and ammoniates. (*In Report on the fertilizer industry*, p. 17-54) '16 U.S. Federal trade comm., Washington, D.C.

Synthetic nitrogen versus Chilean nitrate. *il South Am* (165 Broadway, N. Y. \$2.50 per yr) 5:24-5 S '17

**Nitrate of soda.** See **Saltpeter**, Chile

**Nitrates**

Alkalis in Colorado (including nitrates). W. P. Headen. *Colo Ag Exp B* 239:1-58 '18

Ashes and nitrates for the spring crops. A. E. Grantham. *Prac F* 114:70 F 15 '18

Cheaper nitrates and phosphates for fertilizers. O Judd Farmer 61:15+ D 2 '16

Effect of soluble nitrogenous salts on nodule formation. E. B. Fred and E. J. Graul. *bibliog Am Soc Agron J* 8:316-28 S '16

Extraction of nitrates from soil. R. S. Potter and R. S. Snyder. *Am Soc Agron J* 8:54-5 Ja '16

Further studies of the nitric nitrogen content of the country rock. R. Stewart and W. Peterson. *il Utah Ag Exp B* 150:1-20 '17

Germany's effort to obtain nitrogenous compounds. *Ag J of India* 12:481-3 J1 '17

Great problem of nitrogen. *Rural N Y* 76:1255 N 3 '17

Influence of nitrates on nitrogen-assimilating bacteria. T. L. Hills. *bibliog J Ag Research* 12:183-230 Ja 28 '18

Investigations relative to the use of nitrogenous plant-foods, 1898-1912. J. G. Lipman and A. W. Blair. *N J Ag Exp B* 288:1-126 '16

New forms of soluble nitrogen. L. L. Van Slyke. *N Y Ag Dept B* 86:2288-91 Ag '16

Nitrate arriving. *Weekly N L* 5:1 My 1 '18

Nitrate at cost. *Weekly N L* 5:1 Ja 30 '18

Nitrate deposits disappointing. *Am Fert* 45:46 N 25 '16

Nitrate deposits in the United States. *Science* (Science Press, Garrison, N.Y. 15c) n s 44:864 D 15 '16

Nitrate position. *Ag J of India* 13:356-8 Ap '18

Nitrate problem. W. R. Manier. *Wallaces' F* 41:1532 N 24 '16

Nitrate supply for the U. S. government. *Ag Digest* 2:655 O '17

Nitrates. H. S. Gale. *Am Fert* 47:44+ S 1 '17

Nitric nitrogen content of the country rock. R. Stewart and W. Peterson. *bibliog il Soil Sci* 2:345-62 O '16

Nitrogen production in Germany. *Am Fert* 46:54 My 12 '17

Nitrogen requirements of the olive tree. L. Petri. *Int R Sci & Prac Ag* 7, no 10:1430-2 O '16

Notes on the presence of nitrates in orchard soils. J. H. Gourley and V. D. Shunk. *N H Ag Exp Tech B* 11:1-31 '16

Our new supply of nitrates. F. P. Stockbridge. *World's Work* (Garden City, N. Y. 25c) 36:191-6 Je '18

Production of nitrates by the United States government. *Int R Sci & Prac Ag* 8, no 11:1081-3 N '17

Relation of weed growth to nitric nitrogen accumulation in the soil. L. E. Call and M. C. Sewell. *bibliog Am Soc Agron J* 10:35-44 Ja '18

Washing out of nitrate from arable soil during the past winter. E. J. Russell and A. Appleyard. *J Bd Ag* 23:22-7 Ap '16; *Abstract. Int R Sci & Prac Ag* 8, no 1:19-21 Ja '17

**Nitric acid**

Making nitric acid from gas. *Am Fert* 47:22-3 Ag 4 '17

**Prices**

Prices fixed on sulphuric and nitric acid. *Am Fert* 49:53 J1 6 '18

**Nitrification**

Action of some oligodynamic elements on nitrogen fixing bacteria. C. Montanari. *Int R Sci & Prac Ag* 8, no 6:838-40 Je '17

Ammonifiability versus nitrifiability as a test for the relative availability of nitrogenous fertilizers. C. B. Lipman and P. S. Burgess. *bibliog Soil Sci* 3:63-75 Ja '17

Assimilation of organic nitrogen by zea mays and the influence of bacillus subtilis on such assimilation. R. O. Brigham. *bibliog il Soil Sci* 3:155-95 F '17

Availability of the nitrogen in Pacific Coast kelps. G. R. Stewart. *bibliog J Ag Research* 4:21-38 Ap '15

Azofication. J. E. Greaves. *bibliog Soil Sci* 6:163-217 S '18

Comparison of the nitrifying powers of some humid and some arid soils. C. B. Lipman and others. *bibliog J Ag Research* 7:47-82 O 9 '16

Cytological studies of azotobacter chroococcum. A. Bonazzi. *bibliog il J Ag Research* 4:225-40 Je '15

Detailed study of effects of climate on important properties of soils. C. B. Lipman and D. D. Waynick. *bibliog il Soil Sci* 1:5-48 Ja '16

Effect of nitrifying bacteria on the solubility of tricalcium phosphate. W. P. Kelley. *J Ag Research* 12:671-83 Mr 11 '18

Effect of some manganese salts on ammonification and nitrification. P. E. Brown and G. A. Minges. *la Ag Exp Research B* 35:1-22 '16; Same, *Soil Sci* 2:67-85 J1 '16

Effects of alkali salts on nitrification. P. E. Brown and E. B. Hitchcock. *bibliog Soil Sci* 4:207-29 S '17

Factors that influence nitrate formation in acid soils. E. B. Fred and E. J. Graul. *bibliog il Soil Sci* 1:317-38 Ap '16

How to get rich lands; nitrogen; additional losses and gains and its effects on plants. T. Butler. *Prog F* 32:532 Ap 28 '17

Influence of potsherds of nitrification in the Indian alluvium. Jatindra Nath Sen. *il J Ag Sci* 9:32-42 Ag '18

Influence of resin and tannin on the balance of nitrogen in the soil. S. Koch and A. Oelsner. *Int R Sci & Prac Ag* 7, no 7:936-7 J1 '16

Influence of salts on the bacterial activities of the soil. J. E. Greaves. *bibliog Soil Sci* 2:443-80 N '16

Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D. A. Coleman. *Soil Sci* 4:345-423 N '17

Influence of some common humus-forming materials of narrow and of wide nitrogen-carbon ratio on bacterial activities. P. E. Brown and F. E. Allison. *Soil Sci* 1:49-75 Ja '16

More mottle-leaf discussion. C. B. Lipman. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:308-9 Mr 30 '17

New Russian studies of nitrogen-fixing bacteria. *Int R Sci & Prac Ag* 7, no 7:941-4 J1 '16

Nitrification and fertility. E. R. Allen. *Ohio Ag Exp B v* 1:153-4 My '16

Nitrification and total nitrogen as affected by crops, fertilizers, and copper sulfate. C. A. Jensen. *Am Soc Agron J* 8:10-22 Ja '16

Nitrification as a measure of the availability of different forms of calcium carbonate when employed as correctors of soil acidity. P. S. Burgess. *Soil Sci* 4:327-36 O '17



**Nitrification—Continued**

- Nitrification in semiarid soils. W. P. Kelley. bibliog J Ag Research 7:417-37 D 4 '16
- Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. bibliog Ala Ag Exp B 196:65-82 '17
- Nitrification of the soil by electricity. R. D. McCreery. J Franklin Inst (Franklin Inst., Philadelphia 50c) 185:647-8 My '18; Electrical Review (515 Monadnock blk., Chicago 15c) 72:932 Je 1 '18
- Nitrogen-assimilating organisms in manure. H. L. Fulmer and E. B. Fred. J Bact 2:423-34 Jl '17
- Observations on the present status of the subject of the availability of nitrogen fertilizers. C. B. Lipman. Am Fert 45:23-6 O 14 '16
- On the nature of ammonification and nitrification. K. Miyake. Soil Sci 2:481-92 N '16
- Oxygen requirements of biological soil processes. T. J. Murray. bibliog J Bact 1:597-614 N '16
- Popular science; Dr Osborn's deductions regarding nitrogen-fixing bacteria. R. S. Breed. Science (Science Press, Garrison, N.Y. 15c) n s 46:238-9 S 7 '17
- Relation between certain bacterial activities in soils and their crop-producing power. P. E. Brown. J Ag Research 5:855-69 Ja 31 '16
- Relation of bacterial transformations of soil nitrogen to nutrition of citrus plants. K. F. Kellerman and R. C. Wright. bibliog J Ag Research 2:101-13 My '14
- Relation of green manures to nitrogen fixation. H. L. Fulmer. bibliog Soil Sci 4:1-17 Jl '17
- Relation of plant to soil. Gard Chron Am 21: 246 Je '17
- Relation of the transformation and distribution of soil nitrogen to the nutrition of citrus plants. I. G. McBeth. bibliog J Ag Research 9:183-252 My 14 '17
- Relation of weed growth to nitric nitrogen accumulation in the soil. L. E. Call and M. C. Sewell. bibliog Am Soc Agron J 10: 35-44 Ja '18
- Significance of nitrification as a factor in soil fertility. P. L. Gainey. bibliog Soil Sci 3: 399-416 My '17
- Some effects of oxygen and carbon dioxide on nitrification and ammonification in soils. J. K. Plummer. bibliog Cornell Ag Exp B 384:305-30 '16; Same. Cornell Ag Exp Rep 1917:305-30 '18
- Some factors affecting nitrate-nitrogen accumulation in soil. P. L. Gainey and L. F. Metzler. bibliog J Ag Research 11:43-64 O 8 '17
- Some factors influencing nitrogen fixation and nitrification. B. Williams. Bot Gaz 62: 311-17 O '16
- Stimulating influence of arsenic upon the nitrogen-fixing organisms of the soil. J. E. Graves. bibliog J Ag Research 6:389-416 Je 12 '16; Summary. Int R Sci & Prac Ag 8,no 2:193-5 F '17
- Sulfonation in relation to nitrogen transformations. J. W. Ames and T. E. Richmond. Soil Sci 5:311-21 Ap '18
- Variability in soils and its significance to past and future soil investigations; a statistical study in nitrification in soils. D. D. Waynick. bibliog Cal Univ Pub Ag Sci v 3, no 9 243-70p '18 (30c)
- Vegetation experiment on the availability of nitrogenous fertilizers in an arid soil. C. B. Lipman and W. F. Gericke. bibliog Soil Sci 2:575-81 D '16
- See also Soil bacteriology; Soil inoculation

**Bibliography**

- Azofication; references. Soil Sci 6:207-17 S '18
- Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D. A. Coleman. Soil Sci 4:423-32 N '17

**Nitrites**

- Presence of nitrites and ammonia in diseased plants. P. A. Bonquet and M. Bonquet. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:2088-93 S '17

**Nitrobenzene**

- Fumigation of animals to destroy their external parasites. W. Moore. J Econ Entom 9:71-80 F '16; Same cond. Wallaces' F 41: 162 F 4 '16; Same cond. Hoard's D 51:106 F 11 '16

**Nitrogen**

- American sources of nitrogen. T. H. Norton. il Scientific Am (233 Broadway, N.Y. 10c) 116:394 Ap 21 '17
- Ammonia and nitric nitrogen determinations in soil extracts and physiological solutions. R. S. Davison. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:600-5 Ag '18
- Biochemical study of nitrogen in certain legumes. A. L. Whiting. Int R Sci & Prac Ag 7, no 10:1426-9 O '16
- Cheapest source of nitrogen. Prog F 33:119 F 2 '18
- Comparative tests of sources of nitrogen on coastal plains soils. T. E. Keitt. S C Ag Exp B 192:1-14 '17
- Comparison of percentages of nitrogen in tops and roots of head lettuce plants. H. A. Noyes. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:621-4 Ag '18
- Conserving farm nitrogen. H. E. Mern. J Ag (Quebec) 21:xi Ag '17
- Determination of loosely bound nitrogen as ammonia in eggs. N. Hendrickson and G. C. Swan. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10: 614-17 Ag '18
- Facts about fertilizers; nitrogen: function, availability, application. T. Butler. Prog F 32:152 F 3 '17
- Facts about fertilizers; nitrogen: where obtained and the forms in which it is used. T. Butler. Prog F 32:96 Ja 27 '17
- Fermentation of manure treated with sulfur and sulfates: changes in nitrogen and phosphorus content. J. W. Ames and T. E. Richmond. bibliog Soil Sci 4:79-89 Jl '17
- Fertilizer needs of the United States. H. J. Wheeler. Am Fert 48:38-41 Mr 30 '18
- Fertilizer value of city waste. W. J. O'Brien and others. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:49-54, 513-18 Ja, My '17
- Fixation of nitrogen in faeces. E. H. Richards. J Ag Sci 8:299-311 Je '17
- German nitrogen industry and the future of German agriculture. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:405-6 Ap '17
- Great problem of nitrogen. Rural N Y 76:1255 N 3 '17
- Growing or buying nitrogen. H. H. Bereman. Hoard's D 51:443 Mr 31 '16
- How to get rich lands; nitrogen—how to get it. T. Butler. Prog F 32:506 Ap 21 '17
- Liquid manure and the nitrogen supply. J. B. Abbott. il Ohio F 137:621 Ap 29 '16
- Mineral industries of the United States; fertilizers. J. E. Pogue. (B. 102, pt. 2, p. 10-15) U.S. National museum; 5c Supt. of doc.
- Nitrate of soda and cottonseed meal compared as sources of nitrogen. T. Butler. Prog F 33:159 F 9 '18
- Nitrogen. Am Fert 47:29-31 N 10 '17
- Nitrogen. P. H. S. Kempton. Contemporary Review (249 W. 13th st, N.Y. 50c) 113:322-4 Mr '18
- Nitrogen for peace and war. Country Gent 81:1331 Jl 8 '16
- Nitrogen from legumes. H. G. Bell. (Soil improvement com pamph 18) 25p '16 Nat. fertilizer assn., Chicago
- Nitrogen in plants. F. C. Robb. il Fruit-Grower 28:278 Je 1 '17
- Nitrogen of processed fertilizers. E. C. Lathrop. U S Ag B 158:1-24 '14
- Nitrogen, phosphorus and lime. Wallaces' F 41:330 Je 30 '16
- Nitrogen problem. E. E. Blough. Kimball's D F 14:574 S 15 '16
- Nitrogen products committee. J Bd Ag 24: 1254-7 F '18

**Nitrogen—Continued**

- Nitrogen question. W. S. Landis. *Am Fert* 44:21-4 My 13 '16
- Nitrogen: what it is and how to get it. T. Butler. *Prog F* 31:179 F 5 '16
- Nitrogen's part in nature. F. Rowlinson. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:115 F 23 '18
- Organic nitrogen compounds of soils and fertilizers. E. C. Lathrop. *J Franklin Inst* (Franklin Institute, Philadelphia 50c) 183: 169-206, 303-21, 465-98 F-Ap '17
- Plant food materials in the leaves of forest trees. P. Serex, jr. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39:1286-96 Je '17
- Potatoes grown at Aroostook farm on fertilizers containing ammonia (nitrogen) in different forms. *Maine Ag Exp B* 269:37-9 '18
- Some factors influencing nitrogen fixation and nitrification. B. Williams. *Bot Gaz* 62: 311-17 O '16
- Some factors influencing the quantitative determination of nitric nitrogen in the soil. J. E. Greaves and C. T. Hirst. *bibliog il Soil Sci* 4:179-206 S '17
- Sources of nitrogen compounds in the United States. C. G. Gilbert. (Smithsonian Inst. Pub. 2421) 12p '16 Smithsonian Institution, Washington, D.C.
- Sources of our nitrogenous fertilizers. F. W. Brown. *U S Ag Yearbook* 1917:139-46; Same. *Separate* 729; Same. *Am Fert* 48:58+ My 25 '18
- Study of methods of estimation of metabolic nitrogen. E. B. Forbes and others. *J Ag Research* 9:405-11 Je 18 '17
- Trade in nitrogenous materials. A. Bertrand. *Int R Sci & Prac Ag* 8,no 7:980-4 Jl '17
- Twenty years' work on the availability of nitrogen in nitrate of soda, ammonium sulfate, dried blood and farm manures. J. G. Lipman and A. W. Blair. *il Soil Sci* 5:291-301 Ap '18
- Uniform nitrogen determination in cotton-seed meal. J. S. McHargue. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:533-5 Jl '18

See also Soils—Nitrogen content

**Bibliography**

- Literature of the nitrogen industries, 1912-1916. H. R. Hosmer. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:424-38 Ap '17
- Organic nitrogen compounds of soils and fertilizers. E. C. Lathrop. *J Franklin Institute*. (Franklin Institute, Philadelphia. 50c) 183: 489-98 Ap '17

**Fixation**

- Agricultural conquest of the atmosphere. C. E. Thorne. *J Ag* (Quebec) 19:207 Mr '16
- Air nitrates corporation. *Am Fert* 49:70a Jl 6 '18
- Air nitrogen. *Am Fert* 48:28 Je 8 '18
- Effect of different plant tissues on the fixation of atmospheric nitrogen. T. J. Murray. *Va Ag Exp Tech B* 15:93-102 '17; Same. *Va Ag Exp Rep* 1915-1916: 93-102 '17
- Extracting nitrates from the air. E. J. Crane. *il Ohio F* 142:113-14 Ag 10 '18
- Fertilizer from the air. E. J. Pranke. *Cornell Countryman* 14:563-4 Ap '17
- \$50,000,000 plant in eight months. *Am Fert* 49:36 N 9 '18
- Fixation of atmospheric nitrogen; abstract. *Electrical World* (10th av at 36th st, N.Y. 10c) 71:1095-6 My 25 '18
- Fixation of nitrogen. H. Leffmann. *J Franklin Inst* (Franklin Inst., Philadelphia 50c) 185:852-3 Je '18
- Fixation of nitrogen as cyanide. *Am Fert* 46:37-9 Ap 14 '17
- Germany's great progress in nitrogen fixation from the air. *Sci Am* (233 Broadway, N. Y. 10c) 118:204 Mr 2 '18
- Government nitrate plant. *Am Fert* 47:48+ S 15 '17
- Important developments in nitrogen fixation. *Metallurgical & Chemical Eng* (10th av at 36th st, N. Y. 25c) 18:1-2 Ja 1 '18

Influence of plant residues on nitrogen fixation and on losses of nitrate in the soil. H: B. Hutchinson. *bibliog J Ag Sci* 9:92-111 Ag '18

Nitrogen and its fixation. W. D. Benedict. *Penn State F* 11:162-3 My '18

Nitrogen fixation. *Ag J of India* 13:505-21 Jl '18

Nitrogen from the air. J. Orchiston. *J Ag New Zealand* 16:21-6 Ja '18

\* Recent developments in the fixation of atmospheric nitrogen. G: W. Sears. *School Sci and Math* (2059 E. 72d place, Chicago 30c) 18:527-33 Je '18

See also Nitrification; Soil inoculation

Nitrogen in soils. See Nitrification; Soil inoculation; Soils—Nitrogen content

**Nitrolim**

Granular nitrolim and nitrate of lime. *J Bd Ag* 22:1296-7 Mr '16

Use of granular nitrolim. B. P. Davis. *J Bd Ag* 22:1287-8 Mr '16

**Nolina loderi**

New plants; *nolina loderi*. N. E. Brown. *il Gard Chron* (Lond) 62:66 Ag 18 '17

**Nomadism**

Feebly inhibited, by C: B. Davenport. *Review. J Heredity* 7:169-72 Ap '16

**Nomenclature.** See Names; also subhead Nomenclature under subjects, e.g. Bacteriology—Nomenclature, Botany—Nomenclature, Fruit—Nomenclature, Vegetables—Nomenclature, Wheat—Nomenclature

**Non-partisan league, National.** See National non-partisan league

**Normal schools****Curriculum**

Normal school courses. *J Home Econ* 9:218-19 My '17

**North Carolina**

Prevention and control of erosion in North Carolina, with special reference to terracing. F. R. Baker. *il map N C Ag Exp B* 236: 1-27 '16

See also subhead North Carolina under special subjects, e.g. Agriculture—North Carolina, Dairying—North Carolina

**Industries and resources**

Some facts and figures about North Carolina and her natural resources. 2d ed 51p '17 N. C. geological and economic survey, Chapel Hill

See also Forests and forestry—North Carolina

**North Carolina agricultural experiment station**

39th annual report for the year ended June 30, 1916; including bulletins nos. 232, 233, 234, 235, 236 N C Ag Exp Rep 1916 various paging

40th annual report for the year ended June 30, 1917; including bulletin 237 and technical bulletins 11, 12 and 13. *il N C Ag Exp Rep* 1917 various paging

**North Carolina drainage association**

Proceedings of the 9th drainage convention, Beihaven, Nov. 29-Dec. 1, 1915. (Econ. paper no. 45) 81p '17 N.C. Geological and economic survey, Chapel Hill

**North Carolina state college of agriculture and engineering**

In the land of the long-leaf pine; views. *Country Gent* 81:1157 Je 3 '16

**Extension service**

2d annual report for the year ended June 30, 1916. N C Ag Ext Rep 1916:1-77 '17

3d annual report; year ended June 30, 1917. *il N C Ag Ext Rep* 1917:1-119 '18

**North Dakota**

\* Where the people rule: North Dakota, a state where democracy is safe. 26p n.d. Nat. non-partisan league, St Paul

See also subhead North Dakota under special subjects, e.g. Agriculture—North Dakota, Dairying—North Dakota



**North Dakota—Continued**

**Industries and resources**

Getting together to save a state. W. A. Dyer. Country Life 29:58+ F '16

**Politics and government**

Handing politicians a lemon. R. Harmon. Non-partisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:9-10 N '27 '17

See also National non-partisan league

**North Dakota agricultural college**

**Agricultural extension department**

Agricultural extension report of director, 1916.

il map N D Ag Ext B 6:1-23 '16

Report of director, 1917. T: P. Cooper. il N D Ag Ext B 13:1-28 '17

**North Dakota agricultural experiment station**  
Work of the experiment station; report of director. T: P. Cooper. 21p il map '16 N. D. ag. experiment station, Agricultural College, N. D.

**North Dakota biological station, Devil's lake**  
Work of the North Dakota biological station at Devil's lake. R. T. Young. il map Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:497-508 D '17

**North Dakota cooperative auditing circle**  
By-laws. Coop Manager & F 6:32-4 J1 '17

**North Dakota farmers' grain dealers' association**

Convention, Bismarck, March 5-7, 1918. Am Coop J 13:342-6 Ap '18; Coop Manager & F 7:34-9 Ap '18

Convention, Fargo, Feb. 28-March 1, 1917. Am Coop J 12:580 Ap '17; Coop Manager & F 6:67-74 Mr '17

5th annual convention, Grand Forks, N. D., Feb. 29-Mar. 2, 1916. Am Coop J 11:797-802 Ap '16

7th annual convention, Bismarck, March 5-7; advance program. Coop Manager & F 7:28 Mr '18

**North Dakota farmers' non-partisan league.** See National non-partisan league

**North Dakota grain dealers' association**

Meeting, Fargo, Oct. 2. Coop Manager & F 8:59 N '18

**North Dakota grange**

Grangers indorse the league. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:8 D 24 '17

**North Dakota seed laboratory**

Notes on the work of the year 1916-17 at the North Dakota seed laboratory. O. A. Stevens. Assn Offic Seed Analysts Pro 1916-1917:67-9 '17

**North Dakota state fair**

Fair at Grand Forks, July 17-21, 1917. Breeder's Gaz 72:115 J1 26 '17

1918 state fair at Fargo, July 15-20. Breeder's Gaz 74:125 J1 25 '18

North Dakota state fair. il Breeder's Gaz 70:133 J1 27 '16; Kimball's D F 14:502 Ag 15 '16

**North Lake farm management club**

Farm management club at North Lake. Banker-F 5:2-4 Ja '18

North Lake farm management club. F. Hall. Hoard's D 54:764-5 D 21 '17

**Northern fertilizer manufacturers**

Meeting, Philadelphia, Oct. 19, 1917. Am Fert 47:21-4 O 27 '17

**Northern Great Plains official horticulturists association**

Organization formed at meeting at Northern Great Plains field station, Mandan, N. D., Aug. 23-24. Minn Hort 46:417-19 N '18

**Northern Ohio dairymen's protective league**

Enlargement of the producers' territory. J: Gould. Hoard's D 53:435 Ap 6 '17

Northern Ohio dairymen. Nat Stock & F 41:36 Mr 31 '17

Northern Ohio dairymen win. J: Gould. Rural N Y 76:562 Ap 14 '17

**Northrup, King & co.**

Northrup, King and co's. new giant establishment. il Coop Manager & F 7:78 D '17

**Northwest land products exposition**

1st exhibition, Seattle, Oct. 4-14, 1916. Better Fruit 11:12 S '16

**Northwest live stock show**

Show at Lewiston, Idaho, Nov. 8-15. Breeder's Gaz 72:1037 D 6 '17

**Northwestern commission on land settlement for returning soldiers**

\* Commission on land settlement for soldiers. Municipal J (243 W. 39th st, N.Y. 10c) 45:311 O 19 '18

**Northwestern fruit exchange**

Another advertising objection answered. C. Gano. il Am Bee J 58:50 F '18

**Northwestern grain dealers' association**

3d annual convention, Yellowstone national park, July 11-13. Coop Manager & F 6:38-9+ Ag '17

4th annual convention, Helena, Mont., July 26th, 1918. Coop Manager & F 8:60-1 S '18

**Northwestern live stock conference, St Paul**

Northwestern live stock conference at St Paul, May 1. Coop Manager & F 6:37-9 Je '17

**Norway.** See subhead Norway under Agriculture, Agriculture, Cooperative, Food control, Food supply, Forests and forestry, Horses

**Norwegians as farmers**

Norwegians in Iowa. Wallaces' F 43:671 Ap 19 '18

**Norwich, Vermont**

Here, where the world is quiet. A. V. Carrick. il Country Life 35:53-5 D '18

**No-see-um flies.** See Punkies

**Nose bleed**

Hereditary nose bleed. W. C. Lane. J Heredity 7:132-4 Mr '16

**Nosema apis.** See Bees—Diseases and pests

**Nova Scotia.** See Botany—Nova Scotia; also subhead Canada under main divisions

**Nova Scotia agricultural college**

First agricultural school in Nova Scotia. M. Cumming. il Ag Gaz of Canada 3:815-21 S '16

**Nozzles**

New spray nozzle. C. W. Woodworth. il J Ag Research 5:1177-82 Mr 20 '16

**Nurse crops**

Nurse crop for newly sown grasses. Wallaces' F 41:210 F 11 '16

Nurse crop with clover. Country Gent 81:634 Mr 18 '16

**Nurseries**

Child's own room. A. R. Fairman. il Country Life 33:53-5 D '17

How shall we decorate the nursery. il Country Life 31:82+ Ja '17

**Nurseries (horticulture)**

Crime of being a nurseryman. W. D. Somerville. Am Flor 45:1398 Ja 15 '16

Development of American products. C: W. Ward. Am Flor 51:246 Ag 24 '18

Fungous flora of pine seed beds. A. E. Rathbun. bibliog Phyt 8:469-83 S '18

Improved form of nursery seed bed frame. D. R. Brewster. For Quar 14:183-7 Je '16

Independence of American nurseries. D: Fairchild. il Am For 23:213-16 Ap '17

List of Wisconsin nurseries—1916-17. Wis Ag Dept C 5:1-5 '16

Loi n. 2585 crdonnant aux conseils (administratifs) provinciaux de créer et d'entretenir des pépinières et autorisant les conseils municipaux à en établir partout où l'intérêt public l'exigerait aux Iles Philippines. Int Yearbook Ag Leg 1916:569 '17

Nursery industry in New York. S: Fraser. il N Y Ag Dept B 79,pt 1:646-61 Ja '16;

Same. N Y Ag Dept Rep 1916,pt 2:646-61 '17

Nurseryman, his agent and the public. W. F. Massey. Ohio F 139:150 F 3 '17

Philadelphia nurseries. il Am Flor 48:1206 Je 23 '17

Quebec busy planting spruce and pine—a trip to the nurseries. il Am For 24:610-11 O '18

**Nurseries, Day.** See Day nurseries

**Nursery inspection.** See Horticultural inspection

**Nursery stock**

- American products development. *Am Flor* 49: 386-7 S 8 '17
- Comparative value of pedigree plants. C. B. Waldron. *Minn Hort* 45:135-7 Mr '17
- Eight tests for fruit trees. *Country Gent* 81: 746 Ap 1 '16
- Embargo on nursery stock, bulbs, etc. *Am Flor* 50:852 My 11 '18
- Experience with misit trees. A. H. de Graff. *Rural N Y* 76:1414 D 15 '17
- Fall heeling-in for spring planting. L. W. C. Tuthill. *il Gard M* 24:102-3 O '16
- Fall planting. *Field* 11 27:679 S '17
- Fall planting of orchards. J. P. Stewart. *il Green's Am Fruit Grower* 37:3-4 O '17
- Foreign regulation of nursery-stock sales. *Am Flor* 46:456 Mr 18 '16
- Fruit trees true to name. W. C. Weld. *Rural N Y* 75:159 Ja 29 '16
- Growing fruit for home use in the great plains area; care and planting of nursery stock. H. P. Gould and O. J. Grace. *il Farmers' B* 72:7-15 '16
- High-priced nursery stock. *Fruit-Grower* 27: 206 Mr 15 '16
- Hollanders opposed to auctions. *Am Flor* 47: 1322 D 30 '16
- Important nursery tree case. *Rural N Y* 75: 180 F 5 '16
- Improvement of nursery stock. A. L. Wisker. *Cal State Comm Hort B v* 5:430-3 D '16; Same. *Cal State Comm Hort B v* 6:199-202 My '17; Discussion. L. Coates. *Cal State Comm Hort B v* 6:202-7 My '17
- Is crown gall injurious to apple nursery stock? S. B. Fracker. *J Econ Entom* 11:133-5 F '18
- Lime and nursery stock. H. J. Wheeler; U. P. Hedrick. *Rural N Y* 75:108 Ja 22 '16
- Nursery. L. Darling. *J Dept Ag S Australia* 21:354-9 N '17
- Nursery practice on the national forests. C. R. Tillotson. *il U S Ag B* 379:1-86 '17
- Nursery stock. *il J Dept Ag Victoria* 16:111-14 F '18
- Nursery stock. *Prac F* 113:75 F 15 '17
- Nursery stock for school planting. *il Ag Gaz of Canada* 4:802-9 S '17
- Nursery stock legislation. *Am Flor* 48:98 Ja 27 '17
- Nursery stock shipments restricted. C. L. Marlatt. *Am Flor* 46:646 Ap 8 '16
- Nursery stock true to name. O Judd Farmer. *60:19 F 12 '16*
- Nurseryman's side of tree insurance. S. Fraser. *Rural N Y* 75:684 Ap 29 '16
- Nurseryman's story. W. Ford. *Country Gent* 81:708 Mr 25 '16
- Ordering plants and the selection of varieties. *Am Fruit Grower* 38:19 D '18
- Plant now—or wait till spring? M. G. Kains. *il Gard M* 26:51-2 S '17
- Plant quarantine legislation. *Phyt* 8:170-2 Ap '18
- Prohibition of importation of nursery stock. *Am Flor* 24:241-2 Ap '18
- Relative merits of different rootstocks; with discussion. W. L. Howard. *Cal State Comm Hort B v* 7:20-6 Ja '18
- Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. *il Maine Ag Dept B v* 15:1-33 S '16
- State nur. stock and interstate commerce. C. N. Smith. *Am Flor* 46:321-3 Mr 4 '16
- Test case in nursery stock. G. C. McMillan. O Judd Farmer. *60:31 Mr 18 '16*
- Trees untrue to name. F. A. Waugh. *Country Gent* 81:25 Ja 1 '16
- Value of a currant bush. *Rural N Y* 76:958 Ag 11 '17
- What size nursery trees? A. H. Hendrickson. *Cal State Comm Hort B v* 7:171-4 Ap '18
- Will plants, vines and trees continue to advance in price? *Am Fruit Grower* 38:14 O '18
- With the growers; Storrs & Harrison co., Painesville, O., growers at Cleveland, O., and Baltimore, Md. *il Am Flor* 48:435-7 Mr 17 '17

**Diseases and pests**

- Discovery of the European ermine moth (*yponeuteuta*) on nursery stock imported into Canada. C. G. Hewitt. *il Ag Gaz of Canada* 4:552-4 Jl '17
- Dusting and spraying nursery stock. V. B. Stewart. *il Cornell Ag Exp B* 385:337-61 '17; Same. *Cornell Ag Exp Rep* 1917:337-61 '18
- Dusting nursery stock for the control of leaf diseases. V. B. Stewart. *il Cornell Ag Exp C* 32:1-10 '16; Same. *Cornell Ag Exp Rep* 1916:1a-10a '17
- Effect of hydrocyanic-acid gas under vacuum conditions on subterranean larvæ. E. R. Sasscer and H. L. Sanford. *J Ag Research* 15:133-6 O 21 '18
- \* Sodium cyanide as a fumigant. G. M. Bentley. (B. 18) 12p *il '16 Tenn. State bd. of entomology, Knoxville*

**Transportation**

- \* Shipping instructions for nurserymen (revised to October, 1916). G. M. Bentley. (B. 16) 32p '16 *Tenn. State bd. of entomology, Knoxville*
- \* Synopses of state laws regulating nursery shipments (revised to July 1, 1917). G. M. Bentley. (B. 21) 31p '17 *Tenn. State bd. of entomology, Knoxville*

**Nursery stock inspection.** See *Horticultural inspection*

**Nurserymen****Directories**

- \* Report of nursery inspections and a list of Tennessee nurserymen for 1917-1918. G. M. Bentley. (B. 23) 24p '17 *Tenn. State bd. of entomology, Knoxville*

**Nurserymen, American association of.** See *American association of nurserymen*

**Nurserymen's associations.** See *American association of nurserymen; Illinois nurserymen's association*

**Nurses and nursing**

- Caring for the sick in the home. *il Purdue Ag* 10:143-4+ My '16
- County hospital and the visiting nurse. M. H. Talbott. *il Country Gent* 81:1311 Jl 1 '16
- Farm woman as nurse. *Prog F* 32:408 Mr 31 '17
- Girl who earns her own living: nursing. *Prog F* 31:155 Ja 29 '16
- Illinois visiting nurse association. Mrs H. M. Woodward. *Ohio F* 137:115 Ja 22 '16
- Keeping everlastingly at it. H. C. Bennett. *il Country Gent* 82:468-9 Mr 3 '17
- Lesson in nursing the sick. Mrs W. N. Hutt. *Prog F* 31:1130 S 23 '16
- Marriage rate of nurses. *J Heredity* 8:510-11 N '17
- Nurse we didn't want. H. C. Bennett. *il Country Gent* 81:1832-3 O 14 '16
- Plunkett nurses. Wallace' F 41:1152 S 1 '16
- Public health nurse and her value to the community. H. Fulmer. *il Ill Farmers Inst Household Sci* 1917:25-8 '18
- Red cross and rural nursing. F. F. Clement. *il Ohio F* 137:114 Ja 22 '16
- Rural nursing. K. M. Olmstead. (*In Trans. Am. assn. for study and prevention of infant mortality*, 1916, p. 242-52) \$3+postage '17 G. B. Knipp, sec., 1211 Cathedral st., Baltimore
- Tallett bill for rural nurses. *Rural N Y* 77: 582 Ap 20 '18
- 25,000 nurses required. Mrs W. N. Hutt. *Prog F* 33:936 Ag 24 '18
- What money cannot buy. H. C. Bennett. *Country Gent* 81:2146-7+ D 16 '16

**Study and teaching**

- Successful course in home nursing. E. L. Cowan. *J Home Econ* 8:612 N '16

**Nut grass**

- Questions about cocoa or nut grass. T. Butler. *Prog F* 33:855 Ag 3 '18

**Nut margarin**

- Nut margarine looms large. O Judd Farmer. *64:15 Ap 6 '18*

**Nutcrackers**

- Old wooden nutcrackers. E. F. Peacock and M. M. Moore. *il Country Life* 31:86 Mr '17



**Nuthatches**

Nuthatches and the chickadees. A. A. Allen. *il Am For* 23:663-7 N '17

**Nutrition**

- Biochemical analysis of nutrition. C. L. Alsberg. *Scientific Am Sup* (233 Broadway, N.Y. 10c) \$3:178-9 Mr 24 '17
- Changes in the food supply and their relation to nutrition. L. B. Mendel. (*In Pan American scientific congress Pro.*, 1915, v. 10, p. 112-26) '17
- Commercial edible fats. D: Klein. *Creamery* 6:73-4 O '17
- Concentrates for rations for farm animals. E. S. Savage. *il Field* 11 26:1023-4+ D '16
- Defective nutrition and the standard of living. F. A. Manny. *il Survey* (112 E. 19th st, N.Y. 25c) 36:698-701 Mr 30 '18
- Efficiency of certain milk substitutes in calf feeding. R. H. Carr and others. *Int R Sci & Prac Ag* 8,no 5:768-70 My '17
- Feeding the dairy cow. A. A. Borland. *Pa Ag Dept B* 283:127-44 '16
- \* Food chemistry in the service of human nutrition. H. C. Sherman. *bibliog J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:383-90 My '18
- Food value of different types of bread. A. Pugliese. *Int R Sci & Prac Ag* 7,no 3:427-8 Mr '16
- Formation of albumen in the animal body at the expense of nitrogenous non-albuminoid substances. *Int R Sci & Prac Ag* 7,no 4: 550-1 Ap '16
- Fundamental basis of nutrition, by G. Lusk. *Review. J Home Econ* 8:304-6 Je '16
- How an animal grows. H. J. Waters. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 510-17) '17
- How strictly vegetable diets influence growth and reproduction of swine. E. B. Hart. *Hoard's D* 56:548 N 15 '18
- \* Influence of heat on growth-promoting properties of food. E. V. McCollum. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:191-4 Mr '18
- Investigations into nutritional deficiency. E. Weill and others. *Int R Sci & Prac Ag* 7,no 6:850 Je '16
- Malnutrition through errors in the combination of foods; with discussion. E. V. McCollum. *Assn Am Dairy Food & Drug Offic Pro* 1916:61-8
- Milk necessary for the nation's welfare. E. B. Hart and H. Steenbock. *il Hoard's D* 55:836-9 Je 7 '18
- Mineral nutrients in practical human food. E. B. Forbes. *J Home Econ* 8:122-30 Mr '16
- Same cond. *Ohio Ag Exp B* v 1:123-8 Ap '16
- Minerals in nutrition. H. Mason. *Ohio F* 139: 334 Mr 3 '17
- Net energy values for ruminants. H: P. Armsby and J. A. Fries. *Pa Ag Exp B* 142: 1-20 '16
- Nutrition. *Ontario Ag Dept B* 253:12-21 '17
- \* Nutrition and malnutrition. *Am J Pub Health* (126 Massachusetts av, Boston \$4 per yr.) 8:130 F '18
- Nutrition of the honeybee. R. A. Dutcher. *Am Bee J* 58:92-3, 129 Mr-Apr '18
- Nutritive value of eggs. H. D. Pease. *N Y Prod R* 43:1018; 44:22 Ap 18, My 2 '17
- Our daily food. L. Comstock. *Mass Ag Ext B for Farm Women* 4:1-8 '16
- Principles of animal nutrition. J. A. McLean. *Jersey B* 35:1921, 1956-7 D 6-13 '16
- Principles of nutrition and nutritive value of food. W. O. Atwater. *Farmers' B* 142:1-46 '18 (rev.)
- Protein needs of the body. H. Mason. *Ohio F* 139:598 Ap 21 '17
- Relation of the dairy industry to the public health. E. V. McCollum. *Hoard's D* 54:756 D 21 '17
- Role of water in a dairy cow's ration. C. Larsen and others. *S D Ag Exp B* 175:649-80+ '17
- Scientific basis of rationing. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:35 J1 20 '18
- So-called vitamins of food accessories and their importance in the nutrition of animals. F. W. Christensen. *N D Ag Exp Spec Food B* v 4, no 12 p 331-46 '17

Soil fertility considerations in the feeding of hogs and milch cows. E. B. Forbes. *Ohio Ag Exp B* v 1:351-2 N '16

Some essential facts regarding nutrition. J: P. Street and E. H. Jenkins. *Conn State Ag Exp B* 196:1-15 '17

Some nutritive properties of corn. J. S. Hughes. *bibliog il Kan Ag Exp Tech B* 5: 1-39 '18

Some recent investigations in nutrition at the University of Wisconsin. R. Loughlin. *J Home Econ* 9:546-9 D '17

Value of fruit in human nutrition. S. J. Crumbine. *Better Fruit* 13:7-8 D '18

Value of milk in nutrition. E. B. Hart. *il Hoard's D* 52:756 D 22 '16

Vitamines and nutrition. H. Steenbock. *il Sci Monthly* (Science Press, Garrison, N. Y. 30c) 7:179-88 Ag '18

War bread (unsalted lime bread). R. Dubois. *Int R Sci & Prac Ag* 9,no 1:14 Ja '18

What and how much should we eat? T: B. Osborne. *Atlantic* (41 Mt Vernon st, Boston 35c) 122:332-41 S '18

What to teach the public regarding food values. E. V. McCollum. *J Home Econ* 10: 195-296 My '18

*See also Diet; Digestion; Food; Metabolism; Vitamins*

**Bibliography**

New lights on feeding problems. F. Rose. *N Y Farms & Markets Dept Ag B* 97:104-7 J1 '17

Report of committee to assemble current literature on subject of nutritional disorders, the result of so-called devitalized foods. S. J. Crumbine. *Assn Am Dairy Food & Drug Offic Pro* 1916:80-6

**Experiments**

Amounts of fertilizing constituents excreted by two-year old steers. H. W. Mumford and others. *Am Soc Animal Production Pro* 1915-1916:233-41 '17

Associative digestibility of corn silage and cottonseed meal in steer rations; pt 2. P. V. Ewing and others. *il Ga Ag Exp B* 125:151-64 '17

Availability of the energy of food for growth. C. R. Moulton. *Int R Sci & Prac Ag* 9,no 4:472-4 Ap '18

Bearing of recent experiments in animal nutrition on the food value of milk. J. F. Lyman. *Creamery* 6:19-20 D '17; 7:30-2 Ja '18

Comparative digestibility of palm kernel cake, extracted palm kernel meal and undecorticated cottonseed cake. C: Crowther and H. E. Woodman. *il J Ag Sci* 8:429-47 D '17

Comparative toxicity of cottonseed products. W. A. Withers and F. E. Carruth. *bibliog J Ag Research* 14:425-52 S 2 '18

Composition and digestibility of Sudan grass hay. W. G. Gaessler and A. C. McCandlish. *bibliog Ia Ag Exp Research B* 46:67-75 '18

Dietary deficiencies of the maize kernel. E. V. McCollum and others. *Int R Sci & Prac Ag* 8,no 2:262-3 F '17

Digestibility and utilization of egg proteins. W. G. Bateman. *Int R Sci & Prac Ag* 9,no 5:533-9 My '18

Digestibility of corn silage, velvet-bean meal, and alfalfa hay when fed singly and in combinations. P. V. Ewing and F. H. Smith. *J Ag Research* 13:611-18 Je 17 '18

Digestibility of dried yeast. C: Crowther and H. E. Woodman. *J Ag Sci* 8:448-50 D '17

Digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. *U S Ag B* 310:1-22 '15

Digestibility of some seed oils. A. D. Holmes. *U S Ag B* 687:1-18 '18

Digestibility of some vegetable fats. C. F. Langworthy and A. D. Holmes. *U S Ag B* 505:1-19 '17

Digestibility of sugars, starches, and pentosans of roughages. G. S. Fraps. *Tex Ag Exp B* 196:1-36 '16

Digestion experiments with sheep. J. B. Lindsey and others. *Mass Ag Exp B* 181: 241-335 '17

Dr McCollum answers inquiries. E. V. McCollum. *Hoard's D* 55:1 Ja 25 '18

**Nutrition—Experiments—Continued**

- Effects of feeding the proteins of the wheat kernel at different planes of intake. E. V. McCollum and others. *Int R Sci & Prac Ag* 8,no 2:261-2 F '17
- Energy values of hominy feed and maize meal for cattle. H. P. Armsby and J. A. Fries. *bibliog J Ag Research* 10:599-613 S 17 '17
- Experiments in the determination of the digestibility of millets. C. F. Langworthy and A. D. Holmes. *U S Ag B* 525:1-9 '17
- Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of overfeeding. C. H. Eckles and L. S. Palmer. *Mo Ag Exp Research B* 24:1-35 '16
- Influence of plane of nutrition of the cow upon the composition and properties of milk and butter fat; influence of underfeeding. C. H. Eckles and L. S. Palmer. *il Mo Ag Exp Research B* 25:1-107 '16
- Influence of strictly vegetable diets on growth and reproduction of swine. E. B. Hart and E. V. McCollum. *il Am Soc Animal Production Pro* 1915-1916:49-53 '17
- Influence of the ration upon the intestinal flora of swine. L. D. Bushnell and J. J. Frey. *bibliog il Kan Ag Exp Tech B* 3:1-54 '17
- Methods of experimentation in animal nutrition. *Am Soc Animal Production Pro* 1915-1916:101-11 '17
- Nutrients returned by dairy cows; stage of lactation and individuality affected cost of milk production. R. I. Grady. *il Ohio Ag Exp B v* 2:365-9 N '17
- Nutritive value of the soy bean. A. L. Daniels and N. B. Nicholls. *Int R Sci & Prac Ag* 9,no 1:15-16 Ja '18
- Physiological effect on growth and reproduction of rations balanced from restricted sources. E. B. Hart and others. *bibliog il J Ag Research* 10:175-98 JI 23 '17
- Physiological action of symbionts. P. Portier. *Int R Sci & Prac Ag* 8,no 10:1377-8 O '17
- Present situation in nutrition. E. V. McCollum. *il Hoard's D* 51:989+, 52:3+, 32-3+, 63 JI 21-Ag 11 '16; Same (Effect of feeds on growth and health of animals). *Hoard's D* 54:625+, 653+, 684-5, 723 N 23-D 14 '17
- Productive values of some Texas feeding stuffs. G. S. Fraps. *Tex Ag Exp B* 203:1-42 '16
- Studies in milk secretion; the effect of nutrition on yield and composition. J. Hammond and J. C. Hawk. *J Ag Sci* 8:139-46 Mr '17
- Studies of the values of different grades of milk in infant feeding. R. M. Washburn and C. H. Jones. *bibliog il Vt Ag Exp B* 195:1-134 '16; Same. (*In Vt Ag Exp Report*, 1915-1916) '16; Same cond. (Popular ed with title: Value of different grades of milk in infant feeding). *B* 201:1-32 '16
- Studies on the digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. *U S Ag B* 507:1-19 '17
- Studies on the digestibility of some nut oils. A. D. Holmes. *U S Ag B* 630:1-17 '18
- Studies on the digestibility of the grain sorghums. C. F. Langworthy and A. D. Holmes. *U S Ag B* 470:1-30 '16
- Study of methods of estimation of metabolic nitrogen. E. B. Forbes and others. *J Ag Research* 9:405-11 Je 18 '17
- Weak places in the methods used in animal nutrition investigations. J. A. Fries. *Am Soc Animal Production Pro* 1915-1916:54-63 '17
- Nutrition of plants. See Plants, Nutrition of**
- Nuts**
- Backyard nut orchard. *il Rural N Y* 75:1490 D 2 '16
- Business of cracking nuts. *Rural N Y* 75:121 Ja 22 '16
- How to plant nuts. W. C. Deming. *Rural N Y* 75:360 Mr 4 '16
- New oil nuts, Tucan kernels. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:313 Ag '18
- Nut culture. *Ohio F* 139:303 Je 23 '17
- Nut culture. J. S. Kelley. (*In Peninsula hort. soc. Trans.*, 1916, p. 48-51) '16 W. Webb, sec., Dover, Del.
- Nut growing, a new American industry. W. C. Deming. *il Am For* 22:99-104 F '16
- Nut growing in southern Illinois. R. B. Endicott. *Ill State Hort Soc Trans* 1917:50-8 '18
- Nut trees as food producers. R. T. Morris. *il Gard M* 28:87 O '18
- Nuts: a substitute for meat. A. M. Brennan. *il Am For* 24:170-2 Mr '18
- Nuts for cultivation. O. R. Abraham. *Fruit-Grower* 28:246 Ap 15 '17
- Nuts for Michigan. W. C. Deming. *Rural N Y* 75:117 Ja 22 '16
- Nuts real food; their shells are needed to help make gas masks. *Weekly N L* 6:9 O '18
- Planting and growing nut trees. J. S. Underwood. *Green's Fruit Grower* 36:1 O '16
- Remembering our native nuts. A. Rutledge. *Gard M* 27:50 F '18
- Report of nut tree investigations in Maryland. E. S. Johnston. *maps Md Ag Exp B* 218:239-65 '18
- Selecting nut trees for planting. C. A. Reed. *il Am For* 23:619-24 O '17
- Shade trees that bear nuts. J. R. Smith. *il Country Gent* 81:44 Ja 8 '16
- Studies on the digestibility of some nut oils. A. D. Holmes. *U S Ag B* 630:1-17 '18
- Utilization of some nuts as food. F. A. Cajori. *J Home Econ* 10:304-10 JI '18
- Worth of a nut tree. A. Rutledge. *il Gard M* 25:106 Mr '17
- See also Cookery—Nuts; Feeding and feeding stuffs—Nuts; also names of nuts, e.g. Almond, Chestnut, Coconut, Filbert, Hazel, Hickory, Litchi, Pecan, Walnut*
- Diseases and pests**
- Insects injurious to nuts. *Purdue Ag* 11:49-50 F '17
- Winter killing of fruit and nut trees. J. W. Firor. *il Ga Ag Coll (Ext)* C 60 4p '17
- See also Pecan—Diseases and pests*
- Statistics**
- Commercial stocks of whole and shelled nuts. Jan. 1. *U S Food Surveys* 1:9-10 JI 27 '18
- Commercial stocks of whole and shelled nuts. July 1. *U S Food Surveys* 2:9-12 O 5 '18
- Nysius ericae*. See False chinch bugs
- Nysius vinitor*. See Rutherglen bugs

## O

**Oak**

- American white oak. S. B. Detwiler. *il map Am For* 22:3-6 Ja '16
- Brown and green oak timber. A. D. Webster. *Gard Chron (Lond)* 61:170 Ap 28 '17
- Cluster oak of Savernake forest. A. Henry. *il Gard Chron (Lond)* 61:34 Ja 27 '17
- Commercial uses of white oak. *il Am For* 22:6-11 Ja '16
- Developing the individuality of oak. H. R. Churchill. *Am Architect* (243 W. 39th st, N.Y. 25c) 113:824-5, 829-30 Je 19 '18
- Forest trees worth planting. E. Secrest. *il Ohio Ag Exp B v* 1:54-60 F '16
- \* Germination and juvenile forms of some oaks. L. H. Pammel and C. M. King. (Contribution no. 63) 367-91p *il* '17 Iowa state college, Dept. of botany, Des Moines
- Reprinted from the Proceedings of the Iowa academy of science, v. 24, 1917
- Growth incompatibility of oak and olive trees. L. Petri. *Int R Sci & Prac Ag* 7,no 3:439 Mr '16
- Hybrid oaks. G. B. Sudworth. *il Am For* 23:683-5 N '17
- Hybrids of the live oak and overcup oak. H. Ness. *il J Heredity* 9:263-9 O '18
- Notes on North American trees; quercus. C. S. Sargent. *Bot Gaz* 65:423-59 My '18
- Notes on trees; description. W. W. Ashe. *Soc Am For Pro* 11:88-90 Ja '16
- Oaks of America. W. Trelease. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:23 Ja 13 '17
- Our oaks. B. Adams. *il Am For* 22:90-1 F '16



**Oak —Continued**

- Ray system of quercus alba. L. M. Langdon. bibliog. il Fot Gaz 65:313-23 Ap '18  
Ray tracheids in quercus alba. S. J. Record. il Fot Gaz 64:437 N '17  
Trees of Vermont; the oaks. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:111-27 '16

**Diseases and pests**

- Clytus (plagionotus) arcuatus, a coleopteron injurious to the oak, in Germany. K. Esche-rich. Int R Sci & Prac Ag 8,no 7:1071-2 JI '17  
Death of chestnuts and oaks due to armil-laria mellea. W. H. Long. il U S Ag B 89:1-9 '14  
Heart-rot of oaks and poplars caused by polyporus dryophilus. G. G. Hedgecock and W. H. Long. il J Ag Research 3:65-78 O '14  
Honeycomb heart-rot of oaks caused by ster-eum subpileatum. W. H. Long. il J Ag Research 5:421-8 D '15  
Observations on the oidium of the oak. F. W. Neger. Int R Sci & Prac Ag 8,no 5:803-5 My '17  
Peridermium harknessii and cronartium quer-cum. E. P. Meinecke. il Phyt 6:225-40 Je '16  
Polyporus dryadeus, a root parasite on the oak. W. H. Long. bibliog il J Ag Research 1:239-50 D '13  
Twig blight of quercus prinus and related species. D. E. Ingram. il J Ag Research 1:339-46 Ja '14

**Oat aphid**

- Oat aphid. J. J. Davis. il map U S Ag B 112:1-16 '14

**Oat smut**

- Campaign against oat smut. V. A. Place. il Country Gent 82:582 Mr 24 '17  
Control of wheat and oat smuts. J. A. Elliott. il Ark Ag Exp C 43 3p '18  
Formalin for smut in oats. J. A. Kroll. Breeder's Gaz 69:724 Mr 30 '16  
How to prevent smut in oats. F. D. Fromme. il Va Ag Ext B 26 4p '18  
Improved method of fighting smut in oats. H. D. Hughes. il Ia Ag Exp C 45:1-8 '18  
New York oat smut campaign. C. S. Phelps. Hoard's D 51:567 Ap 21 '16  
Oat smut. il Purdue Ag 12:371 Mr '18  
Oat smut. G. H. Coons. Mich Ag Bd Rep 1917:308-9; Same. Mich Ag Ext B 13 4p '18  
Oat smut and how to prevent it. F. J. Pipal. il Purdue Ag Ext B 61:1-8 '18  
Preventing oat smut. W. F. Bruce. Ohio F 139:394 Mr 17 '17  
Prevention of oats smut. O Judd Farmer 60:22 F 5 '16  
Smut of oats. Hoard's D 53:578 Ap 20 '17  
Smut treatment experiments. Wallaces' F 41:957 JI 7 '16  
Smuts of oats and barley. G. L. Zundel. il Wash Ag Ext Ser 1, no 43 4p '18  
Smuts of wheat and oats. J. F. Duggar. Prog F 32:1162 N 3 '17  
Spray method of applying concentrated for-maldehyde solution in the control of oat smut. R. J. Haskell. Phyt 7:381-3 O '17  
Swat the oat smut. A. R. Jaqua. Country Gent 83:29 Mr 16 '18  
Treat oats for smut. R. A. Hayne. Nat Stock & F 40:1344 Mr 10 '17

**Oats**

- Advice on oat problems. Country Gent 81:887 Ap 22 '16  
Boosting the oat crop. C. A. LeClair. il Country Gent 83:34 Mr 2 '18  
Cereal experiments at the Judith basin sub-station, Moccasin, Mont. N. C. Donaldson. il U S Ag B 398:26-31 '16  
Concerning oats. Wallaces' F 42:412 Mr 2 '17  
Concerning the oat crop. J. L. Hills. bibliog Vt Ag Exp B 197:46-72 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16  
Crops and stock on the home farm. F. Moly-neux. Gard Chron (Lond) 63:20 Ja 12 '18  
Does it pay to grow oats and wheat? Prog F 32:879 Ag 18 '17  
Experimenting on 1000 Iowa farms. O Judd Farmer 60:5 Ap 15 '16

- Experiments with oats. F. A. Welton and C. A. Gearheart. il Ohio Ag Exp B v 1:35-42 F '16  
Farmers' experiment plots; wheat and oat ex-periments, 1917-18. H. C. Stening. il Ag Gaz of New South Wales 29:235-58 Ap '18  
Farmers' experiment plots; wheat and oat harvest, 1917-18. R. G. May. Ag Gaz of New South Wales 29:705-16 O '18  
Farmers' experiment plots; wheat and oats harvest, 1915-16. il Ag Gaz of New South Wales 27:153-200 Mr '16  
Field experiments in 1915 in Maine. Maine Ag Exp B 246:6-14 '16  
Five rules for success with oats. il Prog F 31:997 Ag 19 '16  
Grain production in Nevada. C. S. Knight. il Nev Ag Exp B 89:31-4 '17  
Growing oats, clover and corn. il O Judd Farmer 62:1 Ap 28 '17  
Growing of spring oats. A. E. Grantham. il Prac F 112:143 Ap 1 '16  
Growing winter oats. C. W. Warburton. il Country Gent 82:1253 Ag 11 '17  
Harvesting the oat crop. A. F. Kidder. Prog F 32:570 My 5 '17  
How to get bigger oat yields. A. F. Kidder. Prog F 31:1033 Ag 26 '16  
How to grow oats. A. L. French. Prog F 31:1006 Ag 19 '16  
How to make more oats. E. F. Cauthen. Prog F 31:1017 Ag 19 '16  
How to make the oat crop pay. B. L. Moss. Prog F 31:896 Je 24 '16  
How to succeed with oats in the central south. E. F. Cauthen. Prog F 33:908 Ag 17 '18  
Importance of oats in the Southwest. L. Wermelskirchen. Prog F 33:906 Ag 17 '18  
Improving the oat crop. L. C. Burnett. il Ia Ag Exp B 175:151-72 '18  
Ins and outs with oats. P. D. Cooper. O Judd Farmer 62:4 Ap 21 '17  
Iowa 103, an oat for the cornbelt. Breeder's Gaz 69:367 F 17 '16  
Making a success with oats in the South-east. E. F. Cauthen. Prog F 32:881 Ag 18 '17  
Making oats crop pay. F. H. Demaree. O Judd Farmer 62:4 Mr 24 '17  
Making sure of the oat crop. G. Gardiner. il Field II 26:210 Mr '16  
Making the oat crop pay. L. A. Markham. il Prog F 31:1003 Ag 19 '16  
Making winter oats a safe crop. L. W. Os-born. Prog F 31:1149 S 30 '16  
Naked or hull-less oats. Wallaces' F 41:359 Mr 3 '16  
Oat hay a fine dairy feed. M. Coverdell. Jer-sey B 35:1098 JI 12 '16  
Oat production. H. G. Bell and C. A. Waugh. (Soil improvement com B 17) 15p il map '16  
Nat. fertilizer assn., Chicago  
Oat production. F. E. Robertson. il Rural N Y 75:320 F 26 '16  
Oat production in Georgia. R. R. Childs. il Ga Ag Coll (Ext) B 113:1-12 '16  
Oats. (In Geography of the world's agricul-ture, p. 35-9) maps '17 U S Ag  
Oats and clover. Kimball's D F 16:231 Mr 15 '18  
Oats and soy beans a valuable cropping com-bination. T. Butler. Prog F 31:899 JI 22 '16  
Oats for the dairy farm. Jersey B 37:1394 Ag 28 '18  
Oats in the corn belt. Wallaces' F 41:209 F 11 '16  
Oats in the great plains area; relation of cul-tural methods to production. E. C. Chilcott and others. map U S Ag B 218:1-42 '15  
Oats in Washington. E. G. Schafer and E. F. Gaines. il map Wash Ag Exp B 129:1-13 '16  
Oats neglected crop in Illinois. F. H. Demaree. il O Judd Farmer 60:5 F 26 '16  
Oats on disked corn land. Kimball's D F 14:118 F 15 '16  
Oats that were muddled in. Rural N Y 77:192 F 9 '18  
Oats, the crop for the North; the whole story of production. R. H. Smith. Rural N Y 77:481-2, 512, 549 Mr 30-Ap 13 '18  
Oats with a college education. L. M. Mathew-son. il O Judd Farmer 61:3-Ag 26 '16

**Oats—Continued**

- Peas and oats for hay. Rural N Y 76:543 Ap 14 '17
- Preliminary study of the bleaching of oats with sulphur dioxide. G: H. Baston. il U S Ag B 725:1-11 '18
- Prepare to plant oats. A. F. Kidder. Prog F 32:713 Je 23 '17
- Preparing for fall oats. Prog F 32:795 Jl 21 '17
- Preparing the seedbed for oats. Power F 26:16 Mr '17
- Profitable oat production in the South. J. N. Harper. (B. 21) 15p il map n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Profitable practices with oats. E. L. D. Seymour. Country Life 30:70 S '16
- Raising the crop of oats. C. H. Chesley. Hoard's D 53:433 Mr 30 '17
- Rotations and tillage methods in western Nebraska. W. P. Snyder and W. M. Osborn. Neb Ag Exp B 155:17-19 '16
- Saving the oat crop. il Am Coop J 11:1205 Ag '16
- Seeding oats. Kimball's D F 14:200 Mr 15 '16
- Sow oats early. L. F. Graber. il Country Gent 83:26 Ap 6 '18
- Sow the oats early. E. P. Snyder. Nat Stock & F 40:1423 Mr 24 '17
- Sow winter oats. Weekly N L 5:7 S 12 '17
- Spring oat production. C. W. Warburton. il Farmers' B 892:1-22 '17
- Sprouting oats in the incubator. H. M. Beals. il Country Gent 83:40 O 26 '18
- Success with oats. J. Cownie. Wallaces' F 41:542 Mr 31 '16
- Success with oats and lespedeza. J. S. McGehee. Prog F 31:1016 Ag 19 '16
- Suggestions for fall winter and early spring planting. Fla Ag Dept Quar B v 28:12-15 O '18
- \$10 an acre net profit from oats. B. R. Taylor. Prog F 31:1002 Ag 19 '16
- Time for seeding oats and wheat in the cotton belt. Prog F 32:379 Ag 18 '17
- Value of certain nutritive elements in the development of the oat plant. J. G. Dickson. bibliog il Am J Bot 5:301-24 Je '18
- Wheat and oats; soils that are suited to these crops. W. F. Massey. Prog F 32:880 Ag 18 '17
- Why oat yields are small. Prog F 32:1027 O 6 '17
- Winter oats, barley, spelt and emmer. N. Schmitz. il Md Ag Exp B 200:109-22 '17; Same. Md Ag Exp Rep 1916:1917 '17
- Winter oats for the South. C. W. Warburton. Farmers' B 436:1-16 '17
- Yields of spring grains in Illinois. W. L. Burdison and O. M. Allyn. Ill Ag Exp B 195:499-508 '17

See also Feeding and feeding stuffs—Oats

**Breeding**

- Improvement of black oats by selection and crossing in Sweden. H. Nilsson-Ehle. Int R Sci & Prac Ag 8,no 5:712-15 My '17
- Inheritance in wheat, barley and oat hybrids. E. F. Gaines. il Wash Ag Exp B 135:46-60 '17
- Linkage and crossing-over in oats. H. H. Bartlett. Bot Gaz 62:323-5 O '16
- Oat-breeding experiments. J. T. Pridham. il Ag Gaz of New South Wales 27:457-61 Jl '16
- Oats investigations. T. A. Kieselbach and J. A. Ratcliff. il Neb Ag Exp B 160:1-48 '17
- \* Relation between color and other characters in certain avena crosses. H. H. Love and W. T. Craig. Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:369-83 Ag '18
- Studies on oat breeding. pt 4, Pure line varieties. F. M. Surface and J. Zinn. il Maine Ag Exp B 250:97-148 '16
- Studies on oat breeding: the F<sub>1</sub> and F<sub>2</sub> generations on a cross between a naked and a hulled oat. J. Zinn and F. M. Surface. bibliog il J Ag Research 10:293-312 Ag 6 '17
- Studies on the correlation of characters in the oat plant, in U. S. A. H. H. Love and C. E. Leighty. Int R Sci & Prac Ag 8,no 1:53-60 Ja '17
- Tests of selections from hybrids and commercial varieties of oats. C. W. Warburton and others. il U S Ag B 99:1-25 '14

**Composition**

- Chemical composition of green sprouted oats. J. M. Bartlett. Maine Ag Exp B 266:285-90 '17; Same. Maine Ag Exp Rep 1917:285-90
- Effect of different rotation systems and of fertilizers on the protein content of oats. R. W. Thatcher and A. C. Arny. Am Soc Agron J 9:344-8 O '17; Same cond. Int R Sci & Prac Ag 9,no 2:153-6 F '18

**Diseases and pests**

- Bacterial oat blight. C. Elliott. il Phyt 8:489-91 S '18
- Crioceris melanopa (lema melanopus) injurious to oats and barley in Hungary. Int R Sci & Prac Ag 7,no 2:312-14 F '16
- Powdery mildews of avena and triticum. G: M. Reed. Mo Ag Exp Research B 23:1-19 '16
- Studies on dörrfleckenkrankheit (dry spot disease) in oats. W. Schikorra. Int R Sci & Prac Ag 7,no 9:1371-2 S '16

See also Oat aphid; Oat smut

**Harvesting**

- Harvesting oats and wheat. J. F. Duggar. Prog F 31:646 My 13 '16

**Laws**

- Arrêté n. 5024 modifiant l'ordonnance n. 4782 du 28 juin 1915 réglementant le commerce de l'avoine en Allemagne. Int Yearbook Ag Leg 1916:33-4 '17

**Morphology**

- Classification of the varieties of cultivated oats. W. C. Etheridge. bibliog il Cornell Ag Exp Memoir 10:35-172, pl 1-22 '16

**Prices**

- Profits and losses in oat production during the past sixty years. Wallaces' F 43:873 My 31 '18

**Seed**

- Clean seed increases oats yield. L. M. Matheson. O Judd Farmer 60:14 Mr 4 '16
- How to judge seed oats. H. J. Lechner. il Country Gent 82:313 F 17 '17
- Identification of the country of origin of commercial oats. R. G. Stapledon. J Bd Ag 23:105-16 My '16
- Means of economizing seed oats and wheat. J. F. Duggar. Prog F 32:999 S 22 '17
- Sulphur-bleached oats may prove to be poor as seed. Weekly N L 6:12 N 27 '18
- Supply of seed wheat, oats and rye in the cotton belt. U S Seed Rep 2:7 S '18

**Standards**

- Proposed official grain standards of the United States for oats. Coop Manager & F 8:32 N '18
- Tentative oats standards. Am Coop J 14:84 N '18

**Statistics**

- \* Barley and oats in Ontario. (In Report, Bur. of industries, 1917, p. 29) '18 Ontario ag. dept., Toronto
- Canada—exportable surplus of wheat and oats. Doc Leaflets 1,no 1:6 Jl '17
- Commercial stocks of oats, Jan. 1. U S Food Surveys 1:4-5 Je 8 '18
- Commercial stocks of oats, July 1. U S Food Surveys 2:4-6 S 9 '18
- Farm stocks March 1, 1917, and shipments out of county. Monthly Crop Rep 3:22 Mr '17
- Oats in the United States and other countries, including exports and imports. See United States Department of agriculture Yearbooks
- Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no 4) p 51-61 (O) '16 Bur. of statistics, Int. inst. of ag., Rome
- Winter oats in southern states. Monthly Crop Rep 3:14 F '17

**Storage**

- Spontaneous heating of a heap of oats. Int R Sci & Prac Ag 7, no 2:294 F '16

**Varieties**

- Cereal experiments at Dickinson, N. Dak. J. A. Clark. il U S Ag B 33:24-31 '14



**Oats—Varieties—Continued**

- Cereal experiments at the Williston station; experiments with oats. F. R. Babcock. il U S Ag B 270:24-8 '15
- Cereal investigations on the Belle Fourche experiment farm; experiments with oats. C. Salmon. U S Ag B 297:29-34 '15
- Classification of the varieties of cultivated oats. W. C. Etheridge. bibliog il Cornell Ag Exp Memoir 10:85-172, pl 1-22 '16; Same. Cornell Ag Exp Rep 1917:85-172, pl 1-22 '18
- Comparative tests of 9 varieties of oats at Torestorp, Sweden. H. von Feilitzen. Int R Sci & Prac Ag 7,no 6:818-21 Je '16
- Cultural experiments with different varieties of oats in Norway. W. Knut. Int R Sci & Prac Ag 8,no 12:1217 D '17
- Experiments in Siberia, on different varieties of oats. N. L. Skalosoubov. Int R Sci & Prac Ag 7,no 9:1264-5 S '16
- Experiments with spring cereals at the eastern Oregon dry-farming substation Moro, Oreg. D. E. Stephens. il U S Ag B 498:26-31 '17
- Experiments with wheat, oats, and barley in South Dakota. M. Champlin. il U S Ag B 39:19-28 '14
- Farmers' experiment plots; experiments with oats. R. W. McDiarmid. il Ag Gaz of New South Wales 28:401-4 Je '17
- Farmers' experiment plots; wheat and oats harvest, 1915-16. il Ag Gaz of New South Wales 27:153-200 Mr '16
- Greenhouse experiments on the rust resistance of oat varieties. J. H. Parker. bibliog il U S Ag B 629:1-16 '18
- Identification of varieties of oats in New York. E. G. Montgomery. Am Soc Agron J 10:171-4 Apr '18
- Oat variety trial. Yanco. J. M. Pitt. Ag Gaz of New South Wales 29:406-7 Je '18
- Oats investigations. T. A. Kiesselbach and J. A. Ratcliff. il Neb Ag Exp B 160:1-48 '17
- Percentage of husk in varieties of oats. J. T. Pridham. Ag Gaz of New South Wales 27:625-6 S '16
- Results of variety tests of wheat, oats and rye (E. 232). G. M. Garren. N C Ag Exp Rep 1916 28p '17
- Studies concerning the elimination of experimental error in comparative crop tests. T. A. Kiesselbach. bibliog il Neb Ag Exp Research B 13:1-95 '18
- Studies on oat breeding. pt. 4. Pure line varieties. F. M. Surface and J. Zinn. il Maine Ag Exp B 250:97-148 '16; Abstract (New varieties of oats). Maine Ag Exp Doc 526:1-7 '16
- Tests of selections from hybrids and commercial varieties of oats. C. W. Warburton and others. il U S Ag B 99:1-25 '14
- Varieties of oats and barley: an account of the results of some recent experiments in England and Wales. J Bd Ag 23:1056-63 F '17
- Variety tests of oats. J Ag (Quebec) 21:120 F '18

**Weight of grains**

- Relation of size of sample to kernel-percentage determinations in oats. R. J. Garber and A. C. Army. Am Soc Agron J 10:134-42 Mr '18

**Oats, Rolled**

**Statistics**

- Commercial stocks of rolled oats, Jan. 1. U S Food Surveys 1:20-2 Je 8 '18
- Commercial stocks of rolled oats, July 1. U S Food Surveys 2:26-8 S 9 '18
- Commercial stocks of rolled oats in the United States on August 31, 1917. U S Ag C 99:16-20 '18

**Oats, Wild**

- Control of wild oats. Weekly N L 5:4 S 26 '17
- Methods of controlling or eradicating the wild oat in the hard spring-wheat area. H. R. Cates. il maps Farmers' B 833:1-16 '17

**Oberlin, John Frederick, 1740-1826**

- Life story of a great country pastor. Wis Ag Exp B 278:30-48 '17

**Observation towers**

- Ossipee tower at the top o' the world. E. L. D. Seymour. il Country Life 31:100b F '17

**Obstetrics, Veterinary.** See **Veterinary obstetrics**

**Occupations for women.** See **Woman—Occupations**

**Ocean**

- Solitude; being leaves from a hermit's log-book. R. Wade. il Country Life 32:45-7 Je '17

**Odoriferous glands.** See **Scent-producing organs**

**Oenothera**

- Account of the cruciate-flowered oenotheras of the subgenus onagra. H. H. Bartlett. il Am J Bot 1:226-43 My '14
- Fifteen- and sixteen-chromosome oenothera mutants. A. M. Lutz. bibliog il Am J Bot 4:53-111 F '17
- Mass mutations and twin hybrids of oenothera grandiflora Ait. H. DeVries. bibliog il Bot Gaz 65:377-422 My '18
- Matrocinic inheritance in mutation crosses of oenothera Reynoldsii. C. D. La Rue and H. H. Bartlett. il Am J Bot 4:119-44 Mr '17
- Mutations of oenothera stenomeres. H. H. Bartlett. il Am J Bot 2:100-9 F '15
- New dimorphic mutants of the oenotheras. H. DeVries. il Bot Gaz 62:249-80 O '16
- Oenothera genetics. B. C. Helmick. Bot Gaz 63:81-2 Ja '17
- Oenothera lamareckiana mut. velutina. H. DeVries. il Bot Gaz 63:1-24 Ja '17
- Oenothera mutants with diminutive chromosomes. A. M. Lutz. il Am J Bot 3:502-26 N '16
- Oenothera situation. M. C. Coulter. Bot Gaz 66:284-5 S '18
- Studies on the embryo sac and fertilization in oenothera. M. Ishikawa. bibliog il Ann Bot 32:279-317 Ap '18
- See also *Onagraceae*

**Office furniture**

- Be a business farmer in 1916. J. L. Mogford. il Prog F 31:7 Ja 1 '16
- Office conveniences recommended for the cheese factory. N Y Prod R 41:1096 Ap 19 '16

**Official horticultural inspectors, American.** See **American association of official horticultural inspectors**

**Ogilvie, Robert B.**

- Portrait. Breeder's Gaz 70:405 S 14 '16

**Ohia lehua**

- Hawaiian lehua. V. McCaughey. il Am For 24:409-18 Jl '18
- Ohia lehua trees of Hawaii. J. F. Rock. il Hawaii Ag Bd Bot B 4:1-76 Ag '17

**Ohio**

- Ohio's practical state farms: how the commonwealth employs its wards economically. T. W. Yocum. il Ohio F 138:197-8 S 2 '16
- See also *subhead Ohio under special subjects, e.g. Agriculture—Ohio, Dairying—Ohio*

**Agriculture, State board of**

- Annual meeting, Columbus, Jan. 13, 1916. Ohio F 137:96 Ja 22 '16
- Annual meeting, Columbus, Jan. 17, Ohio F 141:104 Ja 26 '18
- Loi visant la création d'un département de l'agriculture dans l'état d'Ohio et prescrivant son organisation, ses pouvoirs et devoirs. Int Yearbook Ag Leg 1916:786-93 '17
- New agricultural bill. Ohio F 139:140 F 3 '17
- Ohio's agricultural administration. G. A. Stauffer. Ohio F 138:168 Ag 26 '16

**Description and travel**

- Among Logan co., O., hills. T. W. McAllister. Ohio F 140:250 S 22 '17
- Some delightful trips within the Buckeye state. C. T. Conklin. Ohio F 140:65 Jl 28 '17

**History**

- Pioneer farming in southeastern Ohio. M. Ryder. Nat Stock & F 40:1405 Mr 17 '17
- Recollections of long ago. L. B. Pierce. Ohio F 142:224 S 7 '18

**Markets. Bureau of**

- Ohio bureau of markets. V. H. Davis. Ohio F 140:526 D 8 '17

**Ohio agricultural experiment station**

- Ohio experiment station. W. I. Chamberlain. Nat Stock & F 40:300 Je 17 '16  
Ohio's agricultural administration. C: E. Thorne. Ohio F 138:168 Ag 26 '16  
35th annual report for the year ended June 30, 1916. Ohio Ag Exp B 300:1-24 '16  
36th annual report for 1916-17. Ohio Ag Exp B 315:vii-xxxv '17  
37th annual report for 1917-18. Ohio Ag Exp B 325:i-xxvi '18

**Ohio butter, egg and poultry association**

- 6th annual meeting, Cleveland. N Y Prod R 45:644 Mr 6 '18  
Spring convention, Columbus, Feb. 27-28, 1917. N Y Prod R 43:729 Mr 7 '17

**Ohio college of agriculture.** See Ohio state university—College of agriculture**Ohio creamery owners' and managers' association**

- Creamery owners and managers meet at Columbus. N Y Prod R 44:1131 O 31 '17

**Ohio dairymen's association.** See Ohio state dairymen's association**Ohio dairymen's protective league, Northern.** See Northern Ohio dairymen's protective league**Ohio farmer (periodical)**

- Bouquets for our birthday party. Ohio F 141: 2+, 39 Ja 5-12 '18

**Ohio farmers' grain dealers' association**

- New state association organized. Am Coop J 11:811-15 Ap '16  
2d annual convention, Toledo, Feb. 22, 1917. F. S. Betz. Am Coop J 12:512-13 Mr '17  
3d annual convention, Toledo, Ohio, Feb. 21-2. Am Coop J 13:301-3+ Mr '18; Coop Manager & F 7:46-7 Ap '18

**Ohio grain dealers' association**

- Meeting, Columbus, Nov. 13. Coop Manager & F 7:65 D '17

**Ohio Guernsey breeders' association**

- Annual field meeting, Mara Alva farm, Smithville, June 5. Ohio F 141:784 Je 15 '18

**Ohio Jersey breeders' association**

- Mid-year meeting, Whitehall Farms, near Springfield, June 22. Kimball's D F 16:567 Jl 15 '18  
Ohio Jerseymen's picnic at Yellow Springs. il Jersey B 35:1056-8 Jl 5 '16

**Ohio sheep and wool growers' association**

- Meeting, Oct. 4. Ohio F 124:376 O 19 '18  
What organization means to Ohio wool growers. G: M. Wilber. Nat Stock & F 42:513 Ag 31 '18  
Wool consignment. J. F. Walker. Nat Stock & F 42:744 N 16 '18; Same. Ohio F 142:504 N 23 '18

**Ohio state dairymen's association**

- Annual meeting. Ohio state university, Jan. 31-Feb. 2, 1917. Ohio F 139:192 F 10 '17; Hoard's D 53:194 F 23 '17  
Meeting at Columbus, Feb. 2-4, 1916. Ohio F 137:216 F 12 '16  
23d annual convention, Columbus, Jan. 31-Feb. 2d, 1917. O. C. Cunningham. Kimball's D F 15:163 Mr 1 '17  
24th annual convention, Columbus, Jan. 31-Feb. 1. Ohio F 141:194, 223 F 9-16 '18

**Ohio state fair**

- Facts about the Ohio state fair. W. I. Chamberlain. Nat Stock & F 40:516 Ag 1 '16  
1918 state fair. Ohio F 142:211+ S 7 '18  
Ohio sheep show at state fair. L. A. Webster. Am Sheep B & W 36:520-2 S '16  
Ohio state fair has best Jersey show in several years; list of awards. Jersey B 35:1378 S 6 '16  
Ohio state fair, 1918. C: S. Plumb. il Am Sheep B & W 38:595-600 S '18  
Ohio's fair a great success. Nat Stock & F 41:559+ S 8 '17  
Ohio's great state fair. Nat Stock & F 42: 536-7 S 7 '18  
Sheep at the Ohio state fair. L. A. Webster. il Am Sheep B & W 37:546-7 S '17  
66th annual fair at Columbus. Breeder's Gaz 70:365-6a+ S 7 '16; Nat Stock & F 40:598+ S 9 '16; Ohio F 138:223-5+ S 9 '16

- 66th annual Ohio state fair. L. J. Brosemer. Reliable P J 23:780-1+ O '16  
67th annual event. Breeder's Gaz 72:332-3+ S 6 '17; il Ohio F 140:187-9+ S 8 '17; il Hoard's D 54:211+ S 14 '17

**Ohio state grange**

- 45th annual session, Dayton, Dec. 11-13. Ohio F 140:588 D 22 '17

**Ohio state horticultural society**

- Annual meeting, Ohio state university, Jan. 30-31, 1917. Ohio F 139:208, 256 F 10-17 '17  
Annual meeting, Ohio state university, Jan. 30-31, 1917. U. T. Cox. Fruit-Grower 28:172 Mr 1 '17  
49th annual meeting, Columbus, Feb. 1-3, 1916. Ohio F 137:221 F 12 '16  
51st annual convention, Columbus, Jan. 29-30. R. B. Cruikshank. Green's Am Fruit Grower 38:9 Mr '18  
51st annual meeting, Columbus, Jan. 29-30. Ohio F 141:227 F 16 '18  
Meetings, Columbus, Jan. 29-Feb. 2, 1917. W. I. Chamberlain. Nat Stock & F 40:1240 F 17 '17  
Meeting, Port Clinton, Aug. 16, 1916. Ohio F 138:178 Ag 26 '16  
Why not get together? E. T. Owen. Ohio F 142:586 D 14 '18

**Ohio state university****College of agriculture**

- Ohio's agricultural administration. A. Vivian. Ohio F 138:168 Ag 26 '16

**Ohio vegetable growers' association**

- Annual meeting, Columbus, Ohio, Feb. 1-2, 1917. Market Growers J 20:147 F 15 '17; Ohio F 139:252 F 17 '17  
Annual meeting, Toledo, Jan. 30-Feb. 1. Ohio F 141:186, 227 F 9-16 '18; Market Growers J 22:123 F 15 '18  
1918 directory; with membership list. 52p il n. d. L. M. Montgomery, sec., Ohio vegetable growers' assn., Columbus

**Oil analysis.** See Oils and fats—Analysis**Oil cake**

- See also Feeding and feeding stuffs—Oil cakes

**Statistics**

- International trade. See United States Department of agriculture Yearbooks

**Oil extracting apparatus**

- Apparatus for extracting the oil from oily substances by means of non-inflammable solvents. G. Ciapetti. il Int R Sci & Prac Ag 7,no 9:1330-1 S '16

**Oil properties.** See Petroleum industry**Oil stoves**

- Making the oil stove convenient. Mrs A. G. Vestal. il Power F 27:39 My '18

**Oils and fats**

- Biochemical reaction of rancid fats. Int R Sci & Prac Ag 7,no 1:146 Ja '16  
Clarifying and using fats. E. E. Rockwood. O Judd Farmer 64:27 Mr 9 '18  
Cohune palm; a Central American tree, the nuts of which produce a valuable oil. C. D. Mell. il Scientific Am Sup (233 Broadway, N.Y. 10c) 83:196 Mr 31 '17  
Commercial edible fats. D: Klein. Assn Am Dairy Food & Drug Offic Pro 1917:33-6; Same. Creamery 6:73-4 O '17  
Conservation of fats. H. T. Vulté. 10p 10c '17 Am. home economics assn., Emergency committee, 19 W. 44th st, N.Y.  
Contribution to the chemical study of the nuts of sanga-sanga or ricinodendron africanum. Int R Sci & Prac Ag 9,no 4:456-7 Ap '18  
Danish efforts at providing oil substitutes. B. L. Agerton. (Commerce Reports no. 260) p 486 (N 5) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
Detection of foreign fats in butter fat. A. Seidenberg. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10: 617-21 Ag '18  
Determination of essential oils in non-alcoholic flavoring extracts. F. M. Boyles. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:537-9 Jl '18



Oils and fats—Continued

- Digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. U S Ag B 310:1-22 '15
- Digestibility of some seed oils. A. D. Holmes. U S Ag B 687:1-18 '18
- Digestibility of some vegetable fats. C. F. Langworthy and A. D. Holmes. U S Ag B 505:1-19 '17
- Edible fats, in war and law. D: Wesson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:71-3 Ja '18
- Edible vegetable fats and oils; definitions and standards. (F. I. D. 169) 2p '17 U S Ag
- Fat absorption in frying doughnuts. M. C. McKee. J Home Econ 10:18-20 Ja '18
- Fats and fatty acids of the grain sorghums. C. K. Francis and W. G. Friedemann. Okla Ag Exp B 117:1-14 '17
- Fats and fighters. L. Lodian. il Scientific Am (233 Broadway, N.Y. 10c) 118:229 Mr 16 '18
- Fats and oils in cookery; Cooking temperatures. A. W. Williams and C. E. Gray. Ill Univ (Urbana) B v 14:1-19 Jl 23 '17
- Fats and their economical use in the home. A. D. Holmes and H. L. Land. U S Ag B 469:1-26 '16; Excerpts. Ohio F 139:335 Mr 3 '17
- Fats are very precious. Prog F 33:104 Ja 26 '18
- Fats from rhus laurina and rhus diversiloba. J. B. McNair. Bot Gaz 64:330-6 O '17
- Food oils and fats. E. M. Bailey. Conn State Ag Exp B 201:201-11 '18
- Great fat drive. B. J. Hendrick. World's Work (Garden City, N.Y. 25c) 35:321-6 Ja '18
- How and why we should save fats. J Home Econ 9:428-9 S '17
- Increasing consumption of food oils in the United States and the world. Econ World (128 Water st, N.Y. 25c) n s 15:695 My 18 '18
- Manufacture of vegetable oils for edible purposes. Monthly Crop Rep 3:75 Ag '17
- \* Measures are being taken by the newly appointed Dutch Minister of agriculture, industry, and commerce to increase the supply of edible oils in the Netherlands by making full use of the domestic beechnut crop. Between 2,000 and 2,500 metric tons of these nuts may be collected by school children if every effort is made, and from this amount of raw nuts 300,000 to 400,000 kilos of oil may be obtained. The Zuppen Gazette reports that a price of 25 florins per 100 kilos (about 5½ cents per pound at the present rate of exchange) will be paid to the gatherers. Owners of private lands from which beechnuts are gathered will receive compensation at the rate of five per cent of the sums paid to the gatherers, and they will also have the right to purchase cattle cake, prepared from the pulp of the nuts from their property, at 50 florins per 100 kilos.—Sci Am Sup
- Micellar emulsions and hydrogels of oil. K. F. Kellerman and W. T. Swingle. Am Soc Agron J 8:51-3 Ja '16
- Oil content of cotton seed an accurate basis for commercial standardization. L. E. Rast. Science (Science Press, Garrison, N.Y. 15c) n s 45:507-8 My 25 '17
- Oil from rubber seed is a late discovery according to the Food administration bulletin. In the world-wide search for vegetable fats, new materials are being utilized. Seeds from the rubber trees on the East Indian plantations have heretofore been wasted. An experimental shipment of these seeds was recently crushed in England and yielded oil useful for various purposes, and also fodder for cattle. Mills for crushing are to be erected in the East Indies
- Oil-producing plants of French West Africa. G. Francois. Int R Sci & Prac Ag 8,no 10:1371-3 O '17
- Oil seeds and vegetable oils. Sci Am Sup (233 Broadway, N. Y. 10c) 86:7 Jl 6 '18
- Oils and fats in Germany. Scientific Am (233 Broadway, N.Y. 10c) 116:518 My 26 '17
- Report on fats and oils. R. H. Kerr. Assn Offic Ag Chem J 2:237-8 F '17
- Resources in Indo China in oil-yielding plants. Int R Sci & Prac Ag 8,no 5:733-5 My '17

- Save the fat. Hoard's D 54:592 N 16 '17
- Save the fat: 24 recipes using animal fat substitutes. M. M. Lawrence. Tex Univ (Austin) Ext Food Conservation Leaflet 4:1-13 n.d.
- Save the fats. G. McCheyne and H. White. Utah Ag Ext C 6:1-4 '18
- Saving fats from garbage; American chemical society offers to aid Food administration. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:320 Ap '18
- Saving the fats. G. V. Gray. il Country Gent 83:34-5 D 21 '18
- Saving the fats. F. Spring. Country Gent 82:1623 O 20 '17
- Solidified sunshine; the utilization of cottonseed and other vegetable oils. E. E. Slosson. il Independent (119 W. 40th st, N.Y. 10c) 93:70-1+ Ja 12 '18
- Some American vegetable food oils, their sources and methods of production. H. S. Bailey. il U S Ag Yearbook 1916:159-76; Same. Separate 691
- Sources of fat in Germany in 1916. W. Fahrion. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:135 S 1 '17
- Sources of oil. D. C. Picard. Am Fert 44:48 Ap 1 '16
- Studies on the digestibility of some animal fats. C. F. Langworthy and A. D. Holmes. U S Ag B 507:1-19 '17
- Studies on the digestibility of some nut oils. A. D. Holmes. U S Ag B 630:1-17 '18
- Study of the estimation of fat in condensed milk and milk powders. C. H. Biesterfeld and O. L. Evenson. il J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 9:1111-14 D '17
- Use fats wisely. Ia Ag Ext Emergency Leaflet 38:1-4 '18
- Use of meat fats in cooking. il Cornell Reading Course 109:12-16 '16
- Uses of fats. M. E. Marshall. Rhode Island State Bd. of Health (Providence) B v 3:38-47 O '17
- Utilization of cherry by-products; methods of extraction. F. Rabak. U S Ag B 350:1-17 '16
- Vegetable oils and their use in cooking. K. Blunt. J Home Econ 10:23-6 Ja '18
- Wild oil plants of Para, Brazil. Int R Sci & Prac Ag 7,no 8:1116-17 Ag '16
- World-wide search for oils. Americas (National City Bank, 55 Wall st, N.Y.) 4:22-7 Ja '18; Same. Econ World (128 Water st, N.Y. 25c) n s 15:259-63 F 23 '18
- See also Essences and essential oils; Lubrication and lubricants; Oil extracting apparatus; Orange oil industry; Petroleum industry; Vegetable oil industry; also Beech nut oil; Bicuiba oil; Birch oil; Butterfat; Castor oil; Chaulmoogra oil; Chinese wood oil; Coconut oil; Cohune oil; Eucalyptus oil; Fish oil; Fusel oil; Kerosene; Lard; Linseed oil; Olive oil; Orange oil; Palm oils; Peanut oil; Pine oil

Analysis

- \* Determination of the hexabromide and iodine numbers of salmon oil as a means of identifying the species of canned salmon. H. S. Bailey and J. M. Johnson. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:999-1001 D '18
- Fats and oils. bibliog Assn Offic Ag Chem J 2,no 3,pt 2:299-315 N '16
- Refraction constants of various vegetable fats and oils. F Heim. Int R Sci & Prac Ag 7, no 10:1529-32 O '16

Laws

- Arrêté n. 5094 concernant les graisses brutes en Allemagne. Int Yearbook Ag Leg 1916: 270-2 '17
- Arrêté n. 5334 concernant les graisses destinées à la consommation et annulant les prescriptions des ordonnances n. 4923 du 22 octobre 1915 en Allemagne. Int Yearbook Ag Leg 1916:282-9 '17
- Commerce des fruits oléagineux. Int Yearbook Ag Leg 1916:238-43 '17
- Manual of laws pertaining to the Department of farms and markets; turpentine, linseed or flaxseed oil. N Y Farms & Markets Dept Ag B 108:153-5 Je '18

**Oils and fats—Laws—Continued**

- Ordonnance n. 94 du ministre du commerce, d'accord avec les ministres intéressés, concernant la création, pour la durée de la guerre, d'une fédération de l'industrie des huiles et des graisses en Autriche. *Int Yearbook Ag Leg* 1916:296-7 '17
- Ordonnance n. 5235 concernant les mesures provisoires relatives à l'approvisionnement en graisse en Allemagne. *Int Yearbook Ag Leg* 1916:278-81 '17

**Statistics**

- Commercial stocks of fats and oils, including lard, lard compounds, solid vegetable cooking fats, oleo stock, oleo oil, and edible tallow, cottonseed oil, olive oil and peanut oil, Jan. 1. *U S Food Surveys* 1:1-9 My 31 '18
- Commercial stocks of fats and oils, July 1. *U S Food Surveys* 2:1-20 S 16 '18
- Commercial stocks of vegetable oils in the United States on August 31, 1917. *U S Ag C* 99:22-5 '18
- Oka agricultural institute**  
Report of the Oka agricultural institute. (*In Report*, 1917, p. 1-13) il '17 Quebec ag. dept., Quebec
- Okewood of the secret service**; story. D. Valentine. See weekly numbers of Country gentleman, July 20-October 5, 1918

**Oklahoma**

See also subhead Oklahoma under special subjects, e.g. Agriculture—Oklahoma, Dairying—Oklahoma

**Agriculture, State board of**

- Annual report, 1917. il *Okl Ag Bd Rep* 1917: 1-116

**Livestock registry board, State**

- 2d annual report, 1917. il *Okl Ag Exp C* 44: 1-117 '18

**Oklahoma agricultural and mechanical college**

- Carrying the college to the farm; a week with the Oklahoma demonstrators. H. R. O'Brien. il *Country Gent* 81:1187 Je 10 '16
- Solving Oklahoma's problems. il *Country Gent* 81:1757 S 30 '16

**Extension division**

- Annual report of the extension division. il *Okl Ag Ext C* 48:1-14 '17
- Report of the extension division for the year 1915. *Okl Ag Ext C* 33:1-16 '16

**Oklahoma agricultural experiment station**

- 26th annual report, year ending June 30, 1917. *Okl Ag Exp Rep* 1917:1-40 '18

**Oklahoma dairy association**

- Annual session, Stillwater, Jan 3, 1917. C. A. Burns. *Hoard's D* 53:50 F 2 '17

**Oklahoma farmers' cooperative grain dealers' association**

- Kansas-Oklahoma joint convention, Wichita, March 14-16. *Am Coop J* 13:347-51 Ap '18; *Coop Manager & F* 7:48-9 Ap '18

- Oklahoma organizes farmers' grain dealers association. T. L. Daniels. *Am Coop J* 12:514 Mr '17

**Oklahoma free state fair**

- Oklahoma's free state fair at Muskogee. *Breeder's Gaz* 72:794 N 1 '17

**Oklahoma grain dealers' association**

- 21st annual joint convention, Oklahoma grain dealers and Oklahoma millers, Oklahoma City, May 22-23. *Coop Manager & F* 7:54-9 Jl '18

**Oklahoma millers' association**

- 21st annual joint convention Oklahoma grain dealers and Oklahoma millers, Oklahoma City, May 22-23. *Coop Manager & F* 7:54-9 Jl '18

**Oklahoma state fair**

- Good Jersey turnout at Oklahoma fair. *Jersey B* 36:1614 O 17 '17
- Oklahoma state fair. *Breeder's Gaz* 72:555-6 O 4 '17
- Show at Oklahoma City. *Breeder's Gaz* 70:606 O 5 '16

**Okra**

- Culture and uses of okra. W. R. Beattie. il *Farmers' B* 232:1-12 '18 (rev.)
- Novel use of okra. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:196 Mr 31 '17
- Okra—a healthful and delicious vegetable. P. B. Ruggles. il *Country Life* 34:78 My '18
- Okra and its uses. *Rural N Y* 75:1163 S 2 '16
- Okra culture. A. E. Wilkinson. *Country Gent* 81:692 Mr 25 '16
- Okra in Florida. *Fla Ag Dept Quar B v* 27: 17-19 Jl '17

**Diseases and pests**

- Hitherto-unreported disease of okra. L. L. Harter. il *J Ag Research* 14:207-12 Jl 29 '18
- Wilt diseases of okra and the verticillium-wilt problem. C. W. Carpenter. bibliog il *J Ag Research* 12:529-46 Mr 4 '18

**Okra caterpillars**

- Life-history of the okra or mallow caterpillar (cosmophila erosa Hübner). H. L. Dozier. il *J Econ Entom* 10:536-42 D '17

- Old army coat; story. J. W. Parsons. *Ohio F* 141:707 My 25 '18

- Old Ben Farr's awakening; story. il *Rural N Y* 77:456 Mr 23 '18

- Old Caleb's will; story. *J Ag (Quebec)* 21:vii-viii Ja '18

- Old clothes. *Country Gent* 82:723 Ap 14 '17

**Olearias**

- Olearia gunniana and its allies. J. Hutchinson. *Gard Chron (Lond)* 61:3, 13, 23 Ja 6-20 '17

**Oleasters**

- Russian oleaster a valuable overlooked honey plant. L. H. Pammel. il *Am Bee J* 57:374 N '17

**Oleomargarin**

- Against oleomargarine. J. Alexander. *J Ag (Quebec)* 21:13 Jl '17

- Alberta dairymen opposed to oleomargarine. W. M. Tait. *Jersey B* 36:322 F 28 '17

- Coloration of oleomargarine. W. T. Creasy. *N Y Prod R* 41:577 F 2 '16

- Commissioner Osborn's report: large increase in adulterated butter cases brought by internal revenue. W. H. Osborn. *N Y Prod R* 43:278 D 13 '16

- Concerning oleo license fees. *Pa Ag Dept Dairy B v* 16:20-2 Je '18

- Dairy interests fighting. P. H. Kieffer. *N Y Prod R* 43:637 F 21 '17

- Dairy interests vs. oleomargarine. *Ag Digest* 1: 338 Mr '17

- Dairy interests win; Senate kills Underwood oleo amendment by decisive vote. *N Y Prod R* 43:729 Mr 7 '17

- Dairymen's position in regard to oleo legislation. *N Y Prod R* 41:1046 Ap 12 '16

- Detection of added color in butter or oleomargarine. H. A. Lubs. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:436-9 Je '18

- Do you use margarine? D. M. Stern. *Independent* (119 W. 40th st, N.Y. 10c) 92:338 N 17 '17

- Economic objections to colored oleomargarine. J. H. Maurer. *Creamery* 4:27 F '16

- Facts as they are. R. G. Miller. *Kimball's D F* 15:487 Jl 15 '17

- Farrell defends dairy interests. J. J. Farrell. *N Y Prod R* 41:954-5 Mr 29 '16; Same. *Hoard's D* 51:501+ Ap 14 '16

- Fight these oleo bills. W. T. Creasy. *Jersey B* 36:1104 Jl 18 '17

- Government to insist that dairy products used in butter substitute be pasteurized. *N Y Prod R* 42:796 S 13 '16

- Haugen bill. *Nat Stock & F* 40:107 Ap 22 '16

- How oleo is made. *Nat Stock & F* 40:1051 Ja 13 '17

- John T. Ashcraft replies to "A specious argument." *N Y Prod R* 46:319 Je 19 '18

- Labor leader and oleomargarine. J. H. Maurer. *Hoard's D* 51:150 F 18 '16

- Legal control of oleomargarine. H. C. Sherman. *Hoard's D* 56:105 Ag 16 '18

- Let oleo sell on its merits. *Kimball's D F* 14: 90 F 15 '16



**Oleomargarin —Continued**

- \* Manufacture of margarine. Engineer (33 Norfolk st, Strand, London, W.C. 2) 125:301-2 Ap 5 '18
- Manufacture of oleomargarine. Sci Am Sup (233 Broadway, N.Y. 10c) 86:182-3 S 21 '18
- Margarine butter war in France. F. M. Mansfield. Jersey B 35:1274 Ag 16 '16
- Measurement and specification of the physical factors which determine the saturation of certain tints of yellow. I. G. Priest and C. G. Peters. (Technologic papers 92) 11p '17 U.S. Bur. of standards, Washington, D.C.
- Northern farmers use cottonseed oil in oleomargarine. J. T. Ashcraft. Prog F 33:1294 N 23 '18
- Now's the time to advertise away the prejudice against oleo (Printers' Ink p. 65 Ap 11 '18). Business Digest (241 W. 37th st, N.Y. \$5 per yr.) 5:557 Ap 24 '18
- Oleo bill in Congress. N Y Prod R 43:538 Ja 31 '17
- Oleo from the Canadian standpoint. Hoard's D 53:333 Mr 16 '17
- Oleo gains entry into Canada. F. E. Ellis. Hoard's D 54:546 N 9 '17
- Oleo in Congress. Hoard's D 51:510 Ap 14 '16
- Oleo interests masquerading in a new form. G. L. McKay. Hoard's D 51:46+ F 4 '16
- Oleo knocking at back door. C. A. Whittle; G. L. McKay. Hoard's D 53:978 Jl 13 '17
- Oleo legislation. J. R. Morley. Kimball's D F 15:656 S 15 '17
- Oleo legislation and the South. E. E. Miller. Hoard's D 51:392 Mr 24 '16
- Oleo legislation in the 64th Congress. W. T. Creasy. N Y Prod R 41:710 F 23 '16; Same. Hoard's D 51:200 F 25 '16; Same. Kimball's D F 14:143 Mr 1 '16; Same. Creamery 4:21 Ap '16
- Oleo regulation compelling dairy products used in making the substitute to be pasteurized. N Y Prod R 42:990 O 11 '16
- Oleo situation. W. T. Creasy. Jersey B 36:516 Ap 4 '17
- Oleo situation. W. T. Creasy. Jersey B 37:114 Ja 23 '18
- Oleo vs butter. J. H. Mauer. O Judd Farmer 60:19 Ap 1 '16
- Oleomargarin. J Ag (Quebec) 21:241 Je '17
- Oleomargarine. (In Report, Quebec Dairy-men's assn., 1916, p. 288-95) '17
- Oleomargarine. V. C. Cripe. Purdue Ag 10:34-5 My '16
- Oleomargarine and butter. N Y Prod R 45:322 Ja 2 '18
- Oleomargarine and Congress. W. T. Creasy. Hoard's D 53:1018 Jl 20 '17
- Oleomargarine and the National dairy union. G. L. McKay. Pa Ag Dept Dairy B v 16:3-9 Ap '18
- Oleomargarine in the United States Senate. Creamery 5:23-7+ Mr '17
- Oleomargarine legislation. Jersey B 35:694 My 3 '16
- Oleomargarine legislation. W. T. Creasy. Jersey B 35:197 F 9 '16
- Oleomargarine production and the price of butter. Wallaces' F 43:791 My 10 '18
- Oleomargarine question. P. W. Huntmer. Hoard's D 53:334 Mr 23 '17
- Oleomargarine: raw materials and method of manufacture. J. T. Donald. J Ag (Quebec) 21:156 Ap '18
- Oleomargarine situation. Creamery 5:39+ F '17
- Oleomargarine situation in Congress. W. T. Creasy. Jersey B 36:160 Ja 31 '17; Same. Hoard's D 53:95 F 9 '17
- Oleomargarine tax. W. B. Barney. Kimball's D F 15:52 F 1 '17
- Open letter from Swift. Kimball's D F 16:348+ My 1 '18
- Present status of oleomargarine legislation. Hoard's D 52:728 D 15 '16
- Putting across oleo legislation as a war measure. J. R. Morley. Hoard's D 54:235 S 14 '17
- Regulations governing oleomargarine. J Ag (Quebec) 21:91 D '17
- Relative nutritive value of oleomargarine and butter. J Home Econ 9:229 My '17

- Shall we teach the use of oleo in our schools? J. R. Morley. Hoard's D 54:36 Ag 3 '17
- Should stand on their own feet. J. McCabe. Creamery 5:54 Je '17
- Some facts about oleo. W. C. Jeffries. Ohio F 140:429 N 10 '17
- Status of oleo bill. N Y Prod R 43:680 F 28 '17
- Tax on oleomargarine. G. L. McKay. Hoard's D 53:5 Ja 26 '17; Same. N Y Prod R 43:650 F 21 '17
- Vigilance necessary to keep down sale as butter. N Y Prod R 41:618 F 9 '16
- What about oleomargarine? Prog F 32:1290 D 8 '17

**Statistics**

- Commercial supply of oleo stock, oleo oil, and edible tallow, Jan. 1. U S Food Surveys 1:10-11 My 31 '18
- Commercial supply of oleo stock, oleo oil, and edible tallow, July 1. U S Food Surveys 2:9-11 S 16 '18
- List of licenses for the manufacture and sale of oleomargarine and renovated butter granted by the Department of agriculture. See monthly bulletins of the Pennsylvania Department of agriculture, Dairy and food bureau

**Oleoresin**

- Oleoresin of Douglas fir. A. W. Schorger. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:1040-4 My '17

**Oil growers' associations**

- Décret instituant des associations facultatives de propriétaires d'olivettes à Tunis. Int Yearbook Ag Leg 1916:894-6 '17

**Olive oil**

- About olive oil and its cousins. Pa Ag Dept Dairy B v 15:27-8 O '17
- On the scope in South Australia for the extension of olive groves. A. J. Perkins. J Dept Ag S Australia 20:455-62 Ja '17
- Sidelights on the olive oil industry. H. Pye. J Dept Ag Victoria 15:158-65 Mr '17
- Some American vegetable food oils, their sources and methods of production; olive oil. H. S. Bailey. il U S Ag Yearbook 1916:160-3; Same. Separate 691:2-5
- Stability of olive oil. E. B. Holland and others. bibliog J Ag Research 13:353-66 My 13 '18
- Utilization of olive pomace. W. V. Cruess and A. W. Christie. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:45-7 Ja '17

**Statistics**

- Commercial stocks of olive oil, Jan. 1. U S Food Surveys 1:15-17 My 31 '18
- Commercial stocks of olive oil, July 1. U S Food Surveys 2:14-16 S 16 '18

**Laws**

- Décret n. 2274 ordonnant le recensement des vins et des huiles de la production 1915 ainsi que des stocks disponibles pour la consommation en Portugal. Int Yearbook Ag Leg 1916:23 '17

**Olive oil mills, Cooperative**

- Co-operative oilmills in Dalmatia. Int R Ag Econ 75:11-16 Mr '17

**Olives**

- Experiments made in the province of Lecce, Italy, in order to control the unproductivity of olive trees. F. Vallese. Int R Sci & Prac Ag 8,no 5:736-8 My '17
- Growing and grafting olive seedlings. F. T. Bioletti and others. il Cal Ag Exp B 268:305-26 '16
- Growth incompatibility of oak and olive trees. L. Petri. Int R Sci & Prac Ag 7,no 3:439 Mr '16
- Improvements in methods of pickling olives. F. T. Bioletti and W. V. Cruess. Cal Ag Exp B 289:195-200 '17
- Making the ripe olive staple. J. H. Collins. il Country Gent 81:961 My 6 '16
- Nitrogen requirements of the olive tree. L. Petri. Int R Sci & Prac Ag 7, no 10:1430-2 O '16
- Olive-growing and production in Spain. J. M. Priego. Int R Sci & Prac Ag 7,no 12:1727-33 D '16

**Olives—Continued**

- Olive growing in Spain; description of varieties grown, methods of cultivation, and the preparation of pickled olives. W. T. Gracey. (Special Consular Rep. 79) 34p '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Olive; its introduction into Australia. J. H. Maiden. *Ag Gaz of New South Wales* 28: 859-62 D '17
- Olive possibilities in Yuba county. G. W. Harney. *il Cal State Comm Hort B v 6:481-2 D '17*
- On the scope in South Australia for the extension of olive groves. A. J. Perkins. *J Dept Ag S Australia* 20:443-62 Ja '17
- Size grades for ripe olives. F. T. Bioletti. *il Cal Ag Exp B* 263:215-27 '16

**By-products**

- Utilisation of the residues of oil extraction from olives. H. Chevalier. *Int R Sci & Prac Ag* 7,no 4:591 Ag '16

**Diseases and pests**

- Olive insects of California. E. O. Essig. *il Cal Ag Exp B* 283:43-64 '17
- Zelleria oleastrella and glyphodes unionalis, lepidopterous pests of the olive tree in Apulia, Italy. G. Martelli. *Int R Sci & Prac Ag* 7,no 6:915-16 Je '16

**Marketing**

- See also California associated olive growers

**Varieties**

- Oil percentage in different varieties of olives. H. E. Laffer. *J Dept Ag S Australia* 20:548-9 F '17

**Omaha grain exchange**

- Omaha a great western grain center. *Coop Manager & F* 7:39-42 D '17

**Onagraceae**

- Pollen sterility in relation to the geographical distribution of some onagraceae. C. C. Forsaith. *bibliog il Bot Gaz* 62:466-87 D '16
- Uredinales found upon the onagraceae. G. R. Bisby. *Am J Bot* 3:527-61 D '16

See also Oenothera

- One missing horse; story. W. R. Gilbert. *Nat Stock & F* 40:476 Ag 5 '16

**Onion, Wild. See Wild garlic**

- Onion black mold. See Onions—Diseases and pests

**Onion maggots**

- Cabbage root maggot and its control in Canada, with notes on the imported onion maggot. A. Gibson and R. C. Treherne. p 29-32 'il '16 Canada Ag
- Controlling the onion maggot. J. S. Houser. *Market Growers J* 21:54 Ag 1 '17
- Further notes on the imported onion maggot (*hylemyia antiqua* mg.) and its control. A. Gibson. (*In* Report, Entom. Soc. of Ontario, 1917, p. 30-3) '18 Ontario ag. dept., Toronto
- Onion maggot. *Purdue Ag* 11:33 Mr '17
- Poisoned bait for the onion maggot; with discussion. N. F. Howard. *il J Econ Entom* 11:82-7 F '18

**Onion smut**

- Control of onion smut. A. T. Erwin. *Wallaces' F* 42:758 My 4 '17

**Onion thrips**

- Spraying with black leaf 40 to control onion thrips. (B 11-N) 7p 'il '16 Kentucky tobacco product co., Louisville, Ky.

**Onions**

- Asparagus culture; celery culture; onion culture. W. T. Macoun. 8p n. d. Canada Ag
- Baiting the dollar trap with onions. F. F. Rockwell. *il Gard M* 23:34-6 F '16
- Bigger profits from onions. S. B. Haskell and J. W. Henceroth. (Soil improvement com. Pamph. 22) 16p n. d. Nat. fertilizer assn., Chicago
- Bolting onions. *Gard Chron (Lond)* 62:107 S 15 '17
- British onions order, 1917. *J Bd Ag* 24:1130-2 Ja '18

- La cebolla, el ajo y la espinaca. F. Garcia. *il N M Ag Exp B* 115:1-26 '18
- Commercial onion culture in Idaho. C. C. Vincent. *il Idaho Ag Exp B* 97:1-16 '17
- Commercial onion growing. C. B. Sayre. *il Ind Ag Exp C* 57:1-27 '16
- Connecticut Valley onion supply and distribution. A. E. Cance and others. *il maps Mass Ag Exp B* 169:49-122 '16
- Cultivation experiments with onions. J. P. Griffith. *Market Growers J* 23:164 N 1 '18
- Cultivation of onions in the hills. J. Roebuck. *J Dept Ag S Australia* 21:313-15 N '17
- Drilling onion seed and fertilizing. J. W. Henceroth. *il Market Growers J* 20:201 Mr 1 '17
- Egyptian multiplier onions. R. G. Keppel. *Market Growers J* 19:61 Ag 1 '16
- Exhibition onions. E. R. Janes. *Gard Chron (Lond)* 59:29 Ja 15 '16
- Experiences of growers. *Market Growers J* 22:277+ Ap 1 '18
- Experiences with bunch onions; symposium. *Market Growers J* 22:22-3+ Ja 1 '18
- Growing big onions for profit. *Gard M* 23:188 Ap '16
- Growing green onions every month. W. B. Davis. *Market Growers J* 18:179 Ap 15 '16
- Growing onion sets on a small scale. O. F. Taylor. *Fruit-Grower* 27:213 Mr 15 '16
- Growing onions for profit. J. Campbell. (*In* Report, Ontario vegetable growers' assn., 1916, p. 69-74) '17 Ontario ag. dept., Toronto, Canada
- Growing onions from seed. *Prog F* 33:36 Ja 12 '18
- Growing onions in Florida. *Fla Ag Dept Quar B v* 27:12-16 O '17
- Growing red globe onions in Minnesota. A. S. Christenson. *Market Growers J* 22:265-6 Ap 1 '18
- Harvesting onions. J. A. Paice. *Gard Chron (Lond)* 64:87 Ag 31 '18
- How to grow giant bulbs of the Denia onion. *il Market Growers J* 18:80 F 1 '16
- Increasing the onion crop. E. Molyneux. *Gard Chron (Lond)* 61:46 F 3 '17
- Is onion growing worth while? D. Newton. *J Bd Ag* 24:1378-84 Mr '18
- Kiln-drying onions. *Rural N Y* 77:832 Je 29 '18
- Majestic onion. M. K. Boyer. *Am P Advocate* 25:374 Ap '17
- Market gardening. R. L. Watts. *Nat Stock & F* 41:867 D 8 '17
- Moving Texas Bermuda onions. E. B. Reid. *O Judd Farmer* 64:468 Ap '17
- 1916 fertilizers for onions. *Market Growers J* 19:35 Jl 15 '16
- 1916 preliminary onion crop report. *Market Growers J* 19:105-6 S 1 '16
- 1916 seed time onion crop report. *Market Growers J* 18:363+ Je 1 '16
- Onion cultivator the latest. *il O Judd Farmer* 60:7 Ap 29 '16
- Onion-culture. W. H. Taylor. *J Ag New Zealand* 13:281-4 O '16
- Onion culture (C. 40). J. W. Wellington. *N Y State Ag Exp Rep* 1915:659-64 '16
- Onion culture in the Northwest. E. M. Lowry. *il Fruit-Grower* 27:123 F 15 '16
- Onion growers make good; generous crop. *O Judd Farmer* 63:8 S 1 '17
- Onion growing. A. S. Christenson. *il Minn Hort* 46:131-7 Ap '18
- Onion growing in South Lima, N.Y., district. W. H. Ellis. *Market Growers J* 18:361-2 Je 1 '16
- Onion growing in the Connecticut valley. L. R. Smith. *il Mass Ag Bd B* 5:98-106 '18 (3d ed. rev.)
- Onion monopoly alleged by government. *Market Growers J* 20:428 Je 1 '17
- Onion production in the Pacific Northwest. R. G. Risser. *Market Growers J* 23:102 S 1 '18
- Onion set curing in Oregon. A. G. B. Bouquet. *Market Growers J* 18:392 Je 15 '16
- Onions. *Gard Chron (Lond)* 61:2 Ja 6 '17
- Onions. *il Nat Stock & F* 40:1360 Mr 10 '17
- Onions and onion sets. F. C. Michael. *Market Growers J* 18:144 F 15 '16



**Onions—Continued**

- Onions and strawberries in combination. W. Ramsdell. Market Growers J 18:278 Ap 15 '16
- Onions; experiments and culture. T. H. White. il Md Ag Exp B 195:63-78 '16; Same. Md Ag Exp Rep 1915-1916:63-78 '16
- Onions for everyone. G. W. Kerr. il Country Gent 83:54 Ja 12 '18
- Onions from seed. A. J. Gray. Market Growers J 18:152 F 15 '16
- Onions in Oregon. J. C. Leedy. Market Growers J 18:142 F 15 '16
- Orange county (N.Y.) onion methods. W. H. Bullock. il O Judd Farmer 60:5 Mr 4 '16
- Partial directions for raising, harvesting and storing of onions, squashes, cabbages. Maine Ag Dept B v 15:1-8 Je '16
- Some phases on onion culture. W. T. Tapley. il Minn Hort 45:456-63 D '17
- Two-pound onions. Country Gent 81:210 Ja 29 '16

**Diseases and pests**

- Black mold of onions. W. Van Pelt. il Ohio Ag Exp B v 2:152-6 My '17
- Control of onion diseases and thrips. H. T. Fernald and A. V. Osmun. il Mass Ag Ext C 5:1-4 '16
- Neck-rot disease of onions. M. T. Munn. bibliog il N Y State Ag Exp B 437:365-455 '17; Summary. Market Growers J 22:161 F 15 '18
- Neck rot of white onions. J. G. Humbert. il Ohio Ag Exp B v 1:176-80 Je '16; Same. Market Growers J 19:79-80 Ag 15 '16
- Onion blight in Ontario. S. C. Johnston. Market Growers J 19:128 S 15 '16
- Onion neck-rot in storage houses. F. H. Hall. Market Growers J 22:412-13 Je 15 '18
- Onions eaten by grubs. Gard Chron (Lond) 59:339-40 Je 24 '16
- To combat onion malady. Weekly N L 5:7 Ja 16 '18

See also Onion maggots; Onion smut

**Marketing**

- Co-operative marketing of the onion crop. C. Hanna. Market Growers J 22:305-6 Ap 15 '18

**Prices**

- Onions should sell well. O Judd Farmer 61:8 Ag 26 '16
- Trend of onion prices over series of years; table. Market Growers J 18:362 Je 1 '16

**Seed**

- Bermuda onion seed. Weekly N L 5:4 F 13 '18
- California versus Teneriffe onion. Am Flor 45:1344 Ja 8 '16
- Growing Bermuda onion seed in the southwestern United States. S. C. Mason. il (C. P. & B. L.—3) 6p '17 U.S. Bur. of plant industry, Washington, D.C.
- Growing onion seed. L. W. Lee. Ohio F 137:715 My 20 '16
- Growing onion seed. J. T. Rosa, jr. il Country Gent 81:1509 Ag 12 '16
- Home production of onion seed and sets. W. R. Beattie. il Farmers' B 434:1-21 '18 (rev.)
- 1918 Canary Island onion-seed crop. G. K. Stiles. (Commerce Reports no. 101) p 401-2 (Ap 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Onion seed crop in Canary Islands. Am Flor 50:346 My 11 '18
- Onion seed in Canary Islands. Am Flor 49:246 Ag 18 '17
- Onion set review. U S Seed Rep 1:4 Ja '18
- Preliminary report on the growing crop of onion sets. U S Seed Rep 1:3 Je '18
- \* United States buys large Canary Island onion-seed crop. G. K. Stiles. (Commerce Reports no. 265) p 561-2 (N 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Statistics**

- Commercial acreage and production of fall onions. Monthly Crop Rep 3:88 S '17
- Commercial stocks of onions. U S Food Surveys 1:10-12 Jl 24 '18

- Special onion report. Monthly Crop Rep 3:67 Jl '17

**Storage**

- Onion neck-rot in storage houses. F. H. Hall. Market Growers J 22:412-13 Je 15 '18

**Varieties**

- Onion growing simplified. A. Kruhm. il Gard M 23:239-40 My '16

**Onondaga county alfalfa growers' association**

- Gospel of co-operation. M. G. Feint. Prac F 113:257 Jl 15 '17

**Onsted cooperative association**

- Co-operation pays in dividends as well as more decent living conditions at Onsted, Mich. W. F. Vedder. Am Coop J 12:574 Ap '17

**Ontario**

See also Organization of resources committee; also subhead Canada under special subjects

**Agriculture, Department of**

- Campaign of advertising. J. Miller. Ag Gaz of Canada 4:788-90 S '17
- \* Report for the year ending October 31, 1917. 103p il '18 Ontario ag. dept., Toronto
- Report of the Minister of agriculture, province of Ontario, for the year ending October 31, 1916. 84p il '17 Ontario ag. dept., Toronto

**Industries, Bureau of**

- Annual report, 1916; pt 1, Agricultural statistics; pt 2, Chattel mortgages. 47p '17 Ontario ag. dept., Toronto
- \* Annual report, 1917. 47p '18 Ontario ag. dept., Toronto

**Lands, forests and mines, Department of**

- Report of the Minister of lands, forests and mines for the year ending 31st October, 1917. 158p il '18 Ontario ag. dept., Toronto

**Live stock branch**

- Annual report, 1917. 72p il '18 Ontario ag. dept., Toronto
- Annual report of the Live stock branch, 1916. 152p '17 Ontario ag. dept., Toronto, Canada
- Appendix to annual report of the Live stock branch 1917; Co-operative wool sales. 95p il '17 Ontario ag. dept., Toronto

**Stallion enrolment board**

- Report, 1918. 83p '18 Ontario ag. dept., Toronto

**Ontario agricultural and experimental union**

- 38th annual report, 1916. 92p '17 Ontario ag. dept., Toronto
- 39th annual report, 1917. 48p '18 Ontario ag. dept., Toronto

**Ontario agricultural college**

- Activities. (In Report, Minister of agriculture, 1916, p. 8-19) '17 Ontario ag. dept., Toronto, Canada
- Dairy school, Ontario agricultural college, H. H. Dean. il Ag Gaz of Canada 3:47-50 Ja '16
- 42d annual report of the Ontario agricultural college and experimental farm, 1916. 71p '17 Ontario ag. dept., Toronto
- 43d annual report of the college and experimental farm 1917. 72p il '18 Ontario ag. dept., Toronto

**Ontario association of fairs and exhibitions**

- Sixteenth annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1916. 120p il '16 Ontario ag. dept., Toronto

- 17th annual report of the agricultural societies of Ontario and of the convention of the Ontario association of fairs and exhibitions for the year 1917. 120p il '17 Ontario ag. dept., Toronto

**Ontario beekeepers' association. See Beekeepers' association of the province of Ontario**

**Ontario Berkshire breeders' society**

- Annual meeting, Toronto, Feb. 5. (In Report, 1917, Live stock branch, p. 37) '18 Ontario ag. dept., Toronto

- Ontario corn growers' association**  
Annual report, 1916. 36p il Ontario ag. dept., Toronto
- Ontario fruit growers' association**  
49th annual report, 1917. 79p '18 Ontario ag. dept., Toronto
- Ontario horse breeders' association**  
Annual meeting, Toronto, Feb. 7. (*In Report*, 1917, Live stock branch, p. 55-61) '18 Ontario ag. dept., Toronto
- Ontario horticultural association**  
12th annual report of the horticultural societies of Ontario for the year 1917; proceedings of 12th annual meeting, Ontario horticultural association, Toronto, Nov. 21-22, 1917. 112p il plan '18 Ontario ag. dept., Toronto
- Ontario horticultural experiment station**  
Report of Vineland station, 1916-1917. 80p il '18 Ontario ag. dept., Toronto
- Ontario provincial winter fair**  
Comparative tables of attendance, etc. (*In Report*, 1917, Live stock branch, p. 6-11) '18 Ontario ag. dept., Toronto
- Ontario provincial fair for 1916; addresses delivered.** (*In Report*, Live stock branch, 1916, p. 5-37, 74-80) '17 Ontario ag. dept., Toronto, Canada
- Ontario winter fair. Breeder's Gaz** 70:1291 D 28 '16
- 34th annual provincial winter fair, Guelph, Nov. 30-Dec. 6, 1917. *Ag Gaz of Canada* 5:92-3 Ja '18
- Ontario sheep breeders' association**  
Annual meeting, Toronto, Feb. 6. (*In Report*, 1917, Live stock branch, p. 47-54) '18 Ontario ag. dept., Toronto
- Ontario swine breeders' association**  
Annual meeting, Toronto, Feb. 5. (*In Report*, 1917, Live stock branch, p. 33-6) '18 Ontario ag. dept., Toronto
- Ontario vegetable growers' association**  
Annual convention, Toronto, Feb. 15. *Market Growers J* 22:186 Mr 1 '18
- 12th annual report, 1916. 78p il '17 Ontario ag. dept., Toronto, Canada
- 13th annual report, 1917. 83p il '18 Ontario ag. dept., Toronto
- Onygena**  
Spore germination in *onygena equina*. Willd. W: B. Brierley. *Ann Bot* 31:127-32 Ja '17
- Ophioglossaceae**  
*Prothallia of ophioglossum vulgatum*. N. E. Pfeiffer. *il Bot Gaz* 61:518-22 Je '16
- Opossum**  
Talks to young trappers. G: J. Thiessen. *il Country Gent* 82:1936 D 8 '17
- Tested methods of taking the raccoon and 'possum. G: J. Thiessen. *Ohio F* 138:526 N 25 '16
- Opuntias.** See Cactus
- Oral composition**  
Score card for home economics English. A. M. Earhart. *J Home Econ* 9:497-9 N '17
- Orange oil**  
Production of sweet-orange oil. S. C. Hood and G. A. Russell. *il U S Ag B* 399:1-12 '16
- Orange-oil industry**  
Development of orange-oil industry in Jamaica. C: L. Latham. (*Commerce Reports* no. 6) p 90-4 (Ja 8) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Orange pectin**  
Orange pectin for jelly. M. M. Conklin. *Country Gent* 81:1278 Je 24 '16
- Orange rust**  
Orange rust of raspberries and blackberries. H. E. Mern. *Ohio F* 138:119 Ag 12 '16
- Orange rust of *rubus* in Canada. R. E. Stone. *il Phyt* 8:27-9 Ja '18
- Orange rusts of *rubus*. J. C. Arthur. *map Bot Gaz* 63:501-15 Je '17
- Quince rust. F. D. Kern. *il Country Gent* 81:795 Ap 8 '16
- Oranges**  
Branding-iron for oranges. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:64 Jl 28 '17
- Bud variation. A. D. Shamel. *il J Heredity* 7:82-7 F '16
- Citrus-fruit improvement; a study of bud variation in the Valencia orange. A. D. Shamel and others. *il U S Ag B* 624:1-120 '18
- Citrus-fruit improvement; a study of bud variation in the Washington navel orange. A. D. Shamel and others. *il U S Ag B* 623:1-146 '18
- Citrus trifoliata* (syn. *aegle sepiaria*). R. I. Lynch. *il Gard Chron (Lond)* 64:157 O 19 '18
- Dry blood-orange strain. A. D. Shamel. *il J Heredity* 9:174-7 Ap '18
- Effect of fertilizers on the composition and quality of oranges. H. D. Young. *bibliog J Ag Research* 8:127-38 Ja 22 '17
- Forgotten bud variations. L. B. Scott. *il J Heredity* 7:452-5 O '16
- Forty years of the navel orange. G: Gladden. *il Country Life* 30:43 Jl '16
- Humus in mulched basins, relation of humus content to orange production, and effect of mulches on orange production. C: A. Jensen. *bibliog J Ag Research* 12:505-18 F 25 '18
- Is an orange grove a lemon? J: B. Wallace. *il Country Gent* 82:1818-19+ N 24 '17
- Navel orange of Bahia with notes on some little-known Brazilian fruits. P. H. Dorsett and others. *il map U S Ag B* 445:1-35 '17
- Orange growing. C. W. Johnston. *Wallaces' F* 41:239 F 11 '16
- Orange tree in Algeria. L. Trabut. *Int R Sci & Prac Ag* 7,no 8:1121-2 Ag '16
- Oranges. T: P. P. MacPhail. *Gard Chron (Lond)* 61:160 Ap 21 '17
- Orchard and garden notes for the Gulf Coast country. L. T. Rhodes. *Prog F* 31:632 My 6 '16
- Origin and culture of the navel orange. *Scientific Am* (233 Broadway, N.Y. 10c) 116:244-5 Mr 3 '17
- Satsuma orange. R. E. Blackburn. *Ga Ag Coll (Ext)* C 76:1-4 '18
- Standards of maturity for the Washington navel orange. E. M. Chace. *Cal State Comm Hort B v* 6:325-30 Ag '17
- Striking orange bud variations. A. D. Shamel. *il J Heredity* 9:189-91 Ap '18
- Variations in Washington navel orange. *il Rural N Y* 77:1374 D 14 '18
- Washington navel orange. *Int R Sci & Prac Ag* 7,no 1:88-91 Ja '16
- Why navel oranges are seedless. A. D. Shamel. *il J Heredity* 9:246-9 O '18
- See also Citrus fruits; Orange oil

### Composition

Effect of fertilizers on the composition and quality of oranges. H. D. Young. *bibliog J Ag Research* 8:127-38 Ja 22 '17

### Diseases and pests

Aleyrodidae, or white flies attacking the orange, with descriptions of three new species. A. L. Quaintance and A. C. Baker. *bibliog il J Ag Research* 6:459-72 Je 19 '16

Control of the Argentine ant in orange groves. J. R. Horton. *il Farmers' B* 928:1-20 '18

June drop of Washington navel oranges; a progress report. J. E. Coit and R. W. Hodgson. *il Cal Ag Exp B* 290:203-12 '17

Katydid injurious to oranges in California. J. R. Horton and C. E. Pemberton. *il U S Ag B* 256:1-24 '15

Orange grove pest; light brown apple moth. S. A. Cock. *il J Dept Ag Victoria* 15:376 Je '17

### Handling

Factors governing the successful shipment of oranges from Florida. A. V. Stubenrauch and others. *il map U S Ag B* 63:1-50 '14

### Marketing

Advertising and merchandising northwestern apples. R. C. Gano. *Better Fruit* 10:6-8 Je '16

### Packing

One bushel box oranges packed in less than two minutes. C: A. Green. *Green's Fruit Grower* 36:6 Ja '16



**Orchard grass**

- Orchard grass. C. N. Hutchison. N Y Ag Dept B 87:2802-7 S '16
- Orchard grass. A. M. Soule. Breeder's Gaz 69:1227 Je 8 '16
- Orchard grass and cattle for the Ozarks. E. Kilpatrick. Breeder's Gaz 41:288 F 18 '16; Same cond. Prog F 31:844 Jl 1 '16
- Orchard grass experience. J. A. Head. Wal-laces' F 41:288 F 18 '16
- Orchard grass for pasture. C. H. Chesley. Hoard's D 51:631 My 5 '16

**Seed**

- Orchard grass seed. U S Seed Rep 1:4 N '17
- Orchard grass seed outlook. U S Seed Rep 2:5 Jl '18

**Orchard heating. See Frost protection**

**Orchard management**

- Alfalfa in the orchard, or better orchard farming. P. S. Darlington. Better Fruit 10: 15-18 F '16
- Business methods always secure results at Rose Cliff orchard. Va. J. M. Bell. il Green's Am Fruit Grower 38:3 My '18
- Business methods in orchards. W. H. Jenkins. Am Fruit Grower 38:8 S '18
- Clover in irrigated orchards. E. F. Stephens. Fruit-Grower 28:135 F 15 '17
- College men establish orchards. il O Judd Farmer 60:7 Mr 4 '16
- Cover crops—a winter blanket for the or- chard. C. A. McCue. Prac F 114:241 Jl 15 '18
- Cover crops in the orchard. R. D. Anthony. il N Y Ag Dept B 79:pt 1:785-93 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:785-93 '17
- Cultivation of a bearing orchard. B. C. Mor- maw, jr. il Country Gent 81:1650 S 9 '16
- Cultural methods in bearing orchards. J. P. Stewart. il map Pa Ag Exp B 141:1-28 '16
- Do orchards need manure? Green's Fruit Grower 37:4 Ja '17
- Easy method of laying out the orchard. Nat Stock & F 40:237 My 27 '16
- Effect of sod and cover crops on soil nitrates. T. L. Lyon. N Y State Fruit Growers' Assn Pro 1918:127-9
- Extra crops in the orchard. A. W. Brayton. O Judd Farmer 62:8 F 24 '17
- Farm orchard. Nat Stock & F 42:535 S 7 '18
- Fertilizers for fruits. U. P. Hedrick. N Y State Fruit Growers' Assn Pro 1916:89-97
- Fertilizers for fruits. U. P. Hedrick. N Y Ag Dept B 79:pt 1:811-15 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:811-15 '17
- Fertilizing mulched hill orchards. W. J. Green. Rural N Y 76:360 Mr 3 '17
- Fortifying the orchard. M. G. Kains. il Field 11 28:322-3 My '18
- Grass-mulch for orchards. il Fruit-Grower 28: 124 F 15 '17
- Growing cover crops in young orchards. J. A. Hughes. Better Fruit 11:11 N; 20 D '16
- Intercropping the orchard. E. H. Favor. il Fruit-Grower 28:214 Ap 1 '17
- Intercropping the young orchard—from an economic standpoint. M. C. Burritt. il N Y Ag Dept B 79,pt 1:794-802 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:794-802 '17
- Irrigation of orchards. S. Fortier. il Far- mers' B 882:1-40 '17
- Knowing an orchard. S. Van Aken. Nat Stock & F 42:856 D 21 '18
- Laying out an orchard. R. L. Hubbard. il Country Gent 81:395 F 19 '16
- Managing the orchard. J. G. Moore. il Wis Ag Exp B 269:1-47 '16
- Manures for the fruit growers. H. E. Van Deman. Green's Fruit Grower 36:7 Ja '16
- Notes on the presence of nitrates in orchard soils. J. H. Gourley and V. D. Shunk. N H Ag Exp Tech B 11:1-31 '16
- Orchard accounting system that works. J. R. Mattern. Country Life 29:45 F '16
- Orchard cover-crops for the Moutere Hills. W. C. Hyde. il J Ag New Zealand 13:472-7 D '16
- Orchard drainage. T. E. Martin. Rural N Y 75:398, 430 Mr 4-11 '16
- Orchard fertilizers. J. P. Stewart. il Country Gent 82:682 Ap 7 '17

- Orchard in wartime; must clean cultivation give way to the sod mulch? F. A. Waugh. il Country Gent 83:11 Jl 13 '18
- Orchard intercrops. W. A. Radspinner. Pur- due Ag 11:48-9 My '17
- Orchard irrigation. F. R. Arndt. J Dept Ag S Australia 21:959-67 Jl '18
- Orchard irrigation. J. H. Darwent. J Dept Ag S Australia 21:920-3 Je '18
- Orchard irrigation question in the Pacific Northwest. R. W. Allen. il Better Fruit 13: 5-6 Jl '18
- Orchard soil management. W. H. Chandler and R. W. Rees. il Cornell Reading Course 125:303-20 '17
- Points in orchard irrigation. il O Judd Farmer 60:15 Mr 4 '16
- Relation of fruit growing to soil fertility. R. C. Thompson. Ark Ag Exp B 123:1-20 '16
- Results from orchard fertilization. il Pa Ag Exp B 147:34-7 '17
- Securing organic matter in orchard soils. J. R. Mattern. Better Fruit 11:8 Ag '16
- Sod in orchards; lime. Rural N Y 77:786 Je 15 '18
- Soil management in the home orchard. R. W. Rees. il Cornell Countryman 15:531-2 Je '18
- Standardized orcharding. F. A. Waugh. Coun- try Gent 81:267 F 5 '16
- Successful Ohio orcharding. Ohio F 142:142 Ag 17 '18
- Tillage in the orchard. W. H. Chandler. il N Y Ag Dept B 79,pt 1:776-84 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:776-84 '17
- Tillage of a commercial orchard. T. E. Rodda. il J Ag New Zealand 12:106-9 F '16
- Tractor a requirement for the orchard. C. M. Walker. Better Fruit 11:7 Jl '16
- Tractor in the orchard; photographs. Country Gent 82:1734 N 10 '17
- Tractors for orchard work. Rural N Y 76:315 Mr 3 '17
- Use of explosives in the tillage of trees. J. R. Mattern. 78p il '18 Inst. of makers of ex- plosives, 103 Park av, N.Y.
- Using tractors in orchards is profitable. A. L. Dahl. il Green's Am Fruit Grower 38:3-4 Je '18
- Utilize the waste space. Mrs E. M. Anderson. Prac F 112:306 Ag 15 '16
- Vegetables in the orchard. J. T. Rosa, jr. il Country Gent 83:24 F 9 '18
- Water; its application to fruit trees and vines. G. Quinn. J Dept Ag S Australia 20:707-11 Ap '17
- Watering the orchard. F. W. Allen. il Fruit- Grower 28:251 My 1 '17
- What shall the fruit grower do? Country Gent 82:1027 Je 16 '17
- See also Apple culture; Fruit culture; Fruit farms
- Orchard orioles. See Orioles**
- Orchards. See Fruit culture**
- Orchid flies**
  - Cattleya fly. J. B. Moore. bibliog il N J Ag Exp B 308:1-12 '16
  - Detection and eradication of the cattleya or orchid fly. il Am Flor 47:157 Ag 12 '16
- Orchids**
  - Anatomy of the six epiphytic species of the New Zealand orchidaceae. K. M. Curtis. bibliog il Ann Bot 31:133-49 Ja '17
  - Dendrobium Wollastoni. il Gard Chron (Lond) 59:206 Ap 15 '16
  - Disas of the Cape. W. H. Cox. il Gard Chron (Lond) 60:271, 283 D 2-9 '16
  - Easter orchids. C. Y. Pripede. Am Flor 50: 402-3 Mr 16 '18
  - Hybrid orchids. Gard Chron (Lond) 59:294; 60:74 Je 3, Ag 12 '16
  - Hybrids at Scampston Hall, Yorkshire. il Gard Chron (Lond) 60:276 D 9 '16
  - My friend, the orchid—an introduction. L. Barron. il Country Life 31:56-3 F '17
  - Novelties of 1915. il Gard Chron (Lond) 59: 2-3 Ja 1 '16
  - Novelties of 1916. Gard Chron (Lond) 61:1, 24 Ja 6, 20 '17
  - Orchid culture. S. R. Wells. Gard Chron Am 21:275 Jl '17

**Orchids—Continued**

- Orchid houses. J. Collier. Gard Chron (Lond) 62:109 S 15 '17
- Orchid houses. J. Collier. Gard Chron (Lond) 64:168 O 26 '18
- Orchid notes and gleanings. Gard Chron (Lond) 60:300; 61:45, 95, 162; 62:13, 85, 105, 148, 206; 63:33, 75, 87, 110, 122, 134, 145, 155, 184, 194; 64:21, 56, 67, 77, 85, 96, 105, 125, 136, 156, 176, 193 F 3, Mr 3, Ap 21, Jl 14, S 1, 15, O 13, N 24 '17, Ja 26, F 23, Mr 2, 16-Ap 13, My 4-11, Jl 20, Ag 10-S 14, 28-O 5, 19, N 2, 16 '18
- Orchid notes; summer varieties and winter planning. C. Y. Pripede. Am Flor 51:180 Ag 17 '18
- Orchids at Bryndir, Roehampton. Gard Chron (Lond) 62:168 O 27 '17
- Orchids at Gatton Park. Gard Chron (Lond) 61:239 Je 16 '17
- Orchids gain in popularity. Am Flor 46:1285 Jl 8 '16
- Orchids in 1917. Gard Chron (Lond) 63:3 Ja 5 '18
- Popular Christmas varieties. C. Y. Pripede. il Am Flor 49:1143 D 15 '17
- Prolonging blooming season. C. Y. Pripede. Am Flor 49:860 N 10 '17
- Some essential points of orchid cultivation. G. Wilson. Royal Hort Soc J 42:pt 1:7-12 O '16
- Spring-flowering dendrobiums. Gard Chron (Lond) 63:147 Ap 6 '18
- Summer care. Am Flor 49:206 Ag 18 '17
- Summer care of orchids. C. Y. Pripede. Am Flor 47:157 Ag 12 '16
- Watering, shading and ventilating. C. Y. Pripede. Am Flor 46:1239 Jl 1 '16
- See also* Moccasin flowers

**Diseases and pests**

*See also* Orchid flies

- Order of the red ravelings; story.** R. W. Nichols. il Country Gent 83:12+ Ap 27 '18

**Oregon**

*See also* subhead Oregon under special subjects, e.g. Agriculture—Oregon, Dairying—Oregon

**Forester, State**

- 6th annual report, 1916. 20p '17 Ore. State bd. of forestry, Salem
- \* 7th annual report to the governor, 1917. 21p il '18 Ore. State forester, Salem

**Oregon agricultural college**

Exhibits of Oregon agricultural college at the 1916 state fair. Ore Ag Coll (Corvallis) B 243:1-17 S 15 '16

**Oregon agricultural experiment station**

Relation of the experiment station to the horticultural interests of Oregon. A. B. Cordley. (In 8th annual report, 1916, p. 119-23) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.

Report of the Hood River branch experiment station for 1916. il Ore Ag Exp B 141:1-56 '17

Work of the station. Better Fruit 11:18 Ja '17

**Oregon cooperative dairy exchange**

Oregon co-op. dairy exchange; its objects and aims. N Y Prod R 42:938 O 4 '16

Oregon co-operative dairy exchange starts business. R. A. Graves. Hoard's D 52:276 S 22 '16

**Oregon dairy council**

Oregon dairy council, E. H. Holmes. Hoard's D 56:603 N 22 '18

Organization and work. E. H. Holmes. Hoard's D 56:333, 440 O 4, 25 '18

**Oregon forest fire association**

Work of the association. W. Gilbert. Am For 22:563 S '16

**Oregon state fair**

55th Oregon state fair. Breeder's Gaz 72:611 O 11 '17

**Oregon state horticultural society**

8th annual report; proceedings of the 31st annual meeting, Hood River, Oregon, December 11-13, 1916. 125p '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.

**Oregon state live stock sanitary board**

Second biennial report for the period ending December 31, 1916. 127p il '17 Oregon state live stock sanitary board, Salem

**Oregons (poultry)**

Farmer's hen. F. H. Valentine. il Country Gent 82:363 F 24 '17

Oregons; a new poultry breed. J. Dryden. Rural N Y 75:72 Ja 15 '16

**Organization of resources committee**

Organization of resources committee in Ontario. Ag Gaz of Canada 4:715-17 Ag '17

**Organization of the Swiss beekeepers**

What's the reason? why cannot the associations in this country accomplish as much as those in Switzerland? F. Greiner. Gleanings 45:114 F '17

**Organotherapy**

Organotherapy and the classification of therapeutic tissue extracts. R. A. Archibald. Am Vet M Assn J 54:33-9 O '18

**Oriental peach moths**

Further notes on laspeyresia molesta. W. B. Wood and E. R. Selkregg. il J Ag Research 13:59-72 Ap 1 '18

New fruit pest in Connecticut. Conn State Ag Exp B 203:315-19 '18

Oriental peach moth: a Japanese fruit insect recently introduced into the United States. W. B. Wood. il Cal State Comm Hort B v 7:523-8 S '18

Oriental peach pest. P. Garman. il Md Ag Exp B 209:1-16 '17

Oriental what-is-it. F. Tilden. il Country Gent 82:1970-1+ D 15 '17

**Origin of life**

On the supposed origin of life in solutions of colloidal silica. S. G. Paine. il Ann Bot 30: 383-8 Jl '16

**Origin of species. See Evolution****Orioles**

Baltimore oriole. E. S. Jones. il Ohio F 139: 134 Ja 27 '17

Blackbirds and orioles. il Am For 22:673 N '16

Orchard oriole. E. S. Jones. Ohio F 137:270 F 19 '16

**Orland, California**

Elwood Mead outlines his rural credit experiment. Irr Age 31:102 My '16

Orland experiment to be tried in June. E. Mead. Irr Age 31:84 Ap '16

**Ornithodoros megnini. See Spinose ear tick****Ornix geminata. See Apple leaf miners****Orpingtons (poultry)**

Buff Orpington. W. H. Card. il Country Gent 81:519 Mr 4 '16

Buff Orpingtons as layers. L. L. Hamilton. Reliable P J 25:716 O '18

Hail to the beautiful white Orpington. S. B. Brennan. il Am P J 47:918 Je '16

How I produced and prepared 1915 exhibits. L. C. Gercke. Am P J 47:757 My '16

One of his ideal white Orpingtons. G. M. Curtis. il Reliable P J 24:160 Ap '17

Orpington type. W. Moore. Am P J 48:890 Ag '17

Orpingtons—buff, white and black. F. S. Jacoby and A. Bayes. il Ohio F 138:132 Ag 12 '16

Return of the white Orpingtons. O. W. Aldrich. il Am P Advocate 24:315 Mr '16

Single comb white Orpington. R. D. Sherman. Am P Advocate 24:748 S '16

White Orpington. W. H. Card. il Country Gent 81:216 Ja 29 '16

White Orpington—a leading variety. J. A. Carruthers. Am P J 47:851 Je '16

White Orpingtons as exhibition and general purpose fowl. O. W. Aldrich. Reliable P J 23:61+ Mr '16

Why keep Orpingtons? P. A. Cook. Am P J 47:66 Ja '16

*See also* American white Orpington club

**Orthodactyl. See Anchylosis****Orthoptera**

\* Inheritance in orthoptera. J. S. Dexter. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:61-4 Ja '18



**Orthoptera—Continued**

Key to orthoptera of Michigan with annotations. R. H. Pettit and E. McDaniel. *il Mich Ag Exp Spec B* 83:1-48 '18

**Oryctes rhinoceros.** See Rhinoceros beetles

**Osage**

New use for osage orange. *il Country Gent* 81:154 Ja 22 '16

Osage orange. C. C. Osborne. *il Country Life* 33:80b F '18

Osage orange dye. Wallaces' F 41:291 F 18 '16

Osage orange waste as a substitute for fustic dyewood. F. W. Kressman. *U S Ag Yearbook* 1915:201-4

**Oscinid flies.** See Stem maggots

**Osiers**

Growing basket willow. J. B. Berry. *il Ga Ag Coll (Ext) C* 67:1-8 '17

Osier culture in France. *Int R Sci & Prac Ag* 7, no 10:1454-6 O '16

Willow-growing and basket-making as rural industries. H: P. Hutchinson. *il J Bd Ag* 22:1081-95 F '16

Willows; commercial uses. S: B. Detwiler. *il Am For* 23:8-10 Ja '17

**Diseases and pests**

Insect pests of basket willows. *il J Bd Ag* 24: 844-52 N '17

**Osmosis**

Notes on osmotic experiments with marine algae. R. H. True. *bibliog Bot Gaz* 65:71-82 Ja '18

Studies on exosmosis. S. C. Brooks. *bibliog Am J Bot* 3:483-92 N '16

**Osmotic pressure**

Extension to 5.99° of tables to determine the osmotic pressure of expressed vegetable saps from the depression of the freezing point. J. A. Harris. *Am J Bot* 2:418-19 O '15

Notes on the calculation of the osmotic pressure of expressed vegetable saps from the depression of the freezing point, with a table for the values of  $P$  for  $\Delta = 0.001^\circ$  to  $\Delta = 2.999^\circ$ . J. A. Harris and R. A. Gortner. *Am J Bot* 1:75-8 F '14

On the osmotic concentration of the tissue fluids of phanerogamic epiphytes. J. A. Harris. *bibliog Am J Bot* 5:490-506 N '18

On the osmotic pressure of the tissue fluids of Jamaican loranthaceae parasitic on various hosts. J. A. Harris and J. V. Lawrence. *bibliog Am J Bot* 3:438-55 O '16

Osmotic concentration of the tissue fluids of Jamaican montane rain-forest vegetation. J. A. Harris and J. V. Lawrence. *bibliog Am J Bot* 4:268-98 My '17

Osmotic pressure as an index of habitat. B. Moore. *J For* 15:1010-13 D '17

Physical properties of some toxic solutions. G: B. Rigg and others. *bibliog Bot Gaz* 61: 408-16 My '16

Relation between biological activities in the presence of various salts and the concentration of the soil solution in different classes of soil. C. E. Millar. *J Ag Research* 13:213-23 Ap 22 '18

Relationship between the osmotic pressure of the soil solution and the growth of wheat. M. N. Toulakow. *Int R Sci & Prac Ag* 7, no 12:1741-4 D '16

**Ossipee park**

Man and his mountains: Ossipee park, the country home of Mr Thomas G. Plant. E. L. D. Seymour. *il map Country Life* 31: 45-9 F '17

**Osteology.** See Bones

**Osteomalacia.** See Cage paralysis

**Osteopathy**

Principles of osteopathy as applied in the treatment of veterinary patients; with discussion. E. A. A. Grange. *Am Vet M Assn J* 52:670-4 F '18

**Osteopsathyrosis**

Osteopsathyrosis; fragility of bones due to heredity. *J Heredity* 7:36-8 Ja '16

**Ostrich breeding**

Absence of xenia in ostrich eggs. J. E. Duerden. *il J Heredity* 9:243-5 O '18

**Ostrich eggs**

Absence of xenia in ostrich eggs. J. E. Duerden. *il J Heredity* 9:243-5 O '18

Canned ostrich eggs. *N Y Prod R* 45:551 F 20 '18

**Ostriches**

Ostrich investigations. *Ariz Ag Exp Rep* 1916: 290-3 '16

**Otiiorhynchus ovatus.** See Strawberry root weevils

**Otis, Charles A.**

Portrait. *Breeder's Gaz* 69:717 Mr 30 '16

**Otsego county sheep breeders' association**

Constitution and by-laws. *N Y Ag Dept B* 96: 138-9 Je '17

County cooperation. F. S. Barlow. *N Y Ag Dept B* 96:103-6 Je '17

When sheepmen cooperate. *Nat Stock & F* 41: 87 Ap 14 '17

**Ottawa winter fair**

Ottawa winter fair, Jan. 16-19, 1917; addresses delivered. (*In* Report, Live stock branch, 1916, p. 38-73) '17 Ontario ag. dept., Toronto, Canada

**Out-apiaries.** See Bee culture—Out-apiaries

**Ovens**

Old bake ovens in Pennsylvania. E. M. Thomas. *J Home Econ* 8:347-8 Jl '16

**Over the wire;** story. L. Bain. *O Judd Farmer* 61:611 Je 8 '18

**Overflow worm.** See Fall army worm

**Ovicides.** See Insecticides

**Ovine alliance.** See National sheep and wool bureau

**Owls**

Great horned owl. E. S. Jones. *Ohio F* 139: 30 Ja 6 '17

Great horned owl. M. W. Leighton. *il Country Life* 30:42 S '16

Owls. A. A. Allen. *il Am For* 24:219-24 Ap '18

Screech owl. E. S. Jones. *il Ohio F* 139:62 Ja 13 '17

Short-eared owl. C: Carpenter. *il Am Coop J* 13:381 My '18

Spare the owl. *Power F* 25:52 F '16

**Ox warbles.** See Warble flies

**Oxen**

Here is a new one—ox power. *Rural N Y* 76: 4 Ja 6 '17

Ox-power farm. *Rural N Y* 76:109 Ja 27 '17

See also Cattle; Live stock

**Oxford Bears fruit growers' association**

Oxford Bears' fruit growers' association. E. E. Conant. *Mass Ag Bd Yearbook* 1916, pt 2:174-84 '17

**Oxidases**

Catalase and oxidase content of seeds in relation to their dormancy, age, vitality, and respiration. W: Crocker and G: T. Harrington. *bibliog J Ag Research* 15:137-74 O 21 '18

Evidence of the action of oxidases within the growing plant. J. H. Kastle and G. D. Buckner. *Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr)* 39: 478-82 Mr '17

On the mechanism of oxidase action. G. B. Reed. *Bot Gaz* 62:53-64 Jl '16

Oxidases in healthy and in curly-dwarf potatoes. H. H. Bunzel. *bibliog J Ag Research* 2:373-404 Ag '14

Part played by oxidases in the improvement of cultivated plants; biological experiments and considerations. M. Degli Atti. *Int R Sci & Prac Ag* 8, no 5:706-8 My '17

Physiological observations on alkaloids, latex and oxidases in papaver somniferum. R. H. True and W. W. Stockberger. *Am J Bot* 3: 1-11 Ja '16

Relation between oxidase and catalase in plant tissues. G. B. Reed. *Bot Gaz* 62:409-12 N '16

Relation of catalase and oxidases to respiration in plants (B. 191). C: O. Appleman. *bibliog Md Ag Exp Rep* 1915-1916:1-16 '16; Same cond. *Am J Bot* 3:223-33 My '16

**Oxidases—Continued**

Role of oxidases and of iron in the color changes of sugar cane juice. F. W. Zerban. *J Industrial & Eng Chemistry* (Am. Chemical soc., Easton, Pa. 60c) 10:814-17 O '18

Separation of oxidase reactions from the catalase reaction. G. B. Reed. *Bot Gaz* 62:303-10 O '16

Significance of color changes in oxidase reagents. G. B. Reed. *Bot Gaz* 61:430-2 My '16

See also Peroxidases

**Bibliography**

Studies on oxidases. D. H. Rose. *Bot Gaz* 64: 521-4 D '17

**Oxidation**

Measurement of oxidation potential and its significance in the study of oxidases. G. B. Reed. *Bot Gaz* 61:523-7 Je '16

Progressive oxidation of cold-storage butter. D. C. Dyer. bibliog il *J Ag Research* 6:927-52 S 11 '16; Excerpts. *Creamery* 5:24-5 D '16

**Oxyacetylene flame. See Welding****Oxygen**

Dissolved oxygen in rain-water. E. H. Richards. *J Ag Sci* 8:331-7 Je '17

Some effects of oxygen and carbon dioxide on nitrification and ammonification in soils. J. K. Plummer. bibliog Cornell Ag Exp B 384:305-30 '16; Same. Cornell Ag Exp Rep 1917:305-30 '18

**Oyster-shell scale**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B v* 16, no 26:97-8 '16

Oyster-shell scale and the scurfy scale. A. L. Quaintance and E. R. Sasscer. il *Farmers' B* 723:1-16 '16

Predacious mite, *hemisarcoptes malus* Shimmer, and its relation to the natural control of the oyster-shell scale, *lepidosaphes ulmi* L. J. D. Tothill. il *Ag Gaz of Canada* 5: 234-9 Mr '18

Two destructive scale insects. *Better Fruit* 11:19 D '16

**Oyster shells**

Oyster shells for lime. *Country Gent* 81:1028 My 13 '16

**Oysters**

Cleansing and shucking of oysters. *Pa Ag Dept Dairy B v* 15:23-7 Ag '17

Nutrition of oysters; glycogen formation and storage. P. M. Mitchell. (Doc. 851) 153-61p 5c '17 U.S. Bur. of fisheries, Washington, D.C.

Oysters: the food that has not gone up. H. F. Moore. il *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:184-5 Mr 23 '18

Scope of the investigations of the season. il map *N J Ag Exp Rep* 1916:401-30 '17

**Ozark fruit growers' association**

Selling Ozark strawberries. S. O. Rice. il *Country Gent* 83:14 Mr 16 '18

Units of the central distributing and selling agency. G. B. Cady. *Prog F* 32:484 Ap 14 '17

**P****Pacific international live stock exposition**

Pacific international. Portland, Ore. Breeder's *Gaz* 72:1037 D 6 '17

Pacific international show at Portland. Breeder's *Gaz* 70:1291 D 28 '16

**Pacific islands. See Sheep—Pacific islands****Pacific rice growers' association**

Pacific rice growers' association. (*In Report Cal. State market director*, 1916, p 22-7) '16 Cal. State market director, Sacramento

**Pacing. See Horse racing****Pack, Charles Lathrop, 1857-**

American forestry association's new president. *por Am For* 22:86-9 F '16

**Pack rats**

Pack rat as an enemy of natural reproduction on the Angeles national forest. E. N. Munns. *J For* 15:417-23 Ap '17

**Package libraries**

Extension loan library and list of free bulletins. E. S. Gopee. *Tex Univ* (Austin) B 1726:1-13 My 5 '17

Package library in the provinces. *Ag Gaz of Canada* 4:605-8 J1 '17

**Packing for shipment**

Centralization of packing. S. V. Beckwith. *Better Fruit* 10:18+ My '16

How prices are increased by using the right fruit and vegetable packages. il *System on the Farm* 1:225-8 Ag '17

Laws on packages explained. *Market Growers J* 23:204 D 1 '18

Packages and packing—in carlots. J. Mappelbeck. il *Country Gent* 81:780 Ap 8 '16

Packages made of paper. J. Mappelbeck. il *Country Gent* 81:1326-7 J1 8 '16

Packages, packing and—honesty. P. Earle. il *Country Gent* 81:1395 J1 22 '16

Selling produce on looks. C. E. Brehm. il *Country Gent* 82:1341 S 1 '17

Uniform grades and standard packages. C. T. More. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 468-74) '17

See also Apples—Packing; Eggs—Packing; Freight inspection; Fruit—Packing

**Packing houses**

Countryman in Chicago. il *Cornell Countryman* 14:302-5 Ja '17

Farmer packer. il *Wallaces' F* 41:439 Mr 17 '16

Outlook for the small packing plant. *Prog F* 31:1191 O 14 '16

Reply of Swift & company to questions submitted July 23, 1917, by the Federal trade commission. 35p '17 Swift & co., Chicago.

See also Meat industry and trade

**By-products**

How to feed the dairy cow. H. G. Van Pelt. *Kimball's D F* 14:804 D 15 '16

**Packing houses, Cooperative**

Co-operative packing plants. *Wallaces' F* 42:1337 O 5 '17

Cooperative packing plants. C. W. Holman. (*In Nat. conf. on marketing and farm credits*, 1916, p. 286-301) \$2 '17 C. W. Holman, sec., Madison, Wis.; Same. *Ja Ag Bd Yearbook* 1916:419-28; Same. *Wallaces' F* 42:402, 458 Mr 2-9 '17; Same. *Am Coop J* 12: 500+, 568 Mr-Apr '17

Co-operative packing plants. H. T. Morgan. il *Farm Eng* 5:3-4 Ja '17

Farmers' cooperative packing plant at Rockford, Illinois. F. A. Bingham. (*In Nat. conf. on marketing and farm credits*, 1916, p 278-86) \$2 '17 C. W. Holman, sec., Madison, Wis.

Irish co-operative bacon plant. *Wallaces' F* 42:51 Ja 12 '17

Packing plants. B. H. Hibbard and A. Hobson. *Wis Ag Exp B* 232:19-26 '17

St Edmundsbury co-operative bacon factory, limited. *Int R Ag Econ* 9,no 2:111-13 F '18

**Packing industry. See Meat industry and trade****Packing plants. See Packing houses****Paddy. See Rice; Wild melon****Paddy cleaning machines. See Rice cleaning machines****Pageants**

History of agriculture; a pageant. R. Chase. 28p 25c '16 R. Chase, Anoka Herald, Anoka, Minn.

Kinsman historical pageant. *Ohio F* 137:800 Je 10 '16

National Red cross pageant. J. L. Smith and T. W. Stevens. il *Country Life* 33:27-40 Ap '18

Pageant in America. F. G. Wood. il *Country Life* 31:21-5 N '16

See also Theater, Community

**Paint**

How to mix paint for tints. *Prog F* 31:212 F 12 '16

See also Pigments

**Painting**

Romance in the art of painting. il *Country Life* 33:94 Ja '18



**Painting, Industrial**

- About dressing up the farm buildings. J. R. Stone. *il Power* F 26:9 F '17  
Do you expect to paint this spring? *Am Coop* J 12:402 Ja '17  
Economy in painted buildings. O Judd Farmer 60:2 My 13 '16  
Farm cosmetics; brighten up the home grounds. R. H. Smith. *Rural N Y* 76:913-14 J1 28 '17  
How to paint wisely and cheaply. *Prog* F 32: 1065 O 13 '17  
Painted buildings in the country. L. B. Mechling. O Judd Farmer 60:18 Mr 25 '16  
Painting automobile body. Wallaces' F 43:785 My 10 '18  
Painting farm buildings—why and how. *Prog* F 33:1005 S 14 '18  
Painting metal roofs. *N Y Prod R* 42:916 O 4 '16  
Painting the roof. E. H. Crussell. *Country Gent* 82:22 O 26 '18  
Pointers on painting. K. J. T. Ekblaw. *Country Gent* 82:274-5 F 10 '17  
Practical substitutes for oil paints. G. H. Dacy. *Rural N Y* 77:1285 N 16 '18  
To make and apply water paint. A. A. Kelly. *Country Gent* 82:398 F 24 '17  
Use of paint on the farm. P. H. Walker. *il Farmers' B* 474:1-19 '17 (rev.)  
Why use more paint on the farm. C. White. *Power* F 27:18 D '18  
*See also* House painting; Stains and staining; Wood finishing

**Paintings**

- American pastoral paintings; pictures. W. Clark. *Country Life* 34:49-51 Je '18  
Decorative paintings in the New York galleries. *il Country Life* 33:104+ D '17  
Paintings by F. L. Mora; pictures. *Country Life* 33:57-9 F '18  
Some paintings which illustrate the awakening to a more inclusive decorative treatment. *Country Life* 33:94+ F '18

**Palates as food**

- Digestibility of hard palates of cattle. C. F. Langworthy and A. D. Holmes. *J Ag Research* 6:641-8 J1 24 '16

**Paleobotany**

- Mazocorpon or the structural sigillariostrobus. M. J. Benson. *il Ann Bot* 32:569-89 O '18  
On the anatomy of two palaeozoic stems from India. R. Holden. *bibliog il Ann Bot* 31:315-26 J1 '17  
Pityostrobus macrocephalus, L. and H., a tertiary cone showing ovular structures. C. P. Dutt. *bibliog il Ann Bot* 30:529-49 O '16  
*See also* Bennettites; Fungi, Fossil; Trees, Fossil; Wood, Fossil

**Pales weevils**

- Hylobius pales as a factor in the reproduction of conifers in New England. E. E. Carter. *il Soc Am For Pro* 11:297-307 J1 '16

**Palestine**

*See also* Bee culture—Palestine

**Description and travel**

- Land flowing with milk and honey. P. J. Baldensperger. *Gleanings* 44:1080-2 N 15 '16  
On the botany and physical geography of the Holy Land. J. G. Baker. *il Gard Chron* (Lond) 62:245-6, 260 D 22-29 '17  
Village women of Palestine. E. B. Roberts. *il O Judd Farmer* 61:38 J1 29 '16

**Pallid mites. See Cyclamen mites**

**Palm**

- Brazilian piassava. J. S. Tavares. *Int R Sci & Prac Ag* 8,no 9:1251-2 S '17  
Early fall care. W. H. Taplin. *Am Flor* 47: 606 O 7 '16  
Florists' palms; preparing for another season. *Am Flor* 46:1235 J1 1 '16  
Florists' palms; reducing temperatures. W. H. Taplin. *Am Flor* 51:184 Ag 17 '18  
Florists' palms; spring work. W. H. Taplin. *Am Flor* 50:627 Ap 13 '18  
Florists' palms; work for the early summer months. W. H. Taplin. *Am Flor* 48:1262 Je 30 '17  
Genus cocos. *il Gard Chron* (Lond) 63:43 F 2 '18

- Palm grower's troubles. W. H. Taplin. *Am Flor* 51:1 J1 20 '18  
Palm houses after the holidays. W. H. Taplin. *Am Flor* 47:1288 D 30 '16  
Phoenix canariensis in Australia. F. Turner. *Gard Chron* (Lond) 64:158 O 19 '18  
Spring care of the stock. W. H. Taplin. *Am Flor* 46:319; 48:847 Mr 4 '16, My 5 '17  
Summer care. W. H. Taplin. *Am Flor* 49:202 Ag 18 '17  
\* Wax palm and its uses. C. D. Mell. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 86:395 D 21 '18  
*See also* Date palm; Nipa palm; Palmetto; Panama-hat palm; Saw palmetto; Sugar palm

**Diseases and pests**

- Phyllachora of the royal palm. J. R. Johnston and S. C. Bruner. *il Mycol* 10:43-4 Ja '18  
Palm kernel cakes. *See* Feeding and feeding stuffs—Palm kernel cakes  
Brazilian oilseed. E. R. Bolton and D. G. Hewer. *Int R Sci & Prac Ag* 9,no 4:504+ Ap '18  
Palm oil  
Oil palms of the American tropics. L. E. Elliott. *Pan-Am Magazine* (70 5th av, N.Y. 25c) 26:297-304 Ap '18  
*See also* Cohune oil

**Palmetto**

- Palmettos of Florida. *il Am Bee* J 58:408-9 D '18  
Scrub palm and the binder twine problem. R. S. Walker. *il Country Life* 31:66 Ja '17  
Texas palmetto. *il J Heredity* 8:123-4 Mr '17  
Palmetto scrub. *See* Saw palmetto

**Pamphlets**

- Vertical filing for pamphlet collections. W. L. Eikenberry. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:64-5 Ja 19 '17  
Pan American scientific congress, 2d, 1915  
Conservation at the Pan-American scientific congress. *Am For* 22:117-19 F '16  
Pan-American congress for irrigation aid. *Irr Age* 31:59 F '16  
Proceedings, Washington, D.C., Dec. 27, 1915-Jan. 8, 1916. G. L. Swiggett, comp. and ed. 11v '17 Pan-American union, Washington, D.C.; cloth 75c-\$1.50 Supt. of doc.

These volumes have been widely distributed among libraries and are analyzed in this index where articles deal with agricultural subjects

**Panama. See Forests and forestry—Panama; Trees—Panama**

**Panama canal**

- Efectos de la apertura del canal de Panamá, sobre la distribución de productos agrícolas, by E. C. Bascunan; Effective use of the Panama canal in the distribution of products, by C. J. Brand. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 905-11. 911-15) '17

**Panama disease. See Banana wilt**

**Panama-hat palm**

- Notes on the panama-hat palm. P. J. Wester. *Philippine Ag R* 10, no 1:90-1 '17

**Panama Pacific exposition**

- Honey at the Panama Pacific exposition. C. D. Stuart. *Am Bee* J 56:203-4 Je '16  
Iowa at the exposition. V. Felter. *il Wallaces' F* 41:1666 D 22 '16

**Panhandle state fair**

- Panhandle state fair. *Breeder's Gaz* 72:677 O 18 '17

**Pansies**

- Home garden; starting pansies for next spring's bloom. *il Country Gent* 83:30 J1 6 '18  
Pansies all summer. O Judd Farmer 60:44 Mr 4 '16  
Pansies can be grown in the South. B. Reid. *Gard M* 25:300 Je '17  
Pansies for profit. H. G. McCallum. *Country Gent* 81:1517 Ag 12 '16  
Pansies in winter. M. G. Kains. *il Country Gent* 81:272 F 5 '16  
Pansy lore; their history and cultivation for their many lovers. G. Ames. *il O Judd Farmer* 64:31 Mr 2 '18

**Pansies—Continued**

- Pansy plants as a side line. E. I. Farrington. Rural N Y 77:1045 S 7 '18  
 Sow pansies now. G. W. Kerr. il Country Gent 83:48 Ap 20 '18  
 Suggestions for growing pansies. C. W. Johnson. Am Flor 47:340 S 2 '16  
 Violets and pansies. C. W. Johnson. Am Flor 47:1324 D 30 '16

**Papaver.** See **Poppies****Papaws**

- American papaw and its food value. C. F. Langworthy. J Home Econ 9:505-11 N '17  
 Best papaws. il map J Heredity 8:21-33 Ja '17  
 Improving the papaw. P. J. Wester. Philippine Ag R 10, no 1:92 '17  
 Queen Anne's lace, the papaw tree, and self-heal. R. W. Shufeldt. il Am For 23:543-8 S '17  
 Where are the best papaws? il J Heredity 7:291-6 Jl '16

**Papaya fruit flies**

- Papaya fruit fly. F. Knab and W. W. Yothers. bibliog il J Ag Research 2:447-54 S '14

**Papayas**

- Growing melons on trees. J. E. Higgins. il J Heredity 7:208-20 My '16

**Diseases and pests**

See also **Papaya fruit flies**

**Paper**

- Paper-yielding plants. F. Michotte. Int R Sci & Prac Ag 9,no 4:504 Ap '18  
 See also **Fibers**; **Kraft paper**; **Wood pulp**; **Zacaton**; also headings beginning **Paper**

**Paper bottles**

- Glass vs. paper milk bottle. R. M. Ross. Scientific Am (233 Broadway, N.Y. 10c) 117: 157 S 1 '17; Discussion. 117:207 S 22 '17  
 Making milk bottles of paper. il Scientific Am (233 Broadway, N.Y. 10c) 116:275 Mr 17 '17  
 Seamless paper bottles. Creamery 6:49 O '17

**Paper containers**

- Packages made of paper. J. Mappelbeck. il Country Gent 81:1326-7 Jl 8 '16  
 Paper containers for honey. F. W. L. Sladen. il J Ag (Quebec) 21:179 Je '18  
 Sealed paper carton to protect cereals from insect attack. W. B. Parker. il U S Ag B 15:1-8 '13

**Paper making and trade**

- \* British utilization of straw for paper making. P. B. Kennedy. (Commerce Reports no. 247) p 280-1 (O 21) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 English production of paper textiles. H. C. Claiborne. (Commerce Reports no. 154) p 20 (Jl 3) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 \* Finland and the world's next paper supply. C. A. Player. Sci Am (233 Broadway, N.Y. 10c) 119:411 N 23 '18  
 Forestry and the paper industry. D. F. Houston. il Am For 23:205-12 Ap '17; Same. Weekly N L 4:1-3 Mr 28 '17; Excerpts. Ag Digest 1:445 My '17  
 Ground-wood pulp: with samples of paper. J. H. Thickens and G. C. McNaughton. il maps U S Ag B 343:1-151 '16  
 Hemp hurds as paper-making material. L. H. Dewey and J. L. Merrill. il U S Ag B 404:1-26 '16  
 Making paper from dead leaves. Am For 24: 630 O '18  
 New use for the cotton plant. E. L. May. il Country Life 30:12j O '16  
 Preserving our paper industry. H. F. W. Wehe. Tex Ag Dept B n s 26:1-23 n.d.  
 Some new paper-making materials. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:373 D 15 '17  
 Uses of *imperata cylindrica* in paper making; experiments in Italy. F. Vignolo-Lutati. Int R Sci & Prac Ag 9,no 5:615-17 My '18  
 Utilization of American flax straw in the paper and fiber-board industry. J. L. Merrill. il U S Ag B 322:1-24 '16  
 Why paper advanced: increased demand for raw materials. L. F. Searles. N Y Prod R 42:188 My 24 '16

**By-products**

- Utilizing waste sulphite liquors. Chem & Metallurgical Eng (10th av at 36th st, N.Y. 25c) 19:568 O 1 '18

**Regulation**

- Regulations from the pulp and paper section of the War industries board regarding paper. Inland Printer (632 Sherman st, Chicago 30c) 61:767 S '18

**Paper pots.** See **Flower pots****Paper pulp**

- Studies on paper pulps. W. H. Smith. (Technologic papers no. 88) 13p '17 U.S. Bur. of standards, Washington, D.C.

**Paper textiles**

- Paper textiles. L. B. Storms. bibliog J Home Econ 10:451-6 O '18

**Paprika.** See **Pepper****Para rubber trees**

- Bacteriological study of the natural coagulation of the latex of *hevea brasiliensis*. Int R Sci & Prac Ag 8,no 9:1307-8 S '17  
 Manuring of *hevea brasiliensis*. R. D. Anstead. Ag J of India 13:660-5 O '18  
 Seasonal variations in the storage of plant food in *hevea brasiliensis* and their relation to resting periods. L. E. Campbell. Int R Sci Prac Ag 7,no 3:374 Mr '16

**Diseases and pests**

- Laticiferous system of *hevea brasiliensis* and its protective function. A. Sharples. Ann Bot 32:247-51 Ap '18  
 Phytophthora Faberi, the cause of *hevea* canker. A. A. L. Rutgers. Int R Sci & Prac Ag 8,no 11:1164-7 N '17  
 South American *hevea* leaf disease in Trinidad. J. B. Rorer. Int R Sci & Prac Ag 9,no 2:253-4 F '18

**Paracalocoris Hawleyi.** See **Hop redbug****Paraffin**

- Effect of paraffin on the accumulation of ammonia and nitrates in the soil. P. L. Gainey. bibliog J Ag Research 10:355-64 Ag 13 '17  
 Method of replacing paraffin solvent with paraffin. T. H. Goodspeed. il Bot Gaz 66: 381-2 O '18

**Paraguay.** See **Bee culture—Paraguay**; **Cotton—Paraguay****Parandra borers**

- Parandra borer (*parandra brunnea* Fab.) as an orchard enemy. F. E. Brooks. U S Ag B 262:1-7 '15

**Parasites**

- Fish louse; *argulus foliaceus* L. R. Merle. il Scientific Am Sup (233 Broadway, N.Y. 10c) 84:373 D 15 '17  
 Medicinal treatment of parasitic diseases—an undeveloped field of veterinary medicine. M. C. Hall. Am Vet M Assn J 50:608-11 Ja '17  
 Parasites of crops and cattle. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:272 Ap 27 '18  
 Secondary parasitism in *phoradendron*. J. A. Harris. Bot Gaz 66:275-6 S '18

See also **Insects**, **Injurious and beneficial**; also **subhead Diseases and pests** under **names of plants and animals**

**Animals**

- Action and control of animal parasites with special reference to the intestinal canal. R. P. Lyman. Am Vet M Assn J 51:70-8 Ap '17  
 Anaphylaxis in cattle and sheep, produced by the larvae of *hypoderma bovis*, h. *lineatum* and *oestrus ovis*; with discussion. S. Hadwen and E. A. Bruce. il Am Vet M Assn J 51:15-44 Ap '17  
 Animal parasites affecting equines. C. P. Fitch. bibliog Am Vet M Assn J 53:312-30 Je '18  
 Animal parasites and rural sanitation. W. A. Riley. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 99-109) il '17



**Parasites—Animals—Continued**

- Chicken mite (dermanyssus gallinae Redi): its life history and habits. H. P. Wood. *il U S Ag B* 553:1-15 '17
- Common parasites of domestic animals. *il Purdue Ag* 11:47-8 F '17
- Common parasites of farm animals. W. M. Burson. *il Ga Ag Coll (Ext) B* 137:1-39 '17
- Common parasites of swine. J. T. E. Dinwoodie. *il S D Ag Ext C* 8:1-16 '18
- Cysticercus ovis, the cause of tapeworm cysts in mutton. B. H. Ransom. *bibliog il J Ag Research* 1:15-58 O '13
- Dog as a carrier of parasites and disease. M. C. Hall. *il U S Ag B* 260:1-27 '15
- Efficacy of some anthelmintics. M. C. Hall and W. D. Foster. *bibliog J Ag Research* 12: 397-447 F '18 '18
- Endoglobular parasites causing diseases of animals in Russian Turkestan. W. L. Yakimoff and others. *Int R Sci & Prac Ag* 9,no 1:71-2 Ja '18
- Fighting lice and ticks. W. F. Purdue. *Ohio F* 141:563 Ap 20 '18
- Fumigation of animals to destroy their external parasites. W. Moore. *J Econ Entom* 9:71-80 F '16; Same cond. *Wallaces' F* 41: 162 F 4 '16; Same cond. *Hoard's D* 51:106 F 11 '16
- Gastro-intestinal lavage in dogs: its value in removing worms and in other respects. M. C. Hall and M. Wigdor. *Am Vet M Assn J* 52:443-56 Ja '18
- Intestinal parasites of poultry, their prevention and treatment. A. B. Wickware. *13p il '17 Canada Ag*
- Intestinal worms affecting poultry. Mr and Mrs G. R. Shoup. *il Western Wash Ag Exp B v* 6:41-4 Je '18
- Lung parasites. S. B. Freeborn. *Country Gent* 81:889 Ap 22 '16
- Marasmus of army horses. M. Urbain. *Am Vet M Assn J* 53:778-82 S '18
- Note on the effect of cold on the degree of parasitic infestation. M. Wigdor. *bibliog Am Vet M Assn J* 54:251-4 D '18
- Notes on a fatal parasitic infestation in a herd of cattle and goats in the province of Ambos Camarines. W. H. Boynton and L. D. Wharton. *il Philippine Ag R* 9,no 4: 248-53 '16
- Notes on some animal parasites in British Guiana. G. E. Bodkin and L. D. Cleare. *Int R Sci & Prac Ag* 8,no 8:1130-2 Ag '17
- Notes on the acanthocephalid and anthropod parasites of the dog in North America. M. C. Hall and M. Wigdor. *bibliog il Am Vet M Assn J* 53:493-500 Ji '18
- Parasite and paradox. W. W. Reynolds. *Breeder's Gaz* 73:157 Ja 24 '18
- Parasites in sheep. A. M. Paterson. *J Ag New Zealand* 13:226-8 S '16
- Parasites of hogs. *il Ia Ag Ext B* 43:1-8 '16
- Parasites of sheep; with discussion. A. D. Knowles. *Am Vet M Assn J* 53:334-54 Je '18
- Parasites of swine. W. L. Hollister. *Am Vet M Assn J* 53:330-4 Je '18
- Parasites of the dog in Michigan. M. C. Hall. *bibliog Am Vet M Assn J* 51:383-96 Je '17
- Protecting sheep from internal parasites. H. Hackedorn. *il Breeder's Gaz* 73:1251 Je 13 '18
- Recent progress in the development of methods for the control and treatment of parasites of live stock. B. H. Ransom. *bibliog (In Pan American scientific congress Pro., 1915, v. 3, p. 709-19) '17*
- Report of the Zoological division. B. H. Ransom. *(In Report, 1917, Bur. of animal industry, p. 51-8) '17 U S Ag*
- Screw-worms and other maggots affecting animals. F. C. Bishopp and others. *il Farmers' B* 857:1-20 '17
- Sheep pests, parasitic and predacious. B. M. Underhill. *Am Vet M Assn J* 53:192-201 My '18
- Some common poultry parasites. C. A. Lueder. *il W Va Ag Ext C* 142:1-8 '17
- Some external parasites of poultry. D. C. Mote. *il Ohio Ag Exp B* 320:139-56 '17
- Some observations on the internal parasites of live stock. S. Dodd. *Ag Gaz of New South Wales* 29:497-507 Ji '18
- Stomach worms and tapeworms of sheep. D. C. Mote. *il Ohio Ag Exp B v* 3:173-5 Je '18
- Stomach worms in sheep. *Prog F* 33:611 My 18 '18
- Three important internal parasites of sheep. D. C. Mote. *il Ohio Ag Exp B v* 1:259-64 S '16
- Treatment of common parasites affecting farm animals. L. S. Backus. *Mo Ag Ext C* 13:1-11 '17
- Value of zoology to humanity; significance of studies on animal parasites. H. B. Ward. *Science (Science Press, Garrison, N.Y. 15c) n s* 47:302-6 Mr 29 '18
- Worm nodules in cattle. (B. 2) 31p '17 Advisory council of science and industry, Melbourne, Australia
- See also* Ascaris; Coccidiosis; Dogs—Diseases; Lice; Liver flukes; Nematodes; Spine nose ear tick; Strongylidosis; Tapeworms; Trematodes; Trichina and trichinosis

**Insects**

- Aphis parasite feeding at puncture holes made by the ovipositor. L. P. Rockwood. *J Econ Entom* 10:415 Ag '17
- Asparagus-beetle egg parasite. F. A. Johnston. *bibliog il J Ag Research* 4:303-14 Ji '15
- Attempt to redefine the host relationships exhibited by entomophagous insects. H. S. Smith. *J Econ Entom* 9:477-86 O '16
- Biology of apanteles militaris. D. G. Tower. *bibliog il J Ag Research* 5:495-508 D 20 '15
- Biology of ceciniidea meromyzæ (Forbes). E. O. G. Kelly. *J Econ Entom* 10:527-31 D '17
- Breeding fruit-fly parasites in the Hawaiian islands. J. G. Bridwell. *J Econ Entom* 9: 472-6 O '16
- Cabbage root maggot and its control in Canada; means of controlling root maggots. A. Gibson and R. C. Treherne. p 51-6 il '16 Canada Ag
- Calliphallates parasite of the codling moth. R. A. Cushman. *bibliog il J Ag Research* 1: 211-38 D '13
- Cane borer beetle in Hawaii and its control by natural enemies. F. Muir and O. H. Swezey. *(Entom. Ser. B. 13) 102p il '16* Experiment station of the Hawaiian sugar planters' assn., Honolulu
- Comparative study of the amount of food eaten by parasitized and nonparasitized larvae of cirphis unipuncta. D. G. Tower. *J Ag Research* 6:455-8 Je 19 '16
- Control of cabbage-aphis by parasites in western Canada. E. H. Strickland. *(In Pro., Entom. soc. of British Columbia, 1916, p. 84-8) il '16*
- Control of New-Zealand-flax grubs. D. Miller. *il J Ag New Zealand* 15:303-6 D '17
- Dipteros nuevos parasitas de la schistocerca peregrina. C. Nocco. *(In Pan American scientific congress Pro., 1915, v. 3, p. 877-83) '17*
- Emergence response of trichogramma minimum Riley to light. G. N. Wolcott. *J Econ Entom* 11:205-9 Ap '18
- Entomophagous insects and their practical employment in agriculture. A. Berlese. *Int R Sci & Prac Ag* 7,no 3:321-32 Mr '16
- Eupelminus saltator Lindm. as a parasite of the Hessian fly. W. R. McConnell. *il J Econ Entom* 11:168-75 Ap '18
- Forest longicorn beetles and their parasites. W. W. Froggatt. *il Ag Gaz of New South Wales* 27:561-7 Ag '16
- Fruit-fly parasitism in Hawaii during 1916. C. E. Pemberton and H. F. Willard. *J Ag Research* 12:103-8 Ja 14 '18
- Habit of leaf-oviposition among the parasitic hymenoptera. H. S. Smith. *Science (Science Press, Garrison, N.Y. 15c) n s* 44:925-6 D 29 '16
- Hawaiian work in introducing beneficial insects. L. O. Howard. *J Econ Entom* 9:172-8 F '16

## Parasites—Insects—Continued

- Insect parasites and predators as adjuncts in the control of mealybugs. H. S. Smith. *il Cal State Comm Hort B v 6:108-14 Ap '17*
- Interrelations of fruit-fly parasites in Hawaii. C. E. Pemberton and H. F. Willard. *il J Ag Research 12:285-95 F 4 '18*
- Introduction and establishment in Canada of the natural enemies of the brown-tail and gipsy moths. map Ag Gaz of Canada 3: 20-1, 111-16 Ja-F '16
- Life histories and methods of rearing Hessian-fly parasites. C. M. Packard. *il J Ag Research 6:367-82 Je 5 '16*
- Life history and habits of two new nematodes parasitic on insects. J. H. Merrill and A. L. Ford. *il J Ag Research 6:115-27 Ap '17*
- Life history of habrocytus medicaginis, a recently described parasite of the chalcid fly in alfalfa seed. T. D. Urbahns. *il J Ag Research 7:147-54 O 23 '16*
- Limitation of injurious insects by beneficial species. D: Miller. *J Ag New Zealand 17: 12-18 Jl '18*
- Malaria parasite in the mosquito. M. B. Mitzmain. (Reprint no. 422 Pub. health reports) 16p '17 U.S. Public health service, Washington, D.C.
- Natural enemies of the serpentine leaf-miner. F. M. Webster and T. H. Parks. bibliog *il maps J Ag Research 1:76-82 O '13*
- New genera and species of encyrtinae from California parasitic in mealybugs. P. H. Timberlake. *il Cal Univ Pub Entom v 1, no 8 347-67p '18 (25c)*
- New parasite cages. C. E. Pemberton and H. F. Willard. *il J Econ Entom 10:525-7 D '17*
- New parasite on sheep maggot flies; notes and description of a chalcid parasite. W. W. Froggatt. *il Ag Gaz of New South Wales 27:505-6 Jl '16*
- New sarcophagid parasite of grasshoppers. E. O. G. Kelly. bibliog *il J Ag Research 2: 435-46 S '14*
- \* North American species of the genus tiphia (hymenoptera, aculeata) in the collection of the Illinois state natural history survey (parasitic on white grubs). J. R. Malloch. (B. v. 13, Article 1) 24p *il '18 Ill. State nat. history survey, Urbana*
- Notes on prospaltella berlesiei How. L. O. Howard. *J Econ Entom 9:179-81 F '16*
- Notes on rhogas terminalis cress. W. E. Pennington. *il J Econ Entom 9:401-6 Ag '16*
- Observations on the insect parasites of some coccidae. A. D. Imms. *Int R Sci & Prac Ag 7, no 10:1553-4 O '16*
- Observations on the lestophonus, a dipterous parasite of the cottony cushion scale. H. S. Smith and H. Compere. *il Cal State Comm Hort B v 5:384-90 O '16*
- On the life history and successful introduction into the United States of the Sicilian mealybug parasite. H. S. Smith. *il J Econ Entom 10:262-8 Ap '17*
- Parasitism among the larvæ of the Mediterranean fruit-fly in Hawaii during 1915. E. A. Back and C. E. Pemberton. *J Econ Entom 9:306-11 Ap '16*
- Practical use of the insect enemies of injurious insects. L. O. Howard. *il U S Ag Yearbook 1916:273-88; Same. Separate 704*
- Predacious mite, hemisarcoptes malus Shimmer, and its relation to the natural control of the oyster-shell scale, lepidosaphes ulmi l. J. D. Tothill. *il Ag Gaz of Canada 5: 234-9 Mr '18*
- Prospaltella berlesiei against diaspis pentagona in Piedmont in 1915. P. Voglino. *Int R Sci & Prac Ag 7, no 6:905-6 Je '16*
- Prospaltella berlesiei against diaspis pentagona; observations in Piedmont during 1916. P. Voglino. *Int R Sci & Prac Ag 8, no 7: 1066-7 Jl '17*
- Rearing the parasites of the brown-tail moth in New England for colonization in Canada. L. S. McLaine. *il Ag Gaz of Canada 3:22-5 Ja '16*
- Significance of certain natural flagellates of insects in the evolution of disease in vertebrates. *Am Vet M Assn J 49:850-1 S '16*

- Some methods of colonizing imported parasites and determining their increase and spread. S. S. Crossman. *J Econ Entom 10: 177-83 F '17*
- Tetrastichus bruchophagi, a recently described parasite of bruchophagus funebris. T. D. Urbahns. *il J Ag Research 8:277-82 F 12 '17*
- Thersilochus conotrachelii, a parasite of the plum curculio. R. A. Cushman. bibliog *il J Ag Research 6:847-55 Ag 28 '16*
- Two important introduced parasites of the brown-tail moth. C. F. W. Muesebeck. bibliog *il J Ag Research 14:191-206 Jl 29 '18*
- Why the cabbage butterfly does not increase more rapidly. *il J Heredity 8:312-13 Jl '17*
- See also Ichneumon flies; Syrphidae

## Plants

See Fungi; Parasitic plants

## Parasitic plants

- Genetic relationship of parasites. F. D. Kern. *Am J Bot 2:116-31 Mr '15*
- On the haustoria of pedicularis vulgaris. Tournef. A. C. Maybrook. bibliog *il Ann Bot 31:499-511 Jl '17*
- Parasitic fungi of New Jersey. C. A. Schwarze. *il N J Ag Exp B 313:1-226 '17*
- Parasitism of comandra umbellata. G: G. Hedgcock. *J Ag Research 5:133-5 O '15*
- See also Broom rape; Dodder; Fungi; Mistletoe

## Parasitism

- Phenomena of parasitism. H. Hasselbring. *Bot Gaz 63:240-1 Mr '17*

## Paratyphoid fever

- Simple and practical medium for differentiating b. typhosus, b. paratyphosus A, b. paratyphosus B, b. enteritidis, and b. coli. K. Morishima. *J Bact 3:19-22 Ja '18*
- Toxicity of Victoria blue 4 R. for b. paratyphosus A, b. paratyphosus B and b. enteritidis. O. Teague. *J Bact 3:1-6 Ja '18*

## Parcel post

- After forty years. A. L. Sarran. *Country Gent 81:1066 My 20 '16*
- Holland parcel post suspended. *Am Flor 46:804 Ap 29 '16*
- Insurance of parcel-post eggs. *Rural N Y 75: 64 Ja 8 '16*
- Insurance on parcel post packages. A. M. Dockery. *Rural N Y 75:149 Ja 29 '16*
- Parcel post. T: F. Degnan. *N Y Ag Dept B 92:83-5 F '17*
- Parcel post horticultural material dangers. H. M. Armitage. *Cal State Comm Hort B v 6:454-7 N '17*
- Parcel post solves shipping trouble. *il Am Flor 51:433-4 S 21 '18*
- Proposed partnership between the improved highway and the parcel post. J. I. Blakslee. *il Am City (Tribune bldg., N.Y. 35c) 18: 541-5 Je '18*
- Shipping eggs by parcel post. *Rural N Y 76: 424 Mr 17 '17*
- Special delivery and parcel post. G. A. Huffman. *Wallaces' F 41:545 Mr 31 '16*
- Stand by the parcel post. J. Z. Green. *Prog F 31:518 Ap 8 '16*

See also Marketing—Parcel post

## Paris. See Milk supply—Paris

## Paris green

## Analysis

- Report on Paris green. R. C. Roark. *Assn Office Ag Chem J 3:157-63 My '17*

## Park superintendents

- Park superintendent's function. E. T. Mische. *Gard Chron Am 21:24-6 Ja '17*

See also American association of park superintendents

## Parks

- Efficiency and accounting in park administration. F. S. Staley. *Gard Chron Am 20:438-40 O '16*
- Gardener's interest, duty and value in public park service. T. Wirth. *Gard Chron Am 22: 91-2 Mr '18*
- Parks and playgrounds. S. Silcox. (*In Report, Horticultural societies of Ontario, 1917, p. 91-5*) Ontario ag. dept., Toronto



**Parks—Continued**

- Playgrounds in parks from the designer's standpoint. F: L. Olmsted. *Gard Chron* Am 20:479-80 N '16  
 Relation of the gardener to civic work. L. P. Jensen. *Gard Chron* Am 22:126-7 Ap '18  
 Rural parks and playgrounds. H. N. Ensign. *Ohio F* 137:707 My 20 '16  
 Transportation in public parks. H. W. Busch. *il Gard Chron* Am 20:136-7 Mr '16  
 What small communities can do in park work. C. C. Wolf. *Gard Chron* Am 20:199-200 Ap '16  
*See also* Forest reserves; Landscape gardening; National parks; Park superintendents; also Boston Common; Central park, New York city; Prospect park, Brooklyn

**Parks, National.** *See* National parks

**Parliamentary practice**

- Kind of parliamentary motions. H. Mason. *Ohio F* 138:238 S 9 '16  
 Parliamentary law for women. Mrs C. S. Selover. *Ohio F* 138:212 S 2 '16

**Parrya.** *See* Anelsonia

**Parsley**

- Parsley as a year-round crop. E. I. Farrington. *il Country Gent* 81:793 Ap 8 '16  
 Winter parsley. J. T. Rosa, jr. *il Country Gent* 82:14 Ja 6 '17  
 Winter supply of parsley. *Fruit-Grower* 27:441 O 1 '16

**Diseases and pests**

- Disease of coldframe parsley (caused by sclerotinia libertiana). J. A. McClintock. *il Va Truck Exp* B 18:379-84 Ja '16

**Parsnip canker**

- Diseases of parsnips. A. D. Cotton. *Gard Chron* (Lond) 63:224 Je 1 '18

**Parsnips**

- Carrots, salsify, parsnips. *Country Gent* 82:772 Ap 21 '17  
 Cultivation of parsnips. *J Bd Ag* 23:1100-2 F '17  
 Experiences in growing parsnips. *il Market Growers J* 19:18+ J1 1 '16  
 Parsnips. F. J. Chittenden. *Gard Chron* (Lond) 61:141 Ap 7 '17  
 Success in growing parsnips. J: L. Kelly. *Market Growers J* 19:155 O 1 '16  
 Two good winter vegetables—parsnips and salsify. *Rural N Y* 75:529 Mr 25 '16

*See also* Root crops

**Diseases and pests**

- Diseases of parsnips. A. D. Cotton. *il J Bd Ag* 25:61-71 Ap '18

*See also* Parsnip canker

**Parthenogenesis**

- Fabre on parthenogenesis. C. P. Dadant. *Am Bee J* 58:156-7 My '18  
 On the parthenogenetic reproduction of *Otioryhncus sulcatus*, a coleopteron injurious to the vine, in France. J. Feytaud. *Int R Sci & Prac Ag* 9:no 1:124 Ja '18  
 Parthenogenesis among the solitary bees. J: H. Lovell. *Am Bee J* 58:270 Ag '18

*See also* Apogamy

**Partnership**

- Dairy farming partnership. *Kimball's D F* 15:557 Ag 15 '17  
 Figuring a farming partnership. *Rural N Y* 76:767 Je 9 '17

**Paspalum**

- Establishment of paspalum. A. H. Cockayne. *J Ag New Zealand* 15:342-3 D '17

**Diseases and pests**

- Life history and poisonous properties of *claviceps paspali*. H. B. Brown. *il J Ag Research* 7:401-6 N 27 '16  
 Paspalum in Australia. J. R. Macdonald. *J Ag New Zealand* 16:164-6 Mr '18  
 Paspalum in New Zealand. A. H. Cockayne. *J Ag New Zealand* 16:87-91 F '18

**Passion fruit**

- Passion-fruit culture. J. H. Davidson. *J Ag New Zealand* 17:232-4 O '18

**Pasteur, Louis, 1822-1895**

- Work of Pasteur and its influence. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 27:853-9; 28:8-12 D '16-Ja '17

**Pasteurella.** *See* Hemorrhagic septicemia

**Pasteurization of cream.** *See* Cream—Pasteurization

**Pasteurization of milk.** *See* Milk—Pasteurization

**Pastimes.** *See* Amusements

- Pastoral parson and his country folks.** G: B. Gilbert. *il Rural N Y* 76:248, 440, 594, 710, 791, 904, 992, 1088, 1214, 1328, 1449; 77:87, 248, 584, 711, 818, 902, 1006 F 17, Mr 17, Ap 21, My 19, Je 16, J1 21, Ag 18, S 15, O 20, N 17, D 22 '17, Ja 19, F 16, Ap 20, My 18, Je 22, J1 20, Ag 24 '18

**Pastry**

- Foods and food preparation; flour mixtures. E. B. Rutter. *il J Ag* (Quebec) 19:154-5 Ja '16  
 How I make a pie. M. S. Hill. *Country Gent* 81:724 Mr 25 '16  
 Lemon pie. O Judd Farmer 64:18 Mr 30 '18  
 Tempting fresh fruit pastries. M. B. Foulks. *il Country Gent* 18:1457 J1 29 '16

**Pastures and meadows**

- Annual pasture. J. H. McKenney. *Nat Stock & F* 41:168 My 5 '17  
 Basic slag for renewing pastures. J. F. Warren. *Breeder's Gaz* 71:518 Mr 8 '17  
 Breaking up grass land. *J Bd Ag* 24:1065-70 Ja '18  
 Breaking up of grass land. *Gard Chron* (Lond) 62:190 N 10 '17  
 Breaking up of grass land for the harvest of 1918. A. Lee. *J Bd Ag* 24:349-53 Je '17  
 Building up old pasture lands. R. R. Smith. *Rural N Y* 77:1155 O 12 '18  
 Building up the grass ground. E. W. Gage. *Kimball's D F* 16:895 N 15 '18  
 Carrying capacity; grass on the western plains. E. W. Murphy. *J Dept Ag Victoria* 16:629-31 O '18  
 Consider the spring pastures. H. B. Arbuckle. *Am Sheep B & W* 36:173 Mr '16  
 Converting pasture to arable cultivation; means of overcoming some of the difficulties. A. Amos. *J Bd Ag* 23:1073-6 F '17  
 Depleted lands of the South Island central regions. W. J. McCulloch. *il J Ag New Zealand* 14:293-302 Ap '17  
 Economic desirability of tree planting in grasslands. N. Spiridonov. *Int R Sci & Prac Ag* 7:no 9:1283-4 S '16  
 Emergency pasture. *Wallaces' F* 41:442 Mr 17 '16  
 Enterprise in dairy farming. J. R. Bond. *il J Bd Ag* 23:437-46 Ag '16  
 Exhausted pasture. W. F. Massey. *Prog F* 33:436 Ap 6 '18  
 Experience in the breaking up and cropping of old pasture. C. Hutchinson. *J Bd Ag* 23:1191-4 Mr '17  
 Experiments on the cultivation of meadows on peat soils in Russia. V. A. Fominikh. *Int R Sci & Prac Ag* 7, no 10:1445-6 O '16  
 Farming with pastures. *il Wallaces' F* 41:443 Ja 14 '16  
 Fertilizing the grass crop. S. B. Haskell and O. M. Kile. (Soil improvement com. B. 20) 15p *il n.d. Nat. fertilizer assn., Chicago*  
 Fitting and putting down land to permanent pastures and pasture grass mixtures. J: H. Barron. *il N Y Ag Dept B* 87:2975-81 S '16  
 Five essential factors in the use of fertilizer on grass. J. W. Lincoln. *Hoard's D* 54:132 Ag 24 '17  
 Five-lot hog pasture in South Carolina. T. Butler. *Prog F* 31:463 Ap 1 '16  
 Forage crops for New York; with discussion. H. H. Wing. *N Y Ag Dept B* 80:1554-66 F '16  
 Good annual pasture. J. H. McKenney. *Hoard's D* 53:601 Ap 27 '17  
 Grass and hay crop. *il Va Ag Dept B* 126:107-9 '18  
 Grass and stock-farming. C. F. Curtiss. *Breeder's Gaz* 71:1068 My 24 '17

**Pastures and meadows—Continued**

- Grass land and ploughed land. R. G. Stapledon. bibliog J Bd Ag 17:supl-39 My '17; Same cond. Int R Sci & Prac Ag 8,no 10: 1367-9 O '17
- Grass-lands of New Zealand. A. H. Cockayne. il J Ag New Zealand 16:125-31, 210-20, 258-66; 17:35-41, 140-2 Mr-My, JI. S '18
- Grass mixtures for North Carolina pastures. C. B. Williams. N C Ag Ext C 17:1-8 '16
- Greater use of pastures. C: McIntire. Ohio F 141:134 F 2 '18
- Handling the fall pasture. J: Marsh. Ohio F 138:302 S 30 '16
- Have a permanent pasture for the hogs. D. T. Gray. Prog F 32:1204 N 17 '17
- Hay and pasture seedings. W. R. Hechler. il Ia Ag Exp C 39:1-11 '17; Same cond. Hoard's D 55:523 Ap 12 '18
- Health management of young sheep; pasture renovation and liming at Motuihi. il J Ag New Zealand 17:1-5 JI '18
- Hog pastures and feeds. A. P. Spencer. Fla Ag Exp B 7 4p '16
- Hog pastures for the southern states. L. Carrier and F. G. Ashbrook. il Farmers' B 951: 1-20 '18
- How to get rich lands; sods and pastures for soil improvement. T. Butler. Prog F 32:903 Ag 25 '17
- How to help pastures. H. E. White. Nat Stock & F 40:252 Je 3 '16
- Improvement and management of farm pastures. A. W. Sampson. il Breeder's Gaz 69: 1287-8 Je 22 '16
- Improvement and management of native pastures in the West. J. T. Jardine. il U S Ag Yearbook 1915:299-310
- Improvement of pastures. M. Ryder. Kimball's D F 15:58 F 1 '17
- Improving Dakota pastures with sweet clover. Hoard's D 51:818 Je 9 '16
- Increasing pastures in the South. A. M. Soule. il Breeder's Gaz 69:127 Ja 20 '16
- Increasing the area for corn crops. E. Molyneux. Gard Chron (Lond) 63:83 F 23 '18
- Irrigated pastures. G: F: Stratton. il Country Gent 83:12 D 14 '18
- Irrigated pastures for northern reclamation projects. F. D. Farrell. (Demonstrations on reclamation projects, 2) 16p il '16 U.S. Bur. of plant industry, Washington, D.C.
- Keep up the permanent pasture. W. D. Zinn. il Va Ag Dept B 115:110-13 '17
- Laying-down of pastures. A. H. Cockayne. J Ag New Zealand 15:241-7 N '17
- Maintaining a dependable farm pasture. T. B. Hutcheson. il Field II 27:276 Ap '17
- Making a good pasture. T: Butler. Prog F 31: 799 Je 24 '16
- Making his cattle produce cotton. H. S. Stabler. il Country Gent 81:2067-8 D 2 '16
- Making new pastures. J. H. McKenney. Ohio F 137:527 Ap 8 '16
- Management of irrigated grass pastures. J. S. Welch. il Idaho Ag Exp B 95:1-17 '17
- Manuring pasture lands. J. M. Yelland. J Dept Ag S Australia 21:931-3 Je '18
- Meadow seeding. Wallaces' F 43:437 Mr 8 '18
- Meadows and pastures. Hoard's D 51:618 My 5 '16
- More feed—fewer acres. H. H. Kildee. Hoard's D 53:484 Ap 6 '17
- Old pasture land for potatoes. W: P. Brooks. Rural N Y 75:683-4 Ap 29 '16
- Orchard grass for pasture. C. H. Chesley. Hoard's D 51:631 My 5 '16
- Pasture. J Ag (Quebec) 21:22 Ag '17
- Pasture costs. Kimball's D F 16:274 Ap 1 '18
- Pasture crops in the prairie provinces. W. C. McKillican. Ag Gaz of Canada 4:103-9 F '17
- Pasture crops in the prairie provinces; Manitoba and Saskatchewan. T. J. Harrison. il Ag Gaz of Canada 3:419-30 My '16
- Pasture for hogs. il J Ag (Quebec) 21:170 My '18
- Pasture improvement. J: H. Barron. il Cornell Countryman 15:517-19 Je '18
- Pasture improvement. W: P. Brooks. Hoard's D 53:741 My 18 '17
- Pasture improvement investigations. Ag Digest 1:15 My '16
- Pasture is essential. H. H. Williams. Prog F 31:906 JI 22 '16
- Pasture mixtures. C. M. Eklof. Jersey B 36: 437 Mr 21 '17
- Pasture problems. See weekly numbers of Progressive farmer
- Pasture problems: indigenous plants in relation to habitat and sown species. R. G. Stapledon and T. J. Jenkin. bibliog J Ag Sci 8:26-64 S '16; Abstract. Int R Sci & Prac Ag 7,no 12:1768-71 D '16
- Pasture survey in southeastern Ohio. H. W. Hawthorne and C. W. Montgomery. il map Ohio Ag Exp B v 1:282-8 S '16
- Pastures at Cowra experiment farm. E. Breakwell. il Ag Gaz of New South Wales 27:395-6 Je '16
- Pastures for dairy cows. T. Butler. Prog F 33:712 Je 15 '18
- Pastures for Kansas. F. Nicol. Hoard's D 51: 420 Mr 31 '16
- Pastures for the southern farmer. J. F. Duggar. Prog F 31:1429 D 9 '16
- Pastures in New York. F. E. Bonsteel. il N Y Ag Dept B 87:2961-74 S '16
- Pastures in the spring. H. B. Arbuckle. Am Sheep B & W 36:283 My '16
- Pastures save grain. Weekly N L 4:5 Je 27 '17
- Pasturing the woodlot. J. S. Holmes. Prog F 31:1366 N 25 '16
- Pasturing winter wheat. A. R. Jaqua. Country Gent 83:46 F 9 '18
- Permanent and temporary pastures. W. R. Elliott. S C Ag Ext B 33:1-51 n. d.
- Permanent-pasture formation. A. W. Green. J Ag New Zealand 14:28-31 Ja '17
- Permanent pastures. Wallaces' F 41:78 Ja 21 '16
- Permanent pastures. J. W. Ingham. Hoard's D 51:343 Mr 17 '16
- Permanent pastures. H. S. Rice. il Purdue Ag 10:25+ Ap '16
- Permanent pastures and meadows. T. S. Parsons. Wyo Ag Exp Rep 1917:170-7 '17
- Permanent pastures: fertilizing, manuring and liming encourage grasses and legumes. C. W. Montgomery. il Ohio Ag Exp B v 3: 11-15 Ja '18
- Plan for providing a continuous pasture. F. D. Tomson. System on the Farm 1:179 JI '17
- Ploughing of grass and cultivation of the land. J Bd Ag 24:883-90 N '17
- Profitable pastures for pork production. W: R. Butler. il Field II 26:594-5+ JI '16
- Rape pastures. J Bd Ag 24:182-7 My '17
- Renovating pastures. E. Molyneux. Gard Chron (Lond) 62:261 D 29 '17
- Renovation of pasture; top-dressing test in Waipukurau county. G. De S. Baylis. il J Ag New Zealand 16:284-5 My '18
- Resting land. A. L. French. Prog F 32:171 F 10 '17
- Results from an old pasture. il Rural N Y 75:653 Ap 22 '16
- Right use of pasture. C: McIntire. Ohio F 139:638 My 5 '17
- Rip Van Winkle in grass land. Hoard's D 53: 775 My 25 '17
- Scotland's upland grazings. Int R Sci & Prac Ag 7,no 2:223-4 F '16
- Seed-mixtures for pastures. J Ag New Zealand 12:56-62 Ja '16
- Seeding down to clover and grass. E. B. Stookey. Western Wash Ag Exp B v 6:94-6 O '18
- Seeding new land. H. L. Blanchard. Western Wash Ag Exp B v 6:30-1 Je '18
- Seeding of meadows and permanent pastures. A. E. Grantham. Prac F 114:118 Mr 15 '18
- Soil water and rich pastures. L. Ogilvy. Breeder's Gaz 69:1288 Je 22 '16
- Soiling. il Hoard's D 55:744 My '18
- Soiling crops to supplement pastures. H. H. Kildee. Hoard's D 53:528 Ap 13 '17
- Start a permanent pasture. E. F. Cauthen. Prog F 31:1271 O 28 '16
- Start now to have a good permanent pasture. Prog F 31:429 Mr 25 '16
- Summer seeding of grass in the South. B. Howard. il Country Gent 83:7 Ag 24 '18
- Surface-sown grass-mixtures. A. H. Cockayne. J Ag New Zealand 14:169-77 Mr '17



**Pastures and meadows—Continued**

- Sweet clover for pasture. W. E. Bowers. Hoard's D 53:598 Ap 27 '17; Same cond. Country Gent 81:790 Ap '16
- Temporary pastures and crop residues for beef cattle. A. L. French. Prog F 33:1131 O 19 '18
- Top-dressing grassland and pastures. H. J. Wheeler. (B. 7) 12p il n.d. Am. agricultural chemical co., 92 State st., Boston
- Top-dressing meadows. E. O. Fippin. Country Gent 82:582 Mr 24 '17
- Treatment of pastures: prevention of rickets, cripples, and paralysis. E. W. Murphy. il J Dept Ag Victoria 15:449-56 Ag '17
- Trials on grass land with open-hearth basic slag and rock phosphates. G. S. Robertson. J Bd Ag 24:1077-86 Ja '18
- Unique pasture management plan. J. L. Justice. Breeder's Gaz 72:314 S 6 '17
- Using forage in pig feeding. W. L. Robison. il Ohio Ag Exp B v 3:72-6 Mr '18
- Value of pasture in pork production. H. H. Hayner. Nat Stock & F 41:1208 F 23 '18
- Value of permanent pastures. D. T. Gray. Prog F 33:1130 O 19 '18
- Value of stump land pasture. O. I. Bergh. Hoard's D 53:614 Ap 27 '17
- Vegetative succession under irrigation. J. F. Macbride. il J Ag Research 6:741-60 Ag 7 '16
- Veteran breeder holds pasture indispensable. Breeder's Gaz 74:267 Ag 22 '18
- War on waste areas. P. A. Ingvason. il Nat Wool Grower 8:36-8 Mr '18
- Weeds in meadows at the Letteensuo experiment station. E. F. Simola (Finska Mosskulturför. Arsbok., 20, no. 2 92-124p. '16). Exp Sta Record 38:141 F '18
- Winter pasture plots. J. M. Pitt. Ag Gaz of New South Wales 29:197-8 Mr '18
- Winter pasturing in the Southeast. F. H. Jeter. Breeder's Gaz 74:80 Jl 18 '18

See also Clover; Forage plants; Grasses

**Statistics**

- Pasture land and its carrying capacity: acreage in different states. Monthly Crop Rep 4:139 N '18
- Pasture land on farms in the United States. E. A. Goldenweiser and J. S. Ball. maps U S Ag B 626:1-93 '18

**Patagonia.** See Forests and forestry—Patagonia

**Patent medicine, Veterinary.** See Veterinary patent medicine

**Patents**

- New patents. Creamery 7:38 Ja; 35-6 F; 45-6 My; 42-3 Je; 31-2 Ag; 62 O; 40 D '18
- Recent machinery patents. il Power F 25:46-7 Ja; 54-5 F; 58-9 Mr; 42-3 O '16
- Review of patents. See Monthly numbers of the International review of the science and practice of agriculture

**Pathological botany.** See Plants—Diseases and pests

**Pathological laboratories.** See Medical laboratories

**Pathologists, Conference of cereal.** See Conference of cereal pathologists

**Patriotic agricultural service commission**  
Work and organization. Rural N Y 76:623 Ap 28 '17

**Patrogenesis.** See Hybridization

**Patrons of husbandry.** See National grange of the patrons of husbandry

**Pavements, Wood**

Cresosoted wood block pavements. O. P. M. Goss. il Am For 22:105-6 F '16

**Pawpaw.** See Papaw

**Pea aphid**

Pea aphid (macrosiphum pisi Kalt.) with relation to forage crops. J. J. Davis. il U S Ag B 276:1-67 '15

**Pea weevils**

Bean and pea weevils. E. A. Back and A. B. Duckett. il Farmers' B 983:1-24 '18

Observations and experiments on the bean and pea weevils in Kentucky. H. Garman. il Ky Ag Exp B 213:307-33 '17

**Peach aphid**

Control of peach aphid. Ag Gaz of New South Wales 27:778 N '16

**Peach bacterial spot**

Bacterial shot hole of peach. H. W. Anderson. Ill State Hort Soc Trans 1917:121-7 '18

Control of peach bacterial spot in southern orchards. J. W. Roberts. il U S Ag B 543:1-7 '17

**Peach bacteriosis.** See Peach bacterial spot

**Peach leaf curl**

Control of peach leaf-curl. M. A. Blake. il Rural N Y 76:225 F 17 '17

Fall spraying for peach leaf curl. L. R. Hessler. Green's Am Fruit Grower 37:14 D '17

Peach leaf curl and how to control it. J. T. Bregger. Better Fruit 13:16 N '18

Spraying controls peach-leaf curl. Better Fruit 10:10 Ap '16

**Peach lecanium.** See Terrapin scales

**Peach rosette**

Peach yellows and peach rosette. J. B. S. Norton. il Cal State Comm Hort B v 6:282-6 Jl '17

Peach yellows and rosette. Green's Am Fruit Grower 38:20 Ap '18

Rosette and cover crops. O. T. Clawson. Better Fruit 10:24 Ap '16

**Peach scab**

Control of peach scab by dusting. A. J. Farley. Rural N Y 77:610, 640 Ap 27-My 4 '18

Dusting for peach scab. H. E. Thomas. il Va Ag Exp Rep 1915-1916:184-6 '17

Peach scab and its control. G. W. Keitt. il U S Ag B 395:1-66 '17 (20c Supt. of doc.); Summary. Prog F 32:93 Ja 27 '17; Summary. Green's Fruit Grower 37:24 My '17; Summary. Country Gent 82:940 My 26 '17

**Peach tree borers**

Asphaltum for peach borers. Rural N Y 76:404 Mr 17 '17

Combating the peach tree borer. J. S. Underwood. Green's Fruit Grower 36:3 Je '16

Control of peach-tree borers. J. P. Stewart. Country Gent 81:211 Ja 29 '16

Controlling the peach-tree borers. J. P. Stewart. il Penn State F 9:388 My '16

Experience with borers. R. Glenwood. Fruit-Grower 28:235 Ap 15 '17

Fruit tree bark beetle; peaches. Fruit-Grower 27:96 F 1 '16

Insects and diseases of the peach. L. F. Strickland. il N Y Ag Dept B 79,pt 2:1097-1105 Ja '16

Life history, habits, injuries and control measures. J. L. King. il Ohio Ag Exp B v 2:23-8 Ja '17; Same. Fruit-Grower 28:253 My 1 '17

Notes on the peach-tree borer (sanninoidea exitiosa). G. G. Becker. J Econ Entom 10:49-59 F '17

Old fight against peach borers. il Rural N Y 75:854 Je 10 '16

Onions for peach borers. C. J. Benedict. Fruit-Grower 27:13 Ja 1 '16

Peach borers. Fruit-Grower 27:203 Mr 15 '16

Peach tree borer. Prac F 113:12 Ja 1 '17

Peach tree borer. H. A. Gossard. Ohio F 140:401 N 3 '17

Shot-hole and pin-hole borers. T. H. Parks. Country Gent 81:1437 Jl 29 '16

Some experiments on the adults and eggs of the peach tree borer, sanninoidea exitiosa Say, and other notes: with discussion. A. Peterson. il J Econ Entom 11:46-55 F '18

Suggestions for fighting peach tree borers. Ag Digest 1:78 Je '16

Timely suggestions for fighting peach tree borers. Prac F 112:211 My 15 '16

**Peach tree borers, Lesser**

Injuries, life history and control measures. il Ohio Ag Exp B v 2:157-62 My '17

Lesser peach tree borer. J. L. King. bibliog il Ohio Ag Exp B 307:399-448 Ja '17

**Peach worms, Striped**

Striped peach worm. H. G. Ingerson. bibliog il U S Ag B 599:1-14 '18

**Peach yellows**

Peach yellows and peach rosette. J. B. S. Norton. il Cal State Comm Hort B v 6:282-6 Jl '17

Peach yellows—*Continued*

Peach yellows and rosette. Green's Am Fruit Grower 38:20 Ap '18

## Peaches

- Adaptable peach. E. Irving. O Judd Farmer 61:20 Ag 26 '16
- Antiquity of peach growing. Green's Fruit Grower 36:18 Ap '16
- Buried peach orchards. Int R Sci & Prac Ag 7:no 2:231 F '16
- Canning peaches on the farm. H. P. Gould and W. F. Fletcher. il Farmers' B 426:1-24 '17 (rev.)
- Care of a peach orchard. Green's Fruit Grower 37:7 Ag '17
- Care of the peach orchard. Va Ag Dept B 109:100-3 '16
- Census of the peach crop of 1917 in West Virginia. W Va Ag Dept B 26:1-24 '17
- Chemical process of peeling peaches. C. C. Newman and B. Freeman. il plans S C Ag Exp B 196p 6p '18
- Effect of pruning peach trees at different heights previous to planting in the orchard. M. A. Blake. il N J Ag Exp B 293:1-30 '16
- Experience with peaches. R. G. Kirby. Green's Fruit Grower 37:5 Ag '17
- Fall pruning peach trees. M. A. Blake. Rural N Y 77:1183 O 19 '18
- 400 feet of wall peaches. E. I. Farrington. il Gard M 24:148 N '16
- Fundamentals that determine peach pruning practice. E. W. Bailey. Ill State Hort Soc Trans 1917:114-21 '18
- Gamble of growing the fickle peach. F. A. Waugh. il Country Gent 83:10 Ap 6 '18
- Good work in the peach orchard. F. H. Sweet. Green's Fruit Grower 37:4 F '17
- Growing peaches; sites and cultural methods. H. P. Gould. il Farmers' B 917:1-44 '18
- Growing peaches under glass. S. J. Trepass. Gard Chron Am 21:9 Ja '17
- Harvesting and packing peaches. W. B. Lanham. il Tex Ag Ext B B-22:1-8 '16
- Helpful hints on dusting peaches. W. W. Chase. Ga Entom Bd C 24:1-7 '18
- Home market for peaches. H. L. Spooner. Country Gent 81:267 F 5 '16
- Irrigation of peaches. L. D. Batchelor. il Utah Ag Exp B 142:1-23 Ja '16
- Leaf glands of peaches. Gard Chron (Lond) 61:6 Ja 6 '17
- Lye for peeling peaches. Rural N Y 76:983 Ag 18 '17
- Mulching peaches. J. P. Stewart. Rural N Y 75:768 My 20 '16
- New Jersey's peach industry. M. A. Blake. il Field 11 28:237-8 Ap '18
- New peach spray. Fruit-Grower 27:301 My 15 '16
- Notes on Texas peaches. J. W. Stubenbauch. il Rural N Y 75:983 Jl 15 '16
- Open-air peach and nectarine culture. Gard Chron Am 21:211 My '17
- Ozark peaches pay. Fruit-Grower 27:496 N 15 '16
- Peach crop for twenty years. S. L. de Fabry. il Country Gent 81:77 Ja 8 '16
- Peach culture. C. A. McCue. (In Peninsula hort. soc. Trans., 1916, p. 34-40) '16 W. Webb, sec., Dover, Del.
- Peach growing. F. H. Sweet. Green's Fruit Grower 37:5 S '17
- Peach growing in Indiana. J. Oskamp. il Ind Ag Exp C 69:1-24 '17
- Peach growing in North Carolina. C. D. Matthews. il N C Ag Dept B 37:1-46 D '16
- Peach growing in Ontario. F. M. Clement and A. G. Harris. il Ontario Ag Dept B 241:1-51 '16
- Peach growing in the south mountain fruit belt. D. V. Pike. il Prac F 112:26 Ja 15 '16
- Peach growing in Virginia. G. C. Starcher. il Va Ag Dept B 115:42-9 '17
- Peach production in Texas. W. B. Lanham and M. E. Hays. il Tex Ag Ext B B-29:1-32 '16
- Peach trees on Long Island. Rural N Y 76:613 Ap 28 '17
- Peaches at a profit. E. W. Gage. Green's Fruit Grower 37:4 Mr '17
- Peaches in eastern New York, by P. L. Huested; Peaches in western New York, by E. H. Anderson; Cultural methods for the peach, and marketing, by A. T. Henry; Pruning the peach, by M. A. Blake; Packing and marketing the peach, by A. G. Gulley. il N Y Ag Dept B 79:pt 2:1061-93, 1116-17 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1061-93, 1116-17 '17
- Peaches in the mountain regions of the South. W. N. Hutt. Prog F 31:1194 O 14 '16
- Peaches like father used to grow. C. A. Green. il Green's Fruit Grower 36:1+ Ag '16
- Peaches of New York. Am Flor 49:38 Jl 21 '17
- Peaches of New York, by U. P. Hedrick. Review. Gard Chron (Lond) 63:154 Ap 13 '18
- Picking and packing peaches. il Green's Fruit Grower 36:11 Ag '16
- Picking, packing and shipping peaches. M. A. Blake. il Rural N Y 75:973-4, 999, 1028, 1048, 1067, 1094 Jl 15-Ag 19 '16
- Practical and scientific points in peach growing. M. A. Blake. (In Pro. N.J. state hort. soc., 1916, p. 107-11) '17 H. G. Taylor, sec., Riverton, N.J.
- Pruning bearing apple and peach trees. C. J. Hayden. il Prog F 31:282 F 26 '16
- Pruning experiments with peaches: results of first two seasons. M. A. Blake. N J Ag Exp C 83:1-8 '17
- Pruning of peach trees previous to planting in the orchard. Rural N Y 76:314 Mr 3 '17
- Pruning peach trees. W. W. Magill. il Purdue Ag 11:43-4 F '17
- Pruning the apple and peach. S. F. Fletcher. Penn State F 11:265+ F '18
- Raising peaches in Egypt. Illinois. E. L. Ragsdale. il Fruit-Grower 28:4 Ja 1 '17
- Renewal of old peach trees. Green's Fruit Grower 36:37 F '16
- Run by an all-star cast; Potomac valley farm. W. H. Dean. il Country Gent 81:1547-8 Ag 19 '16
- Season of ripening for peaches. Am Fruit Grower 38:24 D '18
- Second-wind success. G. F. Stratton. il Country Gent 82:1597 O 20 '17
- Soils of Massachusetts and Connecticut with especial reference to apples and peaches. H. J. Wilder. il maps U S Ag B 140:1-73 '15
- Spraying, harvesting and marketing the peach. J. M. Tanner. Ill State Hort Soc Trans 1917:382-3 '18
- Starting the peach orchard. il Nat Stock & F 40:50 Ap 8 '16
- Top-working of bearing peach trees. M. A. Blake. il Rural N Y 75:360, 429 Mr 4-11 '16
- Trip to the Fort Valley peach district of Georgia. A. J. Gunderson. Ill State Hort Soc Trans 1916:165-74 '17
- Use of a mulch on peaches. J. P. Stewart. Rural N Y 75:685 Ap 29 '16
- Using over ripe peaches. Green's Fruit Grower 37:5 Ag '17
- Vineland peach experiments. il N J Ag Exp Rep 1916:71-80 '17
- What ails the peach business? Country Gent 81:794 Ap 8 '16
- When peaches are ripe; how to pick and pack for a discriminating market. M. A. Blake. il Country Gent 83:7 Jl 6 '18
- Why peach trees winterkill. B. W. Keith. il Country Gent 81:890 Ap 22 '16
- Will it pay to plant peaches? Nat Stock & F 41:699 O 20 '17
- Winter heating of peach orchards. W. J. Green. Ohio Ag Exp B v 1:374-6 D '16

## Classification

Taxonomic value and structure of the peach leaf glands (B. 365). C. T. Gregory, bibliog il Cornell Ag Exp Rep 1916:183-222 '17

## Composition

Some effects of the brown-rot fungus upon the composition of the peach. L. A. Hawkins. bibliog Am J Bot 2:71-81 F '15

## Costs

Cost of a peach orchard. Prac F 112:313 Ag 15 '16

Cost of running a peach orchard in North Carolina. A. W. Page. Int R Sci & Prac Ag 7,no 4:576-9 Ap '16

Crew work, costs, and returns in commercial orcharding in West Virginia. J. H. Arnold. il U S Ag B 29:1-24 '13



**Peaches—Costs—Continued**

Financial statement of the experiment station peach orchard. C. A. McCue. *Del Ag Exp B* 113:1-21 '16

**Diseases and pests**

Black spot and leaf curl. W. Laidlaw and C. C. Bittlebank. *il J Dept Ag Victoria* 16: 479-87 Ag '18  
 Collar rot of peach trees. M. A. Blake. *il Rural N Y* 76:612 Ap 28 '17  
 Collar rot of peach trees. L. G. Herron. *Prog F* 32:1034 O 6 '17  
 Common diseases of the peach, plum and cherry. M. T. Cook. *il N J Ag Exp C* 81:1-19 '17  
 Common insects and diseases of apples and peaches. E. H. Favor. *il Fruit-Grower* 27: 7-9 Ja 1 '16  
 Control of brown-rot; peach-orchard experiments at Henderson. J. W. Collard. *J Ag New Zealand* 16:275-83 My '18  
 Fighting fruit pests. J. Crowder. *il Fruit-Grower* 28:11 Ja 1 '17  
 Further notes on laspeyresia molesta. W. B. Wood and E. R. Selkregg. *il J Ag Research* 13:59-72 Ap 1 '18  
 Insects and diseases of the peach. L. F. Strickland. *il N Y Ag Dept B* 79,pt 2:1094-1115 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1094-1115 '17  
 Laspeyresia molesta, an important new insect enemy of the peach. A. L. Quaintance and W. B. Wood. *il J Ag Research* 7:373-8 N 20 '16  
 New insect enemy of the peach. *il Rural N Y* 76:33 Ja 13 '17  
 New insect enemy of the peach. *Science (Science Press, Garrison, N.Y. 15c) n s* 44:924-5 D 29 '16  
 New peach disease. J. Oskamp. *il Fruit-Grower* 27:372 Ag 1 '16  
 New peach spray. *Fruit-Grower* 27:301 My 15 '16  
 Pathological aspects of the freight rate classification on peaches. D. Reddick. *bibliog N Y State Fruit Growers' Assn Pro* 1918:12-17  
 Peach growing in Ontario; important insects and diseases attacking peach trees. L. Caesar and J. E. Howitt. *il Ontario Ag Dept B* 241:41-51 '16  
 Ripe-rot of stone-fruits. A. B. Mansfield. *il J Ag New Zealand* 12:214-16 Mr '16  
 Some effects of the brown-rot fungus upon the composition of the peach. L. A. Hawkins. *bibliog Am J Bot* 2:71-81 F '15  
 Spray calendar for the peach. *il N J Ag Exp C* 94:1-4 '18 (rev. C. 79)  
 Spraying a peach orchard. R. M. Hitt. *Fruit-Grower* 27:50 Ja 15 '16  
 Spraying of the peach. L. F. Reese. *il Penn State F* 9:390-1 My '16  
 Spraying peach and apple orchards. J. W. Roberts. (*In Peninsula hort. soc. Trans.*, 1916, p. 30-3) '16 W. Webb, sec., Dover, Del.  
 Spraying peaches. H. P. Barss and A. L. Lovett. *Ore Ag Ext B* 195 4p '17  
 Spraying peaches for the control of brown-rot, scab, and curculio. W. M. Scott and A. L. Quaintance. *il Farmers' B* 440:1-24 '18 (abr. reprint)  
 Spraying the peach; with discussion. W. White. *Ill State Hort Soc Trans* 1916:490-503 '17  
 Substitute for self-boiled lime-sulfur and other summer sprays for peaches. L. G. Gillam. *N J Ag Exp C* 63:1-4 '17  
 Treatment of winter-injured peach trees. J. O. Oskamp. *il Purdue Ag* 12:414 Ap '18  
*See also* Peach aphid; Peach bacterial spot; Peach leaf curl; Peach rosette; Peach scab; Peach tree borers; Peach tree borers, Lesser; Peach worms, Striped; Peach yellows

**Distribution**

Distribution of the New York peach crop. *Better Fruit* 12:12 N '17

**Grading**

Suggested grades for peaches. M. A. Blake and C. H. Connors. *il N J Ag Exp C* 53:1-8 n.d.

**Handling**

Report on experiment in picking, packing, handling, cool-storage, and transportation of peaches. E. Meeking. *il J Dept Ag Victoria* 14:41-55 Ja '16

**Marketing**

Advertising that sells peaches. E. I. Farrington. *il Country Gent* 83:18 Ag 3 '18  
 Boosting a peach week sale. A. J. Bradley. *Prac F* 112:277 Jl 15 '16  
 Co-operation saved the peaches. W. B. Hunter. *il Fruit-Grower* 27:526-4 D 15 '16  
 Future peach markets. R. G. Kirby. *Country Gent* 81:694 Mr 25 '16  
 Marketing of New York state peaches. 16p map n.d. Agricultural Dept., New York Central railroad co., Grand Central terminal, New York  
 Marketing peaches. H. W. Moorhouse. *Okla Ag Ext C* 76 4p '18  
 Marketing the New York peach crop. *Nat Stock & F* 40:972 D 23 '16  
 Marketing the peach crop. C. J. Hayden. *Prog F* 31:592 Ap 29 '16  
 Need of peach marketing plans. *Green's Fruit Grower* 36:5 O '16  
 Peach marketing problems. R. G. Kirby. *Green's Fruit Grower* 37:5 Je '17  
 Peach supply and distribution in 1914. W. A. Sherman and others. map U S Ag B 298:1-15 '15; Abstract. *Int R Sci & Prac Ag* 7,no 2:297-301 F '16  
 Selling a car of peaches. E. B. Pancake. *Country Gent* 81:130 My 27 '16  
 Sixty-two cents or nothing. L. N. Reichel. *il Country Gent* 81:1285 Jl 1 '16  
 Wait for the red wagon; a peach grower's distinctive selling scheme. J. R. Mattern. *Country Gent* 81:1044 My 13 '16  
*See also* California peach growers

**Packing**

Better marketing methods for peaches. W. P. Duruz. *Prac F* 114:207 Je 1 '18  
 Packing peaches in Georgia carriers. L. G. Gillman. *il N J Ag Exp C* 82:1-8 '17

**Statistics**

Apple and peach crop report for 1918. L. M. Estabrook. *Green's Am Fruit Grower* 38:3-4 Ag '18  
 Production, and prices Sept. 15, by states. *See United States Department of agriculture Yearbooks*  
 Special commercial peach crop report for July, 1918. *Monthly Crop Rep* 4:80 Jl '18  
 Table showing number of trees and production in bushels of peaches in New York state. *N Y Ag Dept B* 79,pt 2:1118-19 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1118-19 '17

**Transportation**

Pathological aspects of the freight rate classification on peaches. D. Reddick. *bibliog N Y State Fruit Growers' Assn Pro* 1918:12-17  
 Peach package tests—season of 1915. J. M. Creelman. *il Ag Gaz of Canada* 3:222-5 Mr '16  
 Peach precooling. E. Smith. *Ag Gaz of Canada* 3:121-3 F '16  
 Peaches and a motor truck. W. H. Dean. *il Country Gent* 81:1867 O 21 '16

**Varieties**

Peach varieties and their classification. H. P. Gould. *Farmers' B* 918:1-15 '18 (B. 633 rev.)  
 Winter-killing of peach buds; table showing varietal differences. P. Thayer. *Ohio Ag Exp B v* 1:311-12 O '16

**Peafowl**

Care of peafowl. *Rural N Y* 76:865 Jl 7 '17

Pea fowls. F. H. Valentine. *il Country Life* 31:76 Mr '17

**Peanut butter**

Ultimate food council: nutritive value of peanut butter. *Outlook* (381 4th av., N.Y. 10c) 114:785 D 13 '16

## Peanut butter—Continued

## Statistics

- Commercial stocks of peanut butter, Jan. 1. U S Food Surveys 1:18-20 Je 22 '18  
Commercial stocks of peanut butter, July 1. U S Food Surveys 2:13-15 Ag 31 '18

## Peanut cake and meal

- Peanut meal possibilities. C. A. Whittle. Hoard's D 52:502 N 3 '16

See also Feeding and feeding stuffs—Peanuts

## Peanut flour

- New and efficient substitute for nutrose. R. L. Mackenzie Wallis. Ag J of India 12:621-32 O '17

## Peanut leafspot

- Further studies on peanut leafspot. F. A. Wolf. J Ag Research 5:891-902 F 7 '16

## Peanut milling

- Progress in peanut milling. T. B. Reese. Tex Ag Exp C 12:1-6 '16

## Peanut oil

- Domestic peanut oil. Weekly N L 5:6 F 13 '18  
Home-filtered peanut oil. Weekly N L 5:3 F 20 '18

- Peanut oil. H. C. Thompson and H. S. Bailey. Farmers' B 75:1-16 '16; Abstract. Int R Sci & Prac Ag 8, no 1:82-4 Ja '17

- Peanut oil as fuel for motorships; abstract. Am Soc Mechanical Eng J (29 W. 39th st. N.Y. 35c) 40:192 F '18

- Peanut oil in France. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:112 F 16 '18

- Peanut oil production in Georgia. Ga Ag Coll (Ext) C 23:1-4 F '16

- Peanuts for oil and meal. G. H. Dacy. il Country Gent 82:896 My 19 '17

- Peanuts for oil production. A. P. Spencer and E. W. Jenkins. il Fla Ag Ext B 12:1-19 '18; Excerpts. Ag Digest 2:930 Ap '18

- Possibilities of peanut oil production in the South. G. A. Whittle. Prog F 31:382 Mr 11 '16

- Some American vegetable food oils, their sources and methods of production; peanut oil. H. S. Bailey. il U S Ag Year book 1916: 170-3; Same. Separate 691:12-15

## Statistics

- Commercial stocks of peanut oil, Jan. 1. U S Food Surveys 1:17-19 My 31 '18

- Commercial stocks of peanut oil, July 1. U S Food Surveys 2:17-19 S 16 '18

## Peanut wilt

- Peanut-wilt caused by sclerotium rolfsii. J. A. McClintock. il J Ag Research 8:441-8 Mr 19 '17

## Peanuts

- Arachis hypogaea, Lin., the ground nut, or earth pea. G. C. Dudgeon. (Egyptian agricultural products, no. 2a) 24p 10c '16 Egypt ministry of ag., Cairo

- Consider the peanut. Weekly N L 4:2 Jl 25 '17  
Digestibility of protein supplied by soy-bean and peanut press-cake flours. A. D. Holmes. U S Ag B 717:1-26 '18

- Effects of the peanut crop on soil fertility. J. F. Duggar. Prog F 32:1218 N 17 '17

- Experiences with peanuts. Prog F 33:312 Mr 9 '18

- 51,000,000 bushels of peanuts. Am Fert 48:76 Je 8 '18

- Food-value of the groundnut. Ag J of India 13:351-5 Ag '18

- Future of the peanut. W. D. Little. Prog F 31:790 Je 17 '16

- \* Glory of the peanut. Chemical & Metallurgical Eng (10th av at 36th st. N.Y. 25c) 19:746 D 1 '18

- Handling peanut crop. Weekly N L 5:4 N 7 '17

- Handling the peanut crop. W. H. Harrison. il Rural N Y 76:1127 S 29 '17; Same cond. Nat Stock & F 41:670 O 13 '17

- Harvesting and stacking peanuts. L. A. Niven. Prog F 33:990 S 7 '18

- Harvesting, picking, thrashing, and storing peanuts. H. C. Thompson. il U S Ag C 81:1-6 '17

- Hogging off peanuts versus harvesting and selling. T. Butler. Prog F 33:1279 N 23 '18

- How to grow the peanut and 105 ways of preparing it for human consumption. G. W. Carver. Tuskegee Exp B 31:1-35 '16; Same cond. Rural N Y 75:630 Ap 15 '16

- How to increase the yield of peanuts. E. F. Cauthen. Prog F 33:574 My 4 '18

- How to succeed with peanuts. T. E. Browne. Prog F 31:340 Mr 4 '16

- How we grow peanuts in old Virginia. W. H. Harrison. il Rural N Y 76:869 Jl 14 '17

- Inconsequential goober. G. F. Stratton. il Country Gent 83:10+ My 25 '18

- Keeping varieties of peanuts pure. J. F. Duggar. Prog F 33:572 My 4 '18

- Many ways for using peanuts; one of the cheapest and best foods. Weekly N L 5:7 My 15 '18

- Necessity of fertilizing peanuts. J. N. Harper. (C. 15) 8p il n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.

- New market for peanuts. Ag Digest 1:448 My '17

- New uses for southern peanuts. C. B. Williams. Country Gent 81:1982 N 11 '16

- Peanut. W. D. Kerle. il Ag Gaz of New South Wales 29:137-42, 262-73, 338-43, 429-33, 471-9 F, Ap-Jl '18 (to be cont)

- Peanut, a great American food. H. S. Bailey and J. A. Le Clerc. il U S Ag Yearbook 1917:289-301

- Peanut as a human food. T. E. Browne. Prog F 33:52 Ja 12 '18

- Peanut as a staple and commercial crop. G. S. Bruce. Tex Ag Dept B 52:69-73 '16

- Peanut culture. Nat Stock & F 40:190 My 13 '16

- Peanut culture. il Va Ag Dept B 111:7-10 Ap '16

- Peanut culture. E. T. Batten. il Va Ag Exp B 218:1-16 '18

- Peanut culture. F. W. Davis. Tex Ag Dept B n s 15:1-6 '17

- Peanut-fed hogs. R. K. Phillips. Country Gent 81:1813 O 7 '16

- Peanut harvest. W. H. Harrison. Nat Stock & F 41:670 O 13 '17

- Peanut rooster that pays. R. M. Berry. Prog F 31:249 F 19 '16

- Peanuts. C. C. Clay. il Ga Ag Dept B 68:1-23 '16

- Peanuts a good substitute for cotton in boll weevil territory. J. N. Harper. Am Fert 46: 21-3 Mr 17 '17

- Peanuts and soy beans for oil. Prog F 31: 1383 D 2 '16

- Peanuts and their possibilities for the grower and manufacturer. 23p n.d. Industrial and ag. depts., Central of Georgia Ry. co., Savannah

- Peanuts as a cash crop. D. B. Osborne. Am Fert 46:23-4 Mr 17 '17

- Peanut's bit. J. D. Stuart. il Country Life 33:60 Ap '18

- Peanuts for oil and meal. G. H. Dacy. il Country Gent 82:896 My 19 '17

- Peanuts for oil production. A. P. Spencer and E. W. Jenkins. il Fla Ag Ext B 12:1-19 '18; Excerpts. Ag Digest 2:930 Ap '18

- Peanuts for profit. 16p n.d. Industrial and ag. depts., Central of Georgia Ry. co., Savannah

- Peanuts in Florida. A. P. Spencer and W. E. Brown. il Fla Ag Ext B 6:1-20 '16

- Peanuts; questions and answers. S C Ag Ext B 21:1-8 n. d.

- Peanuts; tests of varieties and fertilizers. J. F. Duggar and others. il Ala Ag Exp B 192:1-32 '17; Same cond. (Popular ed with title: Growing peanuts in Alabama.) B 194: 35-48 '17

- Peanuts; useful facts about varieties, culture, etc. T. E. Browne. Prog F 31:854 Jl 8 '16

- Points about peanuts. E. F. Cauthen. Prog F 32:435 Ap 7 '17

- Power of the peanut. R. H. Moulton. il Hoard's D 55:5 Ja 25 '18

- Preparing the land for peanuts. T. E. Browne. Prog F 31:484 Ap 1 '16

- Present status of the peanut industry. H. C. Thompson. il U S Ag Yearbook 1917:113-26



**Peanuts—Continued**

- Puissance of the peanut. F. S. Tisdale, il *Nation's Business* (Riggs bldg., Washington, D. C. 20c) 5:26-9 Ja '17  
 Puissant peanut and its \$56,000,000 bumper crop. *Current Opinion* (63 W. 36th st., N.Y. 25c) 62:218 Mr '17  
 Rotations for peanut fields. J. F. Duggar. *Prog F* 32:1295 D 8 '17  
 Seven sided peanut. S. R. Winters. il *Country Gent* 83:1 Ag 24 '18  
 Some important facts developed in the Virginia peanut survey. Va Ag Dept B 121: 7-11 S '17  
 Spanish peanuts. M. A. Beeson. *Okla Ag Ext* C 71 4p '18  
 Uses of the peanut on the home table. J. R. Arms. *Fla State College for Women B* 17: 1-16 '17  
 Uses of the peanut on the home table. J. P. Rich. *Tex Univ (Austin) B* 1720:1-18 Ap 5 '17  
*See also* Feeding and feeding stuffs—Peanuts; Peanut butter; Peanut milling; Peanut oil

**Composition**

- Composition of peanuts and peanut by-products. G. S. Fraps. *Tex Ag Exp B* 222:1-38 '17

**Diseases and pests**

- Further evidence relative to the varietal resistance of peanuts to sclerotium rot. J. A. McClintock. *Science (Science Press, Garrison, N.Y. 15c) n s* 47:72-3 Ja 18 '18  
 Injury to peanuts by the twelve-spotted cucumber beetle. D. E. Fink. il *J Econ Entom* 9:366-8 Je '16  
 Peanut mosaic. J. A. McClintock. *Science (Science Press, Garrison, N. Y. 15c) n s* 45:47-8 Ja 12 '17; Same. *Int R Sci & Prac Ag* 8, no 5:802-3 My '17  
*See also* Peanut leafspot; Peanut wilt

**Grading**

- Grades for Alabama peanuts. *Prog F* 33:1209 N 2 '18

**Marketing**

- Needed improvements in the marketing of peanuts. J. F. Duggar. *Prog F* 33:884 Ag 10 '18  
 Peanut marketing suggestions. T. E. Browne. *Prog F* 33:1214 N 2 '18  
 Wiser marketing of peanuts needed. C. W. Mitchell. *Prog F* 33:917 Ag 17 '18

**Prices**

- Peanuts should bring at least 8 cents. *Prog F* 33:1371 D 14 '18

**Statistics**

- Commercial stocks of peanuts, Jan. 1. U S Food Surveys 1:13-14 Jl 27 '18  
 Commercial stocks of peanuts, July 1. U S Food Surveys 2:13-16 O 5 '18  
 Peanut acreage—preliminary estimate. *Monthly Crop Rep* 3:54 Je '17  
 Peanut production in Alabama 1917. *Prog F* 32:1287 D 8 '17  
 Special southern grain and forage crops: acreage 1916 and 1917. map *Monthly Crop Rep* 4:50 My '18

**Pear black-spot**

- Black-spot of pear. J. G. Veall. il *J Ag New Zealand* 16:288-90 My '18

**Pear blight.** *See* Fire blight

**Pear borers, Sinuate.** *See* Sinuate pear borers

**Pear cider.** *See* Perry

**Pear leaf blister mites**

- Leaf blister mite. *Better Fruit* 11:22 D '16  
 Leaf blister mite of pear and apple. A. L. Quaintance. il *Farmers' B* 722:1-6 '16; Same cond. *Prog F* 31:660 My 13 '16

**Pear leaf-worms**

- Pear leaf-worm [*gymnonychus californicus* Marlatt]. R. L. Nougaret and others. il *U S Ag B* 438:1-24 '16

**Pear psylla**

- Pear psylla. il *Green's Fruit Grower* 36:29 F '16

- \* Pear psylla. W. A. Ross. il *Ag Gaz of Canada* 5:1134-6 D '18

- Some results of the spraying service in pear orchards of Niagara country in 1917. L. F. Strickland. N Y State Fruit Growers' Assn *Pro* 1918:21-31

**Pear scab**

- Control of pear scab. R. E. Smith. il *Cal Ag Exp C* 157:1-4 '16

**Pear sooty blotch**

- Sooty blotch of the pear. E. S. Salmon and H. Wormald. il *Gard Chron (Lond)* 59:58 Ja 29 '16

**Pear thrips**

- Cost of spraying in the control of the pear thrips in British Columbia. A. E. Cameron and others. *Ag Gaz of Canada* 4:13-16 Ja '17  
 Life history and habits of the pear thrips in California. S. W. Foster and P. R. Jones. il *map U S Ag B* 173:1-52 '15  
 Pear thrips in British Columbia and its control. A. E. Cameron and R. C. Treherne. il *Ag Gaz of Canada* 3:946-52 N '16

**Pear tree slugs**

- Few notes on the pear tree slug. J. C. Chappais. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 25-7) '17

**Pear woolly aphid.** *See* Woolly aphid

**Pearl millet**

- Pearl millet and teosinte for the North. F. B. Morrison. *Breeder's Gaz* 69:335 F 10 '16

**Pears**

- Blossoming dates of apples and pears. G. H. Johnston. *Ag Gaz of New South Wales* 28: 663-6 S '17  
 Bringing the pear to perfection. M. A. Cromlich. *Nat Stock & F* 42:46 Ap 6 '18  
 Cultural methods for pears, by I. Pease; Pruning pear trees, by A. Farrand; Packing and marketing pears, by A. Farrand. il *N Y Ag Dept B* 79,pt 2:1007-13, 1014-18, 1052-5 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1007-13, 1014-18, 1052-5 '17  
 Dwarf pears. F. T. Swett. *Cal State Comm Hort B v* 6:421-2 N '17  
 Experience with pears. W. H. Jenkins. *Ohio F* 140:558 D 15 '17  
 My experience with pears. W. H. Jenkins. il *Green's Am Fruit Grower* 37:6 D '17  
 Newer fruits in 1915 and how secured. N. E. Hansen. il *Minn Hort* 44:307-12 Ag '16  
 Origin and development of hardy, blight-resistant pears. C. G. Patten. il *Minn Hort* 45: 97-102 Mr '17  
 Pear growing in California. G. P. Weldon. il *Cal State Comm Hort B v* 7:223-410 My '18  
 Pear growing in Nebraska; with discussion. E. Berlin. (*In* *Nebraska Horticulture v.* 6, no. 12, p. 53-9) (F) '17 *Neb. state hort. soc., Lincoln*  
 Pear in Ontario. F. M. Clement and O. J. Robb. il *Ontario Ag Dept B* 249:1-28 '17  
 Pear versus quince root for the Bartlett. W. P. Tufts. il *Cal State Comm Hort B v* 7:416-19 Je '18  
 Pears for fruit and shade. J. W. Payne. O *Judd Farmer* 61:19 Jl 29 '16  
 Pears for the future. P. Earle. *Country Gent* 81:1935 N 4 '16  
 Preliminary observations on the ripening of Bartlett pears. W. V. Cruess and P. M. Stone. *Cal State Comm Hort B v* 5:425-9 D '16  
 Production of war alcohol with perry pears. A. Truelle. *Int R Sci & Prac Ag* 9,no 2:241-2 F '18  
 Promising new pear stock. F. C. Reimer. il *Cal State Comm Hort B v* 5:166-71 My '16  
 Pruning the bearing apple and pear tree. V. R. Gardner. il *Better Fruit* 10:11+ Ja; 10-11 F '16  
*See also* Pyronias

**Breeding**

- Methods and problems in pear and apple breeding. W. R. Ballard. il *Md Ag Exp B* 196:79-92 '16; Same. *Md Ag Exp Rep* 1915-1916:79-92 '16

- Pear breeding. il *J Heredity* 7:435-42 O '16

## Pears—Continued

## Diseases and pests

- Biological observations on roestelia cancellata, a rust attacking the pear. A. Trotter. *Int R Sci & Prac Ag* 8,no 1:161-3 Ja '17
- Brown blotch of the Kieffer pear. G. W. Martin. *il Phyt* 8:234-9 My '18
- Common diseases of apples, pears and quinces. M. T. Cook. *il N J Ag Exp C* 80: 1-27 '17
- Common diseases of the pear. G. W. Martin. *il N J Ag Exp C* 52:1-12 n.d.
- Fungoid disease attacking pears. I. W. Helmsing. *il J Ag New Zealand* 15:96-7 Ag '17
- Further contribution to the study of *erosoma pyricola*, the woolly pear aphid. A. C. Baker and W. M. Davidson. *bibliog il J Ag Research* 10:65-74 Jl 9 '17
- Leaf blister mite on pear and apple foliage. H. C. Clarke. *Gard M* 27:29 F '18
- Protecting apple and pear trees. F. H. Sweet. *il Green's Fruit Grower* 37:2 Ap '17
- Some insects attacking the pear, and their control, by P. J. Parrott; Diseases of pears, by M. F. Barrus. *il N Y Ag Dept B* 79,pt 2: 1019-38, 1039-51 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1019-38, 1039-51 '17
- Spray calendar for pears. *N J Ag Exp C* 76 2p '17
- Spraying apples and pears. H. P. Barss and A. L. Lovett. *il Ore Ag Ext B* 193:1-8 '17
- Woolly pear aphid. A. C. Baker and W. M. Davidson. *il J Ag Research* 6:351-60 Je 5 '16
- Wormy pears are condemned in Sacramento county. F. C. Brosius. *Cal State Comm Hort B v* 6:408-10 O '17
- See also Fire blight; Pear black-spot; Pear leaf blister mites; Pear leaf-worms; Pear psylla; Pear scab; Pear sooty blotch; Pear thrips; Pear tree slugs; Sinuate pear borers

## Marketing

See also California pear growers' association

## Packing

- Harvesting the fruit crop. *il Country Gent* 81: 1324 Jl 8 '16
- Tips on picking and packing pears. *Green's Fruit Grower* 36:15 Jl '16

## Statistics

- Table showing number of trees and production in bushels of pears in New York state. *N Y Ag Dept B* 79,pt 2:1056-7 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1056-7 '17

## Storage

- Preliminary report of pear harvesting and storage investigations in Rogue River valley. C. I. Lewis and others. *Ore Ag Exp B* 154:1-24 '18

## Varieties

- High quality pears for home consumption. S. Fraser. *Gard M* 28:308b Ag '18
- Pears in eastern Quebec. J. C. Chapais. (*In* Report, Quebec Pomological and fruit growing soc., 1916, p. 10-17) '16
- Tests of pears in eastern Quebec. J. C. Chapais. *J Ag (Quebec)* 20:122 D '16
- Varieties of pears for eastern New York, by J. R. Cornell; Varieties of pears for western New York, by I. Pease. *il N Y Ag Dept B* 79,pt 2:991-9, 1000-6 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:991-9, 1000-6 '17
- Pears, Dried**
- Dried pear industry. F. G. Stokes. *Cal State Comm Hort B v* 6:121-5 My '17
- Pearson, Henry Harold Welch, 1870-1916**
- Life and work; with bibliography of works. A. C. Seward. *il Ann Bot* 31:i-xviii Jl '18
- Sketch. C. J. Chamberlain. *por Bot Gaz* 63: 150-1 F '17
- Pearson, Karl, 1857-**
- Portrait. *J Heredity* 7:434 O '16

## Peas

- Best method of pea staking. *Fruit-Grower* 27: 315 Je 1 '16
- Cannery pea culture. E. F. White. *Prac F* 113: 78 F 15 '17

- Canning new peas. S. E. Wilcox. *Nat Stock & F* 41:447 Ag 4 '17
- Canning of peas. R. Christen. *Rural N Y* 77: 774 Je 8 '18
- Early money from early peas. G. D. Aiken. *Market Growers J* 18:149 F 15 '16
- Effects of age on the hybridisation of *pisum sativum*: researches in Austria. E. Zederbauer. *Int R Sci & Prac Ag* 8,no 11:1093-4 N '17
- Experience with peas; symposium. *Market Growers J* 20:386+ My 1 '17
- Experiences with peas and beans. *Market Growers J* 22:140-1+ F 15 '18
- Experiments on the influence of temperature on the rate of growth in *pisum sativum*. I. Leitch. *bibliog il Ann Bot* 30:25-46 Ja '16
- Fine peas for home eating. A. Kruhm. *Ohio F* 137:538 Ap 8 '16
- Food value of beans and peas. H. Mason. *Ohio F* 139:530 Ap 7 '17
- Function of calcium in the nutrition of garden pea seedlings with ammoniacal salts. V. A. Morosov. *Int R Sci & Prac Ag* 8,no 2:214-15 F '17
- Growing of canning peas. *Prac F* 113:125 Mr 15 '17
- Growing peas and beets. *W Va Ag Ext C* 63 3p '16
- Harvesting peas. C. E. Brehm. *il Country Gent* 81:1078 My 20 '16
- Hints on peas. S. A. Hamilton. *Country Gent* 81:114 Ja 15 '16
- Home garden; best peas for the amateur, and how to grow them. *il Country Gent* 83:28 Ja 19 '18
- Inheritance studies in *pisum*; interrelation of the genetic factors of *pisum*. O. E. White. *bibliog J Ag Research* 11:167-90 O 22 '17
- Inoculation improves pea crop. A. W. Hopkins. *il Hoard's D* 55:465 Ap 5 '18
- Pea growing in Spokane county. J. R. Shinn. *il diags Wash Ag Ext Pub Ser* 1, no 19:1-4 '16
- Pea trials at Wisley. *Gard Chron (Lond)* 60: 59 Jl 29 '16
- Peas a mile above sea level. G. F. Stratton. *il Country Gent* 83:8 D 21 '18
- Peas and vetches in western Washington. E. B. Stookey. *il Western Wash Ag Exp B v* 4:2-6 Mr '17
- Peas as a truck crop. C. E. Brehm. *Country Gent* 81:592 Mr 11 '16
- Peas in the Northwest. H. W. Hulbert. *Country Gent* 83:38 F 9 '18
- Peas instead of fallow. J. R. Shinn. *Country Gent* 81:634 Mr 18 '16
- Peas—the stockman's crop. *J Ag (Quebec)* 21:167 My '18
- Prime truck from peas. L. L. Shoemaker. *Country Gent* 81:1471 Ag 5 '16
- Raising peas for canning. E. L. Kirkpatrick. *il Ohio F* 139:366 Mr 10 '17
- Record in peas. R. G. Robertson. *Fruit-Grower* 27:171 Mr 1 '16
- Saving beans and peas for food and seeding purposes. J. P. Helyar. *N J Ag Exp C* 86: 1-4 '17
- Six weeks of garden peas from one sowing. M. G. Kains. *Fruit-Grower* 27:176 Mr 1 '16
- Successful pea culture. M. K. Boyer. *Am P Advocate* 25:330 Mr '17
- Tall telephone peas in Texas. C. L. Bartles. *Market Growers J* 18:280 Ap 15 '16
- Turning peas into pork. R. E. Dimick. *O Judd Farmer* 61:12 Jl 22 '16
- Turnip greens and black-eyed peas. M. M. Williams. *Country Life* 31:98 Ap '17
- Wisconsin peas. *Am Flor* 46:1112 Je 10 '16
- See also Feeding and feeding stuffs—Peas

## Curing

- Pea curing in Texas. E. W. Cole. *Tex Ag Dept B n s* 18:1-6 n.d.

## Diseases and pests

- Bacterial disease of *pisum sativum*. D. M. Cayley. *bibliog il J Ag Sci* 8:461-79 D '17; Abstract. *Int R Sci & Prac Ag* 9,no 5:633-4 My '18
- Bacterial stem blight of field and garden peas. W. G. Sackett. *il Colo Ag Exp B* 218:1-43 '16



**Peas—Diseases and pests—Continued**

- Common diseases of beans and peas. M. T. Cook. *il N J Ag Exp C* 84:1-8 '17  
Control pea blight. *Weekly N L* 5:4 Mr 27 '18  
Spraying beans and peas. W. C. O'Kane. *il Country Gent* 83:24 Ap 6 '18  
*See also* Pea aphids; Pea weevils

**Seed**

- Growing peas and beans for seed in Idaho. F. W. Beckwith. *Market Growers J* 18:167 Mr 1 '16  
Influence of mineral matter on the germination of peas. L. Maquenne and E. Demoussy. *Int R Sci & Prac Ag* 8,no 9:1229-30 S '17  
Influence of water and mineral matter on the germination of peas. L. Maquenne and E. Demoussy. *Int R Sci & Prac Ag* 8,no 8:1110-12 Ag '17  
Report of stocks of peas, beans, spring vetch and sweet corn. *U S Seed Rep* 1:6 Ap '18  
Seed garden peas in the Northwest. *U S Seed Rep* 2:8 Ag '18  
Seed peas in Washington. *Am Flor* 45:1292 Ja 1 '16  
Selection of pea-seed. J. Beverley. *J Ag New Zealand* 15:216 O '17

**Statistics**

- Cabbage for kraut and peas for canneries. *Monthly Crop Rep* 4:25 Mr '18  
Commercial stocks of peas and lentils, Jan. 1. *U S Food Surveys* 1:5-7 Jl 20 '18  
Commercial stocks of peas and lentils, July 1. *U S Food Surveys* 2:4-6 O 1 '18  
\* Peas and beans in Ontario. (*In* Report, Bur. of industries, 1917, p. 30) '18 Ontario ag. dept., Toronto  
Peas in the United States and other countries. *See* United States Department of agriculture Yearbooks  
Report of stocks of peas, beans, spring vetch and sweet corn. *U S Seed Rep* 1:6 Ap '18

**Varieties**

- Solving puzzles in peas. A. Kruhm. *il Gard M* 23:162-3 Ap '16

**Peas, Field**

- Culture and utilization of the field pea. H. N. Vinall. *il N Y Ag Dept B* 87:2914-28 S '16  
Drouth-resisting crops. I. Motes. *O Judd Farmer* 60:8 Je 24 '16  
Field pea. *Weekly N L* 5:4 Ja 30 '18  
Field pea as a forage crop. H. N. Vinall. *il map Farmers' B* 690:1-25 '17 (rev.)  
Field pea production. E. G. Schafer and E. F. Gaines. *bibliog il Wash Ag Exp B* 140:1-16 '17  
Field peas. N. S. Robb. *il Idaho Ag Exp C* 2:6p '16  
Good profit from peas in Illinois. *O Judd Farmer* 61:3 S 23 '16  
Peas and oats for hay. *Rural N Y* 76:543 Ap 14 '17  
Production and utilization of field pease. W. J. Colebatch. *J Dept Ag S Australia* 22:241-50 O '18  
Stock peas, a soil builder. I. H. Motes. *Jersey B* 35:1559 O 4 '16

**Peasantry**

- Peasantry of Russia. N. E. Hansen. *il Wallaces' F* 42:1716 D 21 '17

**Peasants' land bank**

- Activity of the peasants' land bank in Russia. *Int R Ag Econ* 80:32-45; 82:34-50 Ag, O '17

**Peasants' league of Belgium**

- Activity of the Belgian boerenbond in 1915. *Int R Ag Econ* 77:1-8 My '17

**Peasants' revolt. See Germany—History**

**Peat**

- Peat industry breaks record in 1917. *Am Fert* 49:86 Jl 20 '18  
Peat industry in Italy. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:36 Ja 20 '17  
Peat lands. Wallaces' *F* 41:262 F 18 '16  
Peat production in 1916. J. S. Turp. *Am Fert* 47:35-6 N 24 '17; Same cond. (*In* Am fertilizer hdbk., 1918, p. 37) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia

- Report on some allocthonous peat deposits of Florida. C. C. Forsaith. *bibliog il Bot Gaz* 62:32-52; 63:190-208 Jl '16, Mr '17  
Uses of peat in agriculture. *Coal Age* (10th av at 36th st, N.Y. 10c) 14:63 Jl 13 '18

- See also* Feeding and feeding stuffs—Peat; Peat as fertilizer; Soils, Peat

**Composition**

- Inorganic composition of a peat and of the plant from which it was formed. C. F. Miller. *J Ag Research* 13:605-9 Je 17 '18

**Peat as fertilizer**

- Apparent failure of humogen. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 28:729-30 O '17  
Bacterized peat or humogen. W. Sadler. *Ag Gaz of Canada* 3:436-8 My '16  
Bacterized peat or humogen. F. T. Shutt. *Ag Gaz of Canada* 3:10-11 Ja '16  
Bacterized peat plant manure. *Am Flor* 47:149 Ag 12 '16  
Directions for preparing manure from peat. *J Bd Ag* 23:481-4 Ag '16  
Experiments on the bacterisation of peat for soil fertilising purposes. D. H. Jones. *Int R Sci & Prac Ag* 9,no 4:427-8 Ap '18  
Experiments with bacterized peat, or humogen, in 1916. F. J. Chittenden. *Royal Hort Soc J* 42,pts 2-3:349-52 S '17  
Humogen, or bacterized peat. *Rural N Y* 75:930 Jl 1 '16  
Peat as a manure substitute. J. S. Burd. *Cal Ag Exp C* 203:1-10 '18  
Report on experiments with bacterised peat or humogen. F. J. Chittenden. *Int R Sci & Prac Ag* 7,no 5:651-5 My '16  
Report on humogen. E. J. Russell. *J Bd Ag* 24:11-20 Ap '17; Same. *Ag J of India* 12:633-45 O '17  
River bottoms to fertilize the farms. R. H. Moulton. *il Hoard's D* 55:949 Je 28 '18  
Use for peat. H. E. Durham. *Gard Chron (Lond)* 63:111 Mr 16 '18

**Pecan**

- Breeding the pecan. *J Heredity* 7:87 F '16  
Improved pecan as a shade tree. J. S. Kerr. *Prog F* 31:676 My 20 '16  
Orchard and garden notes for the Gulf Coast country. L. T. Rhodes. *Prog F* 31:632 My 6 '16  
Paper shell pecans. 56p *il* '18 Keystone pecan co., Manheim, Pa.  
Pecan budding. *Prog F* 31:994 Ag 12 '16  
Pecan culture; with special reference to propagation and varieties. C. A. Reed. *il Farmers' B* 700:1-32 '16  
Pecan growing. W. P. Snyder. *il Purdue Ag* 10:41-2 Ap '16  
Pecan growing in Georgia. J. W. Firor. *il Ga Ag Coll (Ext)* B 132:1-23 '17  
Pecan in southern California. H. Knight. *il Cal State Comm Hort B v* 7:414-16 Je '18  
Pecan planting in Memphis. M. S. Conser. *il Am For* 24:109-10 F '18  
Pecans and other nuts in Texas. *Tex Ag Dept B n s* 24 (Republication of B. 2, o. s.):1-47 n.d.  
Pecans in Texas; budding, grafting, planting and transplanting. J. A. Evans. *il Tex Ag Ext B* b-35:1-32 '17  
Pollinating the pecan. E. E. Risien. *il J Heredity* 8:384 Ag '17  
Propagation of pecans. J. H. Burkett. *Tex Ag Dept B* 55:1-23 Mr '17  
Some valuable results with pecans. *Prog F* 32:95 Ja 27 '17  
Top-working pecan trees. E. J. Kyle. *Tex Ag Ext B* B-21:1-7 '16  
Top-working pecans. L. T. Rhodes. *Prog F* 31:469 Ap 1 '16  
Value of our native pecan trees. J. S. Kerr. *Prog F* 32:263 F 24 '17  
Walnut tree and the pecan nut tree. L. Traub. *Int R Sci & Prac Ag* 8,no 6:881-3 Je '17  
*See also* Hickory

**Diseases and pests**

- Controlling fall insect pests of pecans. L. A. Niven. *Prog F* 33:917 Ag 17 '18  
Disease of pecan catkins. B. B. Higgins. *il Phyt* 7:42-5 F '17

**Pecan—Diseases and pests—Continued**

- Diseases and insect pests of the pecan. J. Matz. il Fla Ag Exp B 147:135-62 '18  
 Diseases of pecans. F. V. Rand. il J Ag Research 1:303-38 Ja '14  
 Important pecan insects and their control. J. B. Gill. il Farmers' B 843:1-48 '17  
 Method to induce sporulation in cultures of *botryosphaeria berengeriana*. J. Matz. il Phyt 6:387-9 O '16  
*Nezara viridula* and kernel spot of pecan. W. F. Turner. Science (Science Press, Gar- rison, N.Y. 15c) n s 47:490-1 My 17 '18  
 Pecan dieback. J. Matz. Fla Ag Exp Rep 1917:87R-89R '18  
 Pecan insects; Pecan scab; Pecan diseases other than scab. W. F. Turner; C. S. Spooner; C. G. Crittenden. il map Ga Entom Bd B 49:1-48 '18  
 Preventing wood rot in pecan trees. S. M. McMurran. il Farmers' B 995:1-8 '18  
 Undescribed gnomonia on pecan leaves. J. Matz. il Fla Ag Exp Rep 1917:89R-94R '18  
*See also* Pecan leaf case-bearers; Pecan rosette; Pecan twig girdlers

**Statistics**

- Pecan production, 1918, with comparisons. Monthly Crop Rep 4:138 N '18

**Varieties**

- Report on varieties of pecans in 1914-1915-1916 at the Georgia experiment station. H. P. Stuckey. Ga Ag Exp C 76:1-3 '17  
 Two groups of varieties of the *hicola* pecan and their relation to self-sterility. H. P. Stuckey. bibliog il Ga Ag Exp B 124:127-48 '16; Abstract. Prog F 32:97 Ja 27 '17

**Pecan leaf case-bearers**

- Controlling the pecan case-bearer. J. W. Firor. Ga Ag Coll (Ext) C 29:1-4 '16  
 Pecan leaf case-bearer. J. B. Gill. bibliog il U S Ag B 571:1-28 '17

**Pecan rosette**

- Pecan rosette. W. A. Orton and F. V. Rand. il map J Ag Research 3:149-74 N '14

**Pecan twig girdlers**

- Life-history of the pecan twig girdler; with discussion. S. W. Bilsing. J Econ Entom 9: 110-15 F '16

**Peck, Charles Horton, 1833-1917**

- Obituary. G. F. Atkinson. pors Bot Gaz 65: 103-8 Ja '18  
 Peck testimonial exhibit of mushroom models. H. D. House. Mycol 9:313-14 S '17

**Pectin**

- Jellies from pectin. Weekly N L 5:7 Ag 8 '17  
 New method for the preparation of pectin. J. S. Caldwell. bibliog Wash Ag Exp B 147:1-14 '17

*See also* Apple pectin

- Pectinophora gossypiella*. *See* Bollworms, Pink  
 Pediatrics. *See* Children—Care and hygiene

**Pedicularis**

- On the haustoria of *pedicularis vulgaris*. Tournef. A. C. Maybrook. bibliog il Ann Bot 31:499-511 Jl '17

**Pegomya brassicae**. *See* Cabbage maggots**Pegomya fusciceps**. *See* Root maggots**Pekingese (dogs)**

- Vogue of Pom and Peke. W. A. Dyer. il Country Life 31:38-9 D '16

**Pelican flowers**

- Aristolochia gigas* (pelican flower). il Gard Chron Am 22:119 Ap '18  
 Goose flower. Gard Chron Am 20:504 D '16

**Pellagra**

- Diet cure for pellagra. Prog F 31:89 Ja 15 '16  
 Pellagra—additional facts about its cause and cure. Prog F 31:447 Mr 25 '16  
 Treating pellagra by balancing ration. Rural N Y 75:32 Ja 8 '16

**Pemphigus betæ**. *See* Sugar beet root-lice**Penal farms**. *See* State farms**Pendleton roundup**

- Pendleton roundup. W. C. Barnes. il Breed- er's Gaz 72:601 O 11 '17

**Penicillium**

- Influence of certain salts and nutrient solu- tions on the secretion of diastase by peni- cillium camemberti. W. J. Robbins. bib- liog Am J Bot 3:234-60 My '16  
 Relation of *oidium lactis* and *penicillium* to the keeping qualities of butter. W. B. Combs and C. H. Eckles. J Dairy Sci 1: 347-55 N '17

**Peninsula state park**

- Working plan for forest lands of Peninsula state park, Door county, Wisconsin. (B. 3) 45p il map '17 Wisconsin conservation com- mission, Madison

**Peninsular horticultural society**

- 30th annual meeting, Dover, Del., Jan. 9-11, 1917. Prac F 113:50 F 1 '17  
 Transactions of the 29th annual meeting, East- on, Md., Jan. 11-13, 1916. 100p '16 W. Webb, sec., Dover, Del.

**Penn normal, industrial and agricultural school**

- Annual report, 55th year, 1916-1917. 60p il map n. d. The school, St. Helena island, Beaufort county, S.C.  
 Annual report, 56th year, 1917-1918. 52p il '18  
 Penn normal, industrial and ag. school, St Helena, S.C.

**Pennisetum purpureum**. *See* Napier's fodder grass**Pennsylvania**

*See also* subhead Pennsylvania under spec- ial subjects, e.g. Agriculture—Pennsylvania, Dairying—Pennsylvania

**Agriculture, Commission of**

- Loi n. 240 visant la constitution d'une com- mission d'agriculture de l'Etat, determinant ses pouvoirs et devoirs y compris ses pou- voirs vis-à-vis du département de l'agricul- ture et le comité gouvernemental d'hygiène du bétail. Int Yearbook Ag Leg 1916:838-9 '17

**Agriculture, State board of**

- Proceedings of the Farmers' annual normal institute and spring meeting of the state board of agriculture, held at Hotel Berk- shire, Reading, Pa., May 23-25, 1916. Pa Ag Dept B 283:1-276 '16  
 Proceedings of the thirty-ninth annual meet- ing, Harrisburg, Pa., Jan. 26-27, 1916. Pa Ag Dept B 278:1-184 '16  
 Proceedings of the 41st annual meeting, Har- risburg, Jan. 22-23, Pa Ag Dept B v 1 (Gen. B. 310):1-153 Ap '18

**Dairy and food commissioner**

- Preliminary report of the dairy and food commissioner for the year 1916. Pa Ag Dept B 292:1-53 '17

**Forest protection, Bureau of**

- \* Report of the chief forest fire warden for the year 1917. (B. 17) 111p maps '18 Penn. Dep't of forestry, Harrisburg

**Highway department, State**

- \* Report for the period, June 1, 1914 to June 1, 1917. 82p il '18 Pa. State highway dept, Harrisburg

**Industries and resources**

*See also* Forests and forestry—Pennsylva- nia

**Pennsylvania breeders' and dairymen's associa- tion**

- Annual meeting, Harrisburg. Nat Stock & F 40:1172 F 3 '17

**Pennsylvania Dutch**

- Early art industries of the Pennsylvania Dutch. il Country Life 30:100+ My '16

**Pennsylvania state beekeepers' association**

- 12th annual convention, Lancaster, Mar. 3-4, 1916. G: H. Rea. Gleanings 44:411-12 My 15 '16

**Pennsylvania state college****Agricultural extension service**

- Agricultural extension service of the Pennsyl- vania state college. Pa Ag Ext C 51:1-15 '16



Pennsylvania state college—Continued

School of agriculture

Keystone college; views. Country Gent 81:109 Ja 15 '16

Looking over Penn state. il Prac F 113:236 Je 15 '17

Pennsylvania vegetable growers' association.  
See Vegetable growers' section of the State horticultural association of Pennsylvania

Pennyroyal

Control of pennyroyal. J. W. Deem. J Ag New Zealand 14:49-50 Ja '17

Pensions for mothers. See Insurance, Maternity

Pentoses

Utilization of certain pentoses and compounds of pentoses by glomerella cingulata. L. A. Hawkins. Am J Bot 2:375-88 O '15

Pentstemons

Pentstemons; their value in the garden. S. Ashmore. Gard Chron (Lond) 59:253, 266, 277-8, 307 My 13-27, Je 10 '16; Same (pt 1). Gard Chron Am 26:363 Ag '16

Peonies

Business man's pleasure in his peonies. L. R. Bonnewitz. il Minn Hort 45:251-5 Je '17

Everyman's peonies. A. P. Saunders. il Gard M 24:52-3 S '16

Fragrant peonies. C. J. Traxler. il Minn Hort 46:289-93 Ag '18

Herbaceous paeonies. Gard Chron Am 21:377 O '17

Herbaceous paeonies. Gard Chron Am 20:238 My '16

Home garden; plant your peonies now. il Country Gent 82:26 S 28 '18

Just peonies. E. Secor. Wallaces' F 42:453 Mr 9 '17

Peonies for beauty. P. V. D. Hoysradt. il O Judd Farmer 64:30 Mr 2 '18

Peonies for cut flowers. Rural N Y 75:1285 O 7 '16

Peonies that satisfy. P. V. D. Hoysradt. il Gard M 28:14 Ag '18

Peony. Gard Chron Am 20:508 D '16

Peony. E. F. Barr. Am Flor 46:1235 Jl 1 '16

The peony. B. H. Farr. Mass Hort Soc Trans 1918, pt 1:65-79 '18; Excerpts. Gard Chron Am 22:236-7 S '18

Peony. L. B. Pierce. Ohio F 138:283 S 23 '16

Peony—a flower for the farmers to cultivate. P. V. D. Hoysradt. il Rural N Y 76:1239 O 27 '17

Peony as a garden favorite. Gard Chron Am 22:175 Je '18

Peony culture. W. F. Purdue. Ohio F 138:411 N 4 '16

Peony farm. P. T. Sturges. il Country Gent 81:1449 Jl 29 '16

Peony fragrance. A. P. Saunders. Am Flor 48:1094 Je 2 '17

Peony growing. E. B. Wright. Fruit-Grower 28:195 Mr 15 '17

Peony—king of flowers. L. C. Ahlers. il Green's Fruit Grower 37:11 S '17

Peterson's peonies. Am Flor 48:1261 Je 30 '17

Plant notes. Am Flor 46:929, 988 My 20-27 '16

Planting herbaceous paeonies. E. H. Jenkins. Gard Chron (Lond) 60:187 O 14 '16

Planting herbaceous peonies. E. H. Jenkins. Am Flor 51:309 Ag 31 '18

Single peonies. Country Gent 81:797 Ap 8 '16

Some of my pet peonies. S. G. Harris. Gard M 28:40 S '18

Transplant peonies in September. W. E. Bontrager. Ohio Ag Exp B v 3:281-2 S '18

Value of paeonies. Gard Chron Am 21:210 My '17

See also American peony society

Varieties

How to know the different varieties and to care for them. J. H. Sperry. il Country Gent 81:1556-7 Ag 19 '16

Peoples' kitchens

Inexpensive restaurants in Christiana and in Vienna, and a shop-girls' restaurant in Copenhagen. H. W. Atwater. J Home Econ 8:301-4 Je '16

See also Community kitchens

Peperomia

Studies of the development of the piperaceae; the structure and seed-development of peperomia hispida. D. S. Johnson. il Am J Bot 1:323-39, 357-97 Jl, O '14

Pepper

American-grown paprika pepper. T: B. Young and R. H. True. il U S Ag B 43:1-24 '13

Investigations about the dying out of pepper-vines in the Dutch East Indies. A. A. L. Rutgers. Int R Sci & Prac Ag 7, no 12:1783-4 D '16

Investigations on the dying-out of pepper-vines in the Dutch-East-Indies. A. A. L. Rutgers. Int R Sci & Prac Ag 8, no 11:1157-8 N '17

Vascular anatomy of piper methysticum. R. E. Hoffstadt. bibliog il Bot Gaz 62:115-32 Ag '16

Diseases and pests

Bacterial spot of pepper. C. D. Sherbakoff. il Fla Ag Exp Rep 1917:79R-S3R '18

Peppergrass

Pepper grass for sale. L. C. Parker. Country Gent 81:698 Mr 25 '16

Peppermint

Cultivation of peppermint and spearmint. W. Van Fleet. Farmers' B 694:1-13 '17

Japan peppermint cultivation. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:74 Ja '18

Mint growing in northern Indiana. C. B. Sayre. il Ind Ag Exp C 65:1-14 '17

Peppermint and spearmint as commercial crops. Ohio F 137:52 Ja 8 '16

Peppermint oil

Effect of cultural and climatic conditions on the yield and quality of peppermint oil. F. Rabak. U S Ag B 454:1-16 '16; Same cond. Int R Sci & Prac Ag 8, no 3:382-4 Mr '17

Peppers

Care of pepper plants in the hotbed. G. L. Tiebout. Market Growers J 20:102 F 1 '17

Experiences with eggplants and peppers; symposium. Market Growers J 20:320-1+ Ap 1 '17

Experiments with peppers; Study of the influence of environment. il N J Ag Exp Rep 1916:438-43, 447-9 '17

Home garden; growing eggplants and peppers of quality. il Country Gent 83:42 Ap 20 '18

Pepper culture in New Jersey. J. C. Hendrickson. Market Growers J 21:95 S 1 '17

Peppers. (Doc. 39) 8p '18 U.S. States relations service, Washington, D.C.

Peppers in Florida. Fla Ag Dept Quar B v 27:16-17 Jl '17

Production of peppers in southern California. R. G. Risser. Market Growers J 23:148 O 15 '18

Red peppers below standard. F. M. Boyles. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:301-2 Mr '17

Sweet peppers. Rural N Y 75:693 Ap 29 '16

Tomatoes, peppers, eggplant. il Country Gent 82:842 My 5 '17

Diseases and pests

Sclerotium bataticola; the cause of a fruit-rot of peppers. W: H. Martin. il Phyt 7:308-12 Ag '17

Pepsin

Directions for using soluble powdered pepsin as a substitute for rennet. J. A. Ruddick. J Ag (Quebec) 20:16 Jl '16

Experiments with pepsin to replace rennet. D. W. Stewart. J Bd Ag 24:57-9, 313-15 Ap, Je '17

Loss of fat in the whey when using pepsin. G: H. Barr. Ag Gaz of Canada 4:660-2 Ag '17

Pepsin and rennet. N Y Prod R 43:248+ D 6 '16

Pepsin as a substitute for rennet in cheesemaking. Creamery 4:18 Ag '16

Pepsin as a substitute for rennet in the manufacture of cheese. Ag Gaz of Canada 3:789 S '16

Pepsin in cheesemaking. N Y Prod R 42:448 Jl 5 '16

Pepsin in cheesemaking. J. L. Sammis. Hoard's D 52:83 Ag 11 '16

**Pepsin—Continued**

- Pepsin in cheesemaking. C. Stevenson. J Ag New Zealand 14:32-4 Ja '17  
 Pepsin in place of rennet. N Y Prod R 42:321 Je 14 '16  
 Pepsin vs. rennet. N Y Prod R 44:486 JI 18 '17  
 Rennet substitutes. N Y Prod R 43:906+ Mr 28 '17  
 Rennet substitutes. J. A. Ruddick. N Y Prod R 42:544 JI 26 '16  
 Results with pepsin in cheese making. N Y Prod R 42:362 Je 21 '16  
 \* Some further notes on the use of pepsin in the manufacture of cheese. G. H. Barr. (*In* Report, Dairymen's assns., 1917, p. 112-14) '18 Ontario ag. dept., Toronto  
 Substitutes for rennet in cheese making. Ag Gaz of Canada 3:607-8 JI '16  
 Use of pepsin and other substitutes for rennet in cheesemaking. G. H. Barr. (*In* Reports, Dairymen's assns., 1916, p. 55-9) '17 Ontario ag. dept., Toronto  
 Use of pepsin as a rennet substitute in Cheddar cheesemaking. P. S. Lucas. *il* Ore Ag Exp B 155:1-15 '18  
 Use of pepsin for cheesemaking. Hoard's D 53:517 Ap 13 '17  
 Using pepsin. F. R. Ubbelohde. N Y Prod R 45:478 F 6 '18

**Percheron society of America**

- Annual meeting, Chicago, Dec. 3, 1917. Breeder's Gaz 72:1103 D 13 '17  
 Annual meeting, Dec. 4, 1916. Field II 27:40 Ja '17  
 Percheron society wins appeal. Breeder's Gaz 74:119 JI 25 '18

**Percherons**

- Big horses pay. H. T. Morgan. *il* Country Gent 82:861 My 12 '17  
 Bloodlines of great Percheron sires. W. Dinsmore. Breeder's Gaz 72:211 Ag 16 '17  
 Bred-in-America Percherons. W. Dinsmore. *il* Country Gent 82:1481-2 S 29 '17  
 Breeding of some Percheron winners. W. Dinsmore. Breeder's Gaz 71:18 Ja 4 '17  
 Breeding Percherons in a valley of the Canadian Rockies. G. Lane. *il* Breeder's Gaz 70:1188-9 D 21 '16  
 British estimate of war Percherons. Breeder's Gaz 73:111 Ja 17 '18  
 British view of Percherons. *il* Nat Stock & F 40:1083 Ja 20 '17  
 Carnot, a distinguished Percheron sire. C. M. McConnell. *il* Ohio F 142:242 S 14 '18  
 Community effort in Percheron breeding. E. McFarland. Breeder's Gaz 69:1013 My 11 '16  
 Death of a great Percheron sire. *il* Breeder's Gaz 72:786 N 1 '17  
 Eastern Percheron breeders' show. C. T. Conklin. Nat Stock & F 42:677 O 26 '18  
 Eastern Percheron futurity. D. J. Kays. *il* Ohio F 137:705 My 20 '16  
 Eastern Percheron futurity nominations. D. J. Kays. *il* Ohio F 139:314 Mr 3 '17  
 1st eastern Percheron breeders' show. Ohio F 142:404 O 26 '18  
 Getting started in horse breeding. W. Dinsmore. *il* Country Gent 83:8-9 Mr 2 '18  
 Hackney-Percheron cross. A. H. Godfrey. Breeder's Gaz 73:206 Ja 31 '18  
 Home of the Percheron. *il* Hoard's D 51:976 JI 14 '16  
 Japan buys American Percherons. C. T. Conklin. *il* Field II 28:20 Ja '18  
 Looking forward and backward. Breeder's Gaz 72:671 O 18 '17  
 Managing Percheron mares and foals on a cornbelt farm. *il* Breeder's Gaz 69:769 Ap 6 '16  
 Mandy—a most useful Percheron mare. C. M. McConnell. *il* Ohio F 140:134 Ag 25 '17  
 More Percherons going to England. Breeder's Gaz 72:1268 D 27 '17  
 My best investment—Percheron mares. J. A. Ingram. *il* O Judd Farmer 65:68 JI 27 '18  
 Ohio Percheron show. *il* Ohio F 142:271 S 21 '18  
 Organized effort brings success in Percheron horse breeding. O. H. Pollock. *il* Breeder's Gaz 72:1134-5 D 20 '17  
 Percheron enthusiasm at Ohio state fair. D. J. Kays. *il* Ohio F 139:110 Ja 27 '17  
 Percheron futurity winner. C. M. McConnell. *il* Ohio F 141:722 Je 1 '18  
 Percheron history. Breeder's Gaz 71:519 Mr 8 '17  
 Percheron in Brazil. W. Dinsmore. Breeder's Gaz 72:284 Ag 30 '17  
 Percheron interests in Ohio. W. H. Butler. Ohio F 142:324 O 5 '18  
 Percheron mares for practical farmers. W. Dinsmore. *il* Prac F 112:375 O 15 '16  
 Percheron mares paying their way. C. M. McConnell. *il* Ohio F 140:6 JI 7 '17  
 Percheron show ring standards. C. T. Conklin. *il* Field II 26:1021 D '16  
 Percherons. Wallaces' F 42:1598 N 23 '17  
 Percherons. A. Hayne. *il* Nat Stock & F 41:382 JI 14 '17  
 Percherons as work horses. W. Dinsmore. Rural N Y 75:673 Ap 22 '16  
 Percherons at the colleges. L. B. Cummings. Breeder's Gaz 71:69 Ja 11 '17  
 Percherons at the International. Breeder's Gaz 70:1126-7 D 14 '16  
 Percherons in America. J. O. Singmaster. *il* Breeder's Gaz 73:103-4 Ja 17 '18  
 Percherons in America. H. Vaughn. Breeder's Gaz 71:1202 Je 14 '17  
 Percherons in America and France. L. Aveline. Breeder's Gaz 71:332 F 15 '17  
 Percherons in the South. A. M. Soule. Breeder's Gaz 70:594 O 5 '16  
 Percherons on Murray farm. *il* Field II 26:424 My '16  
 Percherons on the farm. H. Young. *il* Field II 28:570 Ag '18  
 Percherons, shorthorns and mixed farming. C. M. McConnell. *il* Ohio F 139:761 Je 9 '17  
 Picking up Percherons. W. Dinsmore. *il* Country Gent 82:96 Ja 20 '17  
 Prolific Percheron mare. J. T. Williams. *il* Breeder's Gaz 69:183 Ja 27 '16  
 Proposes Percheron breeders' shows. W. H. Butler. Breeder's Gaz 72:375 S 13 '17  
 Raising big Percherons in Illinois. E. T. Robbins. Breeder's Gaz 71:218 F 1 '17  
 Raising Percheron colts in the West. W. Dinsmore. Breeder's Gaz 73:1035 My 16 '18  
 Sensation of the Percheron world. Breeder's Gaz 69:309-10 F 10 '16  
 Shire and the Percheron. G. E. Brown. Breeder's Gaz 73:19 Ja 3 '18  
 Sidelights on Percheron history. *il* Breeder's Gaz 71:671 Mr 29 '17  
 Sires of eastern Percheron futurity winners. D. J. Kays. *il* Ohio F 139:806 Je 23 '17  
 Successful county horse breeders' association. C. M. Baker. *il* Ohio F 138:429 N 4 '16  
 Successful Percheron sale. Country Gent 81:972 My 6 '16  
 Thirty years of Percheron breeding. D. Augustin. Breeder's Gaz 70:1290 D 28 '16  
 Visit to the Perche in wartime. J. Ashton. Breeder's Gaz 70:980 N 23 '16  
 Wasting good Percheron blood. Breeder's Gaz 73:976 My 9 '18  
 World's largest Percheron breeder. G. Lane. Breeder's Gaz 73:20 Ja 3 '18  
 See also Percheron society of America

**Price lists**

- Gregory farm Percherons realize \$22,550. Breeder's Gaz 69:563 Mr 9 '16  
 Heisel Percherons average \$672. Breeder's Gaz 69:684 Mr 23 '16  
 Stanwood Percherons sell low. Breeder's Gaz 69:247 F 3 '16

**Percolation, Soil. See Soil percolation****Perennials**

- Annual and perennial blossoms—and roses. *il* Country Gent 81:938-9 Ap 29 '16  
 Annuals and herbaceous perennials. A. H. Thurston. Am Flor 46:728 Ap 22 '16  
 Barbaric oriental poppy. S. R. Duffy. *il* Gard M 28:23 Ag '18  
 Dividing perennials in the spring. E. I. Farrington. Gard M 27:200b My '18  
 Dozen best perennials. T. Baker. *il* Country Gent 81:562-3+ Mr 11 '16  
 Easily grown perennials that flower quickly from seed. G. W. Kerr. *il* Gard M 25:18-20 F '17



**Perennials—Continued**

- Flower in the hardy perennial border. Gard Chron Am 22:189 J1 '18
- Hardy asters and other decorative varieties of perennials for the autumn garden. (*In Ontario horticultural societies, 11th annual report, 1916, p. 83-8*) il '17 Ontario ag. dept., Toronto, Canada
- Hardy herbaceous perennials. Gard M 25:88 Mr '17
- Hardy perennials and biennials. H: Wild. il Gard Chron Am 21:161-2 Ap '17
- Hardy perennials for autumn. W: Saville. il Am Flor 48:897-900 My 12 '17
- Hardy perennials for cutting. A. A. Leach. Am Flor 48:846 My 5 '17
- Hardy shrubs and herbaceous perennials. F. W. Brodrick. Minn Hort 46:446-8 D '18
- Herbaceous perennials for cut flowers; with discussion. W: Toole. Wis Hort Soc Rep 1917:57-64
- Herbaceous perennials we should grow. A. H. Nehrling. Mass Hort Soc Trans 1917, pt 1: 47-55 '17; Same. Gard Chron Am 21:97-8 Mr '17; Same. Am Flor 49:487-9 S 22 '17
- New and desirable herbaceous plants. A. E. Thatcher. il Gard Chron Am 20:391-3 S '16
- New herbaceous plants from China. E. H. Wilson: il Gard M 23:226-9 My '16
- Pay your money and take your choice; newer iris and other hardy perennials. F. M. Thomas. il Gard M 26:17-19, 53-4 Ag-S '17
- Perennial garden at Carmarthen, White Bear. J. W. Taylor. Minn Hort 44:441-4 D '16
- Perennials and others. G. Tabor. il Country Life 31:34-6 Mr '17
- Perennials for busy people. Mrs H. B. Tillotson. il Minn Hort 45:128-31 Mr '17
- Perennials for succession of bloom. E. Herrick. il Gard M 25:167-8 Ap '17
- Planning a hardy herbaceous perennial border. W. E. Groves. Gard Chron Am 22: 167 Je '18
- Planting a garden for autumn; descriptive list of flowers. N. Taylor. Gard M 23:165-6 Ap '16
- Planting and care of hardy perennials. G. E. Kimball. Minn Hort 44:471-2 D '16
- Preparation of ground for and general treatment of hardy herbaceous perennials. H. E. Downer. Gard Chron Am 20:231-3 My '16
- Raising perennial seedlings. J. H. Sperry. il Country Gent 82:601 Mr 24 '17
- Raising perennials from seed. G. W. Kerr. il Gard M 25:56 F '17
- Serious disease of cultivated perennials caused by sclerotium rolfisii. G. L. Peltier. il Ill Ag Exp C 187:1-4 '16
- Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. il Maine Ag Dept B v 15:26-30 S '16
- Start hardy perennial plants in the spring. G. W. Kerr. il Country Gent 81:1082 My 20 '16
- Starting a nucleus for a collection of perennials. A. T. Thomson. il Art World (2 W. 45th st. N.Y. 35c) 3:442-4 F '18
- Ten perennial flowering plants. Wis Hort Soc Rep 48:50-5 '18
- What to plant and how to care for hardy plants, shrubs and trees. C: A. Green. il Green's Fruit Grower 37:1 Ja '17
- See also* names of plants, e.g. Asters, Dahlias, Delphiniums, Gunnera, Pentstemons, Peonies, Phlox

**Perfumery**

- Colour changes due to micro-organisms in the distillates of plants and flowers. R. Guyot. Int R Sci & Prac Ag 7,no 4:593 Ap '16

**Pergolas**

- Garden pergola. H. A. Roberts. Country Gent 81:978 My 6 '16
- Pergola—its use and misuse, convenience and expense. C: H. Ramsdell. il Minn Hort 44: 329-32 S '16
- Pergolas. il Gard Chron (Lond) 62:175-6, 187 N 3-10 '17
- Permanent pergola with iron posts embedded in concrete. H. L. Knight and H. L. Lang. il Country Gent 81:799 Ap 8 '16

*See also* Summer houses

**Pericarditis**

- Traumatic pericarditis and surgical removal of the causative agent. W. F. Burleigh. Am Vet M Assn J 48:739-41 Mr '16

**Peridermium**

- Identity of peridermium fusiforme with peridermium cerebrum. G: G. Hedgcock and W. H. Long. il J Ag Research 2:247-50 Je '14
- Identity of peridermium montanum with peridermium acicolum. G: G. Hedgcock. Phyt 6:64-7 F '16
- Inoculation experiments with peridermium montanum. J. R. Weir and E. E. Hubert. Phyt 6:68-70 F '16
- New species of peridermium. G: G. Hedgcock and N. R. Hunt. Mycol 9:239-42 J1 '17
- Notes on peridermiums from Ohio. R. G. Pierce. Phyt 8:292-4 Je '18
- Notes on the anatomy of peridermium galls. A. Stewart. il Am J Bot 3:12-23 Ja '16
- Occurrence of peridermium balsameum in Washington. H: Schmitz. Phyt 6:369-71 Ag '16
- Peridermium harknessii and cronartium quercuum. E. P. Meinecke. il Phyt 6:225-40 Je '16
- Serious disease in forest nurseries caused by peridermium filamentosum. J. R. Weir and E. E. Hubert. J Ag Research 5:781-5 Ja 24 '16
- Two new hosts for peridermium pyriforme. G: G. Hedgcock and W: H. Long. il J Ag Research 5:289-90 N 15 '15

*See also* Pine blister rust

**Periodicals**

- Appeal to use influence against destructive legislation. N Y Prod R 45:944 Ap 24 '18
- See also* Agricultural periodicals; American journal of physical anthropology

**Periodicals as text-books**

- Teacher's experience. O. Adams. Nat Stock & F 41:421 J1 28 '17

**Periodicity**

- Periodicity in tropical trees. W: Crocker. Bot Gaz 62:244-5 S '16

**Permeability**

- Chemical composition of the plant as further proof of the close relation between antagonism and cell permeability. D. D: Waynick. Cal Univ Pub Ag Sci v 3,no 8 135-242p, 13-24pl '18 (\$1.25)
- Contributions to our knowledge of protoplasmic permeability. C: A. Shull. Bot Gaz 66: 388-90 O '18
- Decrease of permeability produced by anesthetics. W. J. V. Osterhout. Bot Gaz 61:148-58 F '16
- Does the temperature coefficient of permeability indicate that it is chemical in nature? W. J. V. Osterhout. Bot Gaz 63:317-20 Ap '17
- Geotropism and the Weber-Fechner law. J. Small. Ann Bot 31:313-14 Ap '17
- Influence of immersion in certain electrolytic solutions upon permeability of plant cells. M. Williams. Ann Bot 32:591-9 O '18
- Methods of studying permeability of protoplasm to salts. S. C. Brooks. bibliog Bot Gaz 64:230-49 S '17
- New method of studying permeability. S. C. Brooks. diags Bot Gaz 64:306-17 O '17
- Normal and abnormal permeability. W. J. V. Osterhout. Am J Bot 2:93-4 F '15
- Permeability of certain plant membranes to water. F. E. Denny. bibliog il Bot Gaz 63: 373-97 My '17
- Permeability of membranes as related to their composition. F. E. Denny. bibliog Bot Gaz 63:468-85 Je '17
- Permeability of the cell walls of allium. S. C. Brooks. Bot Gaz 64:509-12 D '17
- Quantitative measurement of permeability. W. Stiles and I. Jorgensen. bibliog Bot Gaz 65:526-34 Je '18
- Similarity in the effects of potassium cyanide and of ether. W. J. V. Osterhout. Bot Gaz 63:77-80 Ja '17
- Structure of the integumentary system of the barley grain in relation to localized water absorption and semi-permeability. E. J. Collins. bibliog Ann Bot 32:381-414 J1 '18

**Permeability—Continued**

- Studies in permeability: the absorption of acids by plant tissue. M. Hind. bibliog Ann Bot 30:223-38 Ap '16
- Studies in permeability: the action of various organic substances on the permeability of the plant cell, and its bearing on Czapek's theory of the plasma membrane. W. Stiles and Ingvar Jorgensen. bibliog Ann Bot 31:47-76 Ja '17
- Studies in permeability: the swelling of plant tissue in water and its relation to temperature and various dissolved substances. W. Stiles and Ingvar Jorgensen. bibliog Ann Bot 31:415-34 Jl '17
- Studies in the permeability of the pulvinus of *mimosa pudica*. V. H. Blackman and S. G. Paine. bibliog Ann Bot 32:69-85 Ja '18
- Studies of protoplasmic permeability by measurement of rate of shrinkage of turgid tissues; the influence of temperature on the permeability of protoplasm to water. E. M. Delf. Ann Bot 30:283-310 Ap '16
- Study of permeability by the method of tissue tension. S. C. Brooks. bibliog Am J Bot 3:562-70 D '16

**Peronospora**

- Studies in North American peronosporales. G. W. Wilson. Mycol 10:168-9 My '18

**Peroxidases**

- Mode of action of plant peroxidases. G. B. Reed. Bot Gaz 62:233-8 S '16
- Supposed action of potassium permanganate with plant peroxidases. H. H. Bunzell and H. Hasselbring. Bot Gaz 63:225-8 Mr '17

**Perrine, Ira B.**

- Perrine's big work in Idaho. Irr Age 33:14-15 Mr '18

**Perry**

- Disorders of cider and perry. B. T. P. Barker and O. Grove. J Bd Ag 22:939-49 Ja '16

**Persea americana. See Avocados****Persia. See Gardens—Persia****Persian lambskin**

- Karakul sheep. F. R. Marshall and others. il U S Ag Yearbook 1915:249-62
- Karakul wool and Persian lamb skins. G. H. Dacy. il Nat Wool Grower 7:11-12 My '17

**Persimmons**

- Persimmon in California. S. Fujii. il Cal State Comm Hort B v 5:362-7 O '16

**Diseases and pests**

- Notes on some fungous diseases and a new codling moth attacking the persimmon in Japan. T. Tanaka. bibliog Cal State Comm Hort B v 7:461-3 Jl '18

**Perspiration**

- Sweating apparatus. il J Heredity 8:221-3 My '17

**Peru**

- See also* subhead Peru under Agricultural credit, Agriculture, Cattle, Food supply, Horses, Irrigation

**Industries and resources**

- Markets for agricultural implements and machinery in Chile and Peru. F. H. von Motz. (Special agents ser. no. 142) 48p '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.; 5c Supt. of doc.

**Pests**

- Some means of controlling insects, fungi, and other pests in Porto Rico. R. H. Van Zwaluwenburg and H. E. Thomas. Porto Rico Ag Exp C 17:1-30 '18

- See also* Agricultural pests; Fungi; Household pests; Parasites

**Petalody**

- Petalization in the Japanese quince. A. A. Hansen. il J Heredity 9:15-17 Ja '18

**Petaluma, California**

- Biggest poultry metropolis in the world. Am P Advocate 25:412 Ap '17

- Peter's surprises: story. H. Brunkhurst. il Rural N Y 77:1002 Ag 24 '18

**Petersburg, Virginia**

- New Bohemia, Virginia; colony of alien farmers. R. G. Carroll. il map Country Gent 81:1290-1 Jl 1 '16

**Petrified forests. See Paleobotany; Trees, Fossil****Petroleum as fuel**

- Fuel oil. Am Fert 48:26 Mr 2 '18
- Fuel oil for steam boilers. W. H. Culp. Am Flor 51:185-7 Ag 17 '18
- Industrial alcohol; a substitute for petrol. J Dept Ag S Australia 20:961-2 Jl '17

**Petroleum as insecticide**

- Effects of petroleum oils on mosquito larvae. S. B. Freeborn and R. F. Atsatt. J Econ Entom 11:299-308 Je '18
- Selection of petroleum insecticides. R. K. Vickery. Cal State Comm Hort B v 6:384-7 O '17
- Selection of petroleum insecticides from the commercial point of view. P. R. Jones. Cal State Comm Hort B v 7:189-91 Ap '18

**Petroleum industry**

- Gasoline and the government. B. W. Currie. il Country Gent 81:957-8+, 1014-15 My 6-13 '16

**Pets**

- Animals on the suburban place. J: R. McMahon. il Country Gent 81:1293-4 Jl 1 '16
- How the boy's calf happened. B. S. Van Vleet. Rural N Y 76:436 Mr 17 '17
- Pets for profit. il Green's Fruit Grower 36:13 Ag '16
- Putting life into the garden. F. A. Waugh. il Gard M 24:12-13 Ag '16

*See also* Canaries; Cats; Dogs

**Pe-tsai. See Chinese cabbage****Petunias**

- Petunia our best annual for bedding. G. W. Kerr. il Country Gent 83:33 Ap 27 '18
- Petunia possibilities. M. R. Gray. il Country Gent 82:152 Ja 27 '17

**Diseases and pests**

- Mosaic disease of tomatoes and petunias. H. A. Allard. il Phyt 6:328-35 Ag '16

**Pew, W. H.**

- Prof. Pew, of Iowa state college resigns to go on farm. por Swine World 6:10 Ag '18

**Pewter**

- American pewter. A. Fearing. il Country Life 31:66+ D '16

**Peyote**

- Narcotic plants and stimulants of the ancient Americans. W. E. Safford. il Smithsonian Inst Rep (Washington, D. C.) 1916:398-405

**Peziza**

- Photographs and descriptions of cup-fungi; peziza clypeata. F. J. Seaver. il Mycol 8:235-8 S '16
- Photographs and descriptions of cup-fungi—peziza domiciliana and peziza repanda. F. J. Seaver. il Mycol 8:195-8 Jl '16
- Photographs and descriptions of cup-fungi; peziza proteana and peziza violacea. F. J. Seaver. il Mycol 9:1-3 Ja '17

**Phædon cochleariæ. See Mustard beetles****Phagocytes**

- Defense of the organism by phagocytes. Am Vet M Assn J 50:133-6 N '16

**Pharaoh's figs. See Sycamore figs****Pharmacology**

- Mode of action of drugs with pharmacological demonstrations. H. D. Bergman. Ia Ag Coll Offic Pub v 14, no 36:181-9 '16
- Teaching pharmacology. H. Jensen. Am Vet M Assn J 50:600-7 Ja '17

**Phaseolus vulgaris. See Kidney beans****Pheasant Malays. See Cornish Indian fowl****Pheasants**

- Breeding of ringneck pheasants. E. A. Quarles. il Field 12:262-3, 126-7, 412 Ja-F, My '18
- Pheasants and agriculture. A. F. C.-H. Evershed and C. Warburton. J Ag Sci 9:63-91 Ag '18

- Two pheasant crosses. J: C. Phillips. il J Heredity 7:12-16 Ja '16

**Phenols. See Carbolic acid****Philadelphia. See Milk supply—Philadelphia**



**Philadelphia milk conference**

Conference at Philadelphia Chamber of commerce, Oct. 19, 1916. *Prac F* 112:409 N 1 '16

**Philadelphus.** See Mock orange**Philippine Islands**

Building an American home in the Philippines. M. M. McLean. *il plan Country Life* 32:73-5 My '17

See also subhead Philippine islands under special subjects, e.g. Agriculture—Philippine islands, Forests and forestry—Philippine islands

**Forestry, Bureau of**

Annual report for the fiscal year ended Dec. 31, 1916. 83p '17 P. I. Bur. of forestry, Manila

**Industries and resources**

Historical review of the once important indigo industry of the Philippine islands. E. D. Doryland. *Philippine Ag R* 10, no 1:24-6 '17

Utilization of a tropical forest. G. P. Ahern. *Soc Am For Pro* 11:17-26 Ja '16

See also Forests and forestry—Philippine islands

**Plant industry division**

Resumé of the work of the plant industry division during the fiscal year 1916. A. M. Burton. *il Philippine Ag R* 10, no 4:361-409 '17

**Philocopra**

Spore formation in *philocopra coeruleotecta*. H. J. Sax. *bibliog il Am J Bot* 5:61-78 F '18

**Phipps institute of Philadelphia**

Dietary habits and their improvement; some results of the work of Phipps institute. H. R. M. Landis. *Annals Am Acad* (36th st. and Woodland av., Philadelphia \$1) 74:103-8 N '17

**Phlox**

Hardy perennial phlox. G. W. Kerr. *Country Gent* 81:756 Ap 1 '16

Hardy phlox. *Rural N Y* 75:1133 Ag 26 '16

Hardy phlox for border and color effect. *Gard Chron Am* 20:353 Ag '16

Herbaceous phloxes. E. H. Jenkins. *il Gard Chron Am* 20:67 F '16

Heredity of color in phlox *Drummondii*. A. W. Gilbert. *il J Ag Research* 4:293-302 Jl '15

Multiplying hardy phlox. *Wallaces' F* 41:1024 Jl 28 '16

Perennial phloxes. J. A. Paice. *Gard Chron* (Lond) 59:196 Ap 8 '16

**Phoenix fowl**

Phoenix fowls. F. H. Valentine. *il Country Life* 32:102 My '17

**Pholiota**

Development of some species of *pholiota*. W. H. Sawyer, jr. *bibliog il Bot Gaz* 64: 206-29 S '17

**Phoma**

Black-leg disease of cabbage caused by *phoma lingam* (Tode) Desmaz. M. P. Henderson. *bibliog il Phyt* 8:379-431 Ag '18

Histological relations of sugar-beet seedlings and *phoma betae*. H. A. Edson. *il J Ag Research* 5:55-8 O 4 '15

*Phoma betae* on the leaves of the sugar beet. V. W. Pool and M. B. McKay. *il J Ag Research* 4:169-78 My '15

*Phoma destructiva*, the cause of a fruit rot of the tomato. C. O. Jamieson. *bibliog il J Ag Research* 4:1-20 Ap '15

*Spongiospora subterranea* and *phoma tuberosa* on the Irish potato. I. E. Melhus and others. *bibliog il map J Ag Research* 7:213-54 O 30 '16

**Phomopsis**

British species of *phomopsis*. W. B. Grove. *Int R Sci & Prac Ag* 8, no 10:1427-31 O '17

Fruit-rot, leaf-spot, and stem-blight of the eggplant caused by *phomopsis vexans*. L. L. Harter. *bibliog il J Ag Research* 2: 331-8 Ag '14

**Phonograph**

Farmers' reading and music. F. M. Wood. *il Ohio F* 137:312 F 26 '16

Phonograph as a decorative element in the home. *il Country Life* 33:108+ Mr '18

**Phorbia brassicae.** See Cabbage maggots**Phosencaulus.** See *Anelsonia***Phosphates**

Absorption of ammoniacal gas by superphosphates and the use as fertilisers of the phosphates thus obtained. Gerlach. *Int R Sci & Prac Ag* 7, no 3:343-4 Mr '16

Accumulated fertility in grass land in consequence of phosphatic manuring. W. Somerville. *il J Bd Ag* 22:1201-9 Mr '16

Acid phosphate industry and its possibilities for growth. E. Hendrick. *Am Fert* 44:21-2 Mr 18 '16

Acid phosphate now and after the war. C. A. Whittle. *Am Fert* 49:74 O 26 '18

Acid phosphate or raw phosphate rock. Hoard's D 54:695 D 7 '17

Acid phosphate or rock? E. L. Robins. *Prog F* 32:296 Mr 3 '17

Acid phosphate returns greatest profits of all fertilizers. C. E. Thorne. *il Ohio Ag Exp B* v 3:101-3 Ap '18

Acid phosphate valuable. C. E. Thorne. Hoard's D 55:405 Mr 22 '18

Acid phosphate vs. phosphate rock; their value on southern farms. J. C. Pridmore. *Am Fert* 48:32 Ja 19 '18

Acid phosphate vs. raw phosphate rock. C. E. Thorne. *il Ohio Ag Exp B* v 2:351-6, 390-3 N-D '17

Acid phosphate vs. raw phosphate rock. C. G. Williams. *Ohio Ag Exp B* v 2:249-50 Ag '17

Acid phosphate vs. raw rock phosphate as fertilizer. A. T. Wiancko and S. D. Conner. *Ind Ag Exp B* 187:1055-82 '16

Action of calcium carbonate on acid phosphate. E. W. Magruder. *Am Fert* 45:30-1 O 14 '16

Agricultural availability of raw ground phosphate rock. W. H. Waggaman and C. R. Wagner. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10: 442-4 Je '18

Analysis of experimental work with ground raw rock phosphate as a fertilizer. W. H. Waggaman and others. *U S Ag B* 699:1-119 '18

Availability of mineral phosphates for plant nutrition. W. L. Burlison. *bibliog il J Ag Research* 6:485-514 Je 26 '16

Availability of phosphoric acid in rock phosphate. *Tex Ag Exp B* 212:1-40 '17

Awards for the location of workable phosphatic deposits, in Germany. *Int R Sci & Prac Ag* 9, no 1:42 Ja '18

Basic phosphate as a fertilizer. J. F. Duggar. *Prog F* 33:148 F 2 '18

Basic slag. *J Bd Ag* 23:560-3 S '16

Borrow money for rock phosphates. O Judd Farmer 62:3 Mr 10 '17

Cheaper nitrates and phosphates for fertilizers. O Judd Farmer 61:15+ D 2 '16

Citric solubility of basic slag. *J Bd Ag* 23: 540-9 S '16

Composition of basic slags, sold as manure in the winter of 1915-16. *J Bd Ag* 23:233-6 Je '16

Dr Chamberlain comments; acid phosphate versus raw rock phosphate. W. I. Chamberlain. *Nat Stock & F* 41:790 N 17 '17

Dr Hopkins comments on use of raw phosphate. C. G. Hopkins. *Nat Stock & F* 41: 716 O 27 '17

Dr Hopkins replies; raw vs. acid phosphates. C. G. Hopkins. *Nat Stock & F* 41:396 Ja 12 '18

Doctors continue to disagree. C. G. Hopkins. *Nat Stock & F* 41:836 D 1 '17

Domestic potash and phosphate. *Am Fert* 44: 44-9 Ja 8 '16

Effect of sulfur and manure on availability of rock phosphate in soil. P. E. Brown and A. R. Gwinn. *Ia Ag Exp Research B* 43:369-89 '17

Effects of lime and carbonate of lime on acid phosphate. G. S. Fraps. *Tex Ag Exp B* 223: 1-16 '17

## Phosphates—Continued

- Experiments with phosphate fertilizers in Minnesota. F. J. Alway. Minn Ag Ext Spec B 23:1-8 '18
- Factors affecting the efficiency of phosphates difficultly soluble. Int R Sci & Prac Ag 7, no 1:48-50 Ja '16
- Fertilizer research work. Country Gent 81: 1155 Je 3 '16
- Fertiliser trials with tetraphosphate in Piedmont rice fields, Italy. Int R Sci & Prac Ag 8, no 2:230-2 F '17
- Fertilizers and microbes of the soil. Scientific Am (233 Broadway, N.Y. 10c) 116:129 F 3 '17
- Florida phosphate rock shipments. Am Fert 46:36-7 Ja 20 '17
- Florida phosphates. Am Fert 44:63 Je 24 '16
- Garrison and Philipsburg phosphate fields, Montana. J. T. Pardee. map Am Fert 46: 34-7+ My 26 '17
- German phosphate substitutes. Ag J of India 13:731-4 O '18
- Ground phosphate rock. F. E. Bear. Ohio F 142:210 S 7 '18
- Ground rock phosphate. J. F. Duggar. Prog F 31:303 F 26 '16
- Ground rock phosphate or floats: acid phosphate pays better. Prog F 33:207 F 16 '18
- Half and half phosphate. F. E. Bear. Ohio F 141:486 Ap 6 '18
- How phosphate has paid on wheat. O Judd Farmer 63:1 Ag 11 '17
- How raw rock phosphate becomes available. Wallaces' F 41:945 Jl 7 '16
- How to store rock phosphate and limestone. plan Am Coop J 11:962 My '16
- Illinois phosphate experiments. C. G. Hopkins. Breeder's Gaz 73:158 Ja 24 '18
- Importance of phosphatic fertilizers. J Ag (Quebec) 19:xi My '16
- Indiana soils need phosphates. A. T. Wiancko and S. C. Jones. il Ind Ag Exp C 79:1-7 '18; Summary. Hoard's D 55:1031 Jl 12 '18; Abstract. Rural N Y 77:642 My 4 '18
- Influence of phosphates on the feeding of cattle. M. Piccinini. Int R Sci & Prac Ag 7, no 10:1470-1 O '16
- Interpretation of the results of field experiments with different phosphates. C. A. Mooers. Science (Science Press, Garrison, N.Y. 15c) n s 46:210-12 Ag 31 '17
- Investigations into the utilisation of phosphorites in Russia. D. N. Prianichnikov. Int R Sci & Prac Ag 7, no 6:804-7 Je '16
- Lipman process of making superphosphate; what the sulphur does to compost. J. G. Lipman. Rural N Y 76:1343 N 24 '17
- Making basic phosphate fertilizer as by-product in iron smelting. H. C. Estep. Am Fert 45:42-3 Ag 5 '16
- Manufacture of acid phosphate. W. H. Waggonman. U S Ag B 144:1-28 '14
- Manure and phosphate. C. E. Thorne. Nat Stock & F 41:1062 Ja 26 '18
- Maximum prices for superphosphate order. J Bd Ag 24:686-9 S '17
- Mixing acid phosphate and ground limestone unsafe. Prog F 31:362 Mr 11 '16
- Mixing cottonseed meal and acid phosphate. Prog F 31:355 Mr 11 '16
- Modern methods pay. il O Judd Farmer 63: 3 S 29 '17
- New fertilizer from Italy; tetraphosphate. Sci Am (233 Broadway, N.Y. 10c) 119:337 O 26 '18
- Notes on the nature of the phosphates contained in mineral phosphates. G. S. Robertson. J Ag Sci 8:16-25 S '16
- Oxidation of sulfur by microorganisms in its relation to the availability of phosphates. H. C. McLean. bibliog Soil Sci 5:251-90 Ap '18
- Oxidation of sulfur in soils as a means of increasing the availability of mineral phosphates. J. G. Lipman and others. Soil Sci 1:533-9 Je '16
- Phosphate depletion of soils of Bihar and its contingent risks of malnutrition and endemic disease: a warning. W. A. Davis. Ag J of India 12:181-4 Ap '17
- Phosphate depletion of the soils of Bihar: its effect on the quality and yield of crops and the contingent risks of malnutrition and endemic disease in cattle and man. W. A. Davis. Ag J of India Sci Congress No 1917:77-89
- Phosphate deposits in Tasmania. W. H. Twelvetrees. (Geological survey. Mineral resources no. 3) 7p map '17 Gov. ptr., Hobart, Tasmania
- Phosphate deposits reveal history of past. Am Fert 45:27 Jl 8 '16
- Phosphate experiments. C. G. Hopkins. Science (Science Press, Garrison, N.Y. 15c) n s 45: 213-14 Mr 2 '17
- Phosphate fertilizers. C. E. Thorne. Hoard's D 53:372 Mr 23 '17
- Phosphate fertilizers for Hawaiian soils, and their availability. W. T. McGeorge. il Hawaii Ag Exp B 41:1-45 '16
- Phosphate in Canada. Am Fert 49:64 S 28 '18
- Phosphate industry of Florida during 1917. E. H. Sellards. (In Am. fertilizer hdbk., 1918, p. C9-C11) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia
- Phosphate on corn. G. M. Twitchell. Rural N Y 76:391 Jl 21 '17
- Phosphate production and resources of the world. P. G. Morgan. J Ag New Zealand 16: 76-82 F '18
- Phosphate rock. R. W. Stone. (In Am fertilizer hdbk., 1917, p. C13-C14) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Phosphate rock and methods proposed for its utilization as a fertilizer. W. H. Waggonman and W. H. Fry. U S Ag B 312:1-37 '15
- Phosphate rock in 1915. W. C. Phalen. map Am Fert 45:21-7 O 28 '16
- Phosphate rock in 1916. R. W. Stone. Am Fert 47:21-9 S 1 '17; Same. (In Am fertilizer hdbk., 1918, p. Cc-C9) \$1.50 '18 Ware bros. co., 1010 Arch st. Philadelphia
- Phosphate rock in 1917. R. W. Stone. Am Fert 49:68+ Jl 20 '18
- Phosphate rock industry in 1917. Am Fert 48: 52 My 25 '18
- Phosphate rock our greatest fertilizer asset. W. H. Waggonman. U S Ag Yearbook 1917: 177-83
- Phosphates and honesty; experiments in several states. C. G. Hopkins. Ill Ag Exp C 186:9-31 '16
- Phosphates and lime; some farmers' experience. B. C. Aston. J Ag New Zealand 12: 217-19 Mr '16
- Phosphates: their origin and use. Rural N Y 75:116, 151, 194, 232, 281, 327, 434, 618, 686 Ja 22-F 26, Mr 11, Ap 15, 29 '16
- Phosphatic fertilizers. Hoard's D 56:449 O 25 '18
- Phosphorus carriers in commercial fertilizers; acid phosphate proves most effective plant food. C. E. Thorne. il Ohio Ag Exp B v 3: 79-81 Mr '18
- Pot experiments to determine primarily the availability of phosphoric acid in Thomas slag phosphates in comparison with other phosphates. W. B. Ellett and A. A. Ingham. il Va Ag Exp Tech B 16:118-36 '17; Same. Va Ag Exp Rep 1915-1916:118-36 '17
- Prices of superphosphate. Gard Chron (Lond) 62:151 O 13 '17
- Prices of superphosphate. J Dept Ag Ireland 18, no 1:88-9 '18
- Production and sale of phosphates. (In Report on the fertilizer industry, p. 86-103) '16 U. S. Federal trade comm., Washington, D. C.
- Production of available phosphorus from rock phosphate by composting with sulfur and manure. P. E. Brown and H. W. Warner. bibliog Soil Sci 4:269-82 O '17
- Production of phosphate rock. Am Fert 46:27 My 12 '17
- Production of phosphate rock in 1915. Am Fert 44:36 My 27 '16



**Phosphates—Continued**

- Production of phosphate rock in 1916. W. C. Phalen. (*In* Am. fertilizer hdbk., 1917, p. C2-C8) map \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Production of phosphates in Tonkin. L. P. Briggs. *Am Fert* 44:55 Je 24 '16
- Purchasing ground phosphate rock. W. A. Worsham, jr. *Ga Ag Coll (Ext)* C 42:1-4 '17
- Raw phosphate. W. W. Reynolds. *Nat Stock & F* 41:909 D 22 '17
- Raw phosphate rock as a fertilizer. C. E. Thorne. *Ohio Ag Exp B* 305:229-77 '16
- Raw phosphate rock in Indiana. *Am Fert* 46:33-5 F 17 '17
- Raw rock phosphate vs. acid phosphate. Wallaces' *F* 41:525 Mr 31 '16
- Raw rock phosphate vs. acid phosphate. C. E. Thorne. *Ohio Ag Exp B* v 1:188-92 Je '16
- Relative value of acid phosphate and rock phosphate. J. C. Pridmore. (*C. (11)* 8p n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Report of phosphate in Alberta. *Am Fert* 44:44 My 13 '16
- Report on the phosphate fields of South Carolina. *U S Ag B* 18:1-11 '15
- Research on superphosphates. U. Pratolongo. *Int R Sci & Prac Ag* 7,no 11:1596-8 N '16
- Residual effect of superphosphate. G. S. Gordon. *il J Dept Ag Victoria* 16:610-17 O '18
- Results of experiments, 1915; light and heavy dressings of superphosphate. A. E. V. Richardson. *il J Dept Ag Victoria* 14:288-95 My '16
- Rock and basic phosphate. J. F. Duggar. *Prog F* 31:468 Ap 1 '16
- Rock phosphate. J. R. Fain. *Ga Ag Coll (Ext)* C 20:1-4 '16
- Rock phosphate and acid phosphate compared. T. Butler. *Prog F* 31:247 F 19 '16
- Russian sugar and the superphosphate difficulty. *Am Fert* 46:44+ F 17 '17
- Shall we use raw phosphate rock? *Rural N Y* 76:1104 S 22 '17
- Simple tests for phosphates. W. B. Hicks. *Am Fert* 45:28 O 28 '16
- Six years with phosphate. *O Judd Farmer* 60:14 Mr 25 '16
- Sixteen percent acid phosphate. M. A. Bachtell. *il Ohio Ag Ext B* v 13,no 4 15p '17-'18
- Soil bacteria and phosphates. C. G. Hopkins and A. L. Whiting. *Ill Ag Exp B* 190:395-406 '16
- Soil fermentation and feeding of crops; the use of sulphur and raw phosphate. J. G. Lipman. *Rural N Y* 75:1361, 1388 O 28-N 4 '16
- Solubility of calcium phosphates in citric acid. A. A. Ramsay. *J Ag Sci* 8:277-98 Je '17
- Solubility of fluorspar slag and mineral phosphates in citric acid. G. S. Robertson. *Int R Sci & Prac Ag* 7,no 7:948-50 Ji '16
- Study of the toxic influence of the phosphate salts on soybean seedlings. J. W. Shive. *N J Ag Exp Rep* 1916:449-57 '17
- Sulfur oxidation in soils and its effect on the availability of mineral phosphates. J. G. Lipman and others. *bibliog Soil Sci* 2:499-538 D '16
- Tetraphosphates in rice lands. *Int R Sci & Prac Ag* 7,no 1:64 Ja '16
- Top-dressing lucerne with superphosphate. *Ag Gaz of New South Wales* 28:461-2 Ji '17
- Top-dressing lucerne with superphosphate. *Ag Gaz of New South Wales* 29:468-70 Ji '18
- Toxicity of monobasic phosphates toward soybeans grown in soil- and solution-cultures. J. W. Shive. *bibliog Soil Sci* 5:87-122 F '18
- Trials of Wellington rock phosphate. *Ag Gaz of New South Wales* 27:261-2 Ap '16
- Trials on grass land with open-hearth basic slag and rock phosphates. G. S. Robertson. *J Bd Ag* 24:1077-86 Ja '18
- Utilization of nitre cake in the manufacture of superphosphate. F. T. Shutt and O. E. Wright. *Ag Gaz of Canada* 5:1040-5 N '18
- Utilization of phosphates by agricultural crops, including a new theory regarding the feeding of plants. E. Truog. *il Wis Ag Exp Research B* 41:1-50 '16
- Value of phosphates on Indiana soils. A. T. Wiancko and S. C. Jones. *il Ind Ag Exp B* 210:1-16 '18
- Value of Thomas slag phosphate for neutralizing soil as well as for supplying phosphorus. B. L. Hartwell and others. *il R I Ag Exp B* 171:1-34 '17
- Vegetation experiments on the availability of treated phosphates. J. C. Lipman and H. C. McLean. *il Soil Sci* 4:337-42 O '17
- Walsh bill would turn over to private monopoly the publicly owned phosphate resources of the United States. *Nonpartisan Leader* (Box 575, St Paul, Minn. \$2.50 per yr.) 5:10-11 N 22 '17
- When one dollar brings home seven. L. L. Rummell. *il Country Gent* 83:10 Ja 19 '18
- When to use rock phosphate. C: A. Whittle. *Prog F* 31:77 Ja 15 '16
- See also Ammonium phosphate; Phosphoric acid; Soils—Phosphorus content

**Statistics**

- International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 8-21 My '18 *Int. inst. of ag., Rome*
- International movement of fertilisers; phosphatic fertilisers. *Int Crop Report and Ag Statistics* (*Int. inst. of ag., Rome*) 7th year, no 9 p 621-32 S '16
- Phosphate industry of Florida during 1917. E. H. Sellards. *Am Fert* 48:30 My 25 '18
- Phosphate rock shipments. *Am Fert* 48:33 F 2: 49:45 O 26 '18
- Phosphoric acid**
- Availability of phosphoric acid in rock phosphate. *Tex Ag Exp B* 212:1-40 '17
- Available phosphoric acid. *Rural N Y* 76:193 F 10 '17
- Citric solubility of basic slag. *J Bd Ag* 23:540-9 S '16
- Conversion of soluble phosphoric acid into insoluble phosphoric acid in the soil under the influence of physical, chemical and biological factors. S. Skalkij. *Int R Sci & Prac Ag* 7,no 8:1084-6 Ag '16
- Determination of phosphoric acid. H. D. Haskins; E. O. Thomas. *Am Fert* 48:68+ My 11 '18
- Fertilizer needs of the United States. H. J. Wheeler. *Am Fert* 48:56 Mr 30 '18
- French fertilizer requirements, possibilities and resources. *Am Fert* 48:62+ Je 8 '18
- Function of phosphoric acid. *Am Fert* 48:39 Je 22 '18
- Influence of the presence of calcium carbonate on the determination of available phosphoric acid in soils by Dyer's method. Jatindra Nath Sen. *Ag J of India* 12:258-65 Ap '17
- Note on the loss of phosphoric acid during fusion with ammonium fluoride. W: A. Davis and J. A. Prescott. *J Ag Sci* 8:136-8 S '16
- Organic matter of the soil: some data on humus-phosphoric acid. R. A. Gortner and W: M. Shaw. *bibliog Soil Sci* 3:99-111 F '17
- Organic phosphoric acid of rice. A. R. Thompson. *bibliog J Ag Research* 3:425-30 F '15
- Pot experiments to determine primarily the availability of phosphoric acid in Thomas slag phosphates in comparison with other phosphates. W. B. Ellett and A. A. Ingham. *il Va Ag Exp Tech B* 16:118-36 '17; Same. *Va Ag Exp Rep* 1915-1916:118-36 '17
- Preparation of organic material for the determination of phosphoric acid and potash in aliquots of the same solution. R. M. West. *Assn Offic Ag Chem J* 3:99-101 My '17
- Production and fertilizer value of citric-soluble phosphoric acid and potash. W: H. Waggaman. *U S Ag B* 143:1-12 '14
- Report of the committee on availability of phosphoric acid in basic slag. *Assn Offic Ag Chem J* 3:104-5 My '17
- Report on phosphoric acid. L. S. Walker. *Assn Offic Ag Chem J* 3:90-7 My '17
- Report on use of citrates in determination of phosphoric acid. W. J. Jones, jr. *Assn Offic Ag Chem J* 3:97-9 My '17

**Phosphoric acid—Continued**

Solubility of phosphoric acid in mineral, basic and calcined phosphates, and in basic slag. A. Aita. *Int R Sci & Prac Ag* 7, no 12:1749-52 D '16

See also Inositol phosphoric acids

**Phosphorus**

Availability of mineral phosphates for plant nutrition. W. L. Burlison. bibliog *il J Ag Research* 6:485-514 Je 26 '16

Determination of phytin phosphorus in plant products. J. B. Rather. *Ark Ag Exp B* 135:1-15 '17

Effect of phosphorus on alfalfa and alfalfa bacteria. H. W. Truesdell. bibliog *il Soil Sci* 3:77-98 Ja '17

Facts about fertilizers. T. Butler. *Prog F* 32:172, 226 F 10-17 '17

Fermentation of manure treated with sulfur and sulfates: changes in nitrogen and phosphorus content. J. W. Ames and T. E. Richmond. bibliog *Soil Sci* 4:79-89 Jl '17

Function of phosphorus in plant growth. J. N. Harper. (B. 24) 8p n.d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.

How to get rich lands; phosphorus: how to furnish it to the land. T. Butler. *Prog F* 32:584 My 12 '17

How to get rich lands; phosphorus: its relation to the making of rich lands. T. Butler. *Prog F* 32:559 My 5 '17

Massachusetts experiments with phosphorus. C. E. Durst. *Market Growers J* 23:26 Jl 15 '18

Metabolism of the organic and inorganic compounds of phosphorus. E. B. Forbes and others. *Int R Sci & Prac Ag* 7, no 10:1465-8 O '16

Mineral industries of the United States; fertilizers. J. E. Pogue. (B. 102, pt 2, p. 6-10) U.S. National museum; 5c Supt. of doc.

Need of limestone and phosphorus. *Rural N Y* 77:404 Mr 16 '18

Nitrogen, phosphorus and lime. Wallaces' *F* 41:930 Je 30 '16

Phosphorus and clear thinking. C. E. Thorne. *Nat Stock & F* 41:1237 Mr 2 '18

Phosphorus and potassium not leached out of the soil. T. Butler. *Prog F* 32:855 Ag 11 '17

Phosphorus; what it is and how to use it. T. Butler. *Prog F* 31:250 F 19 '16

Production of available phosphorus from rock phosphate by composting with sulfur and manure. P. E. Brown and H. W. Warner. bibliog *Soil Sci* 4:269-82 O '17

Quick returns from the use of lime. G. P. Williams. *il Ohio F* 141:341 Mr 9 '18

Raw materials of fertilizers. *Am Fert* 47:27-8 N 10 '17

Relation of phosphorus to wheat yields. C. G. Williams. *Ohio F* 142:114 Ag 10 '18

Report on inorganic phosphorus in animal and vegetable substances. E. B. Forbes and F. M. Beegle. *Assn Offic Ag Chem J* 1, no 4 pt 1: 562-80 F '16

Studies by means of both pot and solution culture of the phosphorus and potassium requirements of the barley plant during its different periods of growth. F. R. Pember. *il R I Ag Exp B* 169:1-50 '17

See also Soils—Phosphorus content

**Phosphorus in plants**

Reactions of the phosphorus of the thickened root of the flat turnip. B. L. Hartwell and others. bibliog *J Ag Research* 11:359-70 N 19 '17

**Phosphorus in soils.** See Soils—Phosphorus content

**Photography**

Camera cult. M. Howe. *O Judd Farmer* 61:30 N 4 '16

Photographic illustration. C. M. Hutchinson. *il Ag J of India* 11:246-55 Jl '16

Photography on the farm. H. C. Campbell. *Hoard's D* 52:436 O 20 '16

See also Animals—Photographs and photography; Bees—Photographs and photography; Insects—Photography

**Photomicrography.** See Plant cells and tissues—Photomicrographs

**Photosynthesis**

Demonstration of photosynthesis. W. J. V. Osterhout. *Am J Bot* 5:105-11 Mr '18

Further results in desiccation and respiration of echinocactus. E. R. Long. *Bot Gaz* 65:354-8 Ap '18

\* Green leaf: its scientific and economic exploitation. *Nature* (St Martin's st, London, W. C. 6d) 100:464-7 F 14 '18

Photosynthesis. G. K. K. Link. *Bot Gaz* 62:417-21 N '16

Simple method of measuring photosynthesis. W. J. V. Osterhout and A. R. C. Haas. *Science* (Science Press, Garrison, N.Y. 15c) n.s. 47:420-2 Ap 26 '18

Temperature of leaves of pinus in winter. J. H. Ehlers. bibliog *Am J Bot* 2:32-70 Ja '15

**Phototropism**

Phototropic sense in plants. M. de Laroquette. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:108-10 F 17 '17

**Phthorimaea operculella.** See Potato tuber moths

**Phyllachora**

Phyllachora of the royal palm. J. R. Johnston and S. C. Bruner. *il Mycol* 10:43-4 Ja '18

**Phyllophaga.** See June bugs

**Phyllotreta armoraciae.** See Horse radish flea-beetles

**Phylloxera**

Phylloxera and American vine stocks. *J Dept Ag S Australia* 20:963-9 Jl '17

**Phylogeny (botany)**

Comparative list of fern pinnatracess, with some notes on the leaf-trace in the ferns. R. C. Davie. *Ann Bot* 32:233-45 Ap '18

Investigations on the phylogeny of the angiosperms; the anatomy of the node as an aid in the classification of angiosperms. E. W. Sinnott. bibliog *Am J Bot* 1:303-22, pl 30-5, 441-53; 2:1-22 Jl, N '14, Ja '15

Morphology as a factor in determining relationships. J. M. Greenman. *Am J Bot* 2:111-15 Mr '15

Observations on the anatomy of the leaf in the osmundaceae. D. T. Gwynne-Vaughan. *il Ann Bot* 30:487-93 O '16

On the branching of the zygoteridean leaf, and its relation to the probable pinna nature of gyropteris sinuosa. Goeppert, Birbal Sahni. bibliog *Ann Bot* 32:369-79 Jl '18

Some features in the anatomy of the malvales. C. C. Forsaith. *il Am J Bot* 2:238-49 My '15

Studies in the phylogeny of the filicales. F. O. Bower. bibliog *il Ann Bot* 32:1-68 Ja '18

Studies in the phylogeny of the filicales; ferns showing the acrostichoid condition, with special reference to dipterid derivatives. F. O. Bower. *il Ann Bot* 31:1-39 Ja '17

Systematic analytical study of certain North American convallariaceae, considered in regard to their origin through discontinuous variation. R. R. Gates. *Ann Bot* 32:253-7 Ap '18

**Phylogeny (zoology)**

\* Bacterial phylogeny as indicated by modern types. R. E. Buchanan. *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:233-46 Ap '18

**Physical education**

Gymnrite in our town. W. B. Holliday. *Rural Manhood* 9:191 My '18

Message to rural teachers regarding physical training. D. Chase. *il Cornell Rural School Leaflet* v 11, no 1:272-81 '17

Mr Farmer's round-shouldered son. L. I. Houghton. *Rural Manhood* 8:118-20 Mr '17

Physical training in the country. Wallaces' *F* 43:134 Ja 25 '18

**Physicians**

Lodge plan of medical treatment. J. V. Woodruff. *Rural N Y* 75:795 My 20 '16

**Physiological botany.** See Botany—Physiology

**Physiological chemistry**

Chemical composition of the placenta of the cow. F. Fenger. *Int R Sci & Prac Ag* 9, no 4:470-1 Ap '18



**Physiological chemistry—Continued**

- Effect of autolysis upon muscle creatin. R. Hoagland and C. N. McBryde. *bibliog J Ag Research* 6:535-47 J1 3 '16  
*See also* Biological chemistry; Digestion; Enzymes; Nutrition; Proteins

**Physiology**

- Animal calorimetry: the interrelation between diet and body condition and the energy production during mechanical work. R. J. Anderson and L. Graham. *Int R Sci & Prac Ag* 9,no 3:345-7 Mr '18  
 Foods and food values; health preparedness—the needs of the human body. E. B. Rutter. *J Ag (Quebec)* 19:269 Je '16  
 Personal hygiene. N. S. Knowles and others. *Ia Ag Ext Home Econ B* 3:1-23 '17-'18 (rev.)  
 Relation between the external body measurements, the live weight and the net weight on the one hand, and the weight of the heart and the lungs on the other hand, in cattle of the Schwytz and Parmesan breeds. D. Brentana. *Int R Sci & Prac Ag* 8,no 7: 1014-16 J1 '17  
*See also* Diet; Digestion; Embryology; Growth; Heredity; Hygiene; Individuality (physiological); Longevity; Lymphatics; Metabolism; Monsters; Nutrition; Physiological chemistry; Respiration calorimeters

**Physiology of plants. See Botany—Physiology**

**Physalospora cydoniae. See Apple canker**

**Phytic acid**

- Concerning the organic phosphorus compound of wheat bran and the hydrolysis of phytin (Tech B. 40). R. J. Anderson. *bibliog N Y State Ag Exp Rep* 1915:333-61 '16  
 Phytic acid of the wheat kernel and some of its salts. P. W. Boutwell. *Am Chemical Soc J (Box 505, Washington, D. C. \$6 per yr.)* 39:491-503 Mr '17

**Phytin**

- Concerning the organic phosphorus compound of wheat bran and the hydrolysis of phytin (Tech B. 40). R. J. Anderson. *bibliog N Y State Ag Exp Rep* 1915:333-61 '16  
 Determination of phytin phosphorus in plant products. J. B. Rather. *Ark Ag Exp B* 135:1-15 '17

**Phytogeography. See Geographical distribution of animals and plants**

**Phytolacca. See Pokeweed**

**Phytonomus posticus. See Alfalfa weevils**

**Phytopathological society, American. See American phytopathological society**

**Phytopathology. See Plants—Diseases and pests**

**Phytophthora**

- Morphology and cytology of the sexual organs of phytophthora erythroseptica, Pethyb. P. A. Murphy. *bibliog il Ann Bot* 32:115-53 Ja '18  
 Phytophthora disease of ginseng (B. 363). J. Rosenbaum. *bibliog il Cornell Ag Exp Rep* 1916:65-106 '17  
 Phytophthora Faberi, the cause of hevea canker. A. A. L. Rutgers. *Int R Sci & Prac Ag* 8,no 11:1164-7 N '17  
 Studies of the genus phytophthora. J. Rosenbaum. *bibliog il J Ag Research* 8:233-76 F '12 '17  
*See also* Potato late blight

**Pianos**

- Piano with an interesting history. *il Country Life* 32:116 O '17

**Pica (depraved appetite)**

- Depraved appetite. T. B. Rogers. *Country Gent* 81:632 Mr 18 '16

**Picea mariana. See Spruce**

**Picidae. See Woodpeckers**

**Pickling. See Canning and preserving**

**Picnics**

- Shall we go on picnics? *Prac F* 114:224 Je 15 '18  
 Summer picnics. R. Lampman. *il Rural N Y* 75:963 J1 8 '16  
 War time picnic. *Am Coop J* 12:702 Je '17

**Pictures**

- Good hanging of pictures. A. M. Brooks. *Country Life* 33:84 D '17  
 Influence of a picture. E. C. Salisbury. *il Country Gent* 81:1002 My 6 '16  
 Pictures humanize our homes. *il Country Life* 30:78+ Ag '16  
 Portraits of the past for homes of to-day. J. M. Breese. *il Country Life* 35:84+ N '18  
 Right picture in the right place. G. R. Wilmot. *il Country Gent* 82:1397 S 8 '17  
*See also* Engravings

**Pieplant. See Rhubarb**

**Pies. See Pastry**

**Pig clubs**

- Boy and his pigs. R. G. Miller. *il Kimball's D F* 15:5 Ja 15 '17  
 Boys' and girls' pig clubs. *Ag Gaz of Canada* 5:177-82 F '18  
 Boys' and girls' pig clubs. *Ill Ag Ext* 12p '16 (2d ed)  
 Boys and girls' pig clubs in the South. J. E. Downing. *il Breeder's Gaz* 72:1126-7 D 20 '17  
 Boys' community pig club reading courses. *il La Ag Ext C* 17:1-36 '16  
 Boys' feeding contests. C. H. Taylor. *Wallaces' F* 42:736 Ap 27 '17  
 Boys' pig club instruction sheets nos. 1-6. W Va Ag Ext C 54, 59, 65, 69, 75, 84 '16  
 Titles are: Selection and care of a pig; Feed and forage crops; Hog houses and equipment; Keeping the pig healthy; Preparing the pig for exhibition; Brood sow and her care  
 Boy's pig club work. W. F. Ward. *il U S Ag Yearbook* 1915:173-88; Excerpts. *Int R Ag Econ* 71:4-8 N '16  
 Boys' pig clubs. J. E. Downing. *il Ga Ag Coll (Ext) C* 44:1-8 '17  
 Boys pig clubs, 1915. J. E. Downing. *il Ga Ag Coll (Ext) B* 104:1-15 '16  
 Champion hog raiser. H. H. Havner. *Nat Stock & F* 42:679 O 26 '18  
 County agent, banker and boys. O. Kercher. *il Banker-F* 6:12-13 D '18  
 Fairview pig club; story. *il Hoard's D* 55:964, 996, 1028, 1060; 56:20 Je 28-J1 26 '18  
 Figures that tell the tale. J. T. Taylor. *il Nat Stock & F* 40:968 D 23 '16  
 Financing a pig club. R. L. Buchanan. *Ohio F* 138:215 S 2 '16  
 Forms of contract for pig clubs. *Ag Gaz of Canada* 5:184 F '18  
 Helping the boys to get started. O. W. Sherrill. *il Hoard's D* 56:338 O 4 '18  
 Helping to solve our allies' food problem. R. Graves. *il Nat Geographical Magazine (Washington, D.C. \$2.50 per yr.)* 33:170-94 F '18  
 How bankers can start pig clubs—what they mean to bank and boy. J. D. McVean. *il Banker-F* 4:12-13 S '17  
 How boys grow prize pigs. *Weekly N L* 5:5 Ja 2 '18  
 Iowa boys' and girls' pig club; rules and suggestions. *il Ia Ag Ext Junior C* 48:1-8 Ap '18  
 Juvenile pork raisers. H. H. Havner. *Nat Stock & F* 42:639 O 12 '18  
 LaCrosse county, Wisconsin, pig club. J. R. Kinsloe. *Hoard's D* 55:932 Je 21 '18  
 Minnesota boys' and girls' clubs. T. A. Erickson and L. H. Fudge. *il Minn Ag Ext Spec B* 24 4p '18  
 Monthly program for community pig clubs in Alabama. J. C. Ford. *Prog F* 31:690 My 20 '16  
 Nebraska boys' pig club; lessons. *Neb Ag Ext* '16  
 Subjects follow: Selecting good hogs; Individual hog house; Hog sanitation; Brood sow and litter; Growing shoat  
 North Carolina pig clubs win. F. H. Jeter. *il Banker-F* 5:12 S '18  
 Ohio's pig clubs. C. T. Conklin. *il Ohio F* 138:543 D 2 '16  
 Pig club manual. *il diags N C Ag Ext C* 12:1-32 '16  
 Pig club members as food producers. *il Purdue Ag* 11:38-9 My '17

**Pig clubs—Continued**

- Pig club profits pay way to college. M. Andersen, jr. Prog F 31:741 Je 3 '16  
 Pig club results. Prog F 31:935 J1 29 '16  
 Pig club work in Alabama. J. C. Ford. Prog F 31:576 Ap 22 '16  
 Pig clubs. F. M. Shanklin. il Purdue Ag Ext Leaflet 56:1-6 '16  
 Pig clubs and the swine industry. J. D. McVean. il U S Ag Yearbook 1917:371-84  
 Pork for North Dakotans. Kimball's D F 14:115 F 15 '16  
 Raise a pig. C: Crammer. Nat Stock & F 42:250 Je 1 '18  
 Showing father how. C. C. French. il Swine World 5:12 Ja '18  
 Texas county revived. H. S. Hilburn. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 16:362 Ap '17  
 Texas pig club boys succeed. O. W. Sherrill. il Banker-F 6:14 D '18  
 Texas pig club boys win out. S. N. Barrows. il Banker-F 5:12 F '18  
 Victory is pig club slogan. F. L. Griffin. il Banker-F 5:12 Ja '18  
 Want a pig club? Banker-F 5:3 D '17

**Pigeon tremex**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16,no 26:90-2 '16

**Pigeons**

- Beginning with squabs. H. Butcher. il Country Gent 83:38 Mr 23 '18  
 Care of young pigeons. P. B. Ruggles. Country Life 30:49 Ag '16  
 Cold-storage squabs. Country Gent 81:1485 Ag 5 '16  
 \* Control of sex in pigeons. Nature (St Martin's st, London, W. C. 6d) 100:468-9 F 14 '18  
 Crop of a wood pigeon. il J Bd Ag 25:584-5 Ag '18  
 \* Inheritance of number of feathers of the fantail pigeon. T. H. Morgan. biblog il Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:5-27 Ja '18  
 Model pigeon nest. E. I. Farrington. il Country Gent 81:1378 J1 15 '16  
 Mourning dove. W. S. Taylor. il Texas Univ (Austin) B 57:1-19 O 10 '16  
 Pigeon in war service. E. I. Farrington. il Country Life 34:50-1 Ag '18  
 Pigeons and doves. A. A. Allen. il Am For 24:428-31 J1 '18  
 Pigeons that pay. H. W. Fegley. il Fruit-Grower 27:79 F 1 '16  
 \* Scientific name of the passenger pigeon. S. M. Rasmussen. Science (Science Press, Garrison, N.Y. 15c) n s 48:445 N 1 '18  
 Squab raising. F. W. Kazmeier. Tex Ag Ext B 10:97-9 '16  
 Squab raising. J: J. Patterson. il Country Gent 82:391, 446, 504, 554 F 24-Mr 17 '17  
 Squab raising in the United States. A. B. Lee. Int R Sci & Prac Ag 7,no 3:406-7 Mr '16  
 Squab troubles. G: W. Veditz. il Country Gent 82:1185 J1 21 '17  
 Squabs for everybody. J: J. Patterson. il Country Gent 81:578 Mr 11 '16  
 Squabs for the home table. P. B. Ruggles. Country Life 29:67 Mr '16  
 Suggestions for the destruction of wood pigeons. W: Law. J Bd Ag 23:157-8 My '16  
 What pigeon pays best? J: J. Patterson, jr. Country Gent 81:1520 Ag 12 '16  
 When pigeons moult. P. B. Ruggles. Country Life 35:72 D '18

**Diseases and pests**

- Diphtheria in pigeons. P. B. Ruggles. il Country Life 29:51 F '16  
 Diseases of pigeons. Am P Advocate 24:113 Ja '16

**Pigmentation. See Color of animals****Pigments**

- Important biological problem. J. Dufrenoy. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:210-11 Ap 6 '18

**Pigs. See Swine**

- Pigs in pokes; story. F. Tilden. il Country Gent 82:12-13+ J1 13 '18

**Pigweed**

- \* Proximate analysis of the seed of the common pigweed *amaranthus retroflexus* L. E. P. Harding and W. A. Egge. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:529-30 J1 '18

**Pike's Peak**

- Pike's Peak by burro. A. Wallace. il Wall-laces' F 41:1671 D 22 '16

**Pilacre**

- Roesleria pallida. Sacc. J. S. Bayliss-Elliott and W. B. Grove. il Ann Bot 30:407-14 J1 '16

**Pilobolus**

- Response of pilobolus to light. R. Parr. bib-log Ann Bot 32:177-205 Ap '18

**Pilocrocis tripunctata. See Sweet potato leaf-folders****Pima Egyptian cotton. See Cotton—Varieties****Pimentos**

- To preserve pimentos. Ohio F 140:86 Ag 4 '17

**Pine**

- Agency of fire in propagation of longleaf pines. E. F. Andrews. il Bot Gaz 64:497-508 D '17  
 Botanical paradox. D. F. Higgins. il J Heredity 7:306-8 J1 '16  
 Cheap fertilizer for white pine seedlings. W. D. Clark. Soc Am For Pro 11:336 J1 '16  
 Chemical research as a directing aid in the efficient utilization of pine products. C: H. Herty. (In Pan American scientific congress Pro., 1915, v. 8, p. 385-7) '17  
 Commercial uses of shortleaf pine. il Am For 22:517-20 S '16  
 Commercial uses of white pine. il Am For 22:391-4 J1 '16  
 Density of stand and rate of growth of Arizona yellow pine as influenced by climatic conditions. F. Shreve. J For 15:695-707 O '17  
 Developments in the marking of western white pine (*pinus monticola*) in northern Idaho. C. K. McHarg and others. J For 15:871-85 N '17  
 Does eastern white pine occur on sites IV and V? R. C. Hawley. J For 16:341-3 Mr '18  
 Does it pay to plant a forest? S: J. Record. il Country Gent 81:1188-9 Je 10 '16  
 Effect of planting method upon growth of western yellow pine. H. C. Turner. J For 16:399-403 Ap '18  
 Experiments on the pulping of extracted yellow pine chips by the sulfate process. O. Kress and C. K. Textor. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:268-70 Ap '18  
 Explanation of the G-trees. W. R. Mattoon. il Am For 22:740 D '16  
 Fall of Rhode Island's monarch pine. J. B. Mowry. il Am For 24:212 Ap '18  
 Finishing southern yellow pine. Am Coop J 11:518 Ja '16  
 First season's growth and mortality of white-pine and red-pine plantations. C. H. Guise. J For 16:308-18 Mr '18  
 500,000 pines prospering. J. C. Mason. il Am For 22:41 Ja '16  
 Five-leaved pines. F: Maskew. il Cal State Comm Hort B v 6:280 J1 '17  
 Forest management of loblolly pine in Delaware, Maryland, and Virginia. W. D. Sterrett. il map U S Ag B 11:1-59 '14  
 Injury by disinfectants to seeds and roots in sandy soils. C. Hartley. il U S Ag B 169:1-35 '15  
 Life history of lodgepole pine in the Rocky Mountains. D. T. Mason. il map U S Ag B 154:1-35 '15  
 Life history of shortleaf pine. W. R. Mattoon. il map U S Ag B 244:1-46 '15  
 Lumbering in the sugar and yellow pine region of California. S. Berry. il map U S Ag B 440:1-99 '17  
 Norway pine in the Lake states. T. S. Woolsey, jr. and H. H. Champman. U S Ag B 139:1-42 '14  
 Notes on white-pine four-year transplants. S. N. Spring. J For 15:761-2 O '17  
 Pine trees of the Rocky Mountain region. G: B. Sudworth. il maps U S Ag B 460:1-46 '17



**Pine—Continued**

- Pinus insignis* for fruit-cases. *Il J Ag New Zealand* 17:235-6 O '18
- Planting Scotch pine in Pennsylvania. *J For* 16:462-3 Ap '18
- Pollination in the pine. *Il J Heredity* 7:402-5 S '16
- Preliminary volume table for Scots pine. *J Bd Ag* 25:326-7 Je '18
- Scotch pine in Pennsylvania. *J For* 16:605-7 My '18
- Service and economy in building. 22p *Il n.d. Southern pine assn., New Orleans, La.*
- Shall we plant white pine? C. R. Pettis. *Am For* 23:71-2 F '17
- Shortleaf pine. S: B. Detwiler. *Il map Am For* 22:513-16 S '16
- Shortleaf pine: its economic importance and forest management. W. R. Mattoon. *Il map U S Ag B* 308:1-66 '15
- Slash pine. W. R. Mattoon. *Il Am For* 23:158-60 Mr '17
- Some characteristics of slash pine. W. R. Mattoon. *Il map For Quar* 14:578-83 D '16
- Some factors influencing the reproduction of red spruce, balsam fir, and white pine. B. Moore. *J For* 15:827-53 N '17
- Southern yellow pine timbers. 47p *Il '17 Southern pine assn., New Orleans, La.*
- Standard specifications for grades of Southern yellow pine lumber. 58p plans '17 Southern pine assn., New Orleans, La.
- Studies of yield and reproduction of western yellow pine in Arizona and New Mexico. G. A. Pearson. *J For* 16:273-93 Mr '18
- Study of reforested chestnut cut-over land. E. C. M. Richards. *J For* 15:609-14 My '17
- Sugar pine. S: B. Detwiler. *Il map Am For* 23:280-4 My '17
- Sugar pine. L: T. Larsen and T. D. Woodbury. *Il map U S Ag B* 426:1-40 '16
- Suitability of longleaf pine for paper pulp. H: E. Surface and R. E. Cooper. *U S Ag B* 72:1-26 '14
- Suspensor and early embryo of pinus. J: T. Buchholz. *bibliog Il Bot Gaz* 66:185-228 S '18
- Temperature of leaves of pinus in winter. J: H. Ehlers. *bibliog Am J Bot* 2:32-70 Ja '15
- Test of western yellow pine car sills, joists, and small clear pieces. C. W. Zimmerman. *Il U S Ag B* 497:1-16 '17
- Tests of the absorption and penetration of coal tar and creosote in longleaf pine. C. H. Teesdale and J. D. MacLean. *Il U S Ag B* 607:1-42 '18
- Trees of Vermont; the pines. G. P. Burns and C. H. Otis. *Il Vt Ag Exp B* 194:24-35 '16
- Turning sand hills into pine forests. R. P. Crawford. *Il Sci Am* (233 Broadway, N.Y. 10c) 118:447 My 18 '18
- Utilization and management of lodgepole pine in the Rocky Mountains. D. T. Mason. *Il map U S Ag B* 234:1-54 '15
- Volume of western yellow pine logs from an actual mill tally. S. Berry. *J For* 15:615-18 My '17
- Western yellow pine in Oregon. T. T. Munger. *Il map U S Ag B* 418:1-48 '17; *Abstract. Int R Sci & Prac Ag* 8,no 5:752-5 My '17
- White-barked pine. D. F. Higgins. *Il J Heredity* 7:399-401 S '16
- White pine. S: B. Detwiler. *Il map Am For* 22:387-91 Ji '16
- White pine under forest management. E. H. Frothingham. *Il U S Ag B* 13:1-70 '14
- Yellow pine cuttings in the Blue mountains. *J For* 15:355-61 Mr '17
- See also Conifers; Douglas fir; Hemlock
- Diseases and pests**
- Cone beetles: injury to sugar pine and western yellow pine. J: M. Miller. *Il U S Ag B* 243:1-12 '15
- Disease of pines caused by *cratium pyri-forme*. G: G. Hedgcock and W: H. Long. *bibliog Il map U S Ag B* 247:1-20 '15
- Dying of young pines in circles about ant-hills. F. W. Haasis. *J For* 15:763-71 O '17
- Hypoderma deformans, an undescribed needle fungus of the western yellow pine. J. R. Weir. *Il J Ag Research* 6:277-88 My 22 '16

- Identity of peridermium montanum with peridermium aciculum. G: G. Hedgcock. *Phyt* 6:64-7 F '16
- Inoculation experiments with peridermium montanum. J. R. Weir and E. E. Hubert. *Phyt* 6:68-70 F '16
- Insects injurious to pine and fir trees in Sweden. *Int R Sci & Prac Ag* 7,no 3:464 Mr '16
- Insignis-pine disease. D. E. Hutchins. *J Ag New Zealand* 16:37 Ja '18
- Notes on *cratium comptoniae* III. P. Spaulding. *Phyt* 7:49-51 F '17
- Notes on the anatomy of peridermium galls. A. Stewart. *bibliog Il Am J Bot* 3:12-23 Ja '16
- Observations on the pathology of the jack pine. J. R. Weir. *Il U S Ag B* 212:1-10 '15
- Peridermium harknessii and *cratium quercuum*. E. P. Meinecke. *Il Phyt* 6:225-40 Je '16
- Preliminary report of the occurrence of western red-rot in *pinus ponderosa*. W. H. Long. *U S Ag B* 490:1-8 '17; Same cond. *Mycol* 8:178-9 My '16
- Serious disease in forest nurseries caused by peridermium filamentosum. J. R. Weir and E. E. Hubert. *J Ag Research* 5:781-5 Ja 24 '16
- Spore variation in *neopeckia coulteri*. J. S. Boyce. *Phyt* 6:357-9 Ag '16
- Stem lesions caused by excessive heat. C. Hartley. *bibliog Il J Ag Research* 14:595-604 S 23 '18
- Two new hosts for peridermium pyriforme. G: G. Hedgcock and W: H. Long. *Il J Ag Research* 5:289-90 N 15 '15
- Undescribed timber decay of pitch pine. L. O. Overholts. *Il Mycol* 9:261-70 S '17
- See also Pine barkbeetles; Pine blister rust; Pine leaf scale; Pine moths; Pine needle disease; Pine sawflies; Pine-shoot moths; Pine weevils; Pinon blister rust; Sequoia pitch moths

**Seed**

- Biology of lodgepole pine as revealed by the behavior of its seed. C. G. Bates. *J For* 15:410-16 Ap '17
- Pityostrobus macrocephalus*, L. and H., a tertiary cone showing ovular structures. C. P. Dutt. *bibliog Il Ann Bot* 30:529-49 O '16
- Seed production of western white pine. R. Zon. *U S Ag B* 210:1-15 '15

**Varieties**

- Chemistry as an aid in the identification of species. A. W. Schorger. *Soc Am For Pro* 11:33-9 Ja '16

**Pine barkbeetles**

- Pine bark beetle. W. A. Clemens. *bibliog Il Cornell Ag Exp B* 333:287-98 '16; Same. *Cornell Ag Exp Rep* 1917:287-98 '18

**Pine blister rust**

- Additional list of state and national quarantines against the white pine blister rust. R. G. Pierce. *Phyt* 8:484-6 S '18
- Alternate hosts of the white pine blister rust. L. R. Grose. *Il Am For* 22:469-71 Ag '16
- Arthropods and gasteropods as carriers of *cratium ribicola* in greenhouses. G. F. Gravatt and R. P. Marshall. *Phyt* 7:368-73 O '17
- Battling the pine blister rust. S. B. Detwiler. *Il Am For* 24:451-7 Ag '18
- Blister rust disease of white pine. P. Spaulding. *Il Am For* 22:97-8 F '16
- Blister rust of the white pines. S: J. Record. *Il Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:216-18 O 6 '17
- Blister rust situation. *J For* 15:1063-6 D '17
- Combating white pine blister rust. *J For* 15:265-6 F '17
- Committee for the suppression of pine blister in North America: purpose, personnel and program. J. G. Sanders. *J Econ Entom* 10:213-15 F '17
- Contributions to our knowledge of the white pine blister rust. W. A. McCubbin. *Phyt* 7:95-100 Ap '17

**Pine blister rust—Continued**

- Diagnosing white-pine blister-rust from its mycelium. R. H. Colley. *il J Ag Research* 11:281-6 N 5 '17
- Dispersal distance of urediniospores of *crontartium ribicola* as indicated by their rate of fall in still air. W. A. McCubbin. *Phyt* 8:35-6 Ja '18
- Does *crontartium ribicola* winter on the currant? W. A. McCubbin. *bibliog map Phyt* 7: 17-31 F '17
- Fight against the pine blister disease. *il Am For* 23:38-41 Ja '17
- Fighting the pine blister disease. *Am For* 23:562-4, 688 S, N '17
- Foresters have a vital interest in the white-pine blister rust. P. Spaulding. *bibliog Soc Am For Pro* 11:40-7 Ja '16
- Gipsy-moth larvae as agents in the dissemination of the white-pine blister-rust. G. F. Gravatt and G. B. Posey. *J Ag Research* 12:459-62 F 18 '18
- Incubation period of *crontartium ribicola* on the white pine. R. E. Stone. *il Phyt* 8:438-40 Ag '18
- Inoculations on ribes with *crontartium ribicola* Fischer. P. Spaulding and G. F. Gravatt. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:243-4 S 7 '17
- Necessary quarantine law. Outlook (381 4th av., N.Y. 10c) 115:643 Ap 11 '17
- New facts concerning the white-pine blister rust. P. Spaulding. *U S Ag B* 116:1-8 '14
- Nursery stock shipments restricted. C. L. Marlatt. *Am Flor* 46:646 Ap 8 '16
- Outbreak of white pine blister in Ontario. J. E. Howitt and W. A. McCubbin. *Phyt* 6:182-5 Ap '16
- Outwitting white pine blister rust. S. J. Record. *il Country Gent* 82:2043 D 29 '17
- Pine blister. B. H. Paul. (B. 15) 18p maps n.d. N.Y. conservation commission, Albany
- Pine blister disease. *il map Am For* 22:748-9 D '16
- Pine blister disease problem as a whole. H. Metcalf. *il Am For* 23:72-4 F '17
- Pine blister disease quarantines. *Am For* 23: 302 My '17
- Pine blister disease work progresses. *Am For* 23:433 Jl '17
- Pine blister rust. H. T. Fernald. *il Cal State Comm Hort B v* 7:451-3 Jl '18
- Public school survey for currant rust. W. A. McCubbin. *Phyt* 8:294-7 Je '18
- Quarantine notice: the white pine blister rust. J. G. Sanders. *Wis Ag Dept C* 3 2p '16
- Some factors affecting viability of the urediniospores of *crontartium ribicola*. G. H. Duff. *il Phyt* 8:289-92 Je '18
- Special report of the state entomologist of Minnesota to the governor; Work on the white pine blister rust in Minnesota 1916. (C. 40) 19p '16 Minn. State entomologist, St Anthony Park, Minn.
- State and national quarantines against the white pine blister rust. *Phyt* 7:319-21 Ag '17
- State horticultural inspectors and the white pine blister rust problem. P. Spaulding. *J Econ Entom* 9:231-2 F '16
- Summary of the white-pine blister rust situation. H. Metcalf. *J For* 16:85-9 Ja '18
- Uredinia of *crontartium ribicola* on ribes stems. G. B. Posey and others. *Science (Science Press, Garrison, N.Y. 15c)* n s 46: 314-15 S 28 '17
- War and the white pine blister rust. *Am For* 24:55 Ja '18
- What shall we do about the pine blister disease? S. B. Detwiler. *il Am For* 23:69-70 F '17
- What will happen to our white pine? P. S. Lovejoy. *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2250:59+ Je 29 '18
- White pine blister disease. *il Am For* 23:67-74 F '17
- White pine blister rust. (*In* Forest protection and conservation, p. 167-87) map '17 Maine Dept. of forestry, Augusta
- White pine blister rust. Outlook (381 4th av., N.Y. 10c) 114:748-9 D 6 '16
- White pine blister rust. *Purdue Ag* 11:34 Mr '17
- White pine blister rust. J. J. Pillsbury. *R I Ag Bd C* 1:1-4 '17
- White pine blister rust. J. G. Sanders. *Hoard's D* 52:6 Jl 28 '16
- White-pine blister rust. P. Spaulding. *il Farmers' B* 742:1-15 '16
- White pine blister rust and the chestnut bark disease. E. P. Meinecke. *il Cal State Comm Hort B v* 6:268-77 Jl '17
- White pine blister rust: does the fungus winter on the currant? W. A. McCubbin. *Science (Science Press, Garrison, N.Y. 15c)* n s 45:87 Ja 26 '17
- White pine blister rust in Canada. W. A. McCubbin. (*In* Report, Fruitgrowers' assn., 1916, p. 81-6) '17 Ontario ag. dept., Toronto
- White pine blister rust in Wisconsin. J. G. Sanders and S. B. Fracker. *il maps Wis Ag Dept B* 10:38-44 '16
- White-pine blister rust situation. P. Spaulding. *Am For* 22:137-8 Mr '16
- White pines of Lenox menaced. map *Am For* 22:472 Ag '16
- White pines threatened by destructive disease. *Am For* 22:662-3 N '16
- Work on pine blister rust in Minnesota, 1917. F. L. Washburn. (C. 45) 32p *il maps '17 Minn. State entomologist, St Paul*
- Work on the white pine blister rust in Minnesota, 1916. F. L. Washburn. (*In* Report State entomologist, 1915-1916, p. 10-27) *il maps '16 Minnesota ag. exp. station, St Paul; Abstract. J Econ Entom* 10:277-8 Ap '17

**Pine cones. See Pine—Seed****Pine leaf scale**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:99 '16

**Pine moths**

- Bombyx pini injurious to pine trees in Austria. *Int R Sci & Prac Ag* 7,no 1:173-5 Ja '16
- Zimmerman pine moth. J. Brunner. *bibliog il U S Ag B* 295:1-12 '15
- Zimmerman pine moths. *Int R Sci & Prac Ag* 7,no 2:318-19 F '16

**Pine needle disease**

- Hypoderma deformans, an undescribed needle fungus of the western yellow pine. J. R. Weir. *il J Ag Research* 6:277-88 My 22 '16

**Pine needles**

- Experiments in Germany on feeding lambs with pine needles. *Int R Sci & Prac Ag* 7, no 1:106 Ja '16
- Making baskets of pine-needles. A. Fearing. *il Country Life* 33:74+ Ja '18
- Pine-needle basketry in schools. W. C. A. Hammel. (B. 3) 18p *il '17 U. S. Bur. of educ., Washington, D.C.*

- \* Textile and paper from pine needles. *Sci Am* (233 Broadway, N.Y. 10c) 119:368 N 2 '18

**Pine oil**

- Chemistry as an aid in the identification of species. A. W. Schorger. *Soc Am For Pro* 11:33-9 Ja '16
- Conifer leaf oil industry. A. W. Schorger. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82: 394-5 D 16 '16

**Pine sawflies**

- Another insect enemy of the white pine. P. L. Buttrick. *il Am For* 22:395-6 Jl '16
- Egg-laying habits of diprion simile Hartig. M. P. Zappe. *J Econ Entom* 10:188-90 F '17
- Imported pine sawfly. W. E. Britton and M. P. Zappe. *bibliog Conn State Ag Exp B* 203:273-90 '18
- Notes on diprion simile Hartig. W. E. Britton. *J Econ Entom* 9:281-2 Ap '16

**Pine shoot moths**

- European pine-shoot moth (evetria buoliana); a serious menace to pine timber in America. A. Busck. *U S Ag B* 170:1-11 '15

**Pine weevils**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:72-8 '16



**Pine weevils—Continued**

Notes on the control of the white pine weevil. S. A. Graham. *J Econ Entom* 9:549-51 D '16

White-pine weevil and its relation to second-growth white pine. S. A. Graham. map *J For* 16:192-202 F '18

White pine weevil, pissodes strobil, in Quebec. J. M. Swaine. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 60-64) il '17

**Pineapple black weevils**

Pineapple black weevil; another pest likely to be introduced into Florida. W. Newell. *il Fla State Plant Bd Quar B v 1:47-50 Ja '17*

**Pineapple guava**

Feijoa. *il Green's Am Fruit Grower* 38:20 Ja '18

**Pineapples**

Manganese as a cause of the depression of the assimilation of iron by pineapple plants. M. O. Johnson. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:47-9 Ja '17

\* Pineapple in the Americas. *il Pan Am Union B* (Single copies to be obtained only from Supt. of documents, Wash., D.C. 25c) 47: 350-62 S '18

Pineapples. C. F. Kinman. *Porto Rico Ag Exp Rep* 1916:17-18 '18

Plant-ripened pineapples. M. L. Williams. *il Country Gent* 81:1119 My 27 '16

**Diseases and pests**

Chlorosis of pineapples induced by manganese and carbonate of lime. P. L. Gile. *Science (Science Press, Garrison, N.Y. 15c)* n s 44: 855-6 D 15 '16

New disease of the pineapple reported. D. B. Mackie. *il Philippine Ag R* 10:no 2:150 '17

Spraying of yellow pineapple plants on manganese soils with iron sulphate solutions. M. O. Johnson. *il Hawaii Ag Exp Press B* 51:1-11 '16

See also Pineapple black weevils

**Pinehole borers.** See Ambrosia beetles

**Pink bollworms.** See Bollworms, Pink

**Pink corn worms**

Pink corn-worm; an insect destructive to corn in the crib. F. H. Chittenden. *bibliog il map U S Ag B* 363:1-20 '16

Small pink corn worm (*batrachedra rileyi* Wals.) in Mississippi. R. W. Harned. *maps J Econ Entom* 9:295-8 Ap '16

**Pinks**

*Dianthus allwoodii*. *Gard Chron Am* 21:57 F '17

**Piñon**

Growth and management of piñon in New Mexico. H. H. Chapman and C. E. Behre. *J For* 16:215-17 F '18

**Piñon blister rust**

Piñon blister-rust. G. G. Hedgcock and others. *bibliog il J Ag Research* 14:411-24 S 2 '18

**Pinus.** See Pine

**Pioneer life.** See Frontier and pioneer life

**Piophilidae**

Dipterous families sepsidae and piophilidae. A. L. Melander and A. Spuler. *il Wash Ag Exp B* 143:1-97 '17

**Piper.** See Pepper

**Pipes**

Care of pumps and pipes in cold weather. *Wallaces' F* 43:58 Ja 11 '18

Joining soil pipes. J. R. McMahon. *il Country Gent* 82:295 F 10 '17

Removing pipe from well. *Rural N Y* 76:833 Je 30 '17

Sanitary tubing in dairy products plants. C. M. Cappel. *Creamery* 4:37 Jl '16; Same. *N Y Prod R* 2:438 Jl 5 '16

**Pipes, Wood**

Flow of water in wood-stave pipe; with discussion. F. C. Scobey. *il U S Ag B* 376:1-96 '16

Wood pipe for conveying water for irrigation. S. O. Jayne. *il U S Ag B* 155:1-40 '14

Wooden pipe a century in the ground. *Am For* 22:213 Ap '16

Wooden pipes for carrying water. *il Rural N Y* 76:1366 D 1 '17

**Piptanthus**

New or noteworthy plants; species of *piptanthus* in cultivation. W. G. Craib. *Gard Chron (Lond)* 60:228 N 11 '16

**Pisciculture.** See Fish culture

**Pissodes strobil.** See Pine weevils

**Pistachio**

Cultivation of pistachios in Sicily. A. Picone. *Int R Sci & Prac Ag* 7:no 3:424 Mr '16

**Piston rings**

Loss of compression. *Farm Eng* 5:8 D '17

**Pistons**

Cutting out the leaks. E. L. Watson. *Power F* 26:39 Ap '17

Fitting rings and pistons. H. A. Von Nieda. *il Power F* 27:39 Ap '18

Get acquainted with the pistons. D. R. A. Drummond. *Power F* 26:17 Ap '17

Hints on fitting piston rings. *Power F* 27:24 D '18

Notes on engine piston rings. C. H. Willey. *Country Gent* 83:20 N 16 '18

Rise of the aluminum piston. A. Johnston. *Country Life* 31:84 N '16

When Don got her small engine. *Power F* 27:22 My '18

**Pisum sativum.** See Peas

**Pitanga.** See Surinam cherries

**Pitcher plants**

*Cephalotus follicularis*. *il Gard Chron (Lond)* 59:182 Ap 1 '16

Pitcher-plants—what are they? R. W. Shufeldt. *il Am For* 24:347-50 Je '18

**Pittosporum**

Bud variation of *pittosporum*. A. D. Shamel. *il J Heredity* 8:357-8 Ag '17

**Pittsburgh, Pennsylvania.** See Milk supply—Pittsburgh

**Pituitary extract**

Some aspects of the physiology of mammary secretion. R. L. Hill. *bibliog Am Vet M Assn J* 51:642-54 Ag '17

**Pituitary gland**

Increasing fecundity; effect of pituitary substance. *J Heredity* 7:102-4 Mr '16

**Pituitrine.** See Pituitary extract

**Plagionotus speciosus.** See Sugar-maple borers

**Plane trees**

**Diseases and pests**

Report of conference re disease attacking plane trees. *il J Dept Ag Victoria* 15:443-7 Jl '17

Two destructive insect pests of plane and elm trees in Victoria. C. French. *il J Dept Ag Victoria* 15:308-10 My '17

**Planes (tools)**

Use of hand tools on the farm. J. R. Stone. *Power F* 26:22 F '17

**Plant breeding**

Breeding disease resistant cabbages. *il Field* 11:27:191 Mr '17

Breeding farm crops in Iowa. H. D. Hughes. *J Heredity* 7:143-4 Mr '16

Breeding for disease resistance in plants. W. A. Orton. *Am J Bot* 5:279-83 Je '18

Breeding, growing and disseminating pure seed corn and other grain. R. A. Moore. *N J Ag Dept B* 12:561-7 '18

Breeding millet and sorgo for drought adaptation. A. C. Dillman. *il U S Ag B* 291:1-19 '16

Breeding new castor beans. O. E. White. *il J Heredity* 9:195-200 My '18

Breeding of timothy. C. H. Myers. *il N Y Ag Dept B* 87:2723-36 S '16

Breeding sweet corn resistant to the corn earworm. G. N. Collins and J. H. Kempton. *J Ag Research* 11:549-72 D 10 '17

Breeding the pecan. *J Heredity* 7:87 F '16

Bud variations in lemons. A. D. Shamel. *il J Heredity* 8:75-81 F '17; Abstract (Improvement of lemon trees by selection). *Int R Sci & Prac Ag* 8,no 6:858-9 Je '17

## Plant breeding—Continued

- Colors in vegetable fruits. B. D. Halsted. *J Heredity* 9:18-23 Ja '18
- Controlled pollination in nicotiana. T: H. Goodspeed and P. Davidson. *Cal Univ Pub Botany* v 5, no 13 429-34p '18 (10c)
- Correlative characters of the rice plant. H. O. Jacobson. *Philippine Ag R* 9, no 2:74-119 '16; Abstract. *Int R Sci & Prac Ag* 8, no 1:60-6 Ja '17
- Cross-breeding for increased production; tomatoes and cucumbers. *Gard Chron (Lond)* 62:257 D 29 '17
- Cross-pollination of sugar cane. H. B. Cowgill. bibliog *Am Soc Agron J* 10:302-6 O '18
- Day with Luther Burbank. H. Myrick. *O Judd Farmer* 64:18 F 2 '18
- Degenerate plants. B. D. Halsted. *il J Heredity* 8:270-6 Je '17
- Direct selection in pure lines; recent studies in plant improvement. H. De Vries. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:82-3 F 9 '18
- Dr Walter Van Fleet, Robert White medallist, 1918. *Gard M* 28:92 O '18
- Double flowers. *Gard Chron (Lond)* 61:254 Je 23 '17
- Etiolated cereal plants. B. Kalt. *Int R Sci & Prac Ag* 7, no 12:1761-4 D '16
- Experiments on crossing two varieties of sunflower. F. A. Sazyperov. *Int R Sci & Prac Ag* 7, no 10:1437-9 O '16
- Fertilisation of gramineae and leguminosae in relation to selection. N. H. Frandsen. *Int R Sci & Prac Ag* 8, no 9:1231-3 S '17
- First generation crosses in cucumbers. H. K. Hayes and D. F. Jones. *Conn State Ag Exp Rep* 1916, pt 5:319-21 '17
- Flaxwilt: a study of the nature and inheritance of wilt resistance. W. H. Tisdale. bibliog *il J Ag Research* 11:573-606 D 10 '17
- Forage crop improvement—report of progress. W. Southworth. *il Ag Gaz of Canada* 5: 158-62 F '18
- Gardens for plant breeders. D: Fairchild. *il J Heredity* 9:112-16 Mr '18
- Heredity. W. Bateson. (*In* Smithsonian inst. Report 1915 p 359-94) '16 Smithsonian inst., Washington, D. C.
- How to raise seedling chrysanthemums. P. A. Cragg. *Gard Chron (Lond)* 59:203, 214, 227 Ap 8-22 '16
- Hybrid sunflowers. T. D. A. Cockerell. *Gard Chron (Lond)* 64:126 S 28 '18
- Hybrids of the live oak and overcup oak. H. Ness. *il J Heredity* 9:263-8 O '18
- Improvement of cotton by selection, in India. *Int R Sci & Prac Ag* 9, no 4:443-4 Ap '18
- Improvement of hops by crossing and selection. E. S. Salmon. *Int R Sci & Prac Ag* 8, no 12:1207-8 D '17
- Improvement of the jute crop by pure line selection. R. S. Finlow. *Ag J of India* 12: 283-90 Ap '17
- Improvement of vegetable varieties by selection. R. Wellington. *il Minn Hort* 45:212-14 My '17
- Improvement of wheat and other crops by seed selection. *J Dept Ag Victoria* 15:110-12 F '17
- Increased production of cereals. J. T. Pridham. *Ag Gaz of New South Wales* 29:728-30 O '18
- Indigen and cultigen. L. H. Bailey. *Science* (Science Press, Garrison, N.Y. 15c) n s 47: 306-8 Mr 29 '18
- Inheritance of habit in the common bean. *Int R Sci & Prac Ag* 7, no 1:58 Ja '16
- Inheritance studies in pismus; interrelation of the genetic factors of pismus. O. E. White. bibliog *J Ag Research* 11:167-90 O 22 '17
- Iris breeding. *J Heredity* 7:502 N '16
- Is your seed good? F. S. Prince. *Ohio F* 139: 271 F 24 '17
- Methods of plant breeding, with special reference to the chrysanthemum. F. W. Keeble. *Gard Chron (Lond)* 59:238 Ap 29 '16
- Methods used and results obtained in cereal investigations at the Cornell station. H. H. Love and W. T. Craig. *il Am Soc Agron J* 10:145-57 Ap '18
- Modern seed growers. *Am Flor* 46:36 Ja 22 '16
- Note on the inheritance of certain stem characters in sorghum. G. R. Hilson. *il Ag J of India* 11:150-5 Ap '18
- Official register of selected plants in Hungary. *Int R Sci & Prac Ag* 7, no 1:61 Ja '16
- Opportunities of the garden. E. Loines. *il Gard Chron Am* 20:388-9 S '16
- Outlook for horticultural development. W. J. Beal. *Rural N Y* 75:359 Mr 4 '16
- Plant-breeding and controlled seed farms. *il J Bd Ag* 23:1081-7 F '17
- Plant breeding and seed selection. W. F. Therkildson. *il Field* 11 26:219-20 Mr '16
- Plant breeding at Aroostook farm in 1917. *Maine Ag Exp B* 269:40-4 '18
- Plant breeding at home. C. E. Brehm. *Country Gent* 81:1065 My 20 '16
- Plant breeding for New Ontario. W. R. Leslie. *il Ag Gaz of Canada* 5:700-2 Jl '18
- Plant breeding in Sweden. *Gard Chron (Lond)* 60:268 D 2 '16
- Plant-breeding work at the Central experimental farm. A. J. Logsdail. *il Ag Gaz of Canada* 4:656-9 Ag '17
- Plant improvement by selection. W: Toole. *Minn Hort* 46:368-72 O '18
- Plant improvement by vegetable growers. C. E. Durst. *Market Growers J* 20:197-8 Mr 1 '17
- Population analyses and inheritance studies concerning self-sterility, self-fertility, and sterility in rye. N. Heribert-Nilsson (*Ztschr. Pflanzenzücht.*, 4, no. 1 44p '16). *Exp Sta Record* 38, no 3:236-7 '18
- Producing disease-resistant plants. *il Field* 11 27:360-1 My '17
- Production of an anthracnose-resistant white marrow bean. W. H. Burkholder. *Phyt* 8: 353-9 Jl '18
- Project to improve berries. W. Brink. *il Green's Am Fruit Grower* 38:28 Mr '18
- Protection of horticultural novelties. *Gard Chron (Lond)* 59:301 Je 3 '16
- Reciprocal breeding in tomatoes. B. D. Halsted. *J Heredity* 9:169-73 Ap '18
- Red rock wheat and rosen rye. F. A. Spragg. *Am Soc Agron J* 10:167-71 Ap '18
- Report of the department of botany. *il N J Ag Exp Rep* 1916:433-63 '17
- Includes Experiments with corn, peppers, nasturtiums, beans, peanuts; Study of the influence of environment; Inheritance studies with garden plants; Variation and inheritance studies in species of cucurbita and datura
- Report of the plant breeder. H. B. Cowgill. *Porto Rico Insular Exp Rep* 1916-1917:15-36 '17
- Report of Vineland station, 1916-1917. 80p *il '18 Ontario ag. dept., Toronto*
- Reversible transformability of allelomorphs in rice in Japan. H. Terao. *Int R Sci & Prac Ag* 9, no 1:49-51 Ja '18
- \* Scientific plant breeding. *Nature* (St Martin's st. London. W. C. 6d) 101:405-7 Jl 25 '18; Same. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:347 N 30 '18
- Seed selection of Egyptian cotton. T: H. Kearney. bibliog *U S Ag B* 38:1-8 '13
- Seedling cane. C. W. Hines. *il Philippine Ag R* 10, no 1:32-42 '17
- Selection in pure lines. C. Fruwirth. *il J Heredity* 8:90-4 F '17; Abstract (Pure lines in self-fertile plants). *Int R Sci & Prac Ag* 8, no 6:854-5 Je '17
- Selection of cereals in Sweden and the increased production thus caused. N. H. Nilsson. *Int R Sci & Prac Ag* 9, no 2:160-6 F '18
- Selection of plant-breeding. J: Belling. *J Heredity* 9:95 F '18
- Selection of plants resistant to diseases, animal pests and adverse meteorological conditions. E. Molz. *Int R Sci & Prac Ag* 9, no 5:554-8 My '18
- Selection of some varieties of swede resistant to plasmidiophora brassicae, in Denmark. C. I. Christenson. *Int R Sci & Prac Ag* 9, no 3:317-19 Mr '18
- Small grain investigations. H. H. Love and W. T. Craig. *il J Heredity* 9:67-76 F '18
- Somatic segregation. E. J. Kraus. *il J Heredity* 7:2-8 Ja '16



**Plant breeding—Continued**

- Some effects of selection on the production of alkaloids in belladonna. A. F. Sievers. *U S Ag B* 306:1-20 '15
- Some recent investigations in sugar-beet breeding in the United States. J. F. Pritchard. *Int R Sci & Prac Ag* 8,no 3:365-70 Mr '17
- Studies in cereal-breeding. *Gard Chron* (Lond) 64:150 O 12 '18
- Studies in inheritance in sugar cane. H. B. Cowgill. *J Dept Ag Porto Rico* 2:33-41 Ja '18
- Study of the arrowing (flowering) in the sugarcane with special reference to selfing and crossing operations. T. S. Venkataraman. *il Ag J of India Sci Congress No 1917*: 97-108
- Study plant breeding and seed selection. W. F. Massey. *Prog F* 31:1048 S 2 '16
- Sunflower selection at the district agricultural station of Saratov, Russia. V. Souvorov. *Int R Sci & Prac Ag* 8,no 4:577-9 Ap '17
- Testing new cane seedlings in north India. C. A. Barber. *Ag J of India* 13:243-8 Ap '18
- Thrips as pollinators of beet flowers. H. B. Shaw. *il U S Ag B* 104:1-12 '14
- Two groups of varieties of the hicola pecan and their relation to self-sterility. H. P. Stuckey. *bibliog il Ga Ag Exp B* 124:127-48 '16; *Abstract. Prog F* 32:97 Ja 27 '17
- What is hardness? N. E. Hansen. *il Minn Hort* 44:185-8 My '16
- Work in tobacco selection at the experimental station of Djember, residence of Besoeiki, Java, from 1912 to 1915. A. Sprecher. *Int R Sci & Prac Ag* 7,no 9:1265-71 S '16
- See also Fruit breeding; Grain head thresher; Grain improvement associations; Hybridization, Vegetable; Mendelism; Petalody; Plant propagation; Variation (biology); Variety tests; also names of plants, sub-head Breeding, e.g. Corn—Breeding, Grapes—Breeding, Oats—Breeding, Potatoes—Breeding, Wheat—Breeding

**Plant catalogs. See Catalogs, Seed and plant**

**Plant cells and tissues**

- Abnormal conjugation in spirogyra. J. G. Brown. *il Bot Gaz* 66:269-71 S '18
- Abscission in mirabilis jalapa. F. E. Lloyd. *il Bot Gaz* 61:213-30 Mr '16
- Abscission of flowers and fruits in the solanaceae, with special reference to nicotiana. J. N. Kendall. *bibliog il Cal Univ Pub Botany v 5,no 12 347-428p. 49-53pl '18 (85c)*
- Account of the mode of foliar abscission in citrus. R. W. Hodgson. *bibliog Cal Univ Pub Botany v 6,no 15 417-28p '18 (10c)*
- Aeriferous tissue in willow galls. A. Cosens and T. A. Sinclair. *il Bot Gaz* 62:210-25 S '16
- Cell measurement as an aid in the analysis of quantitative variation. W. Brotherton, Jr., and H. H. Bartlett. *il Am J Bot* 5:192-206 Ap '18
- Chondriosomes and the primordia of chloroplasts and leucoplasts. D. M. Mottier. *bibliog il Ann Bot* 32:91-114 Ja '18
- Cleavage in didymium melanospermum (Pers) Macbr. R. A. Harper. *bibliog il Am J Bot* 1:127-44 Mr '14
- Conjugate nuclei in the ascomycetes. E. J. Welsford. *il Ann Bot* 30:415-17 Jl '16
- Contribution to our knowledge of splachnidium. M. L. Roe. *bibliog il Bot Gaz* 62: 400-8 N '16
- Cross-conjugation in spirogyra Weberi. B. Cunningham. *il Bot Gaz* 66:272-3 S '18
- Crown-gall studies showing changes in plant structures due to a changed stimulus. E. F. Smith. *il J Ag Research* 6:179-82 Ap 24 '16
- Cytological studies in protococcales; cell structure and autospore formation in tetradron minimum (A. Br.). Hansg. G. M. Smith. *bibliog il Ann Bot* 32:459-64 O '18
- Cytological studies in the protococcales; cell structure and zoospore formation in pediatrum boryanum (Turp.) Menegh. G. M. Smith. *bibliog il Ann Bot* 30:467-79 Jl '16
- Cytological studies in the protococcales; zoospore formation in characium Sieboldii. A. Br. G. M. Smith. *bibliog il Ann Bot* 30:459-66 Jl '16

- Cytology of eocronartium muscicola. H. M. Fitzpatrick. *bibliog il Am J Bot* 5:397-419 O '18
- Development of Sanio's bars in pinus inops. W. Rushton. *bibliog il Ann Bot* 30:419-25 Jl '16
- Effect of different plant tissues on the fixation of atmospheric nitrogen. T. J. Murray. *Va Ag Exp Tech B* 15:93-102 '17; Same. *Va Ag Exp Rep* 1915-1916:93-102 '17
- Epidermal cells of roots. E. A. Roberts. *bibliog Bot Gaz* 62:488-506 D '16
- Four-lobed spore mother cells in catharinea. C. E. Allen. *il Am J Bot* 3:456-60 O '16
- Hardening process in plants and developments from frost injury. R. B. Harvey. *bibliog il J Ag Research* 15:83-112 O 14 '18
- Influence of immersion in certain electrolytic solutions upon permeability of plant cells. M. Williams. *Ann Bot* 32:591-9 O '18
- Morphology and ecology of an extreme terrestrial form of zygnema ericetorum. F. E. Fritsch. *bibliog Ann Bot* 30:135-49 Ja '16
- Notes on the anatomy of the punctatus gall. A. Stewart. *bibliog il Am J Bot* 1:531-46 D '14
- Nuclear behavior in the promycelia of caeoma nitens Burrill and puccinia peckiana Howe. L. O. Kunkel. *bibliog il Am J Bot* 1:37-47 Ja '14
- On a species of chlamydomonas. F. E. Fritsch and H. Takeda. *Ann Bot* 30:373-7 Jl '16
- On axial abscission in impatiens sultani as the result of traumatic stimuli. R. A. Gortner and J. A. Harris. *Am J Bot* 1:48-50 Ja '14
- On carteria Fritschii, sp. nov. H. Takeda. *il Ann Bot* 30:369-72 Jl '16
- On cell-generation in botrytis cinerea. W. B. Briery. *il Ann Bot* 32:601-4 O '18
- On stigeosporium marattiacearum and the mycorrhiza of the marattiaceae. C. West. *bibliog il Ann Bot* 31:77-99 Ja '17
- On the life-history and cytology of chlorochytrium grande, sp. nov. B. M. Bristol. *il Ann Bot* 31:107-26 Ja '17
- On the mechanism of translocation in plant tissues; an hypothesis with special reference to sugar conduction in sieve-tubes. S. Mangham. *Ann Bot* 31:293-311 Ap '17
- On the partial sterility of nicotiana hybrids made with n. sylvestris as a parent; an account of the mode of floral abscission in the F<sub>1</sub> species hybrids. T. H. Goodspeed and J. N. Kendall. *bibliog Cal Univ Pub Botany v 5,no 10 293-3p '16 (5c)*
- Origin of the endodermis in the stem of hippuris. K. Barratt. *Ann Bot* 30:91-9 Ja '16
- Pyrenoid of anthoceros. F. McAllister. *bibliog il Am J Bot* 1:79-95 F '14
- Relation between oxidase and catalase in plant tissues. G. E. Reed. *Bot Gaz* 62:409-12 N '16
- \* Scalariform pitting a primitive feature in angiospermous secondary wood. F. B. H. Brown. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:16-18 Jl 5 '18
- Structure of the cytoplasm in the cells of alicularia scalaris. Cord. M. P. Rivett. *bibliog il Ann Bot* 32:207-14 Ap '18
- Studies in permeability; the absorption of acids by plant tissue. M. Hind. *bibliog Ann Bot* 30:223-38 Ap '16
- Studies in permeability; the action of various organic substances on the permeability of the plant cell, and its bearing on Czapek's theory of the plasma membrane. W. Stiles and Ingvar Jorgensen. *bibliog Ann Bot* 31: 47-76 Ja '17
- Studies in permeability; the swelling of plant tissue in water and its relation to temperature and various dissolved substances. W. Stiles and Ingvar Jorgensen. *bibliog il Ann Bot* 31:415-34 Jl '17
- Studies in the permeability of the pulvinus of mimosa pudica. V. H. Blackman and S. G. Paine. *bibliog Ann Bot* 32:69-85 Ja '18

**Plant cells and tissues—Continued**

- Studies of protoplasmic permeability by measurement of rate of shrinkage of turgid tissues; the influence of temperature on the permeability of protoplasm to water. E. M. Delf. *Ann Bot* 30:283-310 Ap '16
- Studies on exosmosis. S. C. Brooks. *bibliog Am J Bot* 3:483-92 N '16
- Studies on nuclear division in desmids; *hyalothea dissiliens* (Sm.) Bréb. E. Acton. *il Ann Bot* 30:379-82 Jl '16
- Study of permeability by the method of tissue tension. S. C. Brooks. *bibliog Am J Bot* 3: 562-70 D '16
- Wandering tapetal nuclei of *arisaema*. F. L. Pickett. *il Am J Bot* 3:461-9 O '16

**Photomicrographs**

- Life within the plant; photomicrographs by Florence G. Rogers. *il Country Life* 31:64 D '16

**Plant chemistry.** See Plants, Chemical analysis of

**Plant diseases.** See Plants—Diseases and pests

**Plant fluids.** See Sap

**Plant fumigation**

- New tent-frame for plant fumigation. P. J. Wester. *il Philippine Ag R* 9,no 4:354-6 '16

**Plant geography.** See Botany—Ecology; Forest ecology; Geographical distribution of animals and plants

**Plant growth.** See Growth (plants); Soils and plant growth

**Plant introduction**

- Adding to our economic flora. J. W. Poynton. *J Ag New Zealand* 15:267-75 N '17
- Annual catalogue of plant immigrants; many additions to our food plants. D: Fairchild. *il J Heredity* 8:500-8 N '17
- Arnold arboretum—what it is and does. C. S. Sargent. *il Gard M* 26:122-5 N '17
- Century of certificated plants introduced from China. E. H. Wilson. *Royal Hort Soc J* 42, pt 1:35-8 O '16
- China a fruitful field for plant exploration. F. N. Meyer. *il map U S Ag Yearbook* 1915: 205-24
- Chinese plants for America. D. Wylie. *il Country Life* 31:86b+- N '16
- Exclusion legislation and fruit tree production. V. B. Stewart. *Phyt* 8:360-4 Jl '18
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from January 1 to March 31, 1914. *il U S Ag B P I Inventory* 38:1-105 '17
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from April 1 to June 30, 1914. *il U S Ag B P I Inventory* 39:1-187 '17
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from July 1 to Sept. 30, 1914. *il U S Ag B P I Inventory* 40:1-110 '17
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from Oct. 1 to Dec. 31, 1914. *il U S Ag B P I Inventory* 41: 1-64 '17
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from January 1 to March 31, 1915. *il U S Ag B P I Inventory* 42:1-123 '18
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from April 1 to June 30, 1915. *il U S Ag B P I Inventory* 43:1-97 '18
- Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from July 1 to September 30, 1915. *il U S Ag B P I Inventory* 44:1-71 '18
- New Chinese trees and shrubs for the Pacific slope and other favored regions. E. H. Wilson. *il Gard M* 22:197-200 Ja '16
- New herbaceous plants from China. E. H. Wilson. *il Gard M* 23:226-9 My '16

New horticultural crops for our scant food supply. U. P. Hedrick. *Mass Hort Soc Trans* 1918,pt 1:51-64 '18

New plant immigrants. *Rural N Y* 75:197, 815, 1033 F 5, My 27, Jl 29 '16

New plants from China. *Gard Chron Am* 20: 278 Je '16

Plant-introduction gardens of the Department of agriculture. P. H. Dorsett. *il U S Ag Yearbook* 1916:135-44; Same, Separate 687

Plant introduction opportunities open to all the Americas. D: Fairchild. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 503-10) '17

Seeds and plants imported into United States. 1913. *Int R Sci & Prac Ag* 7,no 4:523-5 Ap '16

Seeds and plants introduced into the United States by the Bureau of plant industry of the Department of agriculture during the second half of 1913. *Int R Sci & Prac Ag* 8,no 1:34-42 Ja '17

Some of the broader phytopathological problems in their relation to foreign seed and plant introduction. B. T. Galloway. *Phyt* 8: 87-97 Mr '18

Two Peruvian root crops. *Rural N Y* 75:1053 Ag 5 '16

See also Agricultural exploration

**Plant juices.** See Sap

**Plant lice**

- African aphididae. F. V. Theobald. *Int R Sci & Prac Ag* 9,no 4:521-2 Ap '18
- Alternation of hosts in economic aphids. W. M. Davidson. *bibliog J Econ Entom* 11:289-93 Je '18
- Ants and aphids. *il J Heredity* 8:363-5 Ag '17
- Aphid eggs in Texas. H. C. Yingling. *J Econ Entom* 10:223 F '17
- Aphid of choke cherry and grain. E. M. Patch. *il Maine Ag Exp B* 267:293-7 '17; Same. *Maine Ag Exp Rep* 1917:293-7
- Aphides and their eggs. J. G. Blakey. *il Gard Chron (Lond)* 60:275, 294-5 D 9-16 '16
- Aphides or plant lice. N. R. Elliott. *il Ky Ag Ext C* 57:1-8 '18
- Aphididae of California; new species of aphididae and notes from various parts of the state, but chiefly from the campus of the University of California. E. O. Essig. *Cal Univ Pub Entomology* v 1, no 7 301-46p *il* '17 (45c)
- Aphidoletes meridionalis, an important dipterous enemy of aphids. J: J. Davis. *il J Ag Research* 6:883-8 S 4 '16
- Aphids injurious to orchard fruits, currant, gooseberry and grape. A. L. Quaintance and A. C. Baker. *il Farmers' B* 804:1-42 '17
- Aphis bakeri and some allied species. C. P. Gillette and L. C. Bragg. *J Econ Entom* 11:328-33 Je '18
- Aphis on farm crops. E. B. Stookey. *Western Wash Ag Exp B* v 6:49-51 Jl '18
- Aphis parasite feeding at puncture holes made by the ovipositor. L. P. Rockwood. *J Econ Entom* 10:415 Ag '17
- California green lacewing fly. V. L. Wildermuth. *bibliog il J Ag Research* 6:515-25 Jl 3 '16
- Cat-tail rush, *typha latifolia*, as a summer host of injurious insects. W. M. Davidson. *il Cal State Comm Hort B* v 6:64-5 F '17
- Catalogue and host list of the anoplura. G. F. Ferris. (*Pro.* v. 6, no. 6) 129-213p 50c '16
- California academy of sciences, San Francisco
- Control of plant lice in the vegetable garden. H. D. Brown. *il Ill Ag Exp C* 227:1-4 '18
- Controlling aphid on lettuce. *Market Growers J* 22:149 F 15 '18
- Controlling plant lice. *Market Growers J* 21: 96 S 1 '17
- Controlling plant lice. O Judd *Farmer* 64:513 My 11 '18
- Development of the phylloxera vastatrix leaf gall. H. R. Rosen. *bibliog il Am J Bot* 3: 337-60 Jl '16
- Eastern aphids: a few species of prociphilus; and aphid food plant catalogue, including plants from the rose family to the parsley family. E. M. Patch. *il Maine Ag Exp B* 270:45-100 '18



**Plant lice—Continued**

- Eastern aphids, new or little known. E. M. Patch; A. C. Baker. bibliog J Econ Entom 10:416-33 Ag '17
- Economic syrphidae in California. W. M. Davidson. J Econ Entom 9:454-7 O '16
- Further data on the relation between aphids and fire blight (bacillus amylovorus bur. Trev.) J. H. Merrill. il J Econ Entom 10: 45-6 F '17
- Further studies of the embryology of toxoptera graminum. W. J. Phillips. il J Ag Research 4:403-4 Ag '15
- Further studies of the mosaic disease of tobacco. H. A. Allard. il J Ag Research 10: 615-32 S '17
- Habits of some common plant lice. C. P. Gillette. il Cal State Comm Hort B v 6:59-63 F '17
- Honeydew—its origin. J. A. Heberle. Am Bee J 56:381 N '16
- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16, no 26:109-12 '16
- Life-history and feeding records of a series of California coccinellidae. C. P. Clausen. Cal Univ Pub Entomology v 1, no 6 251-99p '16 (50c)
- Life history of pemphigus populi-transversus. T. H. Jones. bibliog il J Ag Research 14: 577-94 S 23 '18
- Migratory habits of Myzus ribis (Linn.). C. P. Gillette and L. C. Bragg. il J Econ Entom 10:338-40 Je '17
- Peculiarities of the destructive plant lice, or aphids. A. L. Melander. il Better Fruit 10: 16+ Mr '16
- Plant lice and honeydew. B. N. Gates. Am Bee J 57:346 O '17
- Plant lice and their control. I. C. Mead. Purdue Ag 12:567-8 Je '18
- Plant lice or aphids. H. A. Gossard. il Ohio Ag Exp B v 1:108-14 Ap '16
- Potato plant lice and their control. W. S. Regan. Mass Ag Exp B 177:135-46 '17
- Problems in aphid ecology. E. M. Patch. J Econ Entom 9:44-50 F '16
- Relation between aphid infestation and blight infection. J. H. Merrill. Am Bee J 56:202 Je '16
- Scourge of plant lice. J. S. Houser. Ohio F 140:59 Jl 28 '17
- Some ladybird beetles destructive to plant lice. W. A. Ross. il Ag Gaz of Canada 5:344-7 Ap '18
- Spraying for aphids in the orchard. U. S. Safford. il Ill State Hort Soc Trans 1916:504-16 '17
- Studies on the morphology and susceptibility of the eggs of aphid avenae Fab., aphid pomi DeGeer, and aphid sorbi Kalt. A. Peterson. J Econ Entom 10:556-60 D '17
- Texas aphid notes. F. B. Paddock. J Econ Entom 11:29-32 F '18
- True nature of spinach-blight and relation of insects to its transmission. J. A. McClintock and L. B. Smith. il J Ag Research 14:1-60 Jl 1 '18
- See also Apple aphid; Black cherry aphid; Box elder aphid; Cabbage lice; Clover aphid; Corn root lice; English grain aphid; Grapevine aphid; Melon aphid; Oat aphid; Peach aphid; Phylloxera; Plum aphid; Plum aphid, Mealy; Potato aphid; Rose aphid; Spring grain aphid; Sugar beet root-lice; Walnut aphid; Wheat aphid; Woolly aphid

**Plant lice, Jumping**

- Tomato and laurel psyllids. E. O. Essig. bibliog il J Econ Entom 10:433-44 Ag '17

**Plant lore**

- Holly lore. H. Wilbur. Catholic World (120-122 W. 60th st, N.Y. 25c) 106:346-9 D '17
- Magic plants of ancient Americans. W. E. Safford. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:123 F 24 '17

See also Bible plants

**Plant models**

- Wax modeling from nature. P. Collins. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:248-50 Ap 20 '18

**Plant morphology. See Botany—Morphology**

**Plant names, Popular**

- Common names of plants. W. C. Egan. Gard Chron Am 20:127-9 Mr '16
- Common plant names. M. Armstrong. Science (Science Press, Garrison, N.Y. 15c) n s 46: 362 O 12 '17
- Onlooker's thoughts about plant names. F. A. Wilson. Gard M 25:97-8 Mr '17
- Plant names. P. J. Wester. Philippine Ag R 10, no 1:55-63 '17
- Popular names of North American plants. J. Adams. Science (Science Press, Garrison, N.Y. 15c) n s 45:114-15 F 2 '17
- Popular names of North American plants. O. A. Stevens. Science (Science Press, Garrison, N.Y. 15c) n s 45:502 My 25 '17
- Popular names of plants. M. A. Bigelow. Science (Science Press, Garrison, N.Y. 15c) n s 46:16-17 Jl 6 '17
- Vernacular names of plants. W. N. Clute. Gard Chron Am 22:122-3 Ap '18
- Vernacular names of Victorian plants. A. J. Ewart. J Dept Ag Victoria 14:55-8, 180-6, 240-3, 499-502 Ja, Mr-Apr, Ag '16

**Plant pathology. See Plants—Diseases and pests**

**Plant physiology. See Botany—Physiology**

**Plant propagation**

- Agency of fire in propagation of longleaf pines. E. F. Andrews. il Bot Gaz 64:497-508 D '17
- Bud variation. A. D. Shamel. il J Heredity 7:82-7 F '16
- Chrysanthemums; propagating. C. W. Johnson. Am Flor 43:507 Mr 24 '17
- Comparative value of pedigree plants. C. B. Waldron. Minn Hort 45:135-7 Mr '17
- Flower garden; propagating. R. P. Brotherton. Gard Chron (Lond) 63:45 F 2 '18
- Grow your own trees. C. C. Wiggins. il Country Gent 83:46 Ja 19 '18
- Growing pedigreed trees; records will show those worthy of propagation. A. D. Shamel. il Country Gent 83:24 F 23 '18
- Growing plants as a greenhouse side line; symposium. Market Growers J 18:84+ F 1 '16
- How small fruits are propagated. Fruit-Grower 27:216 Mr 15 '16
- How to propagate currants. O Judd Farmer 60:21 Mr 4 '16
- How to propagate muscadine grapes. L. A. Niven. Prog F 33:1236 N 9 '18
- Intensive propagation of potatoes. il Gard Chron (Lond) 60:289 D 16 '16
- Methods used in the propagation of plants. T. D. Hatfield. Mass Hort Soc Trans 1916, pt 1:89-102 '16
- Nursery. L. Darling. J Dept Ag S Australia 21:354-9 N '17
- Points on plant growing. L. B. Pierce. Market Growers J 18:247 Ap 1 '16
- Propagating boxwood. Rural N Y 76:921 Jl 28 '17
- Propagating by cuttings. W. H. Jenkins. il Ohio F 142:430 N 2 '18
- Propagating grapes. W. E. Wiecking. Ohio F 138:282 S 23 '16
- Propagating plants by cuttings and layers. M. M. Wright. Ohio F 137:439 Mr 18 '16
- Propagating shrubs. A. D. Turner. Gard Chron (Lond) 61:3 Ja 6 '17
- Propagating the rose. Am Flor 48:230 F 17 '17
- Propagation and pruning of plants; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 63) 12p '17 U. S. States relations service, Washington, D. C.
- Propagation by cuttings. G. Dyke. Gard Chron (Lond) 59:176 Mr 25 '16
- Propagation by soft cuttings. Gard Chron (Lond) 59:78 F 5 '16
- Propagation of shrubs. E. O. Orpet. Am Flor 47:276 Ag 19 '16
- Propagation of vegetable crops. A. J. Pinn. il Ag Gaz of New South Wales 27:801-6 N '16
- Raising ferns from spores. Gard Chron Am 22:196 Jl '18
- Rose; propagating. Am Flor 50:6 Ja 19 '18
- Running out of varieties. C. B. Waldron. il Minn Hort 44:394-9 O '16
- Shield budding of coffee. P. J. Wester. Philippine Ag R 9, no 4:337-8 '16

**Plant propagation—Continued**

- Some observations on bud selection. A. D. Shamel. *il Rural N Y* 77:311 Mr 2 '18  
Sports from root cuttings. *Gard Chron (Lond)* 61:50 F 3 '17  
Starting plants in the greenhouse. C. W. Waid. *Market Growers J* 18:126 F 15 '16  
Stimulation of root growth in cuttings by treatment with chemical compounds. O. F. Curtis. *biblog il Cornell Ag Exp Memoir* 14:75-138 '18

See also Grafting; Plant breeding; Seeds

**Plant protection**

- Garden movies, no. 9; conservation by timely steps to outwit early frost. *il Gard M* 28:43 S '18

**Plant sociology**

- Effect of one plant on another. S. Pickering. *il Ann Bot* 31:181-7 Ap '17; Same. *Ag J of India* 13:86-94 Ja '18  
New science of plant sociology. R. M. Harper. *Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 4:456-60 My '17

**Plant tissues. See Plant cells and tissues****Plant transpiration. See Plants—Transpiration****Plantago**

- On the proliferous form of the scape of plantago lanceolata. J. Doyle. *il Ann Bot* 30:353-5 Ap '16

**Plantain**

- Irrigation of plantains. R. J. D. Graham. *Ag J of India* 12:492-4 Jl '17

**Diseases and pests**

- Spraying for ripe-rot of the plantain fruit. Jehangir Fardunji Dastur. *il Ag J of India* 11:142-9 Ap '16

**Plantations. See Agriculture—Southern states****Planters (machines)**

- Machine transplanters. C. Weckesser. *Rural N Y* 77:719 My 25 '18  
Planters and seeders. E. F. Cauthen. *il Prog F* 32:122 F 3 '17  
Planters that save money. *il Prog F* 32:134 F 3 '17  
Planting cabbage by machine. M. A. Turpin. *Rural N Y* 77:351 Mr 2 '18

See also Strawberry planters

**Planting. See Forest planting; Gardening; Landscape gardening; Transplanting; Tree planting****Plants**

- Green plants. *il Hoard's D* 50:800 Ja 7 '16  
How plants grow: work of roots, stems and leaves. B. L. Moss. *Prog F* 31:500 Ap 8 '16  
Notes on novelties and plants not well known. F. E. Buck. (*In Ontario horticultural societies, 11th annual report, 1916, p. 95-6*) '17  
Ontario ag. dept., Toronto, Canada  
\* On theories concerning soils as media for plant growth. C. E. Lipman. *School Sci and Math* (2059 E. 72d place, Chicago 30c) 18:686-97 N '18 (to be cont)  
Plant families. Wallaces' F 41:1100 Ag 18 '16  
Plant warfare. W. E. Brenchley. *Gard Chron (Lond)* 59:293 Je 3 '16  
Staking growing plants. F. L. Wright. *Gard M* 23:36 F '16  
Trying out new plants. S. R. Duffy. *Gard M* 23:338 Jl '16  
What to do with frozen plants. *Gard Chron Am* 22:18 Ja '18

See also Alpine plants; Annuals (plants); Aquatic plants; Bible plants; Botany; Botany, Medical; Buds; Climbing plants; Color of plants; Desert vegetation; Fertilization of plants; Floriculture; Florists' plants; Flowers; Forcing (plants); Gardening; Geotropism; Glands (botany); Growth (plants); Herbs; Honey plants; House plants; Insectivorous plants; Leaves; Narras plant; Nature study; Paleobotany; Perennials; Pitcher plants; Poisonous plants; Roots; Seeds; Shrubs; Sterility in plants; Tropical plants; Weeds; also headings beginning Plant and Plants

**Anatomy**

See Botany—Anatomy

**Bibliography**

- Fruits; publications relating to culture of fruits, vegetables, grain, grasses, and seeds, for sale by the Superintendent of documents, Washington, D.C. (Price list 44—10th ed) 44p '18 Supt. of doc., Washington, D.C.

**Breeding**

See Plant breeding

**Chemistry**

See Botanical chemistry

**Classification**

See Botany—Classification

**Collection and preservation**

- Collecting tree and flower specimens. R. W. Shufeldt. *il Am For* 23:169-70 Mr '17  
On the preservation of phytopathological specimens in their natural colors. O. Butler. *Phyt* 8:66-8 F '18  
Preparation of material for field crops laboratory. W. O. Whitcomb. *il Am Soc Agron J* 8:38-41 Ja '16  
Preservation of natural color in plants. A. B. Rendle. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:423 D 30 '16  
W. H. Fowler, plant wonder-worker. *Illustrated World (Drexel av. and 58th st., Chicago 15c)* 27:136 Mr '17

**Composition**

- Action of certain organic substances in plants. G. Ciamician and C. Ravenna. *Int R Sci & Prac Ag* 8,no 12:1202-4 D '17  
Determination of phytin phosphorus in plant products. J. B. Rather. *Ark Ag Exp B* 135: 1-15 '17  
Relation of some of the rarer elements in soils and plants. W. O. Robinson and others. *biblog plans U S Ag B* 600:1-25 '17  
Researches on the method used for determining the water-content and the dry matter in vegetable products. A. N. Lebedianzev and G. I. Zalyguine. *Int R Sci & Prac Ag* 8,no 3:350-3 Mr '17  
Specificity of proteins and carbohydrates in relation to genera, species and varieties. E. T. Reichert. *Am J Bot* 3:91-8 Mr '16

See also Phosphorus in plants

**Diseases and pests**

- Annual report of Horticulture branch; diseases of plants. *J Bd Ag* 24:146-54 My '17  
Bacterial diseases of plants. D. H. Jones. *il Ontario Ag Dept B* 265:69-99 '18  
Causation of variegated leaves. *il Gard Chron Am* 20:22-3 Ja '16  
Celluloid cylinders for inoculation chambers. E. E. Hubert. *il Phyt* 6:447-50 D '16  
Common insects and plant diseases of the farm, garden and orchard. W. E. Rumsey. *il W Va Ag Dept B* 17:1-37 '16  
Conduction of potassium cyanide in plants. J. A. Elliott. *il Phyt* 7:443-8 D '17  
Control of diseases of farm crops. H. L. Bolley. *N D Ag Ext C* 14:1-4 '18  
Control of experimental conditions in phytopathological research. A. A. Potter. *Phyt* 6:81-8 F '16  
Control of insect pests and plant diseases (B. 283). *il Cornell Ag Exp Rep* 1917:435-70 '18  
Decree regarding the organization of the phytopathological service in Italy; Decree regulating the importation of living plants, portions of plants, seeds and other plant products in Italy. *Int R Sci & Prac Ag* 8,no 7:1054-6 Jl '17  
Diseases of ornamental plants. D. C. Babcock. *il Ohio Ag Exp B v* 2:323-8 O '17  
Diseases of the year. *Porto Rico Insular Exp Rep* 1916-1917:93-8 '17  
Fungi and disease in plants. by E. J. Butler. Review by G. A. Gammie. *Ag J of India* 13:666-70 O '18



**Plants—Diseases and pests—Continued**

- Fungi, insects and animals injurious to cultivated plants in Norway in 1916. J. H. Schöyen. *Int R Sci & Prac Ag* 9,no 4:514-17 Ap '18
- Garden pests. *Weekly N L* 4:6 Ap 25 '17
- How some of our common plant diseases and insect pests pass thru the winter, and what can be done towards controlling them at that time. A. Frank. *Western Wash Ag Exp B v* 6:96-9 O '18
- How to fight plant diseases. H. R. Fulton. *Prog F* 32:224 F 17 '17
- Influence of meteorological factors on the development of plant diseases. G. I. Dorogin. *Int R Sci & Prac Ag* 7,no 4:608-9 Ap '16
- Injury caused to vegetation in grounds near ironworks at Terni, Italy. G. Ampola and A. Vivenza. *Int R Sci & Prac Ag* 7,no 5:746-7 My '16
- Insect problems of the florist. T. J. Headley. *Am Flor* 47:294 Ag 26 '16
- Insects injurious to cultivated plants in the Nyassaland Protectorate. C. Mason. *Int R Sci & Prac Ag* 7,no 5:763-4 My '16
- International phytopathology. O. Appel. *Phyt* 6:55-63 F '16
- Intumescentes, with a note on mechanical injury as a cause of their development. F. A. Wolf. *bibliog il J Ag Research* 13:253-60 Ap 22 '18
- Laying the bugaboo of disease. W. H. Rankin. *maps Gard M* 27:28-9 F '18
- Lightning injury to herbaceous plants. L. R. Jones and W. W. Gilbert. *il Phyt* 8:270-82 Je '18
- Manual of dangerous insects likely to be introduced in the United States through importations. W. D. Pierce. 256p il '18 U S Ag Market pathology; a new phase of plant disease work. E. H. Toole. *il Purdue Ag* 13: 62-3 N '18
- Minutes of the war emergency board of American plant pathologists. G. R. Lyman. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:210-13 Mr 1 '18
- Natural immunity or resistance of plants to insect attack. R. C. Treherne. *Ag Gaz of Canada* 4:855-9 O '17
- Need for organization of American botanists for more effective prosecution of war work. G. R. Lyman. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:279-85 Mr 22 '18
- 9th annual report for the year ending June 30, 1917. 68p il '17 Arizona Comm. of ag. and horticulture, Phoenix
- Notes on Michigan plant diseases in 1916. G. H. Coons. *Mich Ag Bd Rep* 1917:310-17
- Noteworthy Porto Rican plant diseases. F. L. Stevens. *Phyt* 7:130-4 Ap '17
- Nursery inspection: the importance of legislation against crop pests. H. B. Weiss. *il map N J Ag Dept B* 2:53-64 '16
- Orchard and garden pests. J. G. Sanders. *Prac F* 114:220 Je 15 '18
- Origin and dissemination of disease in cultivated plants. *Gard Chron (Lond)* 60:220 N 4 '16
- Parasitic rhizoctonias in America. G. L. Pel-tier. *bibliog il J Ag Exp B* 189:283-290 '16
- Pathology of ornamental plants. M. T. Cook. *Bot Gaz* 61:67-9 Ja '16
- Perennial mycelium in species of peronosporaceae related to phytophthora infestans. I. E. Melhus. *bibliog il J Ag Research* 5: 59-70 O 11 '15
- Phytopathological work in the tropics. J. R. Johnston. *Phyt* 6:381-6 O '16
- Plant diseases. F. C. Stewart and M. F. Barrus. *N Y Ag Dept B* 86:2426-31 Ag '16
- Plant diseases and the remedies for them. *Prog F* 31:215 F 12 '16
- Plant diseases in crop production. C. R. Orton. *Penn State F* 11:273+ F '18
- Plant diseases in England and Wales, 1914-15. *J Bd Ag* 22:931-9 Ja '16
- Plant diseases in Virginia in 1915 and 1916. F. D. Fromme. *il Va Ag Exp Rep* 1915-1916: 187-92 '17
- Plant diseases: interesting facts about their control. F. A. Wolf. *Prog F* 31:1364 N 25 '16
- Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473—A) 59p il 50c '18 Am ry. perishable freight assn., 135 E. 11th place, Chicago
- Plant diseases vs. national wealth. H. T. Güssow. *Ag Gaz of Canada* 3:211-13 Mr '16
- Plant doctor in the flower garden. F. D. Heald. *Gard M* 28:144-6 D '18
- Plant pathology of to-day. C. L. Shear and N. E. Stevens. *Sci Monthly (Science Press, Garrison, N.Y. 30c)* 7:235-43 S '18
- Plant pests and diseases. *Am Flor* 50:675 Ap 20 '18
- Potash and plant diseases. *Better Fruit* 12: 16 D '17
- Presence of nitrites and ammonia in diseased plants. P. A. Bonquet and M. Bonquet. *Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.)* 38:2572-6; 39:2088-93 N '16, S '17; Same cond. *Int R Sci & Prac Ag* 8,no 11:1083-5 N '17
- Problems and progress in plant pathology. L. R. Jones. *Am J Bot* 1:97-111 Mr '14
- Problems of plant pathology. F. L. Stevens. *Bot Gaz* 63:297-306 Ap '17
- Producing disease-resistant plants. *il Field* 11 27:360-1 My '17
- Program for reducing crop losses from plant diseases and insect pests. A. R. Mann. (B. 3) p. 7-9 (Je 9) '17 New York State food supply commission, Albany
- Progress in control of plant diseases. R. E. Vaughan. *Wis Hort Soc Rep* 48:179-86 '18
- Prophylaxis in vegetable pathology. O. Comes. *Int R Sci & Prac Ag* 7,no 8:1205-10 Ag '16
- Relation of phytopathologists to plant disease survey work. G. R. Lyman. *Phyt* 8:219-28 My '18
- Report of committee on plant diseases. F. C. Stewart. *N Y State Fruit Growers' Assn Pro* 1916:33-8
- Report of the department of plant pathology. *N J Ag Exp Rep* 1916:561-625 '17
- Report of the Federal horticultural board for the fiscal year ending June 30, 1917. 16p '17 U S Ag
- Routing our common foes. L. Melish. *Gard M* 25:326 Jl '17
- Save us from invading pests. J. G. Sanders. *il map Am For* 23:147-53 Mr '17
- Seed and soil treatments for plant diseases. J. G. Humbert. *Ohio Ag Exp B v* 1:43-6 F '16
- Selection of plants resistant to diseases, animal pests and adverse meteorological conditions. E. Molz. *Int R Sci & Prac Ag* 9,no 5:554-8 My '18
- Some diseases of economic plants in Porto Rico. L. E. Miles. *il Phyt* 7:345-51 O '17
- Some of the broader phytopathological problems in their relation to foreign seed and plant introduction. B. T. Galloway. *Phyt* 8:87-97 Mr '18
- Speeding up the plant doctors. H. R. O'Brien. *il Country Gent* 83:11+ Ag 24 '18
- Spray calendar. *il Conn State Ag Exp B* 199: 51-98 '18
- Studies in the physiology of parasitism. W. Brown. *J Bd Ag* 23:474-8 Ag '16
- Studies in the physiology of parasitism; infection by botrytis cinerea. V. H. Blackman and E. J. Welsford. *bibliog il Ann Bot* 30:389-98 Jl '16
- Studies in the physiology of parasitism; on the distribution of cytochrome in cultures of botrytis cinerea. W. Brown. *Ann Bot* 31: 489-98 Jl '17
- Studies in the physiology of parasitism; on the relation between the infection drop and the underlying host tissue. W. Brown. *Ann Bot* 30:399-406 Jl '16
- Susceptibility of non-citrus plants to bacterium citri. R. A. Jehle. *il Phyt* 7:339-44 O '17
- To extend disease control in cotton, truck and forage. *Weekly N L* 5:11 My 29 '18
- Toxicity of galactose and mannose for green plants and the antagonistic action of other sugars toward these. L. Knudson. *il Am J Bot* 4:430-7 Jl '17
- Treatment of fungoid diseases on estates. R. D. Anstead. *Ag J of India* 13:95-104 Ja '18

**Plants—Diseases and pests—Continued**

Ultra-microscopic parasites of plants. Gard Chron (Lond) 60:136 S 16 '16

United States dumping ground for pests. Ag Digest 2:759 D '17

Vegetable parasites of cultivated or useful plants observed in 1913 in the government of Tula, Russia. J. Trudov. Int R Sci & Prac Ag 7,no 6:887-90 Je '16

See also Crown gall; Dry rot; Fungi; Galls (botany); Horticultural inspection; Insects, Injurious and beneficial; Mosaic disease; Parasitic plants; Rusts; Sordago; Spraying and dusting; Wilt disease; also subdivision Diseases and pests under special subjects, e.g. Fruit—Diseases and pests, Grain—Diseases and pests, Trees—Diseases and pests; also American phytopathological society, Quebec society for the protection of plants

**Bibliography**

Literature on plant diseases. E. R. Oberly and F. P. Smith. See monthly numbers of Phytopathology

**Dissemination**

Dissemination of the angular leafspot of cotton. R. C. Faulwetter. bibliog J Ag Research 8:457-75 Mr 19 '17

Role of insects in the dissemination of fire blight bacteria. V. B. Stewart and M. D. Leonard. Phyt 6:152-8 Ap '16

True nature of spinach-blight and relation of insects to its transmission. J. A. McClintock and L. B. Smith. il J Ag Research 14: 1-60 Jl 1 '18

Wind-blown rain, a factor in disease dissemination. R. C. Faulwetter. J Ag Research 10:639-48 S 17 '17

See also Fungi—Dissemination of spores

**Exhibits**

Exhibits of plant diseases and insect pests. J. W. Eastham. Ag Gaz of Canada 5:51 Ja '18

**Laws**

Maladies des plantes; herbes et animaux nuisibles à l'agriculture. Int Yearbook Ag Leg 1916:853-89 '17

**Study and teaching**

Plant pathology and the vocational teacher. C. H. Werkman. Purdue Ag 12:572 Je '18

**Ecology**

See Botany—Ecology

**Fertilization**

See Fertilization of plants

**Fumigation**

See Plant fumigation

**Geographical distribution**

See Geographical distribution of animals and plants

**Growth**

See Growth (plants)

**Iron content**

Immobility of iron in the plant. P. L. Gile and J. O. Carrero. bibliog J Ag Research 7:83-7 O 9 '16

Occurrence of haematoid compounds of iron in plants. Int R Sci & Prac Ag 7,no 1:52 Ja '16

**Mineral content**

Part played by mineral elements in plant life. M. A. Egorov. Int R Sci & Prac Ag 7,no 5:664-5 My '16

**Morphology**

See Botany—Morphology

**Nomenclature**

See Botany—Nomenclature; Plant names, Popular

**Nutrition**

See Plants, Nutrition of

**Pathology**

See Plants—Diseases and pests

**Physiology**

See Botany—Physiology

**Propagation**

See Plant propagation

**Respiration**

See Plants, Respiration of

**Translocation**

See Translocation

**Transpiration**

Automatic transpiration scale of large capacity for use with freely exposed plants. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 5:117-32 O 18 '15

Comparative transpiration of corn and the sorghums. E. C. Miller and W. B. Coffman. il J Ag Research 13:579-604 Je 10 '18

Comparison of the hourly evaporation rate of atmometers and free water surfaces with the transpiration rate of medicago sativa. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 9:277-92 My 28 '17

Daily transpiration during the normal growth period and its correlation with the weather. L. J. Briggs and H. L. Shantz. il J Ag Research 7:155-212 O 23 '16; Summary. Int R Sci & Prac Ag 8,no 2:216-18 F '17

Daily variation of water and dry matter in the leaves of corn and the sorghums. E. C. Miller. il J Ag Research 10:11-46 Jl 2 '17

Determination of wilting. A. L. Bakke. bibliog Bot Gaz 66:81-116 Ag '18

Hourly transpiration rate on clear days as determined by cyclic environmental factors. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 5:583-650 Ja 3 '16

Index of foliar transpiring power as an indicator of permanent wilting in plants. Int R Sci & Prac Ag 7,no 1:56 Ja '16

Influence of Bordeaux mixture on the rates of transpiration from abscised leaves and from potted plants. W. H. Martin. bibliog J Ag Research 7:529-48 D 18 '16

Interrelations of stomatal aperture, leaf water-content, and transpiration rate. R. C. Knight. bibliog Ann Bot 31:221-40 Ap '17

Method of controlling the rate of air movement in transpiration experiments. V. H. Blackman and R. C. Knight. Ann Bot 31: 217-20 Ap '17

On the reduction of transpiration observations. N. Thomas and A. Ferguson. Ann Bot 31:241-55 Ap '17

Physiological water requirement and the growth of plants in glycolic solutions. A. Dachnowski and R. Gormley. bibliog Am J Bot 1:174-85 Ap '14

Relation of transpiration to assimilation in steppe plants. V. S. Hjin. Int R Sci & Prac Ag 8,no 1:48-50 Ja '17

Relative transpiration as a measure of the intrinsic transpiring power of the plant. R. C. Knight. bibliog Ann Bot 31:351-9 Jl '17

Some abnormal water relations in citrus trees of the arid southwest and their possible significance. R. W. Hodgson. Cal Univ Pub Ag Sci v 3,no 3 37-54p, pl 12 '17 (20c)

Transpiration and the ascent of sap in plants. For Quar 14:476-83 S '16

Transpiration as a factor in crop production. T. A. Kieselbach. bibliog il Neb Ag Exp Research B 6:1-214 '16

Transpiration studies. G: D. Fuller. Bot Gaz 61:531-4 Je '16

Transpiration studies. G: D. Fuller. Bot Gaz 63:326-9 Ap '17

See also Stomata

**Africa**

British East Africa. J. H. Cameron. Gard Chron (Lond) 60:253 N 25 '16

**Australia**

Fragments of the flower biology of West-Australian plants. O. H. Sargent. Ann Bot 32: 215-31 Ap '18

Very peculiar Australian plants. W. K. Putney. O Judd Farmer 60:29 F 12 '16



Plants—Continued

Brazil

Wild oil plants of Para, Brazil. *Int R Sci & Prac Ag* 7,no 8:1116-17 Ag '16

California

Gardener in California. E. O. Orpet. *Gard Chron Am* 21:91 Mr '17

Chile

Plants indigenous to Chile which are cultivated, capable of cultivation, or useful. K. Reiche. *Int R Sci & Prac Ag* 7,no 5:656-9 My '16

China

Century of certificated plants introduced from China. E. H. Wilson. *Royal Hort Soc J* 42,pt 1:35-8 O '16

China a fruitful field for plant exploration. F. N. Meyer. *il map U S Ag Yearbook* 1915: 205-24

Chinese plants for America. D. Wylie. *il Country Life* 31:86b+ N '16

Economic botanical explorations in China. F. N. Meyer. *Mass Hort Soc Trans* 1916, pt 1:125-30 '16

New Chinese trees and shrubs for the Pacific slope and other favored regions. E. H. Wilson. *il Gard M* 23:197-200 Ja '16

New herbaceous plants from China. E. H. Wilson. *il Gard M* 23:226-9 My '16

New plants from China. *Gard Chron Am* 20: 278 Je '16

Plants from China. *Wallaces' F* 41:235 F 11 '16

Colombia

Useful plants found in the Colombian republic, Central America. J. E. Bravo. *Int R Sci & Prac Ag* 8,no 6:845-8 Je '17

Galapagos islands

Floral relations among the Galapagos islands. A. L. Kroeber. *Cal Univ Pub Botany* v 6, no 9 199-220p '16 (20c)

Great Britain

Lizard on a morning in June. J. Hutchinson. *Gard Chron (Lond)* 62:31 Jl 23 '17

Hawaiian Islands

Food plants of the ancient Hawaiians. V. MacCaughy. *Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 4:75-80 Ja '17

Italy

Décret n. 723 de la lieutenantance approuvant le règlement y annexé pour l'exécution de la loi du 26 juin 1913, n. 888 (1) concernant des mesures visant à prévenir et à combattre les maladies des plantes. *Int Yearbook Ag Leg* 1916:875-87 '17

Japan

Letters from Japan. E. H. Wilson. *Gard Chron (Lond)* 62:57, 137 Ag 31, O 6 '17

Vegetation of the Liu-kiu islands. *Gard Chron (Lond)* 61:249 Je 23 '17

Mesopotamia

Mesopotamian calendar. F. K. Ward. *il Gard Chron (Lond)* 63:252 Je 22 '18

New Zealand

Adding to our economic flora. J. W. Poynton. *J Ag New Zealand* 15:267-75 N '17

Peru

Two Peruvian root crops. *Rural N Y* 75:1053 Ag 5 '16

Philippine islands

Food plants of the Philippines. P. J. Wester. *il Philippine Ag R* 9,no 3:150-256 '16

New or noteworthy tropical fruits in the Philippines. P. J. Wester. *il Philippine Ag R* 10, no 1:8-23 '17

Porto Rico

Some diseases of economic plants in Porto Rico. L. E. Miles. *il Phyt* 7:345-51 O '17

Siberia

Some new plants at home and abroad. N. E. Hansen. *il Minn Hort* 46:229-34 Je '18

United States

Plants and animals of the Atlantic and gulf states. R. W. Shufeldt. *Am For* 23:743-7 D 17

Plea for the preservation of our native plants. L. P. Jensen. *Gard Chron Am* 22:147-9 My '18

Plants, Assimilation of

Liebig's law of the minimum in relation to general biological problems. H: D. Hooker, jr. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:197-204 Ag 31 '17

Plants, Carbohydrates in

Formation and translocation of carbohydrates in plants. J. S. Caldwell. *Bot Gaz* 66:277-84 S '18

On the mechanism of translocation in plant tissues; an hypothesis with special reference to sugar conduction in sieve-tubes. S. Mangham. *Ann Bot* 31:293-311 Ap '17

Plants, Chemical analysis of

Action of certain organic substances in plants. G. Ciamician and C. Ravenna. *Int R Sci & Prac Ag* 8,no 12:1202-4 D '17

Chemical composition of the plant as further proof of the close relation between antagonism and cell permeability. D. D: Waynick. *Cal Univ Pub Ag Sci* v 3,no 8 135-242p, 13-24pl '18 (\$1.25)

Chemical study of the asparagus plant. F. W. Morse. *Mass Ag Exp B* 171:265-96 '16

Cyanogenesis in plants, studies on tridens-flavus (tall red top). A. Viehoever and others. *Int R Sci & Prac Ag* 9,no 5:548-9 My '18

Estimation of sulfur in plant material and soil. G: A. Olson. *bibliog Wash Ag Exp B* 145:1-12 '17

Fluorine in the vegetable kingdom. A. Gautier and P. Clausmann. *Int R Sci & Prac Ag* 7,no 6:812-17 Je '16

Hydrolysis of the soluble protein of swede turnips. G. Williams. *J Ag Sci* 8:182-215 Mr '17

Methods of analysis of plant constituents. *Assn Offic Ag Chem J* 1,no 4,pt 2: 29-33 F '16

Microchemical studies in the progressive development of the wheat plant. S. H. Eckerson. *Wash Ag Exp B* 139:1-20 '17

Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the leaf and leaf stalks of the potato. W: A. Davis and G: C. Sawyer. *bibliog J Ag Sci* 7:352-84 F '16

Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the mangold leaf. W: A. Davis and others. *bibliog J Ag Sci* 7:255-326 F '16

Studies of the formation and translocation of carbohydrates in plants; the dextrose-laevulose ratio in the mangold. W: A. Davis. *J Ag Sci* 7:327-51 F '16

See also Botanical chemistry; Forage plants—Analysis

Plants, Climbing. See Climbing plants

Plants, Color of. See Color of plants

Plants, Effect of acid on

Effects of acid and alkaline solutions upon the water relation and metabolism of plants. A. Dachnowski. *bibliog Am J Bot* 1:412-39 O '14

Studies in permeability; the absorption of acids by plant tissue. M. Hind. *bibliog Ann Bot* 30:223-38 Ap '16

Plants, Effect of aldehydes on. See Salicylic aldehyde; Vanillin

Plants, Effect of aluminum on

Aluminum as a factor influencing the effect of acid soils on different crops. B. L. Hartwell and F. R. Pember. *Am Soc Agron J* 10: 45-7 Ja '18

Plants, Effect of boron on

Boron: its absorption and distribution in plants and its effect on growth. F. C. Cook. *bibliog J Ag Research* 5:877-90 F 7 '16

**Plants, Effect of boron on—Continued**

Boron: its effect on crops and its distribution in plants and soil in different parts of the United States. F. C. Cook and J. B. Wilson. bibliog J Ag Research 13:451-70 My '27 '18

Effect of three annual applications of boron on wheat. F. C. Cook and J. B. Wilson. bibliog J Ag Research 10:591-7 S '17 '17

Influence of boron on plant growth. J. A. Voelcker; F. C. Cook. Int R Sci & Prac Ag 7,no 8:1100-1 Ag '16

**Plants, Effect of calcium on**

Influence of calcium and magnesium compounds on plant growth. F. A. Wyatt. bibliog il J Ag Research 6:589-620 JI '17 '16; Abstract. Int R Sci & Prac Ag 7,no 12:1758-61 D '16

**Plants, Effect of calcium sulfate on**

Effect of elemental sulphur and of calcium sulphate on plant life. W. Pitz. il J Ag Research 5:771-80 Ja '17 '16

**Plants, Effect of carbohydrates on**

Influence of certain carbohydrates on green plants. L. Knudson. bibliog il Cornell Ag Exp Memoir 9:1-75 '16; Same. Cornell Ag Exp Rep 1917: 1-75 '18

**Plants, Effect of carbon disulfid on**

Relation of carbon bisulphid to soil organisms and plant growth. E. B. Fred. bibliog il J Ag Research 6:1-20 Ap '16

**Plants, Effect of chemicals on**

Absorption of sodium and calcium by wheat seedlings. H. S. Reed. il Bot Gaz 66:374-80 O '18

Antagonistic action of salts in plants. Scientific Am Sup (233 Broadway, N.Y. 10c) 83: 133 Mr '17

Effects of certain organic compounds on plant growth; coumarin, vanillin, pyridine, quinine, dihydroxystearic acid, pyrogallol, etc. M. J. Funchess. il Ala Ag Exp B 191:103-32 '16

Effects of manganese and iron on the growth of wheat. W. E. Tottingham and A. J. Beck. Int R Sci & Prac Ag 8,no 4:574-5 Ap '17

Peculiar effects of barium, strontium, and cerium on spirogyra. S. S. Chien. Bot Gaz 63:406-9 My '17

Specific action of barium. W. J. V. Osterhout. Am J Bot 3:481-2 N '16

See also Chemotropism

**Plants, Effect of climate on**

Climate and plant growth in certain vegetative associations. A. W. Sampson. U S Ag B 700:1-72 '18

Climatic conditions as related to cercospora beticola. V. W. Pool and M. B. McKay. bibliog il J Ag Research 6:21-60 Ap '16

Environmental influences on the physical and chemical characteristics of wheat. J. A. Le Clerc and P. A. Yoder. J Ag Research 1:275-91 Ja '14

Function of flavones in plants. K. Shibata and J. Nagai. Int R Sci & Prac Ag 8, no 4:569-71 Ap '17

Growth-forms of the flora of New York and vicinity. N. Taylor. Am J Bot 2:23-31 Ja '15

Osmotic concentration of the tissue fluids of Jamaican montane rain-forest vegetation. J. A. Harris and J. V. Lawrence. bibliog Am J Bot 4:268-98 My '17

**Plants, Effect of copper arsenate on**

Action of copper arsenate and arsenious acid on sugar cane roots. E. Jarvis. Ag J of India 13:145-7 Ja '18

**Plants, Effect of copper on**

Certain effects under irrigation of copper compounds upon crops. R. H. Forbes. bibliog il Cal Univ Pub Ag Sci v 1,no 12 395-494p '17 (\$1); Same. Ariz Ag Exp B 80:145-238 '16

**Plants, Effect of disinfectants on**

Injury by disinfectants to seeds and roots in sandy soils. C. Hartley. il U S Ag B 169:1-35 '15

**Plants, Effect of distilled water on**

Harmful action of distilled water. R. H. True. bibliog Am J Bot 1:255-73 Je '14

**Plants, Effect of gases on**

Plants and asphyxiating gases. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:340 Je 2 '17

Response of plants to illuminating gas. S. L. Doubt. bibliog il Bot Gaz 63:209-24 Mr '17

Root variations induced by carbon dioxide gas additions to soil. H. A. Noyes and others. il Bot Gaz 66:364-73 O '18

Studies in greenhouse fumigation with hydrocyanic acid: physical effects on the plant. W. Moore and J. J. Willaman. bibliog il J Ag Research 11:319-38 N 12 '17

See also Fungi, Effect of gases on

**Plants, Effect of iron on**

Assimilation of iron by plants. M. J. Sidorine. Int R Sci & Prac Ag 7,no 12:1756-8 D '16

**Plants, Effect of light on**

Electric light in plant culture. A. C. Beal. Am Flor 46:40 Ja 22 '16

Light and the life of plants. Gard Chron Am 20:318 JI '16

On the nutrition of green plants by means of organic substances. C. Ravenna. Int R Sci & Prac Ag 7,no 8:1098-1100 Ag '16

Response of pilobolus to light. R. Parr. bibliog Ann Bot 32:177-205 Ap '18

Xerofotic movements in leaves. F. C. Gates. il Bot Gaz 61:399-407 My '16

See also Electrohorticulture; Trees, Effect of light on

**Plants, Effect of magnesium on**

Influence of calcium and magnesium compounds on plant growth. F. A. Wyatt. bibliog il J Ag Research 6:589-620 JI '17 '16; Abstract. Int R Sci & Prac Ag 7,no 12:1758-61 D '16

**Plants, Effect of minerals on**

Absorption of nutrients as affected by the number of roots supplied with the nutrient. P. L. Gile and J. O. Carrero. bibliog J Ag Research 9:73-95 Ap 16 '17

Copper and zinc as antagonistic agents to the alkali salts in soils. C. B. Lipman and W. F. Gericke. il Am J Bot 5:151-70 Ap '18

Experiments on the effects of constituents of solid smelter wastes on barley growth in pot cultures. C. B. Lipman and W. F. Gericke. Cal Univ Pub Ag Sci v 1,no 13 495-587p '17 (95c)

See also Plants, Effect of calcium on;

Plants, Effect of copper on; Plants, Effect of iron on; Plants, Effect of magnesium on

**Plants, Effect of poisons on**

Organic plant poisons; hydrocyanic acid. W. E. Brenchley. Ann Bot 31:447-56 JI '17

Organic plant poisons; phenols. W. E. Brenchley. Ann Bot 32:259-78 Ap '18

See also Plants, Poisons in

**Plants, Effect of salts on**

Effects of acid and alkaline solutions upon the water relation and metabolism of plants. A. Dachnowski. bibliog Am J Bot 1:412-39 O '14

Effect on plant growth of sodium salts in the soil. F. B. Headley and others. J Ag Research 6:857-69 Ag 28 '16

Relative effect of sodium chloride on the development of certain legumes. G. W. Hendry. Am Soc Agron J 10:246-9 S '18

**Plants, Effect of smoke on**

Damage to greenhouse plants. il Gard Chron Am 22:19-20 Ja '18

**Plants, Effect of sulfur on**

Effect of elemental sulphur and of calcium sulphate on plant life. W. Pitz. il J Ag Research 5:771-80 Ja '17 '16

See also Soils—Sulfur content

**Plants, Effect of tar fumes on**

Injurious effects of tarvia fumes on vegetation. A. H. Chivers. Phyt 7:32-6 F '17

**Plants, Effect of temperature on**

Adaptation in relation to hardiness. M. J. Dorsey. il Minn Hort 46:465-9 D '18

Auxo-thermal integration of climatic complexes. D. T. MacDougal. Am J Bot 1:186-93 Ap '14



**Plants, Effect of temperature on—Continued**

- Effect of greenhouse temperatures on the growth of small grains. T. B. Hutcheson and K. E. Quantz. *il Am Soc Agron J* 9:17-21 Ja '17
- Effect of temperature and other meteorological factors on the growth of sorghums. H. N. Vinall and H. R. Reed. *bibliog il J Ag Research* 13:133-48 Ap 8 '18
- Experiments on the influence of temperature on the rate of growth in *pisum sativum*. I. Leitch. *bibliog il Ann Bot* 30:25-46 Ja '16
- Freezing-point lowering of the leaf sap of the horticultural types of *persea americana*. J. A. Harris and W. Popenoe. *J Ag Research* 7:261-8 N 6 '16
- Plant limitations. W. F. Massey. *Rural N Y* 75:278 F 19 '16
- Preliminary note on soil moisture and temperature factors in the winter-killing of grain crops. S. C. Salmon. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:173-4 F 15 '18
- Relation of weather to crops and varieties adapted to Arizona conditions. A. J. McClatchie and others. *il Ariz Ag Exp B* 78:45-118 '16
- Relation of winter temperature to the distribution of winter and spring grains in the United States. S. C. Salmon. *maps Am Soc Agron J* 9:21-4 Ja '17
- Role of winter temperatures in determining the distribution of plants. F. Shreve. *Am J Bot* 1:194-202 Ap '14
- Soil temperatures and crop production. D. L. Hartman. *Rural N Y* 77:913, 934 Jl 27-Ag 3 '18
- Temperature and growth rate. W. Crocker. *Bot Gaz* 62:82-3 Jl '16
- Temperature coefficient of the duration of life of *ceramium tenuissimum*. A. H. Ayres. *bibliog Bot Gaz* 62:65-9 Jl '16
- Temperature of leaves of *pinus* in winter. J. H. Ehlers. *bibliog Am J Bot* 2:32-70 Ja '15
- Temperature requirements: vegetable necessities. M. G. Kains. *il O Judd Farmer* 60:6+ Mr 4 '16
- Water content of the soil and the composition and concentration of the soil solution. M. M. McCool and C. E. Millar. *bibliog Soil Sci* 3:113-38 F '17
- Why cereals winterkill. S. C. Salmon. *Am Soc Agron J* 9:353-80 N '17; *Abstract. Int R Sci & Prac Ag* 9,no 3:288-9 Mr '18
- Winter injury of grapes. F. E. Gladwin. *il N Y State Ag Exp B* 433:107-39 '17; *Summarized by F. H. Hall. (Why and when winter kills grapes). B 433 Popular ed* 8p
- Plants, Effect of water on.** See Permeability; Water requirement of crops

**Plants, Food**

- Advertising new plant foods. D. Fairchild. *J Heredity* 9:155-7 Ap '18
- Annual catalogue of plant immigrants; many additions to our food plants. D. Fairchild. *il J Heredity* 8:500-8 N '17
- Food plants of the ancient Hawaiians. V. MacCaughy. *Scientific Monthly (Science Press, Garrison, N.Y. 30c)* 4:75-80 Ja '17
- Food plants of the Philippines. P. J. Wester. *il Philippine Ag R* 9,no 3:150-256 '16
- History and value of food from wild plants. W. N. Clute. *Gard Chron Am* 22:49-51 F '18
- New horticultural crops for our scant food supply. U. P. Hedrick. *Mass Hort Soc Trans* 1918,pt 1:51-64 '18
- Part played by oxidases in the improvement of cultivated plants; biological experiments and considerations. M. Degli Atti. *Int R Sci & Prac Ag* 8,no 5:706-8 My '17
- Prophylaxis in vegetable pathology. O. Comes. *Int R Sci & Prac Ag* 7,no 8:1295-10 Ag '16
- Studies on the root system of plants, in reference to selection and drought resistance. A. P. Modestov. *Int R Sci & Prac Ag* 7,no 7:954-60 Jl '16

**Diseases and pests**

See Plants—Diseases and pests

**Plants, Fumigation of.** See Plant fumigation

**Plants, Geographical distribution of.** See Geographical distribution of animals and plants

**Plants, Growth of.** See Growth (plants)

**Plants, Insectivorous.** See Insectivorous plants

**Plants, Irritability and movements of**

- Effect of one growing plant on another. E. J. Russell. *Gard Chron (Lond)* 63:23 Ja 19 '18; *Same cond. Int R Sci & Prac Ag* 9, no 5:549-51 My '18
- Effect of one plant on another. *Gard Chron (Lond)* 62:170 O 27 '17
- Irritability of the bladders in *utricularia*. T. Ekambaram. *il Ag J of India Sci Congress* No 1916:72-9 '16
- Irritability of the pollen-presentation mechanism in the compositae. J. Small. *bibliog Ann Bot* 31:261-8 Ap '17
- Mechanism of movement and the duration of the effect of stimulation in the leaves of *dionaea*. W. H. Brown. *bibliog Am J Bot* 3:68-90 F '16
- Phototropic sense in plants. *il Scientific Am Sup* (233 Broadway, N. Y. 10c) 83:108-10 F 17 '17
- Touring plants; curious devices which they employ for spreading from place to place. S. L. Bastin. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:228 S 29 '17
- See also Geotropism

**Plants, Medicinal.** See Botany, Medical

**Plants, Nutrition of**

- Absorption of ions by living and dead roots. H. V. Johnson. *Am J Bot* 2:250-4 My '15
- Assimilation of iron by plants. M. J. Sidorine. *Int R Sci & Prac Ag* 7,no 12:1756-8 D '16
- Availability of mineral phosphates for plant nutrition. W. L. Burlison. *bibliog il J Ag Research* 6:485-514 Je 26 '16
- Chemical life history of the potato. *Gard Chron (Lond)* 63:178 Ap 27 '18
- Comparative study of salt requirements for young and for mature buckwheat plants in sand cultures. J. W. Shive. *bibliog Soil Sci* 6:1-32 Jl '18
- Comparative study of salt requirements for young and for mature buckwheat plants in solution cultures. J. W. Shive and W. H. Martin. *bibliog J Ag Research* 14:151-75 Jl 22 '18
- Comparison of salt requirements for young and for mature buckwheat plants in water cultures and sand cultures. J. W. Shive and W. H. Martin. *Am J Bot* 5:186-91 Ap '18
- Decay and soil toxins. G. B. Rigg. *bibliog Bot Gaz* 61:295-310 Ap '16
- Effect of the concentration of the nutrient solution on the growth of barley and wheat in water cultures. W. E. Brenchley. *il Ann Bot* 30:77-90 Ja '16
- Effects of acid and alkaline solutions upon the water relation and the metabolism of plants. A. Dachnowski. *bibliog Am J Bot* 1:412-39 O '14
- Exchange of ions between the roots of *lupinus albus* and culture solutions containing one nutrient salt. R. H. True and H. H. Bartlett. *Am J Bot* 2:255-78 Je '15
- Exchange of ions between the roots of *lupinus albus* and culture solutions containing two nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 2:311-23 Jl '15
- Exchange of ions between the roots of *lupinus albus* and culture solutions containing three nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 3:47-57 F '16
- Factors determining character and distribution of food reserve in woody plants. E. W. Sinnott. *bibliog il Bot Gaz* 66:162-75 Ag '18
- Function of calcium in the nutrition of garden pea seedlings with ammoniacal salts. V. A. Morosov. *Int R Sci & Prac Ag* 8,no 2:214-15 F '17
- How to get rich lands; plant foods: from the air and from the soil. T. Butler. *Prog F* 32:352 Mr 17 '17
- Influence of the composition and concentration of the nutrient solution on plants grown in sand cultures. A. H. Ayres. *il Cal Univ Pub Ag Sci* v 1,no 11 341-94p '17 (60c)
- Mineral food of plants. *Gard Chron Am* 21:58 F '17

**Plants, Nutrition of—Continued**

- Mineral food requirements of the wheat plant at different stages of its development. A. G. McCall and P. E. Richards. *il Am Soc Agron J* 10:127-34 Mr '18
- New three-salt nutrient solution for plant cultures. B. E. Livingston and W. E. Tottingham. *Am J Bot* 5:337-46 Jl '18
- Oil content of seeds as affected by the nutrition of the plant. W. W. Garner and others. *bibliog J Ag Research* 3:227-49 D '14
- On the interpretation of the results of water culture experiments. W. Stiles. *Ann Bot* 30:427-36 Jl '16
- Question of the toxicity of distilled water. R. P. Hibbard. *bibliog Am J Bot* 2:389-401 O '15
- Relation between alkalinity of the cultural medium and plant yield. E. A. Gemtchougenikov. *Int R Sci & Prac Ag* 8,no 2:211-13 F '17
- Relation between vegetative vigor and reproduction in some saprolegniaceae. A. J. Pieters. *bibliog Am J Bot* 2:529-76 D '15
- Relation of some rusts to the physiology of their hosts. E. B. Mains. *bibliog il Am J Bot* 4:179-220 Ap '17
- Relation of sulphur compounds to plant nutrition. E. B. Hart and W. E. Tottingham. *bibliog il J Ag Research* 5:233-50 N 8 '15
- \* Relation of the plant to the reaction of the nutrient solution. D. R. Hoagland. *Science* (Science Press, Garrison, N.Y. 15c) n s 48: 422-5 O 25 '18
- Relation of transpiration to assimilation in steppe plants. V. S. Hijn. *Int R Sci & Prac Ag* 8,no 1:48-50 Ja '17
- Role of ammonia in the metabolism of nitrogenous substances in plants. *Int R Sci & Prac Ag* 8,no 2:204-11 F '17
- Significance of the sulfur in sulfate of ammonia applied to certain soils. C. B. Lipman and W. F. Gericke. *Soil Sci* 5:81-6 Ja '18
- Soil constituents which inhibit the action of plant toxins. E. Truog and J. Sykora. *bibliog il Soil Sci* 3:333-51 Ap '17
- Some availability studies with ammonium phosphate and its chemical and biological effects upon the soil. F. E. Allison. *bibliog Soil Sci* 5:1-80 Ja '18
- Spraying of yellow pineapple plants on manganese soils with iron sulphate solutions. M. O. Johnson. *il Hawaii Ag Exp Press B* 51:1-11 '16
- Ten-year study of the effect of fertilizers on the soluble plant food in the soil and on the crop yield. W. B. Ellett and H. H. Hill. *Va Ag Exp Tech B* 13:46-72 '17; Same. *Va Ag Exp Rep* 1915-1916:46-72 '17
- Three-salt nutrient solution for plants. J. W. Shive. *Am J Bot* 2:157-60 Ap '15
- Utilization of certain pentoses and compounds of pentoses by glomerella cingulata. L. A. Hawkins. *Am J Bot* 2:375-88 O '15
- Utilization of phosphates by agricultural crops, including a new theory regarding the feeding of plants. E. Truog. *il Wis Ag Exp Research B* 41:1-50 '16
- Value of certain nutritive elements in the development of the oat plant. J. G. Dickson. *bibliog il Am J Bot* 5:301-24 Je '18
- Vegetation and reproduction with special reference to the tomato. E. J. Kraus and H. R. Kraybill. *bibliog il Ore Ag Exp B* 149:1-90 '18
- Vegetation experiments on the availability of treated phosphates. J. C. Lipman and H. C. McLean. *il Soil Sci* 4:337-42 O '17

See also Photosynthesis

**Plants, Poisons in**

- Secretion by the roots of substances toxic to the plant. M. Mollard. *Int R Sci & Prac Ag* 7,no 3:350 Mr '16

**Plants, Protection of**

- Handy shading device. *Am Flor* 48:790 Ap 28 '17
- How to protect your plants. W. C. McCollom. *il Gard M* 24:130-1 N '16
- Hurry-up devices for the gardener with no greenhouse. E. A. S. Peckham. *il Gard M* 22:195-6 Ja '16

- Improved form of nursery seed bed frame. D. R. Brewster. *For Quar* 14:183-7 Je '16
- Protect the garden against winter weather. *Minn Hort* 44:389-90 O '16
- Protection from sun or frost. W. L. Wilson. *il Gard M* 23:304 Je '16
- Seed and plant forcers. *Market Growers J* 18:193 Mr 1 '16
- Shading vegetables and flowers. G. H. Garekol. *Gard M* 23:42 F '16
- Simple device for protecting early and late crops. C. F. Lawrance. *il J Bd Ag* 23:860-5 D '16
- Simple supports and shelters. H. E. Durham. *il Gard Chron (Lond)* 63:87 Mr 2 '18
- Skirmishing along the frost line. *il map Gard M* 26:57 S '17
- Work for the month of November. H. Gibson. *Gard Chron Am* 20:433 O '16
- See also Frost protection

**Plants, Reproduction in**

- Growing time and seed time. *Gard Chron (Lond)* 59:327-8, 338 Je 17-24 '16
- Notes on the Californian species of trillium L.; seasonal changes in trillium species with special reference to the reproductive tissues. R. P. Brandt. *bibliog Cal Univ Pub Botany v* 7,no 3 39-68p, 7-10 pl '16 (30c)
- Relation between vegetative vigor and reproduction in some saprolegniaceae. A. J. Pieters. *bibliog Am J Bot* 2:529-76 D '15
- Reproduction in the coniferous forests of northern New England. B. Moore. *bibliog Bot Gaz* 64:149-58 Ag '17
- Reproduction in trees. *Gard Chron Am* 20: 152-3 Mr '16
- Some factors influencing the reproduction of red spruce, balsam fir, and white pine. B. Moore. *J For* 15:827-53 N '17
- Vegetation and reproduction with special reference to the tomato. E. J. Kraus and H. R. Kraybill. *bibliog il Ore Ag Exp B* 149:1-90 '18

See also Apogamy; Gametophytes; Sporophytes

**Plants, Respiration of**

- Demonstration of photosynthesis. W. J. V. Osterhout. *Am J Bot* 5:105-11 Mr '18
- Note on a method of demonstrating the heat of respiration. M. C. Potter. *Ann Bot* 31: 435-8 Jl '17
- Relation of catalase and oxidases to respiration in plants (B. 191). C. O. Appleman. *bibliog Md Ag Exp Rep* 1915-1916:1-16 '16; Same cond. *Am J Bot* 3:223-33 My '16
- Respiration and catalase activity in sweet corn. C. O. Appleman. *Am J Bot* 5:207-9 Ap '18
- Respiration in succulents. C. A. Shull. *Bot Gaz* 63:83-4 Ja '17

See also Fruit, Respiration of

**Plants, Sex in**

- Change of sex in hemp. F. J. Pritchard. *il J Heredity* 7:325-9 Jl '16
- Development of dumontia filiformis; development of sexual plants and general discussion of results. G. A. Dunn. *bibliog il Bot Gaz* 63:425-67 Je '17
- Growing melons on trees. J. E. Higgins. *il J Heredity* 7:208-20 My '16
- Inheritance of sex in strawberries. R. D. Anthony and U. P. Hedrick. *N Y State Ag Exp Tech B* 63:1-10 '17
- Inheritance of sex in vitis rotundifolia. L. R. Detjen. *bibliog il N C Ag Exp Tech B* 12:1-42 '17; Same. *N C Ag Exp Rep* 1917:1-42
- Morphology and cytology of the sexual organs of phytophthora erythroseptica, Pethyb. P. A. Murphy. *bibliog il Ann Bot* 32:115-53 Ja '18
- Sexuality in rhizina undulata Fries. H. M. Fitzpatrick. *bibliog il Bot Gaz* 65:201-26 Mr '18
- Sexuality of filament of spirogyra. B. Cunningham. *bibliog il Bot Gaz* 63:486-500 Je '17
- See also Archegonium

Plants, Shading of. See Plants, Protection of

Plants, Sterility in. See Sterility in plants



- Plants, Translocation in.** See Translocation
- Plants, Transpiration of.** See Plants—Transpiration
- Plants, Water requirements of.** See Water requirements of crops
- Plants, Wilting of**  
Determination of wilting. A. L. Bakke. bibliog Bot Gaz 66:81-116 Ag '18
- Plants in the Bible.** See Bible plants
- Plasmodiophora brassicae.** See Clubroot
- Plasmopara viticola.** See Grape mildew
- Play**  
Back-door play pen. H. S. Smith. Country Gent 81:1423 JI 22 '16  
See also Amusements; Children's amusements; Games; Toys
- Playgrounds**  
Better playgrounds at country schools. Prog F 32:1329 D 22 '17  
Children's Isle; how Geneva, Illinois, solved the playground problem. W. F. French. il Country Life 31:44-5 N '16  
Children's playgrounds in parks and forests. S. Riley. Am For 23:680-2 N '17  
Country playground. C. Comstock. Rural Manhood 8:98-101 Mr '17  
Country playground. E. R. Davisson. Country Gent 82:406 F 24 '17  
Parks and playgrounds. S. Silcox. (*In* Report, Horticultural societies of Ontario, 1917, p. 91-5) '18 Ontario ag. dept., Toronto  
Playground; its place in rural education. Prog F 32:747 Je 30 '17  
Playgrounds in parks from the designer's standpoint. F. L. Olmsted. Gard Chron Am 20:479-80 N '16  
Trend of the playground movement. L. H. Weir. Gard Chron Am 20:515-17 D '16
- Pleasant happen-so; story.** B. A. Dana. O Judd Farmer 64:540 My 18 '18
- Plectrodera scalator.** See Cottonwood borers
- Plenodomus**  
Factors involved in the growth and the pycnidium formation of plenodomus fuscomaculans. G. H. Coons. bibliog J Ag Research 5:713-69 Ja 17 '16
- Plowing.** See Tillage
- Plowing contests**  
Conducting a plowing match. C. O. Reed. il Breeder's Gaz 69:1293 Je 22 '16  
Master plowmen. F. M. Chase. il Country Gent 83:1+ N 2 '18  
Ploughing matches. il Ag Gaz of Canada 5:792-4 Ag '18  
Ploughing matches and demonstrations. S. T. Newton. il Ag Gaz of Canada 4:695-6 Ag '17  
Plowing contest. F. W. Duffee. Hoard's D 56: 637 N 29 '18  
Plowing match at Big Rock. F. M. White. il O Judd Farmer 65:309 O 12 '18  
Plowmen compete at Big Rock. O Judd Farmer 61:5 S 30 '16  
Plows and plowing matches. J. S. Collier and C. O. Reed. 19p il n.d. Kankakee county soil and crop improvement assn., Kankakee, Ill.
- Plows**  
Agriculture Americanized. F. M. White. il Field 11 27:175-7 Mr '17  
Blanchard double brabant windlass plough. M. Ringelmann. il Int R Sci & Prac Ag 9, no 3:372-3 Mr '18  
Donalies patent mechanism for attaching one or more implements to a balance-plough. il Int R Sci & Prac Ag 8, no 7:1029-30 JI '17  
Draft of gang plow. Wallaces' F 43:1009 JI 5 '18  
Draft of plows. F. N. G. Kranick. Country Gent 82:230 F 3 '17  
Dreux-Brézès double Flemish plough. Int R Sci & Prac Ag 7, no 1:115-16 Ja '16  
Efficient draft of plow. E. M. Mervine. Kimball's D F 15:235 Ap 1 '17  
Engine gang troubles remedied. C. O. Reed. O Judd Farmer 60:23 F 5 '16  
Engine plows. I. A. Weaver. il Am Soc Ag Eng Trans 9:104-9 '16  
Failure to scour in gang plows. C. O. Reed. O Judd Farmer 60:6 F 12 '16  
Farm implements and machinery; plows and plowing. G. H. Alford. Prog F 33:10 Ja 5 '18  
First school of mechanical cultivation founded in Germany. E. Eckmann. Int R Sci & Prac Ag 8, no 4:553-4 Ap '17  
Handling the engine plow. C. O. Reed. O Judd Farmer 60:5 Ja 22 '16  
How to hitch the plow to the tractor. E. L. Watson. Power F 27:10-11 Ag '18  
Making the plow efficient. J. L. Greenway. Prog F 31:343 Mr 4 '16  
Motor ploughing in France. P. De Cabausse. il Int R Sci & Prac Ag 7, no 11:1650-2 N '16  
Motor-plowing sugar land. A. Wilkinson. Country Gent 82:1026 Je 16 '17  
Nature's factory—the seedbed. C. A. Bacon. il Power F 25:12 JI '16  
No more left-hand plows. Rural N Y 77:5 Ja 5 '18  
Plow. C. J. Borum. il Purdue Ag 11:28-9 F '17  
Plow and the tractor; correct hitching makes for good work in the field. F. N. G. Kranick. Country Gent 83:8+ Ap 20 '18  
Plow draft tests. Am Soc Ag Eng Trans 10, no 2:150-5 '17  
Plowing and harrowing. L. W. Lighty. Nat Stock & F 42:42 Ap 6 '18  
Plows; different kinds and their use. G. H. Alford. il Prog F 31:589 Ap 29 '16  
Quality of plowing and the draft of plows. R. Olney. il Power F 27:9 Ja '18  
Selection of land for tractor ploughing. H. L. French. J Bd Ag 21:759-61 O '17  
Setting coulter on engine gang. C. O. Reed. O Judd Farmer 60:8 F 19 '16  
Side draft of gang plow. Wallaces' F 43:1193 Ag 23 '18  
Story of the left-hand plow. Rural N Y 77: 724 My 25 '18  
Study of the plow bottom and its action upon the furrow slice. E. A. White. il J Ag Research 12:149-82 Ja 28 '18  
Vulcan tractor gang plow. il Motor Age (59 E. Madison st, Chicago, 10c) 34:38-9 JI 18 '18  
Walking plow adjustments. P. T. Hines. Prog F 33:129 F 2 '18  
When your gang plow balks. P. T. Hines. Country Gent 82:762 Ap 21 '17  
See also Listers; Mole plows; Plowshares; Soil milling machines
- Plowshares**  
Repointing plowshares. il Country Gent 83:37 Mr 16 '18
- Plum aphid**  
Aphids on your plum tree? E. M. Patch. il Gard M 26:164 D '17  
Reddish-brown plum aphid (rhopalosiphum nymphaeae Linn). W. M. Davidson. J Econ Entom 10:350-3 Je '17
- Plum aphid, Mealy**  
Mealy plum aphid. J. G. Blakey. il Gard Chron (Lond) 63:1 Ja 5 '18
- Plum black-knot**  
Black knot of plum and cherry. R. C. Walton. il Ohio Ag Exp B v 3:36-8 F '18  
Black knot of plums. H. E. Mern. Ohio F 138: 598 D 16 '16  
Some observations on the anatomy and other features of the black knot. A. Stewart. il Am J Bot 1:112-26 Mr '14
- Plum borers**  
American plum borer. E. D. Blakeslee. bibliog il U S Ag B 26:1-13 '15
- Plum curculio**  
Plum curculio. E. A. Nelson. il Minn Hort 44:245-9 Je '16  
Spraying with arsenate of lead proves best method of control. W. H. Goodwin. il Ohio Ag Exp B v 2:113-16 Ap '17  
Thersilochus conotracheli, a parasite of the plum curculio. R. A. Cushman. bibliog il J Ag Research 6:847-56 Ag 28 '16
- Plum trees**  
Trees of Vermont: the plums and cherries. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:156-7 '16

**Plum wilt**

Plum wilt; its nature and cause. B. B. Higgins. bibliog il Ga Ag Exp B 118:1-29 '16

**Plumbing**

Adding heating and plumbing systems. plans Farm Eng 5:12 Ap '17  
Concerning plumbing. F. H. Sweet. Green's Fruit Grower 36:14 O '16  
Farm house plumbing system. D. H. Stowell. O Judd Farmer 60:22 Ap 29 '16  
Inexpensive plumbing for farm kitchens. W. A. Etherton. il Kan Ag Ext B 9:1-23 '16

**Plums**

Cultural methods and pruning for plums and prunes. G. H. Howe. il N Y Ag Dept B 79, pt 2:1172-82 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1172-82 '17  
Culture of our native and hybrid plums; with discussion. H. G. Street. Ill State Hort Soc Trans 1916:334-42 '17  
Experience in establishing a plum orchard. W. H. Jenkins. Nat Stock & F 41:976 Ja 5 '18  
Experimental work in Italy on the plum (*Prunus domestica* L. var *a-aeconomica*) and on the composition of the oil extracted from the kernels. D. Feruglio and G. B. Bernardis. Int R Sci & Prac Ag 8, no 7:1003-5 Jl '17  
Hardy apples and plums for the Canadian Northwest. F. W. Broderick. il Minn Hort 46:393-9 N '18  
Hardy plums. J Ag (Quebec) 21:5 Jl '17  
Hybrid fruits that have made good. F. A. Waugh. il Country Gent 82:1669 N 3 '17  
Loring prize plum. J. P. Vikla. il Minn Hort 46:81-3 Mr '18  
Native plums, their hybrids and their improvement. D. Cook. Minn Hort 45:322-5 Ag '17  
Plum growing and plum varieties for Kentucky. W. H. Clayton. Ky Ag Dept Rep 1916-1917:465-7 '18  
Plum growing in Maryland. F. S. Holmes. Md Ag Exp B 207:295-326 '17; Same. Md Ag Exp Rep 1916-1917 '17  
Plums and cherries. J. Oskamp. il Ind Ag Exp B 212:1-12 '18  
Plums and grapes for the home garden. R. D. Anthony. il Field 11 27:192-3 Mr '17  
Report on the possibility of conserving surplus plums by drying. J. V. Eyre and S. T. Parkinson. J Bd Ag 24:275-87 Je '17  
Slump in plums. F. A. Waugh. Country Gent 81:1079 My 20 '16  
Why plum trees fail to fruit. E. S. Black. Rural N Y 77:548 Ap 13 '18  
Winter aspect of the buds of plums. E. A. Bunyard. il Gard Chron (Lond) 63:23 Ja 19 '18

**Diseases and pests**

Brown rot disease in plums. F. H. Ballou. Rural N Y 76:1172 O 13 '17  
Common diseases of the peach, plum and cherry. M. T. Cook. il N J Ag Exp C 81:1-19 '17  
Common insect enemies of the plum, by F. H. Lathrop; Diseases of the plum, by L. R. Hesler. il N Y Ag Dept B 79, pt 2: 1183-9, 1190-9 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1183-9, 1190-9 '17  
Control of brown rot of plums and plum pocket. E. C. Stakman and A. G. Tolaas. il Minn Hort 46:182-6 My '18  
Inoculation experiments with species of *coccomyces* from stone fruits. G. W. Keitt. il J Ag Research 13:539-70 Je 10 '18  
Leaf-spot or shot-hole defoliation of cherry and plum. A. D. Selby. Ohio Ag Exp B v 1:206-8 Jl '16  
Pests in plum trees. A. S. Dodsen. O Judd Farmer 60:9 Je 10 '16  
Plum aphides. J. C. F. Fryer. il J Bd Ag 23:661-4 O '16  
Spray calendar for plums. N J Ag Exp C 78 2p '17  
Spraying plums for brown rot. E. C. Stakman. il Minn Hort 44:148-55 Ap '16  
Spraying prunes and plums. H. P. Barss and A. L. Lovett. Ore Ag Ext B 194:1-4 '17

Varietal resistance of plums to brown-rot. W. D. Valleau. bibliog il J Ag Research 5:365-96 N 29 '15

Varieties of plums; brown rot a controlling factor. D. Cook. Minn Hort 44:142-7 Ap '16  
*See also* Pear tree slugs; Plum aphids; Plum aphids. Mealy; Plum black-knot; Plum borers; Plum curculio; Plum wilt

**Marketing**

Marketing plums and prunes. G. H. Howe. N Y Ag Dept B 79, pt 2:1200-3 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1200-3 '17

**Packing**

Standardization of plum and prune pack. C. Rayburn. Cal State Comm Hort B v 6:330-1 Ag '17

**Statistics**

Table showing number of trees and production in bushels of plums and prunes in New York state. N Y Ag Dept B 79, pt 2:1204-5 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3: 1204-5 '17

**Varieties**

All kinds of plums. F. A. Waugh. il Country Gent 83:11+ My 11 '18  
Damson plums. U. P. Hedrick. Rural N Y 75:654 Ap 22 '16  
Native American species of *Prunus*. W. F. Wight. bibliog il maps U S Ag B 179:1-75 '15  
Surprise plum a success. C. A. Pfeiffer. il Minn Hort 44:58-63 F '16  
Varieties of plums. U. P. Hedrick. il N Y Ag Dept B 79, pt 2:1161-71 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1161-71 '17  
Varieties of plums derived from native American species. W. F. Wight. U S Ag B 172: 1-44 '15

*Plutella maculipennis*. See Cabbage plutella

**Plymouth rocks (poultry)**

Advocates two distinct varieties of barred plymouth rocks. M. W. Baldwin. Reliable P J 23:359+ My '16  
Another contribution to the barred plymouth rock discussion. M. S. Gannaway. Reliable P J 23:481+ Je '16  
Back and tail sections of the ever popular plymouth rock. F. L. Sewell. il Reliable P J 22:1241+ Ja '16  
Barred plymouth rocks and the standard of perfection. F. M. Prescott. il Country Life 32:96 My '17  
Barred plym. rocks and their breeding. C. H. Latham. Am P J 47:43-4, 239-40, 611 Ja-F, Ap '16  
Barred plymouth rocks saved this poultry and fruit farm. G. W. Watson. Reliable P J 23:214-15+ Ag '16  
Beauty and utility breed. L. C. Allen. Am P J 48:851 Ag '17  
Blue plymouth rocks. il Reliable P J 23:666 Ag '16  
Boost the breed, the variety you believe in. W. D. Holterman. il Reliable P J 24:680-1 O '17  
Breeding of barred plymouth rocks. W. H. Griffith. il J Ag (Quebec) 20:189 Mr '17  
Breeding white rocks. Ag Digest 2:508-9 Je '17  
Buff plymouth rock. W. H. Card. il Country Gent 81:334 F 12 '16  
Columbian plymouth rocks. L. P. Graham; T. J. Enslin. il Am P J 47:680, 682 Ap '16  
Columbian plymouth rocks. J. F. Walthers. Am P J 48:889 Ag '17  
Cost of raising white plymouth rocks. A. G. Philips. il Ind Ag Exp B 214:1-23 '18  
Development of white rock pullets. J. B. Morman. il Am P J 47:40-2 Ja '16  
E. B. Thompson, barred rock specialist. G. M. Curtis. il Reliable P J 22:1228-9+, 1405+ Ja-F '16  
Fifth annual record of a flock of white plymouth rocks. J. B. Morman. Reliable P J 23:205-6+ Ap '16  
Home of aristocrat barred rocks. S. Strong. il Reliable P J 24:1184 F '18



**Plymouth rocks (poultry)**—*Continued*

- How to secure exhibition quality. C. H. Latham. Am P J 47:1192-3 N '16
- Important facts for barred rock breeders. C. H. Latham. Am P J 48:346-7 Mr '17
- Mating and breeding Columbian ply. rocks. T. J. Enslin. Am P J 49:572 Mr '18
- Michigan flock; year's record. Mrs C. D. Finkbeiner. Country Gent 81:703 Mr 25 '16
- More about barred plymouth rocks. C. H. Latham. Am P J 48:799 JI '17
- New plymouth rock breed book. A. C. Smith. Reliable P J 25:877-8 D '18
- Pacific coast strain of line-bred white plymouth rocks. il Reliable P J 23:73+ Mr '16
- Partridge plymouth rock color; the defects in plumage and how to value them. T. Hewes. il Am P J 49:601-3 Je '18
- Pioneer general-purpose fowl. F. S. Jacoby and A. Bayes. il Ohio F 137:768 Je 3 '16
- Plymouth rocks and how to value them. T. Hewes. il Am P J 48:502-4 Ap '17
- Preparing barred rocks for exhibition. E. B. Thompson. Reliable P J 24:760a N '17
- Reasons for selecting my variety. P. H. Grigsby. Am P J 47:756 My '16
- Remarkable success attained with buff plymouth rocks. C. R. Baker. Reliable P J 24:265-6+ My '17
- Remarkable winter egg record of a barred plymouth rock pullet. F. L. Sewell. il Reliable P J 24:517 Ag '17
- Scientific breeding of barred rocks. F. W. Proctor. il Am P J 49:22-3 Ja '18
- Single mating for partridge rocks. L. D. Cole. Am P J 47:953 JI '16
- Specialty breeding barred plym. rocks. P. T. Woods. il Am P J 47:45-7 Ja '16
- Standard bred plymouth rocks. T. Hewes. il Am P J 48:628-31, 713-15, 781-4, 846-8, 907-8 My-S '17
- Standardization of white plymouth rocks in Oldham county. S. J. Lowry. Reliable P J 24:888A D '17
- W. D. Holterman and his aristocrat barred plymouth rocks. L. J. Brosemer. il Reliable P J 23:873+, 974-5+ N-D '16
- White plymouth rocks. Am P J 49:383 Mr '18
- White plymouth rocks as a breed. F. E. Palmer. Am P J 49:335 Mr '18
- White rocks that combine utility and beauty. Reliable P J 24:739-40+ N '17
- Why I chose the barred plymouth rock. F. W. Proctor. Am P J 47:920 JI '16

**Pneumonia**

- Facts about pneumonia. Wallaces' F 41:275 F 18 '16
- Note on an outbreak of contagious pneumonia in donkeys. R. Branford. Ag J of India 12:268-73 Ap '17
- Pneumonia. E. Mellen. O Judd Farmer 62:24 Ja 27 '17
- Treatment of equine pneumonia. R. C. Moore. Am Vet M Assn J 52:47-56 O '17
- Why pneumonia heads the death list. C. H. Lerrigo. Country Gent 81:200 Ja 29 '16

**Pocket Testament league**

- Carry your Bible movement. Rural Manhood 8:253-5 Je '17
- How farmers are helping fighters. E. T. Walker. il Prac F 114:2 Ja 1 '18

**Podomitrium**

- Morphology and systematic position of podomitrium. D. H. Campbell. il Am J Bot 2:199-210 My '15

**Podophyllum.** See May apples**Poetry**

- Teach poetry to your little beginners. E. F. Lynch. Country Gent 81:548 Mr 4 '16

**Poinsettias**

- Poinsettia (the Christmas flower). Gard Chron Am 21:438 D '17

**Pointers (dogs)**

- In stubble and heather. W. A. Dyer. il Country Life 34:122 My '18
- Rise of the pointer. W. A. Dyer. il Country Life 32:59-61 O '17

**Pointing griffons.** See Griffons**Poison hemlock.** See Water hemlock**Poison ivy**

- Ivy poisoning. M. Howe. Ohio F 137:842 Je 24 '16
- Ivy-poisoning remedies. Country Gent 81:1428 JI 29 '16
- Pernanganate of potash for ivy poisoning. E. H. Butler. Prog F 31:987 Ag 12 '16
- Poison ivy; curse of the fields. R. L. Scharring-Hausen. il Rural N Y 77:743 Je 1 '18
- Poison ivy; the plant and its poison. Rural N Y 75:806 My 27 '16

**Poison oak.** See Rhus**Poisonous plants**

- Eradication of poisonous plants. (In Report, 1916, p. 112-23) il '17 Oregon state live stock sanitary board, Salem
- New poisonous plant; the whorled milkweed. G. H. Glover and others. il map Colo Ag Exp B 246:1-16 '18
- Plants poisonous to domestic animals. Ag Gaz of Canada 5:981-7 O '18
- Plants which produce inflammation or irritation of the skin. J. H. Maiden. Ag Gaz of New South Wales 29:344-5 My '18
- Poisoning by primroses. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:411 Je 30 '17
- Poisonous and suspected plants of New Zealand. B. C. Aston. J Ag New Zealand 16:324-8; 17:6-9 Je-JI '18 (to be cont)
- Poisonous plants. Rural N Y 75:405 Mr 4 '16
- Secretory canals of rhus diversiloba. J. B. McNair. bibliog Bot Gaz 65:268-73 Mr '18
- Stock-poisoning plants of the range. C. D. Marsh. il U S Ag B 575:1-24 '18
- What to do for poison oak poisoning. Prog F 31:887 JI 15 '16
- See also Botany, Medical; Death camas; Fly poison (plant); Forage poisoning; Goldenrod; Isotoma petrea; Larkspur; Milk vetch; Plants, Poisons in; Sorghum—Hydrocyanic acid content; Water hemlock; White snakeroot

**Poisons.** See Arsenical poisoning; Botulism; Forage poisoning; Gossypol; Plants, Poisons in; Poisonous plants; Serums**Pokeweed****Diseases and pests**

- Mosaic disease of phytolacca decandra. H. A. Allard. il Phyt 8:51-4 F '18

**Poland-China swine**

- Breed enthusiasts. W. M. McFadden. Swine World 6:3 Ag '18
- Developing a Poland-China winner. S. McKelvie. il Breeder's Gaz 71:212 F 1 '17
- Famous Poland China towns. W. M. McFadden. il Swine World 6:7 Ag '18
- Foundation boars of the Poland Chinas. R. Davis. il Swine World 5:14-16 Je '18
- Free Trade, one of the truly out-standing of Poland China boars. W. M. McFadden. il Swine World 6:5-6 S '18
- Illinois Poland China show. M. S. McFadden. il Swine World 6:12-16 S '18
- Life story of Peter Mouw. R. Davis. il Swine World 5:6-7+ Je '18
- Nebraska Poland-China show. Swine World 5:33 O '17
- Poland-China. H. T. Morgan. il Country Gent 82:373 F 24 '17
- Poland China boar prices. W. M. McFadden. il Swine World 5:10-11 Je '18
- Poland China development in the South. S. J. Summers. Swine World 5:31 Je '18
- Poland China judges at the National swine show. C. A. Marker. Swine World 5:3 Je '18
- Poland China show at the Missouri state fair, 1918. il Swine World 6:28-9 S '18
- Poland China show at the National; list of awards. M. S. McFadden. il Swine World 6:15-17 N '18
- Poland Chinas at Des Moines, 1918. M. S. McFadden. il Swine World 6:24-5 S '18
- Poland-Chinas at the Illinois state fair. il Swine World 5:31-2 O '17
- Poland-Chinas at the Iowa state fair. Swine World 5:8+ S '17
- Poland-Chinas at the National. il Swine World 5:6+ N '17

**Poland-China swine —Continued**

- Porkmaker that America made and appreciates. R. Davis. il Breeder's Gaz 72:1156 D 20 '17
- Prolificacy of Poland-Chinas. H. W. Vaughan. Breeder's Gaz 72:209 Ag 16 '17
- Spotted Poland Chinas at the National. il Swine World 5:13 N '17
- Spotted Polands are coming back. il O Judd Farmer 61:1 D 9 '16
- 25 years with Poland Chinas. O Judd Farmer 65:24 Jl 13 '18
- Why I breed Poland Chinas. W. M. McFadden. Field 11 28:647 S '18; Same. Swine World 6:20 O '18

**Price lists**

- 52 head of boars average \$701 in Sievers sale. C. A. Marker. il Swine World 6:38-9 O '18
- Mouw's great dispersal sale. il Swine World 5:38-9 O '17
- Southern Poland China promotion sales. W. M. McFadden. Swine World 5:3 Ap '18

**Polar bear cactus.** See Cactus

**Polarization**

- Optical method for the determination of malic and tartaric acids in the same solutions. J. J. Willaman. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:693-704 Ap '18

**Poles**

- Poles purchased, 1915. A. M. McCreight. U S Ag B 519:1-4 '17
- Tests of Rocky Mountain woods for telephone poles. N. D. Betts and A. L. Heim. maps U S Ag B 67:1-28 '14

**Police, Military**

- Guardians of the countryside. K. Mayo. il Country Life 35:61-3 D '18

**Police, State**

- New York state's new rural police. il Rural N Y 76:1365 D 1 '17
- Police protection for rural districts. il Prac F 113:3+ Ja 1 '17
- State constabulary bill. Rural N Y 76:289 F 24 '17

**Police dogs**

- Four-footed policemen. W. A. Dyer. il Country Life 30:48 Jl '16
- Training police and war dogs. R. H. Moulton. il Ohio F 141:272 F 23 '18

**Policemen flies.** See Digger wasps

**Polish (poultry)**

- Why I breed white crested Polish. T. Hewes. il Reliable P J 24:163 Ap '17

**Polk sanitary milk company**

- Largest milk plants keep up-to-date in equipment. il Creamery 4:33 F '16

**Poll tax**

- Outside of South 25 out of 36 states levy no poll tax. C. Poe. Prog F 31:511 Ap 8 '16

**Polled Durhams**

- Are hornless shorthorns coming? J. H. Martz. il Breeder's Gaz 72:1153 D 20 '17
- Ohio and polled Durhams. F. Tossey. Breeder's Gaz 70:164, 199 Ag 3, 10 '16

**Price lists**

- J. H. Miller's polled Durhams make \$645. Breeder's Gaz 71:783 Ap 12 '17
- Miller auction averages \$700. Breeder's Gaz 74:21 Jl 4 '18

**Polled Herefords.** See Herefords, Polled

**Pollen**

- Imperfection of pollen and mutability in the genus rosa. R. D. Cole. il Bot Gaz 63:110-23 F '17
- Improved technique in preventing access of stray pollen. A. Waller and L. E. Thatcher. il Am Soc Agron J 9:191-5 Ap '17
- Pollen-grains as source-indicators of honey. R. Waters. il J Ag New Zealand 12:279-81 Ap '16
- Pollen of flowers. L. Bastin. il Country Life 32:98 My '17
- Pollen sterility in relation to the geographical distribution of some onagraceae. C. C. Forsaith. bibliog il Bot Gaz 62:466-87 D '16

Sterility as the result of hybridization and the condition of pollen in rubus. C. S. Hoar. bibliog il Bot Gaz 62:370-88 N '16

**Pollen plants**

- Garden flowers that beautify the home and many of which provide a wealth of pollen for the bees. W. J. Sheppard. Am Bee J 58:123 Ap '18
- Pollen and pollen plants. L: H. Lovell. il Am Bee J 58:79-81 Mr '18

**Pollen tubes**

- Pollen tube and spermatogenesis in iris. M. L. Sawyer. il Bot Gaz 64:159-64 Ag '17

**Pollination.** See Fertilization of plants; Fruit trees—Pollination

**Polo**

- High lights in American polo. H. Reed. il Country Life 30:46-7 Je '16

**Polychrosis viteana.** See Grape berry worms

**Polydactylism**

- Extra fingers and toes. il J Heredity 7:320-4 Jl '16
- Extra toes in horse and steer. B. O. Severson. il J Heredity 9:39-41 Ja '18
- Polydactylism and tooth color. S. Sinha. J Heredity 9:96 F '18
- Polydactylous family. E. S. Atwood and C. P. Pond. J Heredity 8:96 F '17

**Polygonums**

- Observations on the development and germination of the seed in certain polygonaceae. E. F. Woodcock. bibliog il Am J Bot 1:454-76 N '14

See also Lady's thumb (herb)

**Polyporus dryadeus.** See Root rot

**Polytrichum**

- Spermatogenesis of polytrichum juniperinum. C: E. Allen. bibliog il Ann Bot 31:268-91 Ap '17

**Pomace, Apple.** See Apple pomace as fertilizer

**Pomegranates**

- Pomegranate. R. W. Hodgson. il Cal Ag Exp B 276:163-92 '17
- Pomegranate; history and description. R. W. Hodgson. il Cal State Comm Hort B v 5:140-7 Ap '16

**Pomelo.** See Grapefruit

**Pomeranians (dogs)**

- Vogue of Pom and Peke. W. A. Dyer. il Country Life 31:38-9 D '16

**Pomological and fruit growing society of the province of Quebec**

- Annual meeting, Lennoxville, Aug. 14-15, 1917. J Ag (Quebec) 21:38 S '17
- Annual meeting, Macdonald college, Dec. 9-10, 1915. J Ag (Quebec) 19:144-5 Ja '16
- Annual report, 1916. 140p '16 Quebec ag. dept., Quebec
- Annual summer meeting, La Trappe, Sept. 6-7. il J Ag (Quebec) 20:72 O '16
- Annual winter meeting, Macdonald college, Dec. 5-6, 1916. J Ag (Quebec) 20:141 Ja '17
- Annual winter meeting, Macdonald college, Dec. 4-5, 1917. J Ag (Quebec) 21:99 Ja '18

**Pomological committee of Australia**

- 1917 meeting. E. E. Pescott. J Dept Ag Victoria 15:482-93 Ag '17

**Pomological society, American.** See American pomological society

**Ponies**

- Breeding polo ponies. A. H. Godfrey. Breeder's Gaz 70:1069 D 7 '16
- Hackney pony. R. P. Stericker. Country Gent 81:2074 D 2 '16
- Hackneys and ponies. P. M. Babcock. Field 11 26:232-3 Mr '16
- Ponies of Chincoteague. J. R. Mattern. il Country Gent 81:1290 Jl 1 '16
- Shetland pony; Welsh pony. J. M. Wade. N Y Ag Dept Rep 1916, pt 2:67-9 '17
- From N Y Ag Dept B 76

**Pontia rapae.** See Cabbage butterflies

**Ponting, Tom, 1824-1916**

- Career of Tom Ponting. J: G. Imboden. por Breeder's Gaz 70:724 O 19 '16



**Poodles**

Toy poodle. W. A. Dyer. *il Country Life* 30:53 O '16

**Pools, Garden.** See Garden pools

**Pools, Swimming.** See Swimming pools

**Popcorn**

Double cropping in Illinois. *Rural N Y* 76:342 Mr 3 '17  
Growing and handling of popcorn. M. K. Zimmerman. *il Ohio F* 137:453 Mr 25 '16  
Popcorn. Wallaces' *F* 42:254 F 9 '17  
Popcorn. Wallaces' *F* 43:495 Mr 15 '18  
Pop corn. H. Wenholz. *il Ag Gaz of New South Wales* 29:533-42 Ag '18  
World's popcorn center. *il O Judd Farmer* 60:15 Mr 25 '16  
World's popcorn center. *il Wallaces' F* 42:983 Jl 13 '17

**Popgun** plays Santa Claus; story. W. C. Barnes. *il Nat Wool Grower* 7:11-14 D '17

**Popillia japonica.** See Japanese beetles

**Poplar**

Growth of the black poplar in Tuscany and its utilization. *Int R Sci & Prac Ag* 7,no 1:92-6 Ja '16  
Lombardy poplars. *Gard Chron Am* 21:312 Ag '17  
New balsam poplars. A. Henry. *il Gard Chron (Lond)* 59:230 Ap 29 '16  
Pedigree of a splendid tree. *il Am For* 23:44 Ja '17  
Trees of Vermont; the poplars. G. P. Burns and C. H. Otis. *il Vt Ag Exp B* 194:60-75 '16  
See also Aspen; Tulip poplar

**Diseases and pests**

Heart-rot of oaks and poplars caused by *polyporus dryophilus*. G. G. Hedgcock and W. H. Long. *il J Ag Research* 3:65-78 O '14  
Undescribed canker of poplars and willows caused by *cytospora chrysosperma*. W. H. Long. *il J Ag Research* 13:331-45 My 6 '18  
See also Poplar and willow borers; Poplar-canker, European; Poplar root weevils

**Poplar and willow borers**

Experiments in the control of the poplar and willow borer. R. Matheson. (*In* Report, Entomological soc. of Ontario, 1916, p. 122-32) *il '17 Ontario ag. dept., Toronto*  
Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:67-71 '16  
Poplar and willow borers. R. Matheson. *bibliog il Cornell Ag Exp B* 388:457-83 '17; Same. *Cornell Ag Exp Rep* 1917:457-83 '18

**Poplar canker, European**

Another imported tree disease. *Am For* 22:739 D '16  
Dothichiza populea in the United States. G. G. Hedgcock and N. R. Hunt. *bibliog il Mycol* 8:300-8 N '16  
European poplar canker in the vicinity of Philadelphia, Pennsylvania. J. K. Primm. *J Econ Entom* 11:129-33 F '18

**Poplar root weevils**

Notes on the habits of a dangerous genus of weevils. W. D. Pierce. *J Econ Entom* 9:424-31 Ag '16

**Poppies**

Barbaric oriental poppy. S. R. Duffy. *il Gard M* 28:23 Ag '18  
Iceland poppy. *il Gard Chron Am* 20:20 Ja '16  
Physiological observations on alkaloids, latex and oxidases in *papaver somniferum*. R. H. True and W. W. Stockberger. *Am J Bot* 3:1-11 Ja '16

**Diseases and pests**

*Coeliodes fuliginosus*, a coleopterous injurious to the poppy, in Austria. R. Ranninger. *Int R Sci & Prac Ag* 8,no 7:1068-9 Jl '17

**Population**

Census tables of population; population, male and female, by races: 1915, Florida. *Fla Ag Dept Quar B v* 26:53-8 Ap '16  
National increase of population: rural compared with urban. J. M. Gillette. *Rural Manhood* 9:265-6 Je '18

Population of California. *Cal Ag Bd Rep* 1917:20-37 '18

Rural and agricultural population and number of persons engaged in agriculture in various countries. *U S Ag Yearbook* 1915:576-7

Rural population and production in Canada. (*In* T. Adams. *Rural planning and development*, p. 15-44) *il '17 Canada Comm. of conservation, Ottawa*

See also Vital statistics

**Porch boxes**

Plants for porch boxes. S. J. Mitchell. *il Country Gent* 81:849 Ap 15 '16

**Porch furniture**

For the farm porch. E. H. Ray. *Rural N Y* 75:801 My 20 '16  
Interesting porch furniture. *il Country Life* 31:144 Ap '17

**Porch swings**

Designed after the mission style. H. A. Roberts. *Country Gent* 81:412 F 19 '16

**Porches**

House porches and their construction in relation to the garden. W. H. Butterfield. *il Gard M* 23:293-4 Je '16  
Storm-proofing a porch. C. L. Meller. *il Country Gent* 83:34 N 16 '18  
See also Breakfast porches; Sun rooms

**Porcupines**

Conifers curse. R. E. Taft. *il Am For* 22:283-4 My '16

**Pork**

Business in pork direct to consumer. *il Rural N Y* 75:299 F 19 '16  
Come-back of Major Foot; ice-making plants and hog products. H. Quick. *il Country Gent* 81:1023 My 13 '16  
Cutting pork on the farm. Wallaces' *F* 41:215 F 11 '16  
Danger in raw pork. *Weekly N L* 4:5 Ja 3 '17  
Farmer's pork barrel. I. W. Ingham. *Hoard's D* 50:858 Ja 21 '16  
Farmers' pork supply. *Ohio F* 138:580 D 9 '16  
Feeding and management of hogs; butchering, curing and keeping of pork. J. I. Thompson. *Cal Ag Exp C* 151:14-16 '16  
Fitting pork for retail trade. *Rural N Y* 75:130 Ja 22 '16  
Handling and preservation of pork and pork products. *W Va Ag Dept B* 19:1-15 '16  
Hog cholera transmission through infected pork. R. R. Birch. *Am Vet M Assn J* 51:303-30 Je '17  
Irish co-operative bacon plant. Wallaces' *F* 42:51 Ja 12 '17  
Rare pork dangerous. *Va Ag Dept B* 115:108-10 '17  
Uses of hog products. J. M. Carroll. *Country Gent* 82:702 Ap 7 '17  
See also Meat; Slaughtering

**Preservation**

Appetizing ham and bacon. W. L. Nelson. *il Country Gent* 82:1980 D 15 '17  
Best of hams and bacon; how to dress and cure them on the farm. T. G. Paterson. *il Country Gent* 82:1816-17+ N 24 '17  
Butchering day rules and recipes. O Judd Farmer 61:16 D 30 '16; 62:28 Ja 6 '17  
Butchering time. F. A. Roberts. *Nat Stock & F* 40:895 D 2 '16  
Butchering time. A. E. Vandervort. *Nat Stock & F* 40:796 N 4 '16  
Curing meat on the farm. D. T. Gray. *Prog F* 32:1234 N 24 '17  
Curing pork. Wallaces' *F* 43:123 Ja 25 '18  
Curing pork. W. H. Tomhave. *Nat Stock & F* 41:727 O 27 '17  
Curing pork at home. Wallaces' *F* 41:1594 D 8 '16  
Curing pork on the farm. R. Priest. *Tenn Ag Ext Pub* 57 4p '18  
Curing the pork. *Ohio F* 140:464 N 17 '17  
Don't waste the head; making headcheese, corn-meal scrapple and soap. G. K. Swanger. *il Country Gent* 83:59 Ja 12 '18  
Dressing and curing pork on the farm. *il Ia Ag Ext B* 44:1-15 '16  
Dressing and curing pork on the farm. E. S. Gorton. *il Wallaces' F* 41:1596-7 D 8 '16

**Pork—Preservation—Continued**

- Dry-curing pork. Kimball's D F 14:30 Ja 15 '16; Same cond. Wallaces' F 41:81 Ja 21 '16  
 Farmers' experience meeting; good ideas for hog-killing season. Prog F 33:1282 N 23 '18  
 Handling and preservation of pork and pork products. W Va Ag Dept B 19:1-15 '16  
 Hog butchering and pork curing. P. F. Trowbridge. Il Mo Ag Ext C 42:1-16 '17  
 Hog-killing-time recipes. Prog F 33:1290 N 23 '18  
 Home butchering. Hoard's D 52:811 D 29 '16  
 Home curing and smoking of pork. A. Hansen. J Ag (Quebec) 21:123 F '18  
 Home curing of pork. J. A. Simms. Il Conn Ag Coll Ext B 11:1-14 '17  
 Home-curing pork. A. P. Spencer. Fla Ag Ext B 11:1-8 '17  
 Killing hogs and curing meat. Il Swine World 5:8-10 D '17  
 Killing hogs and curing pork. F. G. Ashbrook and G. A. Anthony. Il Farmers' B 913:1-39 '18 (rev.)  
 My job on hog-killing day. M. L. Magruder. Il Country Gent 82:2039 D 22 '17  
 Pork steaks in jars. Country Gent 81:616 Mr 11 '16  
 Rules concerning preparation of pork products customarily eaten without cooking. (Service and regulatory announcements—B. A. I. 128) p 131-4 '18 U S Ag  
 Smoking meat. Wallaces' F 43:1561 O 25 '18  
 Some meat-saving hints. K. Perkins. Prog F 31:1438 D 9 '16  
 Two methods of curing pork. Wallaces' F 42:1425 O 19 '17  
*See also* Bacon; Sausage; Smokehouses

**Prices**

- \* Hog product prices. (In Official statement, no. 7, p. 13-14) '18 U.S. Food administration, Washington, D.C.

**Statistics**

- Commercial stocks of fresh pork; Commercial stocks of cured hams, bacon and shoulders, and other cured pork, Jan. 1. U S Food Surveys 1:4-6, 20-5 Je 29 '18  
 Commercial stocks of hams, bacon, and shoulders, and other cured pork, July 1. U S Food Surveys 2:4-9 S 30 '18  
 Market hogs show increase in weight. J. M. Carroll. Swine World 5:21 Mr '18

**Porometers**

- Use of the porometer in stomatal investigation. R. C. Knight. bibliog Ann Bot 30:57-76 Ja '16

*See also* Stomatograph

**Portable fences.** *See* Fences, Portable**Portland, Oregon.** *See* Milk supply—Portland, Oregon**Portland cement**

- Recovery of potash as a by-product in the manufacture of Portland cement. J: J. Porter. Am Fert 49:58+ Ag 31 '18

**Porto Rico**

- Forests of Porto Rico, past, present, and future, and their physical and economic environment. L: S. Murphy. bibliog il map U S Ag B 354:1-99 '16

*See also* subhead Porto Rico under Agriculture, Bee culture, Botany, Forests and forestry, Plants, Trees

**Agriculture and labor, Commissioner of**

- Report, 1917. 545-62p '17 Porto Rico Comr. of ag. and labor, San Juan

**Description and travel**

- Porto Rico and its beekeepers. H: Brenner. Il Am Bee J 56:380 N '16

**Porto Rico agricultural experiment station**

- Report, 1916. il Porto Rico Ag Exp Rep 1916: 1-31 '18  
 Report, 1917. il Porto Rico Ag Exp Rep 1917: 1-40 '18

**Porto Rico insular experiment station**

- 5th report of the Board of commissioners of agriculture for the period from July 1, 1915, to June 30, 1916. 101p '17 Porto Rico bd. of com. of ag., Rio Piedras

Contains Reports of the Director, Plant breeder, Pathologist, Entomologist, Chemist, also Report on tobacco and vegetable insect investigations

- Annual report for the period from July 1, 1916-June 30, 1917. Porto Rico Insular Exp Rep 1916-1917:1-131 '17

This constitutes the 7th annual report of the experimental work conducted by this Station, the others of the series having been issued as bulletins one, two and five of the Sugar producers' association and the third, fourth and fifth reports of the Board of commissioners of agriculture

**Portraits**

- Some remarkable portraits of children that have won fame for their creators. Il Country Life 33:106 N '17

**Portugal**

- See also* Agricultural cooperative credit associations—Portugal; Food control—Portugal

**Labor, Minister of**

- Loi n. 494 créant un ministère du travail et de la prévoyance sociale; Décret n. 2354 (rectifié) relatif à l'organisation du service du ministère du travail et de la prévoyance sociale, créé en vertu de la loi n. 494 du 16 mars 1916. Int Yearbook Ag Leg 1916:821-8 '17

**Portuguese Guinea.** *See* Agricultural products—Portuguese Guinea**Postal rates**

- Postal law will kill national publications. Kimball's D F 16:106 F 15 '18

**Postal savings banks**

- Loi modifiant la loi du 25 juin 1910 autorisant le système de l'épargne postale, et visant aussi d'autres fins aux États-Unis d'Amérique. Int Yearbook Ag Leg 1916:970-1 '17

**Postal service**

- Motor trucks used in rural mail service. Il Power F 27:58 Je '18

- Must farmers' pay more for mail than other people pay? C. Poe. Prog F 32:587 Ag 18 '17  
*See also* Parcel post; Rural free delivery

**Posts, Concrete**

- Reinforcement for concrete posts. Scientific Am (233 Broadway, N.Y. 10c) 118:109 F 2 '18

*See also* Guide posts, Concrete

**Posts, Fence.** *See* Fence posts**Potash**

- Abyssinian potash mine. Am Fert 47:48 Ag 18 '17

- Alsation potash. Am Fert 46:68 My 26 '17

- Alunite deposits of Australia and their utilization. (B. 3) 38p bibliog il maps '17 Advisory council of science and industry, Melbourne, Australia

- Alunite near Marysville, Utah. (In Am. fertilizer hdbk., 1917, p. 80-1) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

- \* America independent of German potash. Iron Trade R (Penton bldg., Cleveland, O. 15c) 63:959-60 O 24 '18

- American made potash. J. C. Pridmore. Am Fert 48:78-9 Ap 13 '18

- American potash found in Nebraska lake. Il Rural N Y 77:1305, 1326 N 23-30 '18

- American potash once more. Rural N Y 75: 775 My 20 '16

- American supplies of potash. Rural N Y 77: 762 Je 8 '18

- Another cement potash installation. Am Fert 48:36 My 11 '18

- Another potash recovery plant. Am Fert 48:34 Mr 2 '18

- Availability of potash fertilizer residue in the soil. Pa Ag Exp B 147:38-40 '17



Potash—Continued

- Availability of potash in certain orthoclase-bearing soils as affected by lime or gypsum. L. J. Briggs and J. F. Breazeale. *J Ag Research* 8:21-8 Ja 2 '17; Summary. *Int R Sci & Prac Ag* 8,no 4:556-8 Ap '17
- Availability of potash in some common soil-forming minerals—effect of lime upon potash absorption by different crops. J. K. Plummer. *bibliog il J Ag Research* 14:297-316 Ag 19 '18
- Availability of potash in wood ashes. R. E. Stallings. *Am Fert* 46:24 Ja 20 '17
- Banana stalks as a source of potash. H. E. Billings and A. W. Christie. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:153-4 F '17
- Birth of an industry. *Am Fert* 44:27 Ap 29 '16
- \* Blast-furnace and cement-kiln potash. *Iron Age* (239 W. 39th st, N.Y. 20c) 102:1209 N 14 '18
- Blast furnace flue dust as a potash manure. *J Bd Ag* 24:852-4 N '17
- Box lye usually worthless as a source of potash for fertilizer. C. B. Williams. *Prog F* 31:251 F 19 '16
- Bracken a source of potash. *J Dept Ag Victoria* 16:180-1 Mr '18
- Bracken as a source of potash. R. A. Berry and others. *J Bd Ag* 25:1-11 Ap '18
- By-product potash in the cement industry. Concrete (Telegraph Bldg., Detroit, Mich. 20c) 9:sup57-8 D '16
- California kelp operations of the Hercules powder company. *il Metallurgical & Chemical Eng* (10th av at 36th st, N.Y. 25c) 18:576-80 Je 1 '18
- Canadian potash and nitrate industries. *Am Fert* 46:23 My 12 '17
- Carbonization of kelp for the recovery of potash. J. W. Turrentine. *plan Metallurgical and Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:196-9 F 15 '17
- Cement kilns and blast furnaces as producers of potash. *Engineering News* (10th av. at 36th st., N.Y. 15c) 77:406-7 Mr 8 '17
- Collection of kelp in the United States for potash production. *Int R Sci & Prac Ag* 9,no 1:43 Ja '18
- Concerning potash. *Country Gent* 81:1523 Ag 12 '16
- Concerning potash from kelp. *Country Gent* 81:1192 Je 10 '16
- Condition of fertilizer potash residues in Hagerstown silty loam soil. W. Frear and E. S. Erb. *bibliog J Ag Research* 15:59-81 O 14 '18
- Cottrell process for potash recovery. L. Bradley. *Am Fert* 49:58+ O 12 '18
- Crops without potash. *Country Gent* 81:790 Ap 8 '16
- Cutting off potato tops; potash. *Rural N Y* 76:1392 D 8 '17
- Department favors drawing potash from home sources. *Weekly N L* 6:1 N 6 '18
- Development of our potash industry. F. M. deBeers. *Am Fert* 45:42+ N 11 '16; Same. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:15-16 Ja 6 '17
- Disposal of wool scouring waste. R. S. Weston. *il diags Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:765+ Ja 13 '17
- Do the Red beds of Wyoming contain potash salts? *J Franklin Institute (Franklin Institute, Philadelphia 50c)* 183:168 F '17
- Domestic potash and phosphate. *Am Fert* 44:44-9 Ja 8 '16
- Domestic potash production. *Eng & Mining J* (10th av at 36th st, N.Y. 15c) 104:827-9 N 10 '17
- Domestic supplies of potash. E. H. Jenkins. *Conn State Ag Exp B* 198:47-52 '17
- Drilling for potash. *Am Fert* 46:38 F 3 '17
- Effect of additions on the availability of soil potash, and the preparation of sugar humus. G. S. Fraps. *Tex Ag Exp B* 190:1-30 '16
- English chemists working on potash as a by-product. K. M. Chance. *Am Fert* 49:60 S 28 '18
- Experiments with potash in potato fields; with discussion. W. L. Minch. (*In Pro. N.J. state hort. soc.*, 1916, p. 78-86) '17 H. G. Taylor, sec., Riverton, N.J.
- Experiments with potash manures on hops in Germany. F. Ancker. *Int R Sci & Prac Ag* 7,no 11:1619-21 N '16
- Extraction of potash from kelp. C. A. Higgins. *Chem & Metallurgical Eng* (10th av at 36th st, N.Y. 25c) 19:432-3 S 26 '18; Same. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:832-3 O '18
- Facts about fertilizers; how to supply our potash requirements. C. A. Mooers. *Prog F* 32:248 F 24 '17
- Fertilizer famine. *Country Gent* 81:260 F 5 '16
- Fertilizer needs of the United States. H. J. Wheeler. *Am Fert* 48:58+ Mr 30 '18
- Fertilizer question. J. Dvornik. *Wallaces' F* 41:270 F 18 '16
- Fertilizer situation. W. H. Bowker. *il Field* 11 26:11 Ja '16
- Field experiments in 1915; effect of omitting potash fertilization upon the potato crop. *Maine Ag Exp B* 246:17-27 '16; Summary. *Market Growers J* 20:54 Ja 15 '17
- Garden sources of potash. J. B. Morman. *Gard M* 22:212 Ja '16
- \* German potash and the war. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:655-6 Ag '18
- Translated from *Deutsche Wirtschafts-Zeitung*, Jan. 15, 1918
- German potash industry. *Am Fert* 46:56 My 12 '17
- German potash industry in war time. *Am Fert* 48:64 Ap 27 '18
- German potash syndicate. *Am Fert* 46:34 Je 9 '17
- Getting potash from brines. *Am Fert* 44:46 Ap 15 '16
- Getting potash kelp with a submarine lawn mower is a war industry. *il Am Machinist* (10th av at 36th st, N.Y. 15c) 47:599-600 O 4 '17
- Government to build potash factory. *Market Growers J* 20:60 Ja 15 '17
- Great Britain's sources of potash. *Am Fert* 49:46 N 23 '18
- High potash-bearing slates in Georgia. S. W. McCallie. *Eng & Mining J* (10th av at 36th st, N.Y. 15c) 104:643 O 13 '17
- Immense deposits of potash awaiting a cheap method of extraction. *J Franklin Inst (Franklin Institute, Philadelphia 50c)* 184:590-1 O '17
- Importance of developing our natural resources of potash. F. W. Brown. *il U S Ag Yearbook* 1916:301-10; Same. *Separate* 717
- Important British potash developments. *Am Fert* 49:35-6 Ag 31 '18
- Increase in production of potash. *Am Fert* 48:72+ Je 8 '18
- Influence of gypsum upon the solubility of potash in soils. P. R. McMiller. *bibliog J Ag Research* 14:61-6 Jl 1 '18
- Italian leucitic lavas as a source of potash. H. S. Washington. *Metallurgical & Chemical Eng* (10th av at 36th st, N.Y. 25c) 18:65-71 Ja 15 '18
- KCl answers "Here!" V. Willard. *il Sunset* (San Francisco, Cal. 15c) 40:10-13 Ap '18
- Lime and its relation to potash. L. M. Carter. *Ga Ag Coll (Ext)* C 22:1-4 '16
- Manufacture of potash from felspar. *J Bd Ag* 23:1087-91 F '17
- Manure as a source of potash. *Prac F* 113:76 F 15 '17
- Marsh grass as a source of potash. T. E. Keitt. *Prog F* 31:77 Ja 15 '16
- Modified method for the determination of water soluble potash in wood ashes, treater dust, etc. H. D. Haskins. *Am Fert* 48:76+ My 11 '18
- Nebraska potash industry. E. E. Thum. *il map Metallurgical & Chemical Eng* (10th av at 36th st, N.Y. 25c) 17:693-3 D 15 '17
- Nebraska potash production. *Am Fert* 48:68 Ap 13 '18
- New deposit of alunite. T. H. Norton. *Am Fert* 44:54 Je 24 '16

## Potash —Continued

- New potash deposits. Sci Am Sup (233 Broadway, N. Y. 10c) 86:170 S 14 '18
- New, rapid and accurate method for estimating lime and potash in soils. T. E. Keitt and C. J. King. S C Ag Exp B 188:1-5 n. d.
- New source of potash. H. T. Cranfield. J Bd Ag 24:526-30 Ag '17
- New sources of American potash. Rural N Y 76:544 Ap 14 '17
- Nitrate of potash from Chile. Am Fert 48:23 F 16 '18
- Our mineral supplies. H. S. Gale. (U.S. Geol. survey B. 666-N) 4p '17 U.S. Dept. of the interior, Washington, D.C.
- Permits for prospecting on potash lands. Am Fert 47:52 D 8 '17
- Plant food materials in the leaves of forest trees. P. Serex, jr. Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.) 39:1286-96 Je '17
- Possible sources of potash in America. Am Fert 44:21-6 Ja 22 '16
- Possibility of an American source of potash. W. A. Worsham, jr. Ga Ag Coll (Ext) C 19:1-4 '16
- Potash. H. S. Gale. Am Fert 46:54+ Je 9 '17
- Potash and plant diseases. Better Fruit 12:16 D '17
- Potash as a byproduct from the blast furnace. R. J. Wysor. bibliog il Am Institute of Mining Engineers B (E. Stoughton, sec., 29 W. 39th st., N.Y. 50c) 121:1-32 Ja '17; Discussion. 123:407-8; 124:563-73 Mr-Apr '17
- Potash—as viewed in England. Am Fert 48:32-4 Ap 27 '18
- Potash becomes a valuable cement-mill by-product. A. C. Hewitt. il Engineering News (10th av. at 36th st., N.Y. 15c) 76:1222-6 D 28 '16
- Potash cry. Scientific Am (233 Broadway, N.Y. 10c) 118:70 Ja 19 '18
- Potash factory to be built by government. Am Flor 47:1329 D 30 '16
- Potash famine. F. P. Stockbridge. World's Work (Garden City, N.Y. 25c) 36:28-33 My '18
- Potash for tobacco. Country Gent 81:690 Mr 25 '16
- Potash from alkali deposits. R. Stewart. Country Gent 82:1052 Je 23 '17
- Potash from alunite. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 17:433 O 1 '17
- Potash from banana stalks. Am Fert 44:46 My 13 '16
- Potash from cement at the Riverside Portland cement company. il Metallurgical & Chemical Eng (239 W. 39th st., N.Y. 25c) 16:701-3 Je 15 '17
- Potash from cement dust; patent. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:99 Ja 15 '18
- \* Potash from desert lakes and alunite. J. W. Hornsey. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:838-9 O '18
- Potash from feldspar. Am Fert 46:66 My 26; 47:62 Ag 4; 44 O 27 '17
- Potash from feldspar; abstract. E. A. Ashcroft. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:153 F 1 '18
- Potash from feldspar; patent. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:100 Ja 15 '18
- Potash from ground rock. Am Fert 47:33-4 N 24 '17
- Potash from incinerator ash of the Northwest. C. W. Thing. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:472-4 My '17
- Potash from kelp. Am Fert 46:48 F 3 '17
- Potash from kelp. Int R Sci & Prac Ag 7, no 1:50-1 Ja '16
- Potash from kelp. il O Judd Farmer 64:20 F 9 '18
- Potash from Owens lake. C. Elschner. Am Fert 44:48-50 Mr 4 '16
- Potash from sand-hill lakes. R. P. Crawford. il Scientific Am (233 Broadway, N.Y. 10c) 116:167 F 17 '17
- Potash from the lavas of Vesuvius. Sci Am (233 Broadway, N. Y. 10c) 119:262 S 28 '18
- Potash from tobacco plants; patent. Metallurgical and Chemical Eng (10th av at 36th st, N.Y. 25c) 18:317 Mr 15 '18
- Potash from tule and the fertilizer value of certain marsh plants. P. L. Hibbard. Cal Ag Exp B 288:187-92 '17
- Potash from wood ashes. C. T. Edgar. Am Fert 48:38-9 My 25 '18; Same. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:537-9 My 15 '18
- Potash from wood ashes. S: J. Record. Country Gent 82:1483 S 29 '17
- Potash in agriculture. B. C. Aston. J Ag New Zealand 16:249-58 My '18
- Potash in agriculture; manure, flax refuse, ashes, bracken fern. B. C. Aston. J Ag New Zealand 14:440-7 Je '17
- Potash in agriculture; some recent researches. B. C. Aston. J Ag New Zealand 13:446-54 D '16
- Potash in bagasse ashes. I. Selector. Prog F 31:451 Mr 25 '16
- Potash in banana stalks and skins. R. H. Ellis. Int R Sci & Prac Ag 7, no 7:950-1 Jl '16
- Potash in cottonseed meal. J. G. Lipman. Country Gent 81:805 Ap 8 '16
- Potash in lake muds of western Utah. Am Fert 44:26 My 13 '16
- \* Potash in Nebraska. J. M. Lliteras. Chemical and Metallurgical Eng (10th av at 36th st, N.Y. 25c) 19:633-4 O 15 '18
- Potash in New Zealand and other countries. P. G. Morgan. J Ag New Zealand 14:257-73 Ap '17
- Potash in 1916; abstracts from "Mineral resources of the United States". H. S. Gale. Am Fert 47:34-6+ D 22 '17; 48:37-40 Ja 5 '18; Int. inst. of ag., Rome) 7th year, no 9 '18; Same. (In Am. fertilizer hdbk., 1918, p. 51-67) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia
- Potash in 1917. (In Am. fertilizer hdbk., 1918, p. 67-8) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia
- Potash in prickly pear. Scientific Am (233 Broadway, N.Y. 10c) 116:58 Ja 13 '17
- Potash; its need and sources. J Dept Ag Victoria 16:58-60 Ja '18; Same. J Dept Ag S Australia 21:591-3 F '18
- Potash laid up in the soil; utilizing the residue. Rural N Y 76:1345 N 24 '17
- Potash mine in Abyssinia. Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:sup9 Ja '18
- Potash not especially needed for plant beds. Prog F 31:76 Ja 15 '16
- Potash problem. Hoard's D 55:125 F 15 '18
- Potash problem on the farm. G. S. Beaumont and R. S. Dunham. Farm Eng 5:7 N '17
- Potash production increasing rapidly. Concrete (Telegraph bldg., Detroit, Mich. 20c) 11:sup30 O '17
- Potash question and general farm crops. A. W. Blair. N J Ag Exp C 67:1-7 '17
- Potash salts and other salines in the Great Basin region. G. J. Young. il U S Ag B 61:1-96 '14
- Potash salts—1915. W. C. Phalen. Am Fert 45:21-31 S 2; 21-31 S 16 '16; Same. (In Am. fertilizer hdbk., 1917, p. 73-90) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Potash situation. L. Heimbürger. Am Fert 44:21-3 My 27 '16
- Potash situation. A. W. Stockett. Am Fert 49:40-2 N 9 '18
- \* Potash situation. A. W. Stockett. (War minerals investigation ser. 2) 13p '18 U.S. Bur of Mines, Washington, D.C.; Same. Am Fert 49:62+ N 23 '18
- Potash situation in America. J. L. Pool. Purdue Ag 12:234-5 Ja '18
- Potash supply. R. K. Meade. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:405 D 29 '17
- Potash supply on the farm. J. B. Weems. Va Ag Dept B 108:3-5 Ja '16
- Potassium: what it is and how to supply it. T. Butler. Prog F 31:281 F 26 '16
- Potatoes without potash. W. B. Duryee, jr. il Country Gent 81:731 Ap 1 '16
- Preliminary report on the potash industry of Nebraska. il maps Neb Ag Bd B 245:233-69 '18



**Potash—Continued**

- Preparation of organic material for the determination of phosphoric acid and potash in aliquots of the same solution. R. M. West. Assn Offic Ag Chem J 3:99-101 My '17
- Present and future of potash. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:58-9 Ja 15 '18
- Production and fertilizer value of citric-soluble phosphoric acid and potash. W. H. Waggonman. U S Ag B 143:1-12 '14
- Production and sale of potash salts. (In Report on the fertilizer industry, p. 104-19) '16 U. S. Federal trade comm., Washington, D. C.
- Production of potash during first six months of 1917. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 17:433 O 1 '17
- Production of potash in 1916. Engineering and Mining J (10th av. at 36th st., N.Y. 15c) 103:356 F 24 '17
- Production of potash in the United States. Science (Science Press, Garrison, N.Y. 15c) n s 46:282-3 S 21 '17
- \* Quest for potash. A. Findlay. New Statesman (10 Great Queen st, Kingsway, London, W. C. 6d) 10:447-9 F 9 '18
- Real facts about potash. H. A. Huston. Am Fert 45:30 N 25 '16
- Recovery of potash as a by-product in the cement industry. W. H. Ross and others. U S Ag B 572:1-22 '17; Same cond. Am Fert 48:35-6+ Ja 19 '18
- Recovery of potash as a by-product in the manufacture of cement. J. J. Porter. Am Fert 46:52 Ap 28 '17
- Recovery of potash as a by-product in the manufacture of Portland cement. J. J. Porter. Am Fert 49:58+ Ag 31 '18
- Recovery of potash from alunite. W. H. Waggonman and J. A. Cullen. map U S Ag B 415:1-14 '16
- Recovery of potash from beet-sugar house waste liquors. H. E. Zitkowski. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:692-4 J1 '17
- \* Recovery of potash from blast furnace gases. Nature (St Martin's st, London, W. C. 6d) 101:147-8 Ap 25 '18
- \* Recovery of potash from blast furnaces; abstracts. L. Bradley. Iron Age (239 W. 39th st, N.Y. 20c) 102:1151-3 N 7 '18
- Recovery of potash from wool scouring waste. R. S. Weston. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3103+ Ja 12 '18
- Recovery of water soluble potash. W. H. Ross and A. R. Merz. Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:sup3-8 Ja '18
- Recovery of water-soluble potash as a by-product in the cement industry. W. H. Ross and A. R. Merz. Am Fert 47:26-8 S 29 '17
- Report on availability of potash. E. E. Vanatta. Assn Offic Ag Chem J 3:105-7 My '17
- Report on determination of potash. T. D. Jarrell. Assn Offic Ag Chem J 3:107-21 My '17
- Russian potash. Am Fert 45:48 S 16 '16
- Seaweeds: some of their economic uses and possibilities. M. A. Howe. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:134-5 Mr 3 '17
- Shortage of kelp at Hercules powder co.'s potash plant. Eng and Mining J (10th av. at 36th st., N.Y. 15c) 103:333 F 24 '17
- Simple tests for potash. W. B. Hicks. Am Fert 45:30-1 S 16 '16; Same. (In Am. fertilizer hdbk., 1917, p. 90-2) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Situation in regard to manganese, sulphur, pyrite, and some other war minerals; with discussion. J. E. Johnson, jr. Eng Soc W Pa (568 Union Arcade bldg., Pittsburgh, Pa. 50c) 33:656-8 Ja '18
- Source of potash. Hoard's D 51:106 F 11 '16
- Sources of potash. T. E. Thorpe. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:103 F 16 '18; Same; with comments by H. Maxwell. Nature (St Martin's st, London, W. C. 6d) 100:344-7, 384 Ja 3, 17 '18
- Spanish potash deposits legislation. Am Fert 48:56+ Je 22 '18

- \* Study of sources of error incident to the Lindo-Gladding method for determining potash. T. E. Keitt and H. E. Shiver. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:994-6 D '18
- Study of the availability of potash in commercial wood ashes. R. E. Rose. Am Fert 46:21-3 Ja 20 '17
- Study of the determination of potash chiefly concerned with the Lindo-Gladding method. P. L. Hibbard. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:504-13 My '17
- Substitution of Stassfurt potash salts by finely crushed Austrian phonolites. J. Stoklasa. Int R Sci & Prac Ag 8,no 5:698-700 My '17
- Supply of American potash. Rural N Y 77:144 F 2 '18
- Talks about saving potash. Rural N Y 75:880 Je 17 '16
- Teachable father; corn on marsh lands. H. E. West. Hoard's D 55:604 Ap 26 '18
- Topographic features of the desert basins of the United States with reference to the possible occurrence of potash. E. E. Free. il map U S Ag B 54:1-62 '14
- Volatilization of potash from cement materials. E. Anderson and R. J. Nestell. J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:253-61 Mr '17
- Wasted potash—can it be saved? Rural N Y 75:806 My 27 '16
- We are dependent upon Germany for potash. World's Work (Garden City, N.Y. 25c) 35:127 D '17
- Wood-ashes as a source of potash. F. B. Guthrie. Ag Gaz of New South Wales 29:817-19 N '18
- See also Marl

**Bibliography**

- Extraction of potash from complex mineral silicates, such as feldspar, leucite and glauconite (greensand marl). E. C. Buck. Metallurgical & Chemical Eng (10th av at 36th st, N.Y. 25c) 18:33-7, 90-5 Ja 1-15 '18
- \* List of references on the potash industry. 13p '18 U. S. Lib. of Congress, Division of bibliography, Washington, D.C.
- Obtained only thru Public affairs information service, 958-964 University av, N.Y. (Typew. 65c)
- Literature of the potash industry, 1912-1917. F. W. Bruckmiller. Chem & Metallurgical Eng (10th av at 36th st, N.Y. 25c) 19:447-9 S 26 '18

**Statistics**

- International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 22-5 My '18 Int. inst. of ag., Rome
- International movement of fertilisers; potash fertilisers. Int Crop Report and Ag Statistics (Int. inst. of ag., Rome) 7th year, no 9 p 633-40 S '16

**Potassium**

- Conservation of potassium. J. W. Ames. Ohio Ag Exp B v 1:155-8 My '16
- Fertilizer materials statistics. (In Am. fertilizer hdbk., 1917, p. 34-7) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia
- Fertilizer materials statistics. (In Am. fertilizer hdbk., 1918, p. 36a-36d) \$1.50 '18 Ware bros. co., 1010 Arch st. Philadelphia
- How to get rich lands; potassium: how to make available. T. Butler. Prog F 32:630 My 26 '17
- How to get rich lands; potassium: its place in crop production and soil building. T. Butler. Prog F 32:606 My 19 '17
- Mineral industries of the United States; fertilizers. J. E. Pogue. (B. 102, pt. 2, p. 15-22) U. S. National museum; 5c Supt. of doc.
- Phosphorus and potassium not leached out of the soil. T. Butler. Prog F 32:855 Ag 11 '17
- Potassium. Am Fert 47:31-3 N 10 '17
- Potassium requirements of bacteria. G. P. Koch. bibliog Soil Sci 5:219-24 Mr '18
- Potassium; what it is and how to supply it. T. Butler. Prog F 31:281 F 26 '16
- Problem of potassium salts in Italy. M. G. Levi; E. Manzella. Int R Sci & Prac Ag 9,no 4:423-6 Ap '18

**Potassium—Continued**

- Sources of potassium. C. T. Hirst and E. G. Carter. *Utah Ag Exp C* 22:1-12 '16
- Studies by means of both pot and solution culture of the phosphorus and potassium requirements of the barley plant during its different periods of growth. F. R. Pember. *il R I Ag Exp B* 169:1-50 '17

See Also Soils—Potassium content

**Potassium bitartrate.** See Cream of tartar

**Potassium cyanide**

- Conduction of potassium cyanide in plants. J. A. Elliott. *il Phyt* 7:443-8 D '17
- Cyanide of potassium. *Am Flor* 46:706 Ap 15 '16
- Poisoning tree parasites with cyanide of potassium. M. M. Metcalf. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:344 Ap 5 '18
- Results of experiments on the use of cyanide of potassium as an insecticide. W. Wellhouse. *il J Econ Entom* 9:169-71 F '16
- Similarity in the effects of potassium cyanide and of ether. W. J. V. Osterhout. *Bot Gaz* 63:77-80 Ja '17

**Potassium in soils.** See Soils—Potassium content

**Potassium permanganate**

- Supposed action of potassium permanganate with plant peroxidases. H. H. Bunzell and H. Hasselbring. *Bot Gaz* 63:225-8 Mr '17

**Potato aphids**

- Controlling potato plant lice. *Market Growers J* 22:241 Mr 15 '18
- Outbreak of the pink and green potato aphids. W. E. Britton and Q. S. Lowry. *bibliog il Conn State Ag Exp B* 203:290-302 '18
- Pink and green aphid of potato. J. S. Houser and others. *il Ohio Ag Exp B* 317:61-88 '17; Abstract. (*il Ohio vegetable growers' assn. directory*, 1918, p. 32-4) n.d. Ohio vegetable growers' assn., Columbus
- Pink and green potato plant louse. J. S. Houser. *il Ohio Ag Exp B* v 2:261-7 Ag '17
- Plant lice on potatoes. W. H. Brown. *Rural N Y* 76:1053 S 8 '17
- Potato lice in New Jersey. *Rural N Y* 76:962 Ag 11 '17
- Potato plant lice and their control. W. S. Regan. *Mass Ag Exp B* 177:133-46 '17
- Traitor aphid that robs potatoes. E. M. Patch. *il Gard M* 27:145 Ap '18

**Potato association of America**

- Its purposes and its work. L. D. Sweet. *Market Growers J* 21:117-18 S 15 '17
- 3d annual meeting, Washington, Nov. 13-15, 1916. W. Stuart. *Market Growers J* 19:253-4 D 1 '16
- 3d annual meeting, Washington, D.C., Nov. 13-15, 1916. C. W. Waid. *Ohio F* 138:546 D 2 '16
- 4th annual convention, Washington, D.C., Nov. 9-10. *Market Growers J* 21:221-3 N 15 '17
- 4th annual meeting; resolutions. *Am Flor* 49:1020 N 24 '17

**Potato black leg**

- Black leg disease of potatoes. P. A. Murphy. *sp il '16 Canada Ag*
- Black-leg or black stem-rot of potatoes. *il J Bd Ag* 24:653-6 S '17
- Influence of temperature and precipitation on the blackleg of potato. J. Rosenbaum and G. B. Ramsey. *J Ag Research* 13:507-13 Je 3 '18

- Studies in bacteriosis; blackleg of the potato. S. G. Paine. *bibliog J Ag Sci* 8:480-94 D '17
- Studies upon the blackleg disease of the potato, with special reference to the relationship of the causal organisms. W. J. Morse. *bibliog J Ag Research* 8:79-126 Ja 15 '17

**Potato bugs.** See Colorado potato beetles

**Potato butter**

- Potato butter. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:191 Mr 23 '18

**Potato contests**

- Vermont boys champion potato growers. M. R. Tolstrup. *Hoard's D* 55:644 My 3 '18

**Potato dry rot.** See Potato late blight

**Potato early blight**

- Alternaria* on *datura* and potato. R. D. Rands. *bibliog il Phyt* 7:327-38 O '17
- Early blight of potato and related plants. R. D. Rands. *bibliog Wis Ag Exp Research B* 42:1-48 '17

**Potato flour**

- Imperishable potatoes. L. D. Sweet. *Review of Reviews* (30 Irving Place, N.Y. 25c) 58:77-8 Jl '18
- More food: best way to take care of it; manufacture of potato flour a coming industry. D. H. Anderson. *Irr Age* 33:145 Jl '18

**Potato gravy eye.** See Potatoes—Diseases and pests

**Potato growers' associations**

- Potato growers' associations in Ontario. F. C. Hart. (*il Report*, Ontario ag. and exp. union, 1916, p. 43-5) '17 Ontario ag. dept., Toronto
- Steuben county potato growers' association. M. B. Dean. *Rural N Y* 77:1219 O 26 '18
- See also names of associations, e.g. Michigan potato growers' association, New York state potato growers' association, Potato association of America

**Potato late blight**

- Conditions influencing the distribution of potato blight in India. Jehangir Fardunji Dastur. *Ag J of India Sci Congress No* 1917:90-6
- Fighting late blight on potatoes. *il O Judd Farmer* 62:1 Je 16 '17
- Getting rid of potato blight. *O Judd Farmer* 64:625 Je 15 '18
- Hibernation of phytophthora infestans in the Irish potato. I. E. Melhus. *bibliog il J Ag Research* 5:71-102 O 11 '15
- Hibernation of potato blight. *Gard Chron (Lond)* 64:80 Ag 24 '18
- Late blight and rot of potatoes. P. A. Murphy. 13p il '16 Canada Ag
- Late blight of potatoes. D. C. Babcock. *il Ohio Ag Exp B* v 2:255-6 Ag '17
- Late potato blight in Iowa. A. T. Erwin. *Ja Ag Exp B* 163:287-305 '16
- On the reappearance of mildew (phytophthora infestans) in the haulm of the potato. J. Eriksson. *Int R Sci & Prac Ag* 7,no 11:1709-11 N '16
- Potato crop and blight. B. F. Lutman. *Rural N Y* 75:707 My 6 '16
- Researches on the germination of the late blight of potato. *Int R Sci & Prac Ag* 7,no 2:305-6 F '16

**Potato leak**

- Disease of potatoes known as leak. L. A. Hawkins. *bibliog il J Ag Research* 6:627-40 Jl 24 '16
- Experiments in the control of potato leak. L. A. Hawkins. *U S Ag B* 577:1-5 '17

**Potato machinery**

- Potato machinery. C. R. White. *il N Y Ag Dept Rep* 1916,pt 2:378-83 '17; Same. *N Y Farms & Markets Dept Ag B* 102:101-6 D '17

From N Y Ag Dept Bulletin 77

**Potato mottled-eye.** See Potatoes—Diseases and pests

**Potato powdery scab**

- Contribution to the life history of *spongospora subterranea*. L. O. Kunkel. *bibliog il J Ag Research* 4:265-78 Je '15
- Influence of moisture and temperature upon infection by *spongospora subterranea*. G. E. Ramsey. *Phyt* 8:29-31 Ja '18
- Powdery scab of potatoes. *J Ag (Quebec)* 19:205 Mr '16
- Powdery scab (*spongospora subterranea*) of potatoes. I. E. Melhus. *il U S Ag B* 82:1-16 '14
- Spongospora subterranea* and *phoma tuberosa* on the Irish potato. I. E. Melhus and others. *bibliog il map J Ag Research* 7:213-54 O 30 '16



**Potato rot**

Physiological study of two strains of fusarium in their causal relation to tuber rot and wilt of potato. G: K. K. Link. bibliog il Bot Gaz 62:169-209 S '16; Same. Neb Ag Exp Research B 9:1-45 '16

Potato wilt and tuber rot caused by fusarium eumartii. R. J. Haskell. il Phyt 6:321-7 Ag '16

Spongiospora subterranea and phoma tuberosa on the Irish potato. I. E. Melhus and others. bibliog il map J Ag Research 7:213-54 O 30 '16

Western fieldrot of the Irish potato tuber caused by fusarium radicleola. O. A. Pratt. il J Ag Research 6:297-310 My 29 '16

**Potato scab**

Effect of temperature on germination and growth of the common potato-scab organism. M. Shapovalov. il J Ag Research 4: 129-34 My '15

Growth of the potato scab organism at various hydrogen ion concentrations as related to the comparative freedom of acid soils from the potato scab. L. J. Gillespie. bibliog Phyt 8:257-69 Je '18

Hydrogen-ion concentration—soil type—common potato scab. L: J. Gillespie and L. A. Hurst. bibliog Soil Sci 6:219-36 S '18

Important points in treating potatoes for scab. A. T. Erwin. Wallaces' F 41:608 Ap 14 '16

Seed and soil treatment for the control of potato scab. H: C. Lint. il N J Ag Exp C 95 4p '18

Seed tuber treatments for potatoes. G. H. Coons. bibliog il Phyt 8:457-68 S '18

**Potato silver-scurf**

Silver-scurf of the Irish potato caused by spongylocladium atrovirens. E. S. Schultz. bibliog il J Ag Research 6:339-50 Je 5 '16

**Potato starch**

\* Japanese potato-starch trade. G: H. Scidmore. (Commerce Reports no. 257) p 435 (N 1) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Potato starch and its use in the home. J Home Econ 8:38-9 Ja '16

Waste waters from potato-starch factories in Hungary; their noxious action and purification. J. Halmi. Int R Sci & Prac Ag 7,no 5:736-7 My '16

**Potato stem borers**

Notes on two unusual garden pests in Nova Scotia. W. H. Brittain. (In Report, Entom. Soc. of Ontario, 1917, p. 94-9) il '18 Ontario ag. dept., Toronto

**Potato tuber moths**

Potato-moth. J Ag New Zealand 14:327 Ap '17

Potato tuber moth. E. R. De Ong. il Cal State Comm Hort B v 7:198-201 Ap '18

Potato tuber moth. J. E. Graf. bibliog il maps U S Ag B 427:1-56 '17; Excerpt. Market Growers J 20:253 Mr 15 '17

Tobacco splitworm. A. C. Morgan and S. E. Crumb. U S Ag B 59:1-7 '14

**Potato wart**

Asks gardeners to watch for cases of potato wart. Weekly N L 6:5 O 30 '18

Ormskirk potato trials, 1918. Gard Chron (Lond) 64:188 N 9 '18

Potato wart in the United States. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 90-1 '18 U S Ag

Wart disease. G. C. Gough. il Gard Chron (Lond) 63:206 My 18 '18

Wart disease of potatoes. Gard Chron (Lond) 63:22 Ja 19 '18

Wart disease of potatoes order of 1918. J Bd Ag 25:212-15 My '18

Wart disease of potatoes: reports on the immunity trials at Ormskirk in 1915-16-17. il J Bd Ag 24:801-18 N '17

**Potato weevils**

New potato weevils from Andean South America. W. D. Pierce. il J Ag Research 1:347-52 Ja '14

Weevils which affect Irish potato, sweet potato, and yam. W. D. Pierce. il J Ag Research 12:601-12 Mr 4 '18

**Potato wilt**

Physiological study of two strains of fusarium in their causal relation to tuber rot and wilt of potato. G: K. K. Link. bibliog il Bot Gaz 62:169-209 S '16; Same. Neb Ag Exp Research B 9:1-45 '16

Potato wilt and tuber rot caused by fusarium eumartii. R. J. Haskell. il Phyt 6:321-7 Ag '16

Potato wilt; south-eastern crop affected. T. G. B. Osborn. J Dept Ag S Australia 20: 864-5 Je '17

**Potatoes**

Action on potato surplus. il Ag Digest 2:649 O '17

Agricultural situation for 1918: potatoes; an ample supply of potatoes needed. U S Ag C 92:1-39 '18

Approved potato ways far and near; symposium. il O Judd Farmer 62:6 Mr 3 '17

Are we all at sea in potato culture? W. C. McCollom. il Gard M 27:80-2 Mr '18

Army of 1,500 women tells nation to eat more potatoes. Weekly N L 5:1 My 15 '18

Back yards and potato pens. B. T. Galloway. il Rural N Y 76:1415 D 15 '17

Battling potato problems. R. E. Dimick. O Judd Farmer 62:6 F 3 '17

Biochemical and physiological study of the rest period in the tubers of solanum tuberosum. C: O. Appleman. bibliog il Bot Gaz 61:265-94 Ap '16

Boys' potato contest; instruction sheets nos. 1-7. W Va Ag Ext C 52, 57, 66, 70, 77, 81, 91 '16

Titles are: To the members of the boys' potato contests; Seed potatoes; Time and methods of planting; Cultivating potatoes; Potato spraying; Selecting potatoes for exhibit and for seed; Marketing the crop

Care of late planted potatoes. D. Dean. Rural N Y 75:740, 768, 807, 832, 855 My 13-Je 10 '16

Chemical life history of the potato. Gard Chron (Lond) 63:178 Ap 27 '18

Colorado potatoes. C. A. Gebhardt. Rural N Y 77:319 Mr 2 '18

Commercial handling, grading, and marketing of potatoes. C. T. More and C. R. Dorland. il map Farmers' B 753:1-40 '16

Community potato crop. Rural N Y 77:32 Ja 12 '18

Comparison between the effects of manuring potatoes with nitrate of soda and sulphate of ammonia. A. Zasukhin. Int R Sci & Prac Ag 7,no 8:1114-15 Ag '16

Cull potato as an asset. W. Harper. Country Gent 82:1429 S 15 '17

Cultivating and spraying potatoes; our experience pool. Prac F 114:143 Ap 1 '18

Culture of beans and potatoes. H. E. Cox. Rural N Y 77:551 Ap 13 '18

Culture of early potatoes under glass. J Bd Ag 23:976-8 Ja '17; Same. Gard Chron (Lond) 61:34 Ja 27 '17

Culture of the potato (C. 26). J. W. Wellington. N Y State Ag Exp Rep 1915:655-8 '16

Dates of planting and digging early potatoes. J. R. Covert. maps Market Growers J 20:251 Mr 15 '17

Degeneration of potatoes. A. C. Bartlett. Gard Chron (Lond) 63:117 Mr 16 '18

Degeneration of potatoes. G. M. Taylor. Gard Chron (Lond) 63:13 Ja 12 '18

Dream of potato growing. Rural N Y 76:697 My 19 '17

Effect of lime on potatoes. il Rural N Y 75: 424 Mr 11 '16

Effects of rest and no-rest periods upon growth of solanum. W. F. Gericke. Bot Gaz 65:344-53 Ap '18

Experiences with potatoes; symposium. Market Growers J 21:39+ J1 15 '17

Experiences with potatoes; symposium. Market Growers J 22:227 Mr 15 '18

Experiments with potash in potato fields; with discussion. W. L. Minch. (In Pro. N.J. state hort. soc., 1916, p. 78-86) '17 H. G. Taylor, sec., Riverton, N.J.

Extension circulars. Mass Ag Ext C 27, 50 '17

Titles are: Potato growing; Potato and corn stalk borer

Factors in successful potato growing. W. T. Macoun. il J Ag (Quebec) 21:164 My '18

## Potatoes—Continued

- Fall crop of Irish potatoes. W. H. Wicks. Ark Ag Exp C 30 4p n. d.
- Fertilization and cultivation of potatoes. D. Dean. Market Growers J 21:30 Jl 15 '17
- Fertilization, seed selection and marketing of potatoes. C. L. Wilkins and others. Maine Ag Dept B v 15:10-23 Mr '15
- Fertilizer industry and the potato situation. H. G. Bell. Am Fert 47:28-30 N 24 '17
- Fertilizing and cultural experiments with Irish potatoes. T. H. White. Md Ag Exp B 215: 151-74 '18
- Fertilizing the potato crop. C. E. Thorne. il Ohio Ag Exp B v 2:142-6 My '17
- Fewer potato varieties. il Country Gent 81: 688 Mr 25 '16
- Field cultivation of early potatoes; with discussion. H. Broughton. il (In Report, Ontario vegetable growers' assn., 1916, p. 30-9) '17 Ontario ag. dept., Toronto, Canada
- Field experiments, 1917. J Dept Ag Ireland 18, no 2:158-68 '18
- Food value of the potato; facts and superstitions of the potato. Gard Chron (Lond) 62: 250 D 22 '17; Same. Gard Chron Am 22:56 F '18
- For increased potato acreage. O Judd Farmer 62:6 My 5 '17
- Getting a full stand of potatoes. E. S. Brigham. Market Growers J 18:331 My 15 '16
- Grow better potatoes. A. G. Tolaas and G. R. Bisby. Minn Ag Ext Spec B 22 4p '18
- Grow more potatoes. Gard Chron (Lond) 63: 148 Ap 6 '13
- Growing and marketing potatoes. D. Dean. N Y Ag Dept B 81:1662-72 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1662-72 '17
- Growing early potatoes. C. W. Waid. Market Growers J 22:230 Mr 15 '18
- Growing potatoes in crates where ground is scarce. il Scientific Am (233 Broadway, N.Y. 10c) 117:102 Ag 11 '17
- Handling and marketing potatoes. Market Growers J 19:280 D 15 '16
- Hardening potato situation. O Judd Farmer 60:11 Ja 1 '16
- Harvesting potatoes with machinery. O Judd Farmer 63:11 S 15 '17
- Harvesting the potato crop. J. Fixter. J Ag (Quebec) 21:51 O '17
- High-pressure gardening. Gleanings 45:558-61 Jl '17
- Home potato patches. C. S. Knight. il Nev Ag Exp B 87:1-8 '17
- How to insure a stand of fall Irish potatoes. J. M. Sugr. Prog F 31:650 My 13 '16
- How to make potato growing profitable. E. R. Smith. Market Growers J 18:42 Ja 15 '16
- How will you have your potatoes? Ag Digest 2:331-2 F '13
- Hurrying up potatoes. Wallaces' F 41:482 Mr 24 '16
- Importance of potatoes as a world food crop. Coop Manager & F 7:55 Je '18
- Importance of the potato as a food crop. W. Stuart. il Market Growers J 22:212-13 Mr 15 '18
- Importance of type in potato standardization. W. Stuart. Market Growers J 21:29 Jl 15 '17
- Important factors in potato production. H. J. Wheeler. (B. 9) 23p il n.d. Am. ag. chemical co., 92 State st, Boston
- Improvement of potatoes by hill selection. W. T. Macoun. Ag Gaz of Canada 3:784-6 S '16
- Increased food production. Gard Chron (Lond) 63:174 Ap 27 '18
- Increasing potato production. F. C. Gaylord. il Purdue Ag Ext B 64:1-12 '18
- Increasing the yield of potatoes. J. Marsh. Ohio F 141:594 Ap 27 '18
- Influence of excess of water in the soil, on the formation of secondary potato tubers and their starch content. M. Arkhangelskij. Int R Sci & Prac Ag 7, no 8:1112-14 Ag '16
- Intensive propagation of potatoes. il Gard Chron (Lond) 60:289 D 16 '16
- Irish potato spraying. H. P. Stuckey and B. B. Higgins. il Ga Ag Exp B 123:115-24 '16
- Irish potatoes. Prac F 112:458 D 15 '16
- Irrigation of potatoes. F. S. Harris. il Utah Ag Exp B 157:1-20 '17
- Keep the potatoes green and growing. J Ag (Quebec) 21:19 Ag '17
- Last season's potato crop. E. Molyneux. Gard Chron (Lond) 60:263 D 2 '16
- Late planted potatoes. R. W. De Baun. il Rural N Y 76:371 Mr 10 '17
- Lecture on potato growing. W. Cuthbertson. il Gard Chron (Lond) 63:81-3 F 23 '18
- Make 'em big and mealy. J. Eby. il Country Gent 83:15 Mr 9 '18
- My potato patch in 1916; and some notes on the mystery manures. H. E. Durham. Gard Chron (Lond) 61:113 Mr 17 '17
- 1918 potato crop; details of the distribution scheme. J Bd Ag 25:708-13 S '18
- Observations on some degenerate strains of potatoes. F. C. Stewart. il N Y State Ag Exp B 422:319-57 '16; Summarized by F. H. Hall (Some disappointing seed potatoes). B 422 Popular ed 8p
- Old pasture land for potatoes. W. P. Brooks. Rural N Y 75:683-4, 709, 769 Ap 29-May 6, 20 '16
- \* Outline for a study of the potato. W. G. Vinal. il Nature Study R (Ithaca, N.Y. 15c) 14:187-95 My '18
- Patriotic potato. S. E. Bower. J Home Econ 10:314-20 Jl '18
- Planting fall potatoes. Prog F 31:938 Jl 29 '16
- Planting for the main crop of potatoes. J. A. Paice. Gard Chron (Lond) 61:114 Mr 17 '17
- Planting potato prosperity. il Country Gent 82: 911 My 19 '17
- Plants for saving waste potatoes. Wallaces' F 41:212 F 11 '16
- Points in potato culture. C. H. Sapp. Ohio F 139:450 Mr 24 '17
- Poor year, but good potato show. O Judd Farmer 61:7 D 9 '16
- Potato as a war crop. J Bd Ag 24:1225-7 F '18
- Potato bloom. Gard Chron (Lond) 63:256 Je 22 '18
- Potato bread and rolls. Wallaces' F 41:1445 N 3 '16; Same. Rural N Y 76:49 Ja 13 '17
- Potato bulletin of the National agricultural society. Ag Digest 1:371-4 Ap '17
- Potato crop in 1915. G. P. Clinton. Rural N Y 75:361, 435 Mr 4-11 '16
- Potato crop of 1917. T. Shaw. Nat Stock & F 41:108 Ap 21 '17
- Potato cull silage. Weekly N L 5:6 D 12 '17
- Potato culture; with discussion. H. M. Anderson. Pa Ag Dept B 283:45-65 '16
- Potato culture. T. B. Hutcheson and T. K. Wolfe. il Va Ag Exp B 217:1-16 '17
- Potato culture. J. Johnson. J Dept Ag S Australia 20:584-5 F '17
- Potato culture. C. F. Noll. il Pa Ag Ext C 45: 1-16 '16
- Potato culture. F. S. Prince. N H Ag Ext Press B 69 1p '17
- Potato culture and marketing. D. Maynard. il (In Report, Ontario vegetable growers' assn., 1917, p. 37-43) '18 Ontario ag. dept., Toronto
- Potato culture under irrigation. W. Stuart and others. il Farmers' B 953:1-23 '18
- Potato distribution. Power F 26:14 N '17
- Potato extension scheme. J. Miller. Ag Gaz of Canada 5:277-80 Mr '18
- Potato fertilizers. T. C. Johnson. Va Truck Exp B 21:431-56 '16
- Potato grower and increased production. C. W. Waid. Market Growers J 22:18 Ja 1 '18
- Potato growing. S. N. Green. il Ohio Ag Exp B v 2:147-52 My '17
- Potato growing and marketing. L. D. Sweet. Am Coop J 12:439 F '17
- Potato growing and potato diseases from Maine to California. W. J. Morse. Maine Ag Exp Doc 531:1-20 '16
- Reprint (with slight changes) of pp. 265-282 of the Report of the Maine Commissioner of agriculture, 1916
- Potato-growing for small areas. W. H. Taylor. J Ag New Zealand 14:473-5 Je '17
- Potato harvest. Wallaces' F 42:1082 Ag 3 '17
- Potato harvest common sense. W. H. Dean. il Country Gent 82:1313-14 Ag 25 '17
- Potato insurance. D. C. Babcock. Ohio Ag Exp B v 1:175-6 Je '16
- Potato militiam. E. Davenport. il Country Gent 82:1509-10 O 6 '17



**Potatoes—Continued**

- Potato pointers. A. L. Dacy. *il W Va Ag Ext C* 205:1-8 '18 (C. 124 rev.)
- Potato production. H. G. Bell and C. A. Waugh. (Soil improvement com. B. 16) 14p *il '16 Nat. fertilizer assn., Chicago*
- Potato productive power. T. W. Harvey. *Country Gent* 81:526 Mr 4 '16
- Potato profits. O. A. Clement. *il Country Gent* 82:633 Mr 31 '17
- Potato project. J. C. Hogenson and E. W. Stephens. *Utah Ag Ext C v 6, no 7 7p '18*
- Potato soils and their preparation. D. Dean. *Rural N Y* 75:611-12, 653, 684, 708 Ap 15-May 6 '16
- Potato spraying in 1917. *Gard Chron (Lond)* 62:150 O 13 '17
- Potato spraying pays. *Weekly N L* 5:8 Mr 13 '18
- Potato yields. *Gard Chron (Lond)* 62:117 S 22 '17
- Potato yields. *il Gard Chron (Lond)* 64:167 O 26 '18
- Potatoes. *Gard Chron (Lond)* 60:306 D 23 '16
- Potatoes. (In *Geography of the world's agriculture*, p. 66-70) maps '17 U S Ag
- Potatoes. C. A. Zavitz. *il Ontario Ag Dept B* 229:1-88 '16
- Potatoes and celery—two late crops. W. F. Massey. *Prac F* 114:244 Jl 15 '18
- \* Potatoes and potato culture. F. T. Ullrich. 10p bibliog n.d. Wis. State normal school, Platteville
- Potatoes and prejudice. *Gard Chron (Lond)* 61:53 F 3 '17
- Potatoes as a cash crop. J. Marsh. *Ohio F* 137:742 My 27 '16
- Potatoes as a market gardener's crop. T. W. Blackman. *Market Growers J* 22:222 Mr 15 '18
- Potatoes for South American markets. W. Stuart. *Market Growers J* 18:207-8 Mr 15 '16
- Potatoes grown under a straw mulch. E. F. Murphy. *il Gard M* 28:96 O '18
- Potatoes move conservatively. O Judd *Farmer* 63:8 O 20 '17
- Potatoes on sand barrens; beans and vetch build up land to profit. O. Van Epps. *il Country Gent* 81:959 My 6 '16
- Potatoes, sweet potatoes, and other starchy roots as food. C. F. Langworthy. *U S Ag B* 468:1-28 '17
- Potatoes this year share with corn in popularity and importance. *il O Judd Farmer* 63:1 O 27 '17
- Potatoes under straw. S. W. Jones. *Nat Stock & F* 40:1425 Mr 24 '17
- Potatoes with pork. H. W. Doyle. *il Country Gent* 81:875-6 Ap 22 '16
- Potatoes without potash. W. B. Duryee, jr. *il Country Gent* 81:731 Ap 1 '16
- Present conditions in the potato industry. L. D. Sweet. *Market Growers J* 20:403-4 My 15 '17
- Prevention of field and storage rot of potatoes by Bordeaux mixture. P. A. Murphy. *il Ag Gaz of Canada* 4:942-4 N '17
- Process for using spoiled potatoes. *Scientific Am* (233 Broadway, N.Y. 10c) 117:487 D 22 '17
- Production of high quality potatoes. L. D. Sweet. *Market Growers J* 18:333 My 15 '16
- Production of no. 1 grade potatoes. D. Dean. (In *Ohio vegetable growers' assn. directory*, 1918, p. 26-31) n.d. Ohio vegetable growers' assn., Columbus; Same. *Market Growers J* 23:23-5 Jl 15 '18
- Raise things. *Nat Stock & F* 41:134-5, 164, 190, 320 Ap 28-May 12, Je 23 '17
- Raising potatoes. J. E. Weber. *Penn State F* 11:126 Ap '18
- Remarks on hilling potatoes. *Rural N Y* 75:1047 Ag 5 '16
- Requisites in potato growing. K. A. Kirkpatrick. O Judd *Farmer* 60:16 Ap 15 '16
- Rice vs. potatoes. *Ohio F* 139:418 Mr 17 '17
- Saving our potato crop. H. Wardwell. *Field* 11:27:684 S '17
- Saving potatoes by spraying; symposium. O Judd *Farmer* 60:26 Mr 4 '16
- Savory potatoes for home-supplies. *Am Coop J* 13:200 Ja '18

- Seasonable notes on potato culture. C. W. Waid. *Market Growers J* 18:334 My 15 '16
- Second crop Irish potatoes. H. M. Cottrell. *Prog F* 32:743 Je 30 '17
- Second crop potatoes; status and outlook. W. Stuart. *Market Growers J* 19:32 Jl 15 '16
- Selection of potato tubers for planting. *Gard Chron (Lond)* 61:71 F 17 '17
- Serious business of potato raising. T. H. Wittkorn. *il Prac F* 113:139 Ap 1 '17
- Soaring spud. H. S. Stabler. *Country Gent* 82:3-43 Ja 13 '17
- Specialists meet to discuss potato situation. J. Miller. *Ag Gaz of Canada* 4:1061-5 D '17
- Spray potatoes. *Weekly N L* 5:1 Ag 8 '17
- Spraying, lifting, and storing of potatos. *Gard Chron (Lond)* 63:261 Je 29 '18
- Spraying potatoes. W. Taylor. *Gard Chron (Lond)* 62:191 N 10 '17
- Spuds and strawberries. *il Country Gent* 82:696 Ap 7 '17
- Story of potato planting. *Rural N Y* 76:334, 380, 462 Mr 3-10, 24 '17
- Study of potatoes. H. Mason. *il Ohio F* 137:354 Mr 4 '16
- Study of the potato. *il Cornell Rural School Leaflet v 11, no 1:140-66 '17*
- Talk about level culture; experience with corn and potatoes. G. W. Rogers. *Rural N Y* 77:641 My 4 '18
- This plan made a crop worth 60% more. F. Berner. *System on the Farm* 2:167 My '18
- This year—prize potatoes! A. Rutledge. *Gard M* 25:186 Ap '17
- Timely hints for Irish potato growers. W. N. Hutt. *Prog F* 33:274 Mr 2 '18
- Treatment of frozen potatoes. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:99 F 16 '18
- Trial of early potatos. W. A. Cook. *Gard Chron (Lond)* 64:23 Jl 20 '18
- Two crops of spuds a year. W. H. Olin. *il Country Gent* 81:1826-7 O 14 '16
- Unorthodox cultivation of potatoes. T. E. Tomalin. *Gard Chron (Lond)* 61:35 Ja 27 '17
- Use more potatoes. R. W. Peterson. *il Country Gent* 83:10 Mr 30 '18
- Value of quality in the potato. F. W. Allen. *Wallaces F* 41:190 F 4 '16
- What of 1918 potato acreage? O Judd *Farmer* 64:11 Ja 26 '18
- Where potato shortages are. O Judd *Farmer* 61:6 O 14 '16
- Where the potatoes went. O Judd *Farmer* 65:161 Ag 31 '18
- Who cares for potatoes? F. S. Culver. *il Good Housekeeping* (119 W. 40th st., N.Y. 15c) 64:76 Mr '17
- Wholesale potato growing. H. A. Shearer. *il Farm Eng* 7:10-12 Ap '18
- Women and potatoes. *Country Gent* 82:190 Ja 22 '16
- See also *Cookery—Potatoes; Feeding and feeding stuffs—Potatoes; Potato starch; also Michigan potato growers' association, New York state potato association, Potato association of America*

**Anatomy**

- Anatomy of the potato plant, with special reference to the ontogeny of the vascular system. E. F. Artschwager. bibliog *il J Ag Research* 14:221-52, 27-47pl Ag 5 '18

**Breeding**

- Bud variation in potatoes. A. W. Sutton. *Chron (Lond)* 64:199-200 N 16 '18
- Degeneration of potatoes. H. T. Güssow. *J Ag (Quebec)* 19:228 Ap '16
- Irish potato breeding. C. C. Newman and L. A. Leonian. bibliog *il S C Ag Exp B* 195:1-28 '18
- More potatoes. *J Heredity* 8:346-9 Ag '17
- Ormskirck potato trials. 1918. *Gard Chron (Lond)* 64:188 N 9 '18
- Paterson of Dundee; the production of new varieties of potatoes. J. Wilson. *J Dept Ag Ireland* 18:121-7 '18
- Potato breeding and selection. W. Stuart. *il U S Ag B* 195:1-35 '15
- Potato breeding for farmers. J. T. Pridham. *Ag Gaz of New South Wales* 28:726-8 O '17

**Potatoes—Breeding—Continued**

- Potato selection experiments in Germany. H. Wacker. *Int R Sci & Prac Ag* 8 no 7:988-91 J1 '17
- Practical potato breeding. L. R. Waldron. *Minn Hort* 46:455-62 D '18
- Raising new varieties of potatoes. F. A. Joyner. *J Dept Ag S Australia* 20:673-6 Mr '17
- Rogues among potatoes. S. Jackson. *Gard Chron (Lond)* 64:122, 210 S 21, N 23 '18
- Rogues among potatoes. A. W. Sutton. *Gard Chron (Lond)* 64:162 O 19 '18
- Rogues among potatoes. G. M. Taylor. *Gard Chron (Lond)* 64:172 O 26 '18
- Seed selection and breeding. C. H. Myers. *il N Y Ag Dept Rep* 1916, pt 2:295-306 '17; Same. *N Y Farm & Markets Dept Ag B* 102:17-28 D '17
- From N Y Ag Dept Bulletin 77

**Classification**

- Group classification and varietal descriptions of some American potatoes. W. Stuart. *il U S Ag B* 176:1-56 '15; Excerpt. *J Ag (Quebec)* 19:160 Ja '16
- Standardization and group classification of potato varieties for Michigan. C. W. Waid. *il Mich Ag Ext B* 5:1-15 '16

**Composition**

- Composition of the potato plant at various stages of development. J. T. Ramsay and W. C. Robertson. *il J Dept Ag Victoria* 15: 641-55 N '17; Same cond. *Int R Sci & Prac Ag* 9, no 4:446-51 Ap '18
- Effect of certain species of fusarium on the composition of the potato tuber. L. A. Hawkins. *bibliog J Ag Research* 6:183-96 My 1 '16
- Effect of frost and decay upon the starch in potatoes. H. A. Edson. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:725-6 S '18
- Investigations into the part played by the amylase in potato tubers. J. Bodnár. *Int R Sci & Prac Ag* 7, no 8:1093-5 Ag '16
- Starch congestion accompanying certain factors which retard plant growth. B. L. Hartwell. *R I Ag Exp B* 165:1-23 '16
- Studies of the formation and translocation of carbohydrates in plants; the carbohydrates of the leaf and leaf stalks of the potato. W. A. Davis and G. C. Sawyer. *bibliog J Ag Sci* 7:352-84 F '16

**Costs**

- Cost of growing potatoes. *Rural N Y* 75:1466 N 25 '17

See also Potatoes—Prices

**Diseases and pests**

- A B C's of potato spraying. G. B. Ramsey. *Maine Ag Ext B* 119:1-7 '18
- Bacterial rot of stored potato tubers. *Int R Sci & Prac Ag* 7, no 1:155-6 Ja '16
- Blackheart and the aeration of potatoes in storage. F. C. Stewart and A. J. Mix. *il N Y State Ag Exp B* 436:321-62 '17
- Blackheart of potatoes in storage. F. C. Stewart. *Market Growers J* 21:31 J1 15 '17
- Bordeaux spray for tip burn and early blight of potatoes. A. T. Erwin. *il Ia Ag Exp B* 171: 63-75 '17
- Common potato diseases and their control. A. V. Osmun. *il Mass Ag Bd Yearbook* 1917, pt 2:125-33 '18; Same. *Mass Ag Bd* 5:164-71 '18 (3d ed. rev.)
- Control of injurious insects and diseases of the potato. H. T. Fernald and A. V. Osmun. *Mass Ag Ext C* 8:1-4 '16
- Control of insect pests and diseases of the potato. D. E. Merrill and F. C. Werkenthin. *il N M Ag Ext C* 29:1-20 Ap '18
- Control of late blight and rot of potatoes. *Ohio F* 138:67 J1 22 '16
- Control of potato diseases in Oregon. M. B. McKay. *il Ore Ag Ext B* 186:1-24 '17
- Control of the powdery dryrot of western potatoes caused by fusarium trichothecoides. O. A. Pratt. *il J Ag Research* 6:817-32 Ag 21 '16

- Co-operative potato spraying 1916. G. P. Clinton and F. E. Rogers. *Conn State Ag Exp Rep* 1916, pt 5:355-64 '17
- Cooperative spraying of potatoes. W. B. Cookingham. *il Country Gent* 83:34 Ap 20 '18
- Destructive foliage diseases of the potato. I. E. Melhus. *il Ia Ag Ext B* 56:1-11 '17
- Determination of the factors inducing leaf roll of potatoes particularly in northern climates; first progress report. P. A. Murphy and E. J. Wortley. *Phyt* 8:150-4 Ap '18
- Diseases of the Irish potato. *Hawaii Ag Exp Rep* 1917:34-40 '18
- Diseases of the potato. J. F. Trost. *il Purdue Ag* 11:36-7 Je '17
- Early and late blight of potatoes—cause and methods of control; with discussion. J. Woodman. *Ill State Hort Soc Trans* 1916: 297-310 '17
- Effect of certain species of fusarium on the composition of the potato tuber. L. A. Hawkins. *bibliog J Ag Research* 6:183-96 My 1 '16
- Experiments on potato leaf curl, in France. *Int R Sci & Prac Ag* 8, no 12:1286-7 D '17
- Experiments with clean seed potatoes on new land in southern Idaho. O. A. Pratt. *J Ag Research* 6:573-5 J1 10 '16
- Form of potato disease produced by rhizoctonia. G. B. Ramsey. *il J Ag Research* 9: 421-6 Je 18 '17
- Fusarium coeruleum the cause of the rot of the potato tuber in the British Isles. G. H. Pethybridge and H. A. Lafferty. *Int R Sci & Prac Ag* 8, no 12:1290-1 D '17
- Get more potatoes. *Weekly N L* 4:4 J1 25 '17
- Gravy-eye, or matter-eye, in potatoes. R. Waters. *J Ag New Zealand* 14:357-62 My '17
- Hill-selection of potatoes with reference to controlling disease. A. Frank. *Western Wash Ag Exp B* v 6:51-2 J1 '18
- How to increase the potato crop by spraying. F. H. Chittenden and W. A. Orton. *il maps Farmers' B* 868:1-22 '17
- Infestation of potatoes by a midge. E. M. Patch. *il J Econ Entom* 10:472-3 O '17
- Investigations on potato diseases. G. H. Pethybridge. *il J Dept Ag, Ireland* 17, no 4: 595-605 '17
- Leaf burn of the potato and its relation to the potato leaf-hopper. E. D. Ball. *Science (Science Press, Garrison, N.Y. 15c)* n s 48: 194 Ag 23 '18
- Leaf-roll of potatoes. *Gard Chron (Lond)* 60: 124 S 9 '16
- Lime-sulphur vs. Bordeaux mixture as a spray for potatoes (B. 397). M. T. Munn. *il N Y State Ag Exp Rep* 1915:291-301 '16
- Lime-sulphur vs. Bordeaux mixture as a spray for potatoes. M. T. Munn. *il N Y State Ag Exp B* 421:311-17 '16
- Michigan potato diseases. G. H. Coons. *il Mich Ag Exp Spec B* 85:1-49 '18
- Mosaic disease of potatoes. P. A. Murphy. *il Ag Gaz of Canada* 4:345-9 My '17
- New disease of the Irish potato. C. W. Carpenter. *il Phyt* 8:286-7 Je '18
- New parasitic nema found infesting cotton and potatoes. N. A. Cobb. *il J Ag Research* 11:27-33 O 1 '17
- New potato disease. *Weekly N L* 4:1 Ja 24 '17; Same. *Market Growers J* 20:246 Mr 15 '17
- New potato trouble; lack of water and proper food. G. P. Clinton. *Rural N Y* 77:976, 994 Ag 17-24 '18
- New strain of rhizoctonia solani on the potato. J. Rosenbaum and M. Shapovalov. *il J Ag Research* 9:413-20 Je 18 '17
- Observations on obscure potato troubles. H. T. Güssow. *il Phyt* 8:491-5 S '18
- Ormskirk potato trials, 1918. *Gard Chron (Lond)* 64:188 N 9 '18
- Oxidases in healthy and in curly-dwarf potatoes. H. H. Bunzel. *bibliog J Ag Research* 2:373-404 Ag '14
- Pathogenic action of rhizoctonia on potato. H. T. Güssow. *il Phyt* 7:209-13 Je '17
- Physiological diseases of potatoes. M. F. Barus. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 45-53) *il* '17



**Potatoes—Diseases and pests—Continued**

- Potato and tomato diseases. N. J. Giddings. il W Va Ag Exp B 165:1-24 '17
- Potato blight. Ag Digest 1:78 Je '16
- Potato disease in East. Am Flor 48:558 Mr 24 '17
- Potato diseases. D. C. Babcock. il Ohio Ag Exp B 319:121-36 '17; Abstract. (*In* Ohio vegetable growers' assn. directory, 1918, p. 35-7) n.d. Ohio vegetable growers' assn., Columbus; Abstract. Ohio Ag Exp B v 3: 148-9 My '18
- Potato diseases. C. R. Orton. il Pa Ag Exp B 140:1-37 '16
- Potato diseases and methods of control. H. E. Vasey. il Colo Ag Ext B 136 4p '18
- Potato diseases and seed potatoes. D. C. Babcock. il Ohio Ag Exp B v 1:10-14 Ja '13
- Potato diseases and their control. E. C. Stakman and A. G. Tolaas. il Minn Ag Exp B 158:1-47 '16
- Potato diseases in Indiana. H. S. Jackson and G. A. Osner. il Ind Ag Exp C 71:1-16 '17
- Potato diseases in New Jersey. M. T. Cook and H. C. Lint. il N J Ag Exp C 53:1-23 n.d.
- Potato diseases show tendency to spread in various parts of the country. Weekly N L 4:1+ Ja 3 '17
- Potato eelworm. A. L. Lovett. il Ore Ag Ext B 198:1-4 '17
- Potato growing and potato diseases from Maine to California. W. J. Morse. Maine Ag Exp Doc 531:1-20 '16
- Reprint (with slight changes) of pp. 265-282 of the Report of the Maine Commissioner of agriculture, 1916
- Potato growing in Washington; potato diseases; potato insects. F. D. Heald; M. A. Yothers. il Wash Ag Exp Pop B 106:17-123 '17
- Potato insects. Purdue Ag 11:38-9 Je '17
- Potato insects. C. H. Hadley. jr. Pa Ag Ext C 58 4p '17
- Potato leaf-roll: its diagnosis and cause. E. J. Wortley. bibliog il Phyt 8:507-29 O '18
- Potato quarantine and the American potato industry. W. A. Orton. U S Ag B 81:1-20 '14
- Potato spraying. S. Pickering. Gard Chron (Lond) 64:131 S 28 '18
- Potato-spraying experiment at Rush, N.Y., in 1914 (B.405). F. C. Stewart. N Y State Ag Exp Rep 1915:313-17 '16
- Potato spraying for farmers. E. S. Salmon. il J Bd Ag 24:265-74 Je '17
- Potato-spraying lessons. D. Dean. il Rural N Y 75:179-80, 229 F 5-12 '16
- Potato-stem lesions. H. A. Edson and M. Shapovalov. il J Ag Research 14:213-20 Jl 29 '18
- Potato warning. Wallaces' F 41:264 F 18 '16
- Potato wilt, leaf-roll, and related diseases. W. A. Orton. bibliog il U S Ag B 64:1-48 '14
- Potatoes; control of diseases and pests. R. J. Barrett and others. Wash Ag Exp Pop B 113 1p '18
- Potatos (corky scab) suspension order of 1918. Gard Chron (Lond) 63:169 Ap 20 '18
- Powdery dry-rot of potato. W. A. Orton and G. K. Link. il (C., T., & F. C. D. C. 1) 4p '18 U.S. Bur. of plant industry, Washington, D.C.; Same. Weekly N L 5:5 Ap 3 '18
- Practical hints on potato spraying. J Bd Ag 25:198-203 My '18
- Report of potato spraying experiments. H. C. Lint. N J Ag Exp Rep 1916:604-17 '17
- Seed-plot control of potato diseases. Market Growers J 20:52+ Ja 15 '17
- Seed potatoes and potato diseases. G. R. Bisby. il Minn Hort 46:164-7 Ap '18
- Soil fungi in relation to diseases of the Irish potato in southern Idaho. O. A. Pratt. bibliog il J Ag Research 13:73-100 Ap 8 '18
- Some causes of poor stands of potatoes, by F. A. Serrine; New European potato diseases, by G. G. Atwood; Potato insects, by B. B. Fulton; Potato diseases in New York state, by M. F. Barrus; Spraying, by F. C. Stewart. il N Y Ag Dept Rep 1916, pt 2: 307-25, 344-62 '17; Same. N Y Farms & Markets Dept Ag B 102:29-47, 67-85 D '17
- From N Y Ag Dept Bulletin 77

- Some potato tuber-rots caused by species of fusarium. C. W. Carpenter. bibliog il J Ag Research 5:183-210 N 1 '15
- Spindling-sprout disease of potatoes (B. 399). F. C. Stewart and F. A. Serrine. il N Y State Ag Exp Rep 1915:302-12 '16
- Spray potatoes this summer. C. L. Fitch. il Wallaces' F 41:202 Je 23 '16
- Spraying for the prevention of diseases and pests. C. A. Zavitz. il Ontario Ag Dept B 239:61-78 '16
- Spraying potatoes. W. C. O'Kane. il Country Gent 83:24 Mr 16 '18
- Spraying potatoes in 1916. il Maine Ag Exp Doc 522:1-11 '16
- Spraying to protect the potato crop. E. G. McCloskey. Market Growers J 22:359 My 15 '18
- Them 'tater bugs. Prog F 31:781 Je 17 '16
- Three common diseases of potato in Pennsylvania. C. F. Murphy. il Penn State F 10: 77-9 Ap '17
- Tip burn and early burn of potatoes. F. W. Wesler. Purdue Ag 12:369-70 Mr '18
- Urgent need for state inspection of potatoes. H. B. Nielsen. Cal State Comm Hort B v 7:519-20 S '18
- Why potatoes rot and how to prevent rotting. A. Frank. Western Wash Ag Exp B v 6:83 S '18
- Wireworms in potato soil. Rural N Y 76:284 F 24 '17
- See also Colorado potato beetles; Potato aphid; Potato black leg; Potato early blight; Potato late blight; Potato leak; Potato powdery scab; Potato rot; Potato scab; Potato silverscurf; Potato stem borers; Potato tuber moths; Potato wart; Potato weevils; Potato wilt

**Bibliography**

- Potato wilt, leaf-roll, and related diseases. W. A. Orton. U S Ag B 64:44-8 '14

**Exhibits**

- Potato exhibits. S. N. Green. Ohio Ag Exp B v 1:240-2 Ag '16
- Potatoes for exhibit. C. C. Osborne. il Country Gent 81:1696 S 16 '16
- Potatoes for exhibition. E. V. Hardenburg. il Rural N Y 75:1392 N 4 '16

**Grading**

- Grade your Irish potatoes. J. S. Knox. Prog F 33:649 My 25 '18
- Grading Iowa potatoes. A. T. Erwin. Wallaces' F 42:92 Ja 19 '17
- Guarding the potato stock—some timely hints. Coop Manager & F 7:48 N '17
- New potato grades. Country Gent 82:1505 S 29 '17
- Potato grades recommended by the United States Department of agriculture and the United States food administration. (Doc.—Markets 7) 4p '17 U.S. Bur. of markets, Washington, D.C.; Same. Wallaces' F 42: 1344 O 5 '17; Same. Coop Manager & F 7: 52 D '17
- Potato grading; an amendment to the Inspection and sale act, il J Ag (Quebec) 22:35-S '18
- Proper grading of market potatoes. Market Growers J 18:338 My 15 '16
- Recommendations of potato conference. Market Growers J 21:167 O 15 '17
- Result of grading New Jersey potatoes. E. Dilatash. il Rural N Y 77:547 Ap 13 '18

**History**

- History of the potato. E. van Alstyne. N Y Ag Dept Rep 1916, pt 2:287-91 '17; Same. N Y Farms & Markets Dept Ag B 102:9-13 D '17
- From N Y Ag Dept B 77
- Potato culture in eighteenth and twentieth centuries. W. Cuthbertson. Gard Chron (Lond) 61:21 Ja 20 '17

**Judging**

- Use of the score card in potato judging. S. N. Green. il Ohio Ag Exp B v 1:271-3 S '16

**Laws**

- Arrêté du conseil fédéral concernant l'enquête sur les stocks de pommes de terre et la culture des pommes de terre en l'année 1917 en Suisse. Int Yearbook Ag Leg 1916:23-5 '17

**Potatoes—Laws—Continued**

- Arrêté du conseil fédéral concernant le ravitaillement du pays en pommes de terre en Suisse. Int Yearbook Ag Leg 1916:212-15 '17
- Arrêté n. 5053 concernant l'approvisionnement en pommes de terre pour la consommation au printemps et dans l'été de 1916 en Allemagne. Int Yearbook Ag Leg 1916:170-2 '17
- Arrêté n. 5120 rendant obligatoire la livraison des pommes de terre et annulant le décret n. 5071 du 26 février 1916 en Allemagne. Int Yearbook Ag Leg 1916:174-5 '17
- Arrêté n. 5121 relatif au relevé des approvisionnements de pommes de terre ainsi que des produits du séchage des pommes de terre et des produits de la féculerie en Allemagne. Int Yearbook Ag Leg 1916:14-15 '17
- Arrêté n. 5285 concernant l'approvisionnement en pommes de terre en Allemagne. Int Yearbook Ag Leg 1916:186-9 '17
- 1918 potato crop and state purchase. Gard Chron (Lond) 63:26 Ja 19 '18
- Ordinance relating to a loan (\$200,000) from traction funds to Municipal food staples association for purchase, storage and distribution of potatoes. (*In* Journal of the Proceedings, Oct. 15, p. 1226-7) '17 City Council, Chicago
- Ordonnance du Board of trade concernant les pommes de terre d'Irlande. Int Yearbook Ag Leg 1916:204-5 '17

**Marketing**

- Box-car market; Iowa farmers are reaching the neglected consumer direct. J. H. Collins. il Country Gent 81:1146-7 Je 3 '16
- A committee was recently formed in Minnesota to assist in marketing a large surplus of potatoes in that state, being called together in St Paul by State federal food administrator A. D. Wilson. Its membership represents potato growers, produce merchants, retail grocers and consumers. Preliminary recommendations were made for the greater use of potatoes in hotels and restaurants, serving them with meat orders without extra charge, greater use in homes both as a vegetable and in making bread, more energetic marketing of potatoes at once by farmers, and grading under the government standard, with attractive displays of potatoes in retail stores and a general effort to handle them on narrow margins of profit
- Essentials in marketing, by R. H. Cooper; Successful cooperative marketing, by W. H. Ingling. N Y Ag Dept Rep 1916, pt 2:363-8, 369-73 '17; Same. N Y Farms & Markets Dept Ag B 102:86-91, 92-6 D '17
- From N Y Ag Dept Bulletin 77
- First steps in the marketing of the potato. R. D. Barclay. il Market Growers J 18:329-31 My 15 '16
- Grading white potatoes for the market. H. R. Talmage. Market Growers J 19:29-30 Jl 15 '16
- Handling and grading table stock potatoes. L. C. Aicher. Market Growers J 18:209 Mr 15 '16
- Marketing potatoes direct to consumer. Market Growers J 18:338 My 15 '16
- Marketing the potato crop. H. F. Thurston. il Am Coop J 13:51-2+ O '17
- Plan for increasing potato profits. C. C. Boyce. map System on the Farm 1:117-19 My '17
- Potato box. E. P. Sandsten. Country Gent 81:24 Ja 1 '16
- Potato marketing. Country Gent 81:2094 D 2 '16
- Potatoes at five cents an ounce. G. F. Stratton. il Country Gent 83:2+ O 5 '18
- Result of grading New Jersey potatoes. E. Dilatush. il Rural N Y 77:547 Ap 13 '18
- Suggestions for marketing potatoes. C. M. Arthur. Prac F 113:316 S 15 '17

See also Delta potato growers

**Prices**

- City potato drive; the consumer's price—the farmer's share. il Rural N Y 77:665 My 11 '18
- Crop statistics as a guide in prophesying potato prices. E. V. Hardenburg. Cornell Countryman 14:738-9 Je '17

- Distribution of the potato crop. Gard Chron (Lond) 64:208 N 23 '18
- Potato growers up in arms. O Judd Farmer 63:11 D 8 '17
- Potato market puzzles many. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:16 D 24 '17
- Potato prices this winter. R. B. Edwards. il Country Gent 83:8 O 19 '18
- Potatoes order, 1917. J Bd Ag 24:765-75 O '17
- Present potato prices and outlook for 1917. E. V. Hardenburg. il Cornell Countryman 14:651-3 My '17
- Profits and losses in potato production during the past sixty years. Wallaces' F 43:929 Je 14 '18

**Seed**

- About seed potatoes. J. J. Taubenhaus. il Country Gent 82:797 Ap 28 '17
- Best seed potatoes. Prog F 32:1230 D 8 '17
- Blight infected potato seed. A. T. Erwin. O Judd Farmer 60:12 Ap 1 '16
- Blighted potatoes for seed. A. T. Erwin. il Wallaces' F 41:526 Mr 31 '16
- California certified seed potatoes. W. V. Shear. Cal State Comm Hort B v 5:211-13 Je '16
- Certified potato seed from Idaho. E. P. Taylor. Better Fruit 11:29 O '16
- Copper sulfate as a disinfectant for potatoes. G. R. Bisby and A. G. Tolaas. Phyt 8:240-1 My '18
- Culling out the rogues from seed potatoes. C. S. Phelps. Rural N Y 76:1173 O 13 '17
- Cutting and planting potatoes. C. A. Zavitz. il Ontario Ag Dept B 239:10-15 '16
- Early potatoes. J. T. Rosa, Jr. il Country Gent 83:22 F 2 '18
- Economy in seed potatoes. A. D. Wilson and R. S. Mackintosh. Minn Hort 45:221 My '17
- Experiments with potato seed. Ag Gaz of Canada 4:1056-9 D '17
- Experiments with potato seed. W. T. Macoun. il Ag Gaz of Canada 4:1039-42 D '17
- Fresh seed potatoes. G. W. Hood. il Country Gent 81:934 Ap 29 '16
- Greening and cutting seed potatoes. A. D. Cromwell. Wallaces' F 41:705 My 5 '16
- Growing high-grade potato seed stock. (C. T., & F. C. D. Circular 5) 8p il '18 U.S. Bureau of plant industry, Washington, D.C.
- Growing seed potatoes in Minnesota. A. G. Tolaas. il Market Growers J 22:214+ Mr 15 '18
- Growing sun-sprouted potatoes for seed. W. J. Green. Market Growers J 20:252 Mr 15 '17
- Hill selected potatoes for seed. Wallaces' F 42:1138 Ag 17 '17
- Hill selection of seed potatoes in Ontario. Ag Gaz of Canada 3:901-2 O '16
- Hill selection of seed potatoes. Manitoba and British Columbia. il Ag Gaz of Canada 3:810-12 S '16
- Hints on purchasing seed potatoes. J Bd Ag 23:972-6 Ja '17
- How to treat seed potatoes. C. W. Waid. Market Growers J 18:207 Mr 15 '16
- Hunting for pure, clean potato seed. Rural N Y 77:1088 S 21 '18
- Improvement of the seed potato. J. E. Larson. il Ore Ag Ext B 185:1-4 '17
- Irish potatoes: how to save seed from first crop. H. M. Cottrell. Prog F 33:198 F 16 '18
- Northern Ontario as a source of seed potatoes. J. Miller. (*In* Report, Ontario ag. & exp. union, 1917, p. 17-23) '18 Ontario ag. dept., Toronto
- Open-air storage of seed potatoes. il J Ag New Zealand 13:51 Jl '16
- Physiological basis for the preparation of potatoes for seed. C. O. Appleman. il Md Ag Exp B 212:79-102 '18
- Potato cultivation; cutting seed and rate of seeding per acre. J. T. Ramsay. il J Dept Ag Victoria 14:590-5 O '16
- Potato-cutting methods. B. Kelleher. il Country Gent 81:845 Ap 15 '16
- Potato seed fallacy ending. Am Flor 51:34 Jl 20 '18
- Potato seed from blighted vines. F. A. Sirrine. Rural N Y 75:515 Mr 25 '16
- Potatoes from split eyes. il O Judd Farmer 64:17 Mr 9 '18



Potatoes—Seed—Continued

- Potatoes grown from single eyes. J Bd Ag 24:376-7 N '17
- Problems of potato seed certification. M. F. Barrus. Market Growers J 20:45-6+ Ja 15 '17; Same cond. Ag Digest 1:302 F '17
- Production of high-grade seed potatoes. L. D. Sweet. Market Growers J 18:37-9 Ja 15 '16
- Qualities needed in seed potatoes. D. Dean. il Rural N Y 75:321, 363, 425 F 26-Mr 11 '16
- Quality seed potatoes. H. W. Doyle. il Country Gent 82:1769 N 17 '17
- Raise your own seed potatoes. A. C. Gorham. J Ag (Quebec) 19:213 Ap '16
- Raising fancy seed potatoes. R. B. Becker. O Judd Farmer 60:7 Ap 29 '16
- Relative vigor of potato eyes. W. B. Duryee. il Country Gent 82:596 Mr 24 '17
- Results from second crop and immature potato seed. Market Growers J 23:128 O 1 '18
- Save seed potatoes for next year. C. E. Brehm. il Country Gent 82:1225 Ag 4 '17
- Saving on seed potatoes. F. F. Rockwell. il Country Gent 82:838 My 5 '17
- Saving seed potatoes. J. E. Allyn. Ohio F 137:75 Ja 15 '16
- Saving seed potatoes. W. Stuart. il Weekly N L 4:1-2 Mr 21 '17
- Saving seed potatoes. A. E. Wilkinson. Ohio F 138:328 O 7 '16
- Seed plot method of potato improvement. O. B. Whipple. Mont Ag Exp C 73:71-7 '17
- Seed potato certification in Idaho. E. P. Taylor. il Market Growers J 19:33 Jl 15 '16
- Seed potato certification in Oregon. M. B. McKay. il Ore Ag Ext B 295 4p '18
- Seed potato certification in Wisconsin. J. G. Milward. Market Growers J 18:282 Ap 15 '16
- Seed potato experiments and variety studies. T. C. Johnson and J. T. Rosa, jr. Va Truck Exp B 24:509-23 '17
- Seed potato inspection in Michigan. C. W. Waid. Market Growers J 18:82 F 1 '16
- Seed-potato plots. Country Gent 81:446 F 26 '16
- Seed potato questions. C. W. Waid. Market Growers J 18:171 Mr 1 '16
- Seed potato treatment. Green's Fruit Grower 37:4 My '17
- Seed potatoes. J Bd Ag 22:1136-8 F '16
- Seed potatoes. M. T. Cook. il N J Ag Dept B 4:89-111 '17
- Seed potatoes. W. T. Macoun. il Ag Gaz of Canada 3:303-5 Ap '16
- Seed potatoes and potato diseases. G. R. Bisby. il Minn Hort 46:164-7 Ap '18
- Seed potatoes and their treatment. F. S. Prince. N H Ag Ext Press B 64 1p '17
- Seed potatoes (1917 crop) order, 1917. J Bd Ag 24:1014-20 D '17
- Seed selection and breeding. C. H. Myers. il N Y Ag Dept Rep 1916.pt 2:295-306 '17; Same. N Y Farms & Markets Dept Ag B 102:17-28 D '17
- From N Y Ag Dept Bulletin 77
- Seed treatment of potatoes. Rural N Y 76:651 My 5 '17
- Seed tuber treatments for potatoes. G. H. Coons. bibliog il Phyt 8:457-68 S '18
- Selection and treatment of seed potatoes to avoid diseases. (C., T., & F. C. D. C. 3) 8p il '18 U.S. Bur. of plant industry, Washington, D.C.
- Selection of potato-seed. J. Beverley. J Ag New Zealand 12:130-1 F '16
- Small potatoes for seed. E. A. Hill. Rural N Y 76:287, 316 F 24-Mr 3 '17
- Small potatoes for seed. C. O. Ormsbee. Market Growers J 19:254 D 1 '16
- Some seed potato questions answered. C. W. Waid. Mich Ag Ext B 3:1-4 '16
- Somerset potato scheme. J. H. Burton. J Bd Ag 23:970-2 Ja '17
- Somerset scheme for the distribution of Scotch seed potatoes. J Bd Ag 23:360-2 Jl '16
- Study your plants now for next year's seed potatoes. Weekly N L 6:11 Ag 7 '18
- Sun-sprouted potato seed. P. B. Ruggles. il Country Life 34:80b My '18
- Sun-sprouted seed potatoes. W. J. Green. il Ohio Ag Exp B v 1:15-20 Ja '16; Same. Market Growers J 18:122 F 15 '16
- Treat seed potatoes. Weekly N L 4:3 Ap 4 '17

- Treatment of seed potatoes to prevent diseases. G. H. Coons. il Mich Ag Ext B 15 4p '18
- Use plenty of seed potatoes. A. T. Morison. Hoard's D 54:560 N 9 '17
- Value of immature potato tubers as seed. H. P. Hutchinson. J Bd Ag 23:529-39 S '16
- What about seed potatoes and acreage? C. W. Waid. il Market Growers J 20:247 Mr 15 '17
- Whole potatoes for seed. C. W. Waid. Market Growers J 20:8 Ja 1 '17
- Whole vs. cut potato tubers for planting on irrigated land. L. C. Aicher. il Am Soc Agron J 9:217-23 My '17
- Whole vs. cut potato tubers for planting on irrigated land. J. S. Welch. Am Soc Agron J 9:224-30 My '17

Standardization

- Importance of type in potato standardization. W. Stuart. Market Growers J 21:29 Jl 15 '17
- Standardization and group classification of potato varieties for Michigan. C. W. Waid. il Mich Ag Ext B 5:1-15 '16
- Standardization of seed potatoes, by F. C. Stewart; E. H. Forristall; C. B. Tillson; O. F. Ross. N Y Ag Dept Rep 1916.pt 2:395-409 '17; Same. N Y Ag Dept B 86:2402-16 Ag '16; Same. N Y Farms & Markets Dept Ag B 102:118-32 D '17
- From N Y Ag Dept Bulletin 77
- Standardizing Minnesota potatoes. A. W. Aamodt. il Minn Hort 44:189-94 My '16
- Standardizing of Minnesota potatoes. B. M. Gile. il Wallaces' F 42:43 Ja 12 '17

Statistics

- Commercial acreage and production of early Irish potatoes. Monthly Crop Rep 3:49 Je '17
- Commercial stocks of Irish potatoes. U S Food Surveys 1:4-6 Jl 24 '18
- Government potato crop report for September. Market Growers J 21:133 S 15 '17
- Percentage of the total potato crop usually disposed of each month. Monthly Crop Rep 4:53 My '18
- Potatoes: acreage, production, foreign trade, supply, and consumption. G: K. Holmes. U S Ag B 695:1-24 '18
- \* Potatoes and carrots in Ontario. (In Report, Bur. of industries, 1917, p. 33) '18 Ontario ag. dept., Toronto
- Potatoes in the United States and other countries, including imports and exports. See United States Department of agriculture Yearbooks
- Stocks of potatoes January 1. Monthly Crop Rep 3:8 Ja '17
- Stocks of potatoes January 1. Monthly Crop Rep 4:5 Ja '18
- Table showing total acreage of potatoes and number of bushels produced in New York state by counties. N Y Ag Dept Rep 1916.pt 2:416-17 '17; Same. N Y Farms & Markets Dept Ag B 102:162-3 D '17
- From N Y Ag Dept Bulletin 77
- World's potato crop. Monthly Crop Rep 4:24 Mr '18

Storage

- Banking Irish potatoes. Rural N Y 76:1127 S 29 '17
- Blackheart and the aeration of potatoes in storage. F. C. Stewart and A. J. Mix. il N Y State Ag Exp B 436:321-62 '17
- Blackheart of potatoes in storage. F. C. Stewart. Market Growers J 21:31 Jl 15 '17
- Build a potato curing house. plans Ga Ag Coll (Ext) Poster 14
- Digging and storing of potatoes. W. T. Macoun. 4p n. d. Canada Ag
- Dirty potato cellars waste much of the crop. Weekly N L 6:3 Ag 21 '18
- Get ready for storing potatoes. W. H. Lawrence. O Judd Farmer 63:4 Ag 4 '17
- Harvesting and storing potatoes. R. E. Dimick. O Judd Farmer 61:7 S 2 '16
- Importance of ventilating stored potatoes. F. H. Hall. Market Growers J 23:47-8 Ag 1 '18
- Potato storage and storage houses. W. Stuart. il plans Farmers' B 847:1-27 '17; Abstract. il Field 11 27:685 S '17
- Potato storage house; building one that has a capacity of twenty-five thousand bushels. E. V. Laughlin. Farm Eng 5:6 Ap '17

**Potatoes—Storage—Continued**

- Potato storage house that keeps the crop for high prices. A. E. Wilkinson. *il Country Gent* 81:409 F 19 '16
- Potato storage in North Dakota. H. O. Werner and P. E. Clement. *plans N D Ag Ext B* 11:1-12 '17
- Potato storage profitable. G. W. Iverson. *O Judd Farmer* 62:12 Ja 13 '17
- Potato storehouse. M. Ringelmann and M. Krotoff. *Int R Sci & Prac Ag* 8, no 10:1406-7 O '17
- Saving the potato crop. W. Harper. *il Country Gent* 82:1373-4 S 8 '17
- Storage cave for potatoes. W. I. Chamberlain. *Nat Stock & F* 41:500 Ag 25 '17
- Storage of potatoes. *Gard Chron (Lond)* 62:75 Ag 25 '17
- Storage of potatoes. J Bd Ag 24:629-34 S '17; Excerpt. *Gard M* 26:168 D '17; Same. *Power F* 26:43 D '17
- Storage of potatoes and other vegetables. E. H. Grubb. *il Reclamation Record (Reclamation Service, Dept. of Interior, Washington, D.C.)* 9:402-4 S '17; Excerpts. *Gard Chron Am* 21:433 D '17
- Store early potatoes. C. E. Brehm. *Tenn Ag Ext Pub* 40 2p '17
- Why potatoes rot and how to prevent rotting. A. Frank. *Western Wash Ag Exp B v* 6:83 S '18

**Transportation**

- Lining and loading cars of potatoes for protection from cold. H. S. Bird and A. M. Grimes. (*Markets Doc.*—17) 26p *il '18 U S Ag*
- Potato; with best methods of loading. 14p n. d. Agricultural dept., New York Central railroad co., Grand Central terminal, New York
- Shipping potatoes in winter. *Ohio F* 141:144 F 2 '18

**Varieties**

- Bud variation in potatoes. A. W. Sutton. *Gard Chron (Lond)* 64:190 N 9 '18 (to be cont)
- Cultural, food and industrial value of some varieties of potato tested in Hungary. L. Szell. *Int R Sci & Prac Ag* 7, no 8:1110-11 Ag '16
- Essential to grow varieties which have been proved. L. C. Brown. *O Judd Farmer* 65: 258 S 28 '18
- Experiments carried out in 1915 by the German station for potato cultivation. F. Von Eckenbrecher. *Int R Sci & Prac Ag* 7, no 5:678-81 My '16
- Fine crops of potato Kerr's pink. J. J. Graham. *Gard Chron (Lond)* 64:141 O 5 '18
- Group classification and varietal descriptions of some American potatoes. W. Stuart. *il U S Ag B* 176:1-56 '15; Excerpt. *J Ag (Quebec)* 19:160 Ja '16
- Improvement of Bliss triumph potatoes. H. C. Sands. *il N Y Farms & Markets Dept Ag B* 102:133-55 D '17
- Improving potatoes; new varieties developed by department. *Coop Manager & F* 6:94 F '17
- List of varieties recommended for 1917. *Gard Chron (Lond)* 61:65 F 10 '17
- Many good potatoes. J. Lawrence. *O Judd Farmer* 64:6 F 9 '18
- Potato varieties. *Prac F* 112:147, 398 Ap 1, N 1 '16
- Potato varieties from the cook's viewpoint. *il Ohio F* 137:396 Mr 11 '16
- Potato variety tests; season 1915-16. *J Ag New Zealand* 13:59-61 Jl '16
- Results of trials in 1916 at the German station for potato growing. E. Von Eckenbrecher. *Int R Sci & Prac Ag* 8, no 6:863-6 Je '17
- Standardization and group classification of potato varieties for Michigan. C. W. Waid. *il Mich Ag Ext B* 5:1-15 '16
- Varietal nomenclature and testing of the potato. W. Stuart. *Market Growers J* 22: 380 My 15 '18
- Varieties, and variety tests. C. A. Zavitz. *il Ontario Ag Dept B* 239:16-34 '16
- Variety study of the Irish potato. W. H. Wicks. *il Ark Ag Exp B* 137:1-32 '17

**Australia**

- Experiments in the cultivation of potatoes, 1915-1916. J. T. Ramsay. *J Dept Ag Victoria* 14:461-70 Ag '16
- Farmers' experiment plots, potato experiments 1915-16. *Ag Gaz of New South Wales* 27: 479-88, 579-85, 793-8 Jl-Ag. N '16
- Farmers' experiment plots; potato experiments, 1916. *Ag Gaz of New South Wales* 28:329-31 My '17
- Farmers' experiment plots; potato experiments, 1916-17. *il Ag Gaz of New South Wales* 28:773-86 N '17
- Farmers' experiment plots; potato experiments, 1916-17. G. C. Sparks. *Ag Gaz of New South Wales* 29:27-30 Ja '18
- Farmers' experiment plots; potato experiments, 1917. H. Wenholz. *Ag Gaz of New South Wales* 29:199-203 Mr '18
- Farmers' experiment plots; potato experiments, 1917-18. R. N. Makin. *Ag Gaz of New South Wales* 29:282-3 Ap '18
- Farmers' experiment plots; potato experiments, 1917-18. H. C. Stening. *Ag Gaz of New South Wales* 29:812-16 N '18
- Field crop competitions (potatoes). J. T. Ramsay. *J Dept Ag Victoria* 14:372-5 Je '16
- Potato experimental fields, 1915-16. J. T. Ramsay. *J Dept Ag Victoria* 14:107-15 F '16
- Potato experiments, 1916; Grafton experiment farm. K. E. Macpherson. *Ag Gaz of New South Wales* 28:332-6 My '17
- Raising new varieties of potatoes. F. A. Joyner. *J Dept Ag S Australia* 20:673-6 Mr '17

**Bermuda**

- Potato leaf-roll: its diagnosis and cause. E. J. Wortley. *bibliog il Phyt* 8:507-29 O '18

**California**

- El Dorado county potatoes. J. E. Hassler. *Cal State Comm Hort B v* 6:100 Ap '17
- Growing the fall or second crop of potatoes in California. S. S. Rogers. *Cal Ag Exp C* 200:1-4 '18
- Potatoes in California. J. W. Gilmore. *Cal Ag Exp C* 161:1-8 '17

**Canada**

- Northern Ontario as a source of seed potatoes. J. Miller. (*In Report, Ontario ag. & exp. union*, 1917, p. 17-23) '18 Ontario ag. dept., Toronto
- Potato in Canada: its cultivation and varieties. W. T. Macoun. (*E. F. B.* 90) 16p *il '18 Canada Ag*
- Potato trade with the United States re-established. *Ag Gaz of Canada* 3:6-9 Ja '16
- Regulations adopted by the United States regarding the admission of consignments from Canada. *Ag Gaz of Canada* 3:1036-7 D '16
- What Ontario should do in regard to potato production; with discussion. A. Elliott. (*In Report, Ontario ag. & exp. union*, 1916, p. 45-53) '17 Ontario ag. dept., Toronto

**Chile**

- Effect of sulphur in the cultivation of the potato; experiments in Chili. G. R. Opazo. *Int R Sci & Prac Ag* 7, no 10:1443-4 O '16

**Colorado**

- How I grow potatoes. L. D. Sweet. *il Country Gent* 83:6-7 F 9 '18
- Potato culture in Colorado. E. P. Sandsten. *il Colo Ag Exp B* 243:1-35 '18
- Potato growing in Colorado. E. P. Sandsten. *il Colo Ag Exp B* 220:1-29 '17

**England**

- Ormskirk potato trials. W. Cuthbertson. *Gard Chron (Lond)* 64:72 Ag 17 '18
- Ormskirk potato trials, 1918. *Gard Chron (Lond)* 64:60 Ag 10 '18
- Potatoes on grass land at Aldenham. E. Molyneux. *Gard Chron (Lond)* 62:191 N 10 '17

**Florida**

- Big profits from poor soil. J. C. Pridmore. *il Field* 11 28:826-7 N '18
- Excess-profits tax pares the potatoes. S. O. Rice. *Country Gent* 83:14 O 26 '18



**Potatoes—Florida —Continued**

Irish potatoes in Florida. A. P. Spencer. *il Fla Ag Exp B 133* (revision of B 120):22-32 '17  
Spuds by the million; what Florida farmers are doing to prevent a potato famine. *il Scientific Am Sup* (233 Broadway. N.Y. 10c) 85:196 Mr 30 '18

**Georgia**

Growing Irish potatoes. T. H. McHatton. *Ga Ag Coll (Ext) C 61* (Reprint B 95):1-4 '17

**Germany**

Experiments on the manuring of potatoes in Germany. *Int R Sci & Prac Ag 7*, no 12: 1766-8 D '16  
Lessons for American potato growers from German experiences. W. A. Orton. *U S Ag B 47*:1-12 '13  
Potato selection experiments in Germany. H. Wacker. *Int R Sci & Prac Ag 8*, no 7:988-91 JI '17  
Results of trials in 1916 at the German station for potato growing. E. Von Eckenbrecher. *Int R Sci & Prac Ag 8*, no 6:863-6 Je '17

**Great Britain**

Board of agriculture potato committee. *Gard Chron* (Lond) 60:292 D 16 '16  
Potato problem in 1917. *Gard Chron* (Lond) 60:256 N 25 '16

**Hungary**

Cultural, food and industrial value of some varieties of potato tested in Hungary. L. Szell. *Int R Sci & Prac Ag 7*, no 8:1110-11 Ag '16

**Idaho**

Idaho idea in potatoes. J. H. Collins. *il Country Gent 81*:249-50 F 5 '16

**Illinois**

Double cropping in Illinois. *Rural N Y 76*:342 Mr 3 '17

**India**

Conditions influencing the distribution of potato blight in India. Jehangir Fardunji Dastur. *Ag J of India Sci Congress No 1917*:90-6

**Iowa**

Box-car market; Iowa farmers are reaching the neglected consumer direct. J. H. Collins. *il Country Gent 81*:146-7 Je 3 '16  
Iowa potato growing methods. C. L. Krauss. *O Judd Farmer 60*:8 Mr 18 '16  
Potato and truck crop growers' association. Wallaces' F 41:12 Ja 7 '16  
Potatoes on the Iowa farm. W. P. Dawson. *il Wallaces' F 42*:287 F 16 '17; Same. *Market Growers J 20*:245 Mr 15 '17

**Ireland**

Paterson of Dundee; the production of new varieties of potatoes. J. Wilson. *J Dept Ag Ireland 18*, no 1:21-7 '18

**Kentucky**

Potato growing industry in Jefferson county. F. E. Merriman. *Ky Ag Dept Rep 1916-1917*: 467-71 '18

**Maine**

Field experiments in 1915; effect of omitting potash fertilization upon the potatoe crop. *Maine Ag Exp B 246*:17-27 '16; Summary. *Market Growers J 20*:54 Ja 15 '17  
Maine growers know how. F. F. Rockwell. *il Field 11 28*:163-4 Mr '18  
Potato culture in Maine. E. L. Newdick. *il Maine Ag Dept B v 17*:1-40 Mr '18  
Potatoes enrich Maine farmers. M. S. Hazen. *il Prac F 113*:14 Ja 1 '17  
Potatoes grown at Aroostook farm on fertilizers containing ammonia (nitrogen) in different forms. *Maine Ag Exp B 269*:37-9 '18  
Who's who in Aroostook. F. Tilden. *il Country Gent 83*:8-9 D 14 '18

**Massachusetts**

Potato growing in Massachusetts. S. C. Damon. *il Mass Ag Bd 5*:84-97 '18 (3d ed. rev.)

**Michigan**

Condition of potato crop in Michigan. C. W. Waid. *il Market Growers J 23*:113 S 15 '18  
General condition of the potato crop. C. W. Waid. *Market Growers J 23*:152 O 15 '18  
Meeting of potato growers at Grand Rapids. C. W. Waid. *Market Growers J 18*:5-6 Ja 1 '16  
Potato inspection trip. *Market Growers J 21*: 81 Ag 15 '17  
Standardization and group classification of potato varieties for Michigan. C. W. Waid. *il Mich Ag Ext B 5*:1-15 '16

**Minnesota**

Better-potato campaign. Crow Wing county, Minnesota. *Country Gent 81*:738 Ap 1 '16  
Points on potato growing in Minnesota. R: Wellington. *Market Growers J 18*:332 My 15 '16  
Potato investigations. *Minn Ag Exp Rep* (Crookston ser. v. 10, no. 1, p. 63-70) '17  
Standardizing Minnesota potatoes. A. W. Aamodt. *il Minn Hort 44*:189-94 My '16  
Standardizing of Minnesota potatoes. B. M. Gile. *il Wallaces' F 42*:43 Ja 12 '17

**Nebraska**

Farming practice in the sand hills. J. Cowan. *Neb Ag Exp B 156*:47-53 '16

**Netherlands**

Case of variations observed in the potato in Holland. *Int R Sci & Prac Ag 7*, no 10:1435-6 O '16

**Nevada**

Potato culture in Nevada. C. S. Knight. *il Nev Ag Exp B 90*:1-24 '18

**New Jersey**

Farm profits and factors influencing farm profits on 370 potato farms in Monmouth county, New Jersey. F. App. *il map N J Ag Exp B 294*:1-103 '16  
Successful potato growing. E. Dilatush. *il Rural N Y 77*:403 Mr 16 '18

**New York**

New York potato town, Gainesville. *Country Gent 82*:1408 S 15 '17  
Potato growing in New York. E. V. Hardenburg. *il map Cornell Reading Courses 5*, no 112:159-80 '17; Same. *Cornell Ag Exp Rep 1916*, v 2:1257-75 '17  
Potato growing in New York state. (B. 77). *il N Y Ag Dept Rep 1916*, pt 2:287-422 '17; Same. *N Y Farm & Markets Dept Ag B 102*:1-168 D '17  
Potato planting pointers for New York growers. E. V. Hardenburg. *Market Growers J 18*:205-6 Mr 15 '16  
System for state of New York potato crop. J: J. Dillon. *Rural N Y 76*:987 Ag 18 '17

**New Zealand**

Water-potato; curious occurrence near Rangitaiki river. D. M. Ross. *J Ag New Zealand 15*:209-10 O '17

**North Dakota**

Potato culture in North Dakota. P. E. Clement and H. O. Werner. *il N D Ag Ext B 10*:1-12 '17

**Oregon**

Potato growing in Oregon. J. E. Larson. *il Ore Ag Ext B 184*:1-4 '17

**Pennsylvania**

Pennsylvania potato pilgrimage. C. F. Preston. *Market Growers J 23*:129 O 1 '18  
Potato situation in Pennsylvania. *Prac F 114*: 158 Ap 15 '18

**Prince Edward island**

Paradise for potatoes. J. A. Macdonald. *Rural N Y 76*:485 Mr 31 '17

## Potatoes—Continued

## Rhode Island

Potato growing in Rhode Island. S. C. Damon. R 1 Ag Bd 4p '17  
Twenty-year comparison of different rotations of corn, potatoes, rye and grass. B. L. Hartwell and S. C. Damon. R 1 Ag Exp B 167:1-38 '16

## South Dakota

Potato culture in South Dakota. bibliog il map S D Ag Exp B 176:698-764 '17

## Southern states

Garden notes for the Gulf Coast country. L. T. Rhodes. Prog F 31:199 F 5 '16

## Switzerland

Potato situation in Switzerland. F. Bohr. (Commerce Reports 121) p 724-5 (My 24) '17 U.S. Bureau of foreign and domestic commerce, Washington, D.C.

## United States

Lessons for American potato growers from German experiences. W. A. Orton. U S Ag B 47:1-12 '13  
1918 potato crop outlook. Market Growers J 22:362 My 15 '18  
Potato culture in Merrimack valley. E. M. Straight. il diags N H Ag Ext B 18:1-15 '16  
Potato culture in the Middle West. J. F. Keller. Ohio F 139:545-6, 574 Ap 14-21 '17  
Potato growing in the North and West. W. Stuart. Market Growers J 22:209+ Mr 15 '18  
Potato outlook in important sections; what organized agencies are doing to promote production and consumption. Market Growers J 22:242-3+ Mr 15 '18  
Potato quarantine and the American potato industry. W. A. Orton. U S Ag B 81:1-20 '14  
Potato work of experiment stations. W. Stuart. Market Growers J 18:41 Ja 15 '16  
Shall we have another large potato crop? L. D. Sweet. Review of Reviews (30 Irving Place, N.Y. 25c) 57:300-2 Mr '18  
War and our potato industry. L. D. Sweet. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:197-202 N '17

## Virginia

New job for the bank roll: Virginia potato growers buy supplies with surplus. J. H. Collins. il Country Gent 82:759-60 Ap 21 '17

## Washington

Potato growing in Washington. O. M. Morris and others. il Wash Ag Exp Pop B 106:1-123 '17

## West Virginia

Potato growing industry in West Virginia. A. L. Dacy. W Va Ag Dept B 13:16-20 '16

## Wisconsin

How much is a county agent worth? Ag Digest 2:783 Ja '18  
Organized potato work in Wisconsin. J. G. Milward. il Ohio F 140:161-2 S 1 '17  
Potato growing in Wisconsin. J. G. Milward. il map Wis Ag Exp B 280:1-26 '17  
Wisconsin potatoes. H. I. Wood. il Country Gent 81:322 F 12 '16

## Potatoes, Dried

Canned spuds from Aroostook county, Maine, to France; thousands of cans produced in record time. il Metal Worker (243 W. 39th st. N.Y. 10c) 89:855-6 Je 28 '18  
Desiccation of potatoes in Germany. Int R Sci & Prac Ag 7,no 11:1685-6 N '16  
Evaporator for potatoes. Rural N Y 75:1307 O 14 '16  
Potato flakes and flour. (Crop report, June 15) '18 Am. steel and wire co., Chicago

## Laws

Décret n. 340 du ministre de l'agriculture, d'accord avec les ministres intéressés, concernant la création, pour la durée de la guerre, d'une fédération de l'industrie du séchage des pommes de terre en Autriche. Int Yearbook Ag Leg 1916:637-42 '17

Potatoes, Sweet. See Sweet potatoes

## Potpourri

Preparing a rose jar. Rural N Y 76:969 Ag 11 '17

Pots for plants. See Flower pots

## Pottery

Collecting Chinese porcelain. il Country Life 32:82+ Ag '17  
Dishes: china and other ware. H. Mason. Ohio F 139:794 Je 16 '17  
Early art industries of the Pennsylvania Dutch. il Country Life 30:100+ My '16  
First American porcelain. il Country Life 31:58 Ja '17  
Old delftware. W. A. Dyer. il Country Life 34:72+ My '18  
Porcelains of Josiah Spode. W. A. Dyer. il Country Life 33:74 D '17  
Slip-decorated ware. W. A. Dyer. il Country Life 33:80 N '17  
Wedgwood plaques and medallions. W. A. Dyer. il Country Life 33:74 Mr '18  
Whieldon ware. il Country Life 32:74 Je '17

See also Staffordshire ware

## Pottery tree

Pottery tree of Brazil. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:7 Ja 6 '17

## Poultices

Poultices; when to use these old-fashioned remedies and how to make them. M. H. Neil. il Country Gent 82:127 Ja 20 '17

## Poultry

About raising broiler chickens. F. H. Sweet. Green's Fruit Grower 36:14 Ag; 16 S '16  
Advice to a beginner. M. K. Boyer. il Am P Advocate 25:280 Mr '17  
Advice to the beginner with poultry. Mrs P. S. Brumfield. Am P J 49:296-7 Mr '18  
Agricultural situation for 1918; poultry; one hundred hens on every farm—one hundred eggs from every hen. U S Ag C 107:1-24 '18  
Apples, hens and sheep. J. T. Bartlett. il Fruit-Grower 28:249 My 1 '17  
April and May hatched chickens. E. B. Templer. Am P Advocate 24:448 Ap '16  
April poultry work. M. G. Feint. Ohio F 139:586 Ap 21 '17  
Avoidable troubles. T. F. McGrew. Am P Advocate 24:674-5 Ag '16  
Beginner in poultry culture. M. K. Boyer. Am P Advocate 24:770 O '16  
Beginner's luck. E. Parker and C. C. Parker. Am P Advocate 26:344 Ap '18  
Beginning with the egg. I. B. Blake. il Country Gent 83:18-19 Ja 26 '18  
Best paying branch of farm work. R. S. Good. Prac F 112:75 F 15 '16  
Better eggs—better prices. M. D. Bowers. Prac F 113:231 Je 15 '17  
Better market poultry. T. F. McGrew. Am P Advocate 25:165-6 F '17; Same cond. Field 11 27:119 F '17  
Big drive to increase production. P. T. Woods. Am P J 49:17-19 Ja '18  
Boost standardbred poultry. Am P J 49:672 Jl '18  
Breed, weed, feed—then gain speed. N. W. Sanborn. il Am P Advocate 25:259-60, 357-8, 441-2, 493-4, 529-30, 565-6, 601-2, 645-6, 697-8; 26:5-6, 75-7, 157-9, 241-2, 325-6, 393-4, 445-6 Mr '17-Je '18  
Bright prospects for poultry raisers. R. F. Palmer. Am P Advocate 25:536 Jl '17; Same. Am P J 48:785 Jl '17  
Bringing pullets to maturity. Mrs A. M. Ashton. il O Judd Farmer 60:12 My 6 '16  
Business-like poultry farming. E. B. Seeds. Fruit-Grower 27:140 F 15 '16  
Can women succeed well in standard-bred poultry business. B. H. Barrett. Reliable P J 23:863+ N '16  
Care of fowls during molt. O: E. Hackman. Am P J 49:797 S '18  
Care of laying hens. V. M. Couch. Am P Advocate 25:32 D '16  
Care of sitting hens. Weekly N L 5:4 Mr 20 '18  
Care of small farm flocks. J: Marsh. Ohio F 141:799 Je 22 '18  
Case of chicken fever. il Fruit-Grower 28:88 F 1 '17



**Poultry—Continued**

- \* Case of the blue Andalusian. W: A. Lippincott. bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:95-115 F '18
- Changing from sheep to farm poultry. il Ohio F 137:645 My 6 '16
- Chicken by the quart. il Country Gent 82:2074 D 29 '17
- Chicken farming means hard work. Green's Fruit Grower 36:12 Je '16
- Chicken management on the farm. R. M. Sherwood and others. il Kan Ag Exp C 60:1-23 '17
- Chicken tale. N. B. Gosnell. Nat Stock & F 41:468 Ag 11 '17
- Chickens and gentleness. F. S. Jacoby. il Ohio F 140:351 O 20 '17
- Chickens for profit. J. Summerfield. Kimball's D F 13:819 Ja 1 '16
- Chick's diary for July. C. L. Opperman. il Country Gent 82:1125 Jl 7 '17
- Chicks that lag behind. M. G. Feint. Ohio F 142:412 O 26 '18
- City man and the poultry business. A. J. Bradley. Prac F 112:111 Mr 1 '16
- Color of hens' legs. M. K. Boyer. Am P Advocate 25:726 N '17
- Common sense with poultry. J. T. Campbell. il Ohio F 141:160 F 2 '18
- Concerning the annual molt. W. R. Gilbert. Reliable P J 23:680 Ag '16
- Continuous growth of young stock on the range. V. G. Aubrey. il Rural N Y 76: 1029 S 1 '17
- Controlling the farm poultry flock. G. W. Brown. Ohio F 141:515 Ap 6 '18
- Co-operative fattening of farm chickens. M. C. Herner. Ag Gaz of Canada 3:823-4 S '16
- Cost of raising cockerels for broilers. G. R. Shoup. Western Wash Ag Exp B v 6:55-7 Jl '18
- Cull out slacker hens. H. C. Knandel. Penn State F 11:235 Ja '18
- Culling the flock and helping moulters. F. V. L. Turner. Prac F 114:290 S 1 '18
- Culling the flocks of chicks. W. V. Clarke. il Reliable P J 25:229 Ap '18
- Day-old chicks admitted to parcel post. Reliable P J 25:202+ Ap '18
- Daylight culling of poultry. G. R. Shoup. il Western Wash Ag Exp B v 6:72-5 Ag '18
- Dear experience; lessons taught that are worth remembering. M. K. Boyer. Am P Advocate 24:776 O '16
- Dispose of surplus cockerels. I. J. Mathews. Ohio F 142:483 N 16 '18
- Disposing of the spring cockerels. Prac F 113: 234 Je 15 '17
- Does farm poultry pay? S. R. Miles. Purdue Ag 10:26 F '16
- Don't swap roosters. C. C. McCurdy. Nat Stock & F 40:1188 F 10 '17
- Don'ts for poultry raisers. A. E. Vandervort. Am P J Advocate 26:649 N '18
- Double the farm flock. H. R. Lewis. il Country Gent 82:1360 S 1 '17
- Doubling poultry profits. Prac F 112:282 Jl 15 '16
- Early hatching. A. A. Graham. Purdue Ag 12: 293+ F '18
- Early molters and the egg yield. Prac F 114: 306 S 15 '18
- Efficient poultry production in war time. M. A. Jull. J Ag (Quebec) 22:61 O '18
- Egg and meat production in 1918. F. S. Jacoby. il Ohio F 141:129+ F 2 '18
- Eggs and poultry. Am P J 48:789 Jl '17
- Eggs and the chicks to lay them. F. V. L. Turner. Prac F 114:176 My 1 '18
- Eggs for early hatching. E. L. Vincent. Nat Stock & F 40:1058 Ja 13 '17
- Eggs in several baskets insure poultry success. M. A. Herold. il Prac F 112:71+ F 15 '16
- Eggs in zero weather. J. D. Strickler. Nat Stock & F 41:1130 F 9 '18
- Eggs the year round. D. Q. Wright. Country Gent 82:1006 Je 9 '17
- \$64,000,000 eggs from one station. H. W. Jackson. il Nat Stock & F 41:516-17 Ag 25 '17
- Eliminate the boarders. H. R. Lewis. Country Gent 82:1097 Je 30 '17

- Experience book in poultry culture. W. H. Card. Am P Advocate 24:627-8 Jl '16
- Experience the best teacher. W: A. Dodwell. Am P Advocate 25:180 F '17
- Experience with a big flock. R. H. Stone. Nat Stock & F 40:1401 Mr 17 '17
- Extension circulars. Mass Ag Ext C 18, 19, 26 '17
- Titles are: Have you a back-yard poultry flock; Farm poultry flock in 1917; Present poultry situation
- Extravagant claims in the poultry business. G: D. Black. Ohio F 137:686 My 13 '16
- Factors in increasing business. G: Parsons. Am P J 48:1134-5 D '17
- Factors of poultry progress. E. J. W. Dietz. Am P Advocate 25:10-11 D '16
- Facts about poultry. Prog F 33:424 Mr 30 '18
- Family flock. A. C. Brown. Country Gent 83: 28 Mr 2 '18
- Farm flock. A. Horton. Purdue Ag 11:19 F '17
- Farm poultry. F. D. Crooks. il Pa Ag Ext C 47:1-23 '17
- Farm poultry; with the results of some experiments in poultry houses and fattening chickens. W. R. Graham and F. N. Marcellus. il Ontario Ag Dept B 247:1-80 '17
- Farm woman's poultry business. M. L. Williams. Country Gent 81:1809 O 7 '16
- Farmers should produce more eggs. M. A. Jull. J Ag (Quebec) 21:45 S '17
- Farmers to increase poultry production. Weekly N L 5:1 Ja 9 '18; Same. Am P Advocate 26:183 F '18
- Farmer's wife delights in flock. il O Judd Farmer 61:3 N 18 '16
- Feeding and housing winter layers. (Doc. 61) 3p il plans '17 U.S. States relations service Washington, D.C.
- Few summer thoughts. W. H. Card. Am P Advocate 24:671 Ag '16
- Finds poultry profitable notwithstanding high grain prices. E. P. Nostrand. Reliable P J 24:662+ O '17
- Finishing market poultry. W. C. Thompson. N J Ag Exp Hints to Poultrymen v 5 4p Ag '17
- Flock in January. Mrs C. E. Hill. Kimball's D F 14:33 Ja 15 '16
- Forced molting for hens. E. W. Gage. Ohio F 138:191 Ag 26 '16
- Fruit and poultry. J. Nelson. Green's Am Fruit Grower 38:24 Ap '18
- Fruit grower's incubator. C. A. Langston. Green's Am Fruit Grower 38:27 Mr '18
- Future of the American hen. C. L. Opperman. Country Gent 82:1592 O 20 '17
- Future prospects for poultry. E. T. Owen. Ohio F 139:816 Je 23 '17
- Gain by experience. T. F. McGrew. Am P Advocate 26:162-3 F '18
- General purpose fowl. T. F. McGrew. Am P Advocate 25:650-1 O '17
- Gentle process of introducing chickens to a new home. F. S. Wiggins. il Reliable P J 23: 706+ S '16
- Get ready for big business. T. E. Quisenberry. Am P Advocate 26:100 Ja '18
- Get ready now for next winter's eggs. Green's Fruit Grower 36:16 My '16
- Getting pullets ready for winter. A. E. Vandervort. Am J Advocate 24:780 O '16
- Give the children a start with poultry. E. R. Wright. Am P J 48:740 Je '17
- Giving poultry a chance to pay. J. R. Kessler. Prac F 113:258 Jl 15 '17
- Good health in the poultry yard. R. R. Hannas. il Country Gent 83:36 S 28 '18
- Goodale's experiments on gonadectomy of fowls. T. H. Morgan. Science (Science Press, Garrison, N.Y. 15c) n s 45:483-4 My 18 '17
- Growing poultry according to rule. F. V. L. Turner. Prac F 114:232 Jl 1 '18
- Growing the soft roaster. E. L. Farrington. il Fruit-Grower 28:80 F 1 '17
- Handling farm flock to advantage. W. H. Bullock. O Judd Farmer 64:3 F 2 '18
- Handling of poultry. G. Dowling. J Dept Ag Victoria 15:661-2 N '17
- Hatch chickens early. Weekly N L 4:1 F 21 '17
- Hatch chickens now. Weekly N L 4:1 Mr 7 '17
- Hatch early for size. Weekly N L 4:1 Mr 14 '17

**Poultry—Continued**

- Hatching problems. C. E. Baxter. *Fruit-Grower* 27:181 Mr 1 '16
- He won with hens. L. W. Lighty. *il Nat Stock & F* 42:311 Je 22 '18
- Hens pay better than horses. Mrs G: L. Russell. *il Fruit-Grower* 27:78-9 F 1 '16
- Hen's place on the farm. Mrs I. Jacobs. *il Purdue Ag* 12:208+ Ja '18
- Hens vs. Huns. L. S. Kleinschmidt. *Penn State F* 11:233 Ja '18
- Hints to poultry raisers. H. M. Lamon. *il Farmers' B* 528:1-13 '18 (rev)
- Home poultry production. (Ser. 2, no. 11) 22p *il '18 Winthrop normal and industrial college, Rock Hill, S.C.*
- Hope farm notes; the red hens. *Rural N Y* 76:1374 D 1 '17
- How a wife helps swell the family income with poultry. A. F. Hunter. *il Reliable P J* 24:361+ Je '17
- How many hens for the farm flock? *Nat Stock & F* 42:861 D 21 '18
- How one poultryman is helping. F. V. Lewis. *Prac F* 114:208 Je 1 '18
- How to have healthy chicks. M. G. Feint. *Ohio F* 141:284 F 23 '18
- How to keep looking on the bright side. M. W. Brown. *Am P J* 49:763 S '18
- How to make poultry raising profitable. E. S. Aldrich. *Am P J* 47:1323 D '16
- How to set a hen. *Weekly N L* 4:1 Mr 14 '17
- How to succeed with poultry. F. J. Rothpletz. *Prog F* 32:5 Ja 6 '17
- Ideas from commercial poultrymen. J. T. Bartlett. *Prac F* 113:351 O 15 '17
- If at first you fail with hens. E: S. Lawrence. *il Country Gent* 83:6+ Ag 24 '18
- Increase and conserve poultry products. R. E. Jones. *il Conn Ag Coll Ext C* 12 4p '17
- Increase your flock; win the war. R. G. Spears. *Purdue Ag* 12:422 Ap '18
- Incubation and brooding. (B. 15) 12p *il n.d. Mo. State poultry exp. station, Mountain Grove*
- Incubators to hatch—brooders to brood—chicks. *Am P J* 49:334 Mr '18
- Instructions for July culling out of poor layers and backward pullets. *Reliable P J* 25:488 Jl '18
- Interview with H. C. Hoover. *Reliable P J* 24:663+ O '17
- Interview with poultry and egg cabinet member of U.S. food administration. *Reliable P J* 24:675-7 O '17
- Is everything shipshape for winter? M. M. Ewing. *Am P J* 49:820-1 O '18
- It's knowledge that counts. R. F. Palmer. *Am P J* 48:1172 D '17
- July poultry calendar. M. G. Feint. *Ohio F* 140:16 Jl 7 '17
- Just hens. P. McArthur. *Wallaces' F* 42:414 Mr 2 '17
- Keep a record of the flock. Mrs C. E. Hill. *Kimball's D F* 14:544 S 1 '16
- Keep the hen that lays. T. E. Quisenberry. *Am P Advocate* 25:710 N '17
- Late hatching counts this year. F. V. L. Turner. *Prac F* 113:215 Je 1 '17
- Leg bands in uniform flocks. Mrs W. B. Doak. *Nat Stock & F* 41:368 Jl 7 '17
- Let's be fair to the chickens. H. W. Jackson. *Nat Stock & F* 41:126 F 9 '18
- Live interest in work necessary. Mrs D. A. Farwell. *Am P J* 48:1090 N '17
- Living from poultry. M. Purvis. *Breeder's Gaz* 74:154 Ag 1 '18
- Look ahead now to winter. C. A. Langston. *Green's Am Fruit Grower* 38:23 Ap '18
- Make your flock profitable. F. W. Kazmeier. *Nat Stock & F* 41:1129 F 9 '18
- Making a late start. F. H. Valentine. *Country Life* 30:61 My '16
- Making a living with hens. M. K. Boyer. *Am P Advocate* 26:520-1 Ag '18
- Making drinking fountain for poultry. *il Metal Worker* (50 Union sq., N.Y. 10c) 87:148+ Ja 26 '17
- Making money with poultry as a side-line. *Reliable P J* 25:323+ My '18
- Management of the farm poultry flock. V. G. Aubry. *N J Ag Exp C* 49:1-20 n.d.
- Managing farm flocks. *Ohio F* 138:506 N 18 '16
- Market poultry business. F. E. Mixa. (B. no. 11) 46p *il n.d. Mo. state poultry bd., Mountain Grove*
- Marketing broilers for profit. F. F. Hunstock. *Hoard's D* 53:254 Mr 2 '17
- Maturing the pullets. R. R. Hannas. *il Country Gent* 83:31 Ag 17 '18
- May work for farm poultry. C. A. Langston. *Green's Am Fruit Grower* 38:15 My '18
- Meeting the crisis. J. M. Curtis, jr. *Am P Advocate* 26:98 Ja '18
- Mr Edward Brown of England urges increased poultry production. *Am P Advocate* 26:340 Ap '18
- Mrs Hen and her family. M. C. Wilson. *Am P J* 48:849-51 Ag '17
- Mobilizing the hen. C. L. Opperman. *il Country Gent* 82:1053 Je 23 '17
- Molting time in hendom. *Prac F* 112:346 S 15 '16
- More eggs from higher cost feed. R. V. Hicks. *il Country Life* 33:61-3 Ja '18
- More poultry not alone a necessity. F. V. L. Turner. *Prac F* 113:246 Jl 1 '17
- Moulting. Mrs G: R. Shoup. *Western Wash Ag Exp B v* 4:15-16 Ag '16
- Moulting hens and laying pullets. C. A. Langston. *il Am Fruit Grower* 38:14 D '18
- Moulting of fowls. R. F. Irvin. *N J Ag Exp Hints to Poultrymen v* 5 4p Jl '17
- Move of first importance for poultry keepers to make. *Reliable P J* 24:588-9 S '17
- My experience with poultry. E. L. Ragsdale. *Fruit-Grower* 28:112 F 1 '17
- My home flock. J: R. McMahon. *Country Gent* 82:1098 Je 30 '17
- My poultry sideline. F. E. Ellis. *Hoard's D* 55:185 F 22 '18
- New way to play the chicken game. P. B. Ruggles. *Country Life* 32:156 My '17
- 1917 and poultry. *Prac F* 113:54 F 1 '17
- Number your chicks by toe-punching. F. C. Hare. *il Reliable P J* 25:212 Ap '18
- Observations by the egg man; marketing of laying poultry. *N Y Prod R* 45:568 F 20 '18
- October judgment days. C. A. Langston. *Am Fruit Grower* 38:7 O '18
- One farmer's experience. *Nat Stock & F* 40:942 D 16 '16
- 1,000 hen farm flock. H. W. Jackson. *Nat Stock & F* 41:64 Ap 7 '17
- One year with a farm flock. Mrs G. Kepler. *Country Gent* 81:754 Ap 1 '16
- Open-air sleeping-porch for chickens. *il Gleanings* 44:877-8 S 15 '16
- Optimism spells success. Mrs J. E. Almy. *Prac F* 114:62 F 15 '18
- Painless poultry profits. *Nat Stock & F* 41:696 O 20 '17
- Patriotism and profit from poultry. T. E. Quisenberry. *Am P Advocate* 25:504 Je '17
- Same. *Kimball's D F* 15:437 Je 15 '17
- Piano dividends from home flocks. B: North. *il Country Gent* 83:7 Ag 3 '18
- Place of the hen on the farm. V. H. Matthews. *Purdue Ag* 10:30 Ap '16
- Plan of poultry work for early spring. M. H. Decker. *Am P J* 48:342-5 Mr '17
- Planning the year's business; keeping records. *Country Gent* 81:27 Ja 1 '16
- Plea for more poultry. *Nat Stock & F* 41:866 D 8 '17
- Plea for pure-bred chickens. Mrs C. E. Hill. *Kimball's D F* 14:73 F 1 '16
- Plumage changes in chicks. C. L. Opperman. *Country Gent* 81:1558 Ag 19 '16
- Points of good layers. C. L. Opperman. *Country Gent* 81:2167 D 16 '16
- Possibilities of a farm flock in war time. V. G. Aubry. *N J Ag Exp Hints to Poultrymen v* 6 4p S '18
- Post-mortem examination of poultry. W. T. Johnson. *il Western Wash Ag Exp B v* 6:109-12 N '18
- Poultry a by-product. *Wallaces' F* 43:133 Ja 25 '18
- Poultry a universal profit maker. *Prac F* 112:298 Ag 1 '16
- Poultry accounts. Mrs G: R. Shoup. *Western Wash Ag Exp B v* 5:54-6 Jl '17
- Poultry and dairy cows. J. R. Snyder. *Kimball's D F* 14:177 Mr 15 '16



**Poultry—Continued**

- Poultry and farm. N. W. Sanborn. Am P Advocate 24:307-8, 421-2, 521-2, 581-2, 625-6, 669-70, 712-13, 765-6, 825-6, 25:5-6, 75-6, 159-60 Mr '16-F '17
- Poultry and fruit growing. E. M. Long. il Reliable P J 23:1073, 1195; 24:55+, 142 Ja-Apr '17
- Poultry and garden on an acre in 1917. M. C. Wilson. Am P J 49:294-5 Mr '18
- Poultry and preparedness. Wallaces' F 42: 761 My 4 '17
- Poultry as a source of meat. Rural N Y 76: 394 Mr 10 '17
- Poultry as a source of meat. F. W. Proctor. Rural N Y 76:442 Mr 17 '17
- Poultry business and war time prices. W. H. Jenkins. il Nat Stock & F 41:1128 F 9 '18
- Poultry club instruction sheets nos. 1-7. W. Va Ag Ext C 55, 56, 67, 71, 74, 83, 92 '16
- Titles are: Selecting a breed; The hatch; Care of chicks; Poultry coops; Lice and mites; Fall feeding; Poultry show
- Poultry counsels. G. P. Black. Ohio F 137: 614 Ap 22 '16
- Poultry culture. 5th ed rev il plans Mass Ag Bd B 1:1-159 '17
- Poultry culture—as it was and as it is. M. K. Boyer. Am P Advocate 26:560 S '18
- Poultry culture—home production. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:39 Ja 19 '18
- Poultry facts expressed briefly. C. T. Patterson. 39p il n. d. Mo. State poultry experiment station, Mountain Grove
- Poultry farm equipment. G. H. Alford. Prog F 33:518 Ap 20 '18
- Poultry finance vs. the high price of feed. W. H. Card. Am P Advocate 25:649 O '17
- Poultry for the farmer's wife. Mrs C. Hoffman. Prac F 112:251 Je 15 '16
- Poultry-fruit combination. R. G. Kirby. Fruit-Grower 28:90 F 1 '17
- Poultry growing offers greater reward. O Judd Farmer 65:500 N 30 '18
- Poultry helps from the farmers' week at Massachusetts agricultural college. N. W. Sanborn. Am P Advocate 25:458 My '17
- Poultry investigational work. D. T. Gray. N C Ag Exp Rep 1917:55-63
- Poultry is profitable. 10p il '16 Int. harvester co., Chicago
- Poultry keeping and egg production. M. K. Boyer. Am P Advocate 25:174 F '17
- Poultry keeping conveniences. Country Life 34:84 My '18
- Poultry-keeping in town and country. F. C. Elford. 46p il '17 Canada Ag
- Poultry keeping pays under existing conditions. A. G. Lunn. Reliable P J 24:457 JI '17
- Poultry keeping under war conditions. H. T. Woods. Am P J 48:906 S '17
- Poultry losses in summer. M. K. Boyer. Am P Advocate 26:449 Je '18
- Poultry management. W. E. Vaplon. il Colo Ag Ext B 130:1-8 '17
- Poultry management at the Maine station. R. Pearl. il Maine Ag Exp Doc 515:1-98 '16
- Poultry management, care of breeding stock and chicks. E. J. Peterson. il N D Ag Exp C 11:1-10 '16
- Poultry more profitable. Va Ag Dept B 126: 102-6 '18
- Poultry notes for April. Prog F 33:461 Ap 6 '18
- Poultry notes for June. Prog F 33:673 Je 1 '18
- Poultry notes from Woodbine farm. J. T. Campbell. Ohio F 141:48 Ja 12 '18
- Poultry on a modern farm. E. S. Parsons. il Country Life 29:50-1 Ap '16
- Poultry on dairy farms. il Kimball's D F 16: 92 F 1 '18
- Poultry on the dairy farm. F. F. Hunstock. Hoard's D 52:428 O 20 '16
- Poultry on the dairy farm. F. F. Hunstock. il Kimball's D F 15:204 Mr 15 '17
- Poultry on the farm. J. E. Dougherty. Cal Ag Exp C 186 4p '17
- Poultry on the farm. E. H. Parsons. Ohio F 141:26 Ja 5 '18
- Poultry outlook. M. Purvis. Breeder's Gaz 74:78 JI 18 '18
- Poultry pointers for boys and girls. D. J. Lambert. R I Ag Ext B n s 3:1-8 '17
- Poultry problems that today confront America. E. Brown. Reliable P J 24:853+ D '17
- Poultry profit figures. M. Purvis. Breeder's Gaz 69:915 Ap 27 '16
- Poultry profits. Prac F 112:442 D 1 '16
- Poultry prosperity now. H. W. Jackson. il Nat Stock & F 42:495 Ag 24 '18
- Poultry raising. H. D. White. Farm Eng 6:16 F '18
- Poultry sanitation. H. R. Lewis. il Cornell Countryman 14:733-5 Je '17
- Poultry sanitation. A. W. Richardson. N H Ag Ext C 38:1-6 '18
- Poultry: selecting stock birds. E. Molyneux. Gard Chron (Lond) 62:63 Ag 11 '17
- Poultry, selection, care and management. R. E. Jones. Conn Ag Coll Ext B 2:1-22 '16
- Poultry sideline; possibilities of an extra profit when poultry is dressed or shipped alive. N Y Prod R 46:764 S 25 '18
- Poultry situation at home and abroad. P. T. Woods. Am P J 48:843-5 Ag '17
- Poultry standards in their relation to utility. J. Hadlington. il Ag Gaz of New South Wales 28:208-16 Mr '17
- Poultry tale twice told. J. T. Campbell. Ohio F 141:328 Mr 2 '18
- Poultry to the front. Prac F 112:79 F 15 '16
- Poultry warriors. C. Dubose. Am P Advocate 26:8-9 D '17
- Poultry warriors. C. Dubose. Purdue Ag 12: 201-3 Ja '18; Same cond. Ag Digest 2:801 Ja '18
- Poultry work on the experimental farms. F. C. Elford. il J Ag (Quebec) 20:111 N '16
- Poultry yard. E. I. Farrington. il Independent (119 W. 40th st, N.Y. 10c) 93:36, 197-8; 94: 40-2, 218, 376; 95:330-1; 96:27-8 Ja 5, F 2, Ap 6, My 4, Je 1, S 7, O 5 '18
- Poultry yard hints for March. A. E. Vandervort. Am P Advocate 26:274 Mr '18
- Poultryman and the public. C. H. Herr. Ohio F 139:695 My 19 '17
- Poultryman who is a slacker. T. E. Quisenberry. Am P Advocate 26:454 Je '18
- Poultryman's chance. D. Wagner. il Field II 27:778 O '17
- Poultryman's complaint. H. A. Roberts. il Country Gent 82:1553+, 1632+ O 13, 27 '17
- Practical pointers for the month of March. M. H. Decker. il Am P J 47:422-5 Mr '16
- Practical poultry keeping, adopt a system. A. Hart. il J Dept Ag Victoria 14:366-72 Je '16
- Practical poultry pointers. E. W. Gage. Green's Fruit Grower 36:30 F '16
- Practical sized flock of poultry. Mrs V. D. Wade. Prac F 112:174 Ap 15 '16
- Preparedness for winter eggs. V. M. Couch. Am P Advocate 25:616 S '17
- Preparing chickens for market. A. G. Taylor. J Ag (Quebec) 22:61 O '18
- Present day poultry keeping. C. M. Brumfield. Am P J 48:320 JI '17
- Produce more and cut cost are war-time poultry aims. Weekly N L 6:4 O 23 '18
- Production and conservation series no. 23-4. 3p Vt Ag Ext '17 (Mim)
- Titles are: Vermont farmers should grow more poultry; Feeding the chicks; Layers; Growing chicks
- Profitable poultry. J. P. Gilbert. Ill Farmers Inst Rep 1917:191-5 '17
- Profitable poultry raising on the farm. B. C. Elliott. Prac F 114:62 F 15 '18
- Profitable side line. V. A. Place. il Country Gent 81:1945 N 4 '16
- Profits in poultry. M. K. Boyer. Am P Advocate 25:28 D '16
- Proper moulting means egg profits. R. F. Palmer. Am P Advocate 25:670 O '17
- Prospects better for fall and winter. R. F. Palmer. Am P Advocate 26:568 S '18
- Pure bred fowls in the central west. E. J. W. Dietz. Am P Advocate 24:767 O '16
- Quality in poultry. M. K. Boyer. Am P Advocate 26:350 Ap '18
- Raise more chickens. Weekly N L 4:1 My 23 '17; Same. N Y Prod R 44:398 JI 4 '17
- Raise more pullets. E. T. Owen. Nat Stock & F 41:310 Je 16 '17

## Poultry—Continued

- Raising poultry for profit. Mrs J. G. Kelly. Ill Farmers Inst Household Sci 1917:154-8 '18
- Raising 600 successfully on the farm. W: Penrose, jr. il Prac F 114:61 F 15 '18
- Range versus confinement for laying hens. W. J. Buss. il Ohio Ag Exp B v 2:71-5 Mr '17
- Rapid growth of chicks and ducklings. il Reliable P J 25:197 Ap '18
- Rearing of poultry. E. Molyneux. Gard Chron (Lond) 63:131 Mr 23 '18
- Reasonable conditions of successful poultry keeping. il Nat Stock & F 40:1186 F 10 '17
- Recent inventions for poultrymen. L. L. Sargent. See monthly numbers of American poultry journal
- Record and rations. J: Marsh. Nat Stock & F 40:1445 Mr 24 '17
- Recreation and the farm flock. T. Z. Richey. il Ohio F 141:410 Mr 16 '18
- Reducing the high cost of living. il Rural N Y 75:213 F 5 '16
- Report of the committee on poultry. E. W. Benjamin. N Y Farms & Markets Dept Ag B 97:61-5 Jl '17
- Requirements for success with poultry. S. Swaysgood. Am P J 48:973-4 O '17
- Roasters for the city trade. E. I. Farrington. Country Gent 82:1925 D 8 '17
- Saving the products of poultrymen for table use. Reliable P J 25:543-4+ Ag '18
- School teacher's poultry. J. K. Morrison. il Country Gent 81:1273 Je 24 '16
- Seasonable poultry pointers. E. W. Gage. il Green's Fruit Grower 36:32 Ja '16
- Selecting birds for laying flocks. W. C. Thompson. Rural N Y 76:979 Ag 18 '17
- Selecting the laying hen. M. E. Dickson. il Am P Advocate 26:224 F '18
- Selection: the basis of improving the poultry flock. H. R. Lewis. N J Ag Exp Hints to Poultrymen v 5 4p S '17
- Shall we separate the sexes? J: E. Read. Ohio F 137:795 Je 10 '16
- Sheep and hen farm. E. I. Farrington. il Country Gent 83:35 My 4 '18
- Should I keep poultry in wartime? E. K. Parkinson. il Country Life 32:61-2 S '17
- Should we sell the hens? C. A. Langston. Green's Am Fruit Grower 38:12 Ag '18
- Side line for the fruit grower. H. E. Botsford. N Y State Fruit Growers' Assn Pro 1918:94-7
- Six acres and 500 hens. J. R. Kessler. il Country Gent 81:1451 Jl 29 '16
- Small or large flocks. W. A. Dreher. Country Gent 81:217 Ja 29 '16
- Small poultry house and hints on poultry raising. C. H. Burgess. il diags Mich Ag Ext Club B 6:1-16 '16
- Some practical poultry questions. Nat Stock & F 42:354 Jl 6 '18
- Spare the hen and hatch the egg. J. C. Marquis. il Country Gent 83:8-9 Mr 23 '18
- Special federal war emergency poultry work. Reliable P J 25:415+ Je '18
- Speeding up farm poultry for best results. F. V. L. Turner. Prac F 113:329 O 1 '17
- Spirit of 1918. il Ag Digest 2:936 Ap '18
- Spirit of the fancy in poultry culture. F. L. Sewell. Reliable P J 25:471+ Jl '18
- Spring hatch. Hoard's D 51:304 Mr 10 '16
- Spring moult. Mrs G: R. Shoup. Western Wash Ag Exp B v 5:14-16 Ap '17
- Spring plans for winter eggs. il O Judd Farmer 64:3 F 23 '18
- Spring poultry work. il Va Ag Dept B 111: 10-12 Ap '16
- Spring poultry work. Weekly N L 4:1 F 14 '17
- Spring poultry work. Mrs C. E. Hill. Kimball's D F 14:160 Mr 1 '16
- Standard-bred poultry provides income for home women. Reliable P J 25:409+ Je '18
- Starting the new flock. A. F. Hunter. Reliable P J 23:816 O '16
- Stick to the chickens. D. E. Hale. il plan Field II 28:100 F '18
- Story of Tilly. Mrs R. W. Stevens. Rural N Y 76:1086 S 15 '17
- Studies on the physiology of reproduction in birds. O. Riddle and others (Am. J. Physiol. 41, no. 3:387-437; 42:151-62 '16). Exp Station Rec 37:772-4 D '17
- Study of constitutional vigour in poultry. J. E. Rice. Int R Sci & Prac Ag 7, no 10:1495-8 O '16
- Success with poultry. J: F. Wallace. Am P Advocate 25:368 Ap '17
- Summer care of pullets. H. G. Forster. il Country Gent 83:31 Je 29 '18
- Summer poultry management. G. A. Meredith. Ohio F 142:40 Jl 13 '18
- Swat the rooster! H. R. Lewis. Country Gent 82:1039 Je 16 '17
- Tenant farmer and the poultry business. B. F. Kaupp. Prog F 33:13 Ja 5 '18
- Things worthy of consideration. T. F. McGrew. Am P Advocate 25:444-5 My '17
- Thirty-four cents an hour from the farm hen. L. L. Jones. Purdue Ag 11:25 D '16
- This flock of poultry pays. Mrs H. H. Smith. il O Judd Farmer 62:11 Mr 31 '17
- This man got interested in good poultry. V. M. Couch. Am P Advocate 25:502 Je '17
- Thrift stamps and eggs. N. B. Jones. Nat Stock & F 41:1216 F 23 '18
- To discourage sale of hens. W. F. Priebe. N Y Prod R 45:459 F 6 '18
- Tour of investigation. Nat Stock & F 40:1322 Mr 3 '17
- Truth about poultry. F. F. Lincoln. Rural N Y 75:1415 N 11 '16
- 25 hens instead of 100. Prog F 31:302 F 26 '16
- Unprofitable hen. H. Hovey. Country Life 29:54 F '16
- Upset of hen business. O Judd Farmer 64:22 Mr 2 '18
- Value of a good poultry paper. W. H. Hood. Am P J 49:822-3 O '18
- Very early hatches pay best. Mr and Mrs G: R. Shoup. Western Wash Ag Exp B v 5:152-5 Ja '18
- Veteran's appeal. F. B. Squires. Nat Stock & F 41:1295 Mr 9 '18
- Views of a poultry raiser. Mrs N. B. Gosnell. Ohio F 141:727 Je 1 '18
- Village poultry plant. F. H. Valentine. il Country Life 30:48 S '16
- War bride hen in Europe. E: Brown. il Country Gent 83:6-7 O 12 '18
- War measure for poultrymen. H. R. Lewis. il Field II 27:698 S '17
- War time and the poultry industry. M. G. Feint. Ohio F 139:671 My 12 '17
- Wartime poultry conditions and suggestions. J. E. Rice. il Purdue Ag 12:204-7 Ja '18
- Washing the show bird. H. A. Roberts. il Country Gent 82:1692 N 3 '17
- Well arranged programme for poultry keepers. H. B. Donovan. Reliable P J 24:452 Jl '17
- What a farmer's wife can earn with standard-bred poultry. Mrs C. Rapp. Reliable P J 23:711 S '16
- What are you going to do about it? P. T. Woods. il Am P J 48:710-11 Je '17
- What is possible in poultry meat production? il Reliable P J 25:535-6+ Ag '18
- What is proper equipment? Nat Stock & F 40:556 Ag 26 '16
- What poultrymen say: fruit and poultry. il Fruit-Grower 27:82 F 1 '16
- What the hen can do in war time. C. T. Wright. J Ag (Quebec) 21:29 Ag '17
- What will the harvest be? Prac F 113:34 Ja 15 '17
- Which chickens to keep and which to sell. B. F. Kaupp. Prog F 33:624 My 18 '18
- White skinned chickens. G: D. Black. Ohio F 137:40 Ja 8 '16
- Winter care of poultry by persons of limited experience. H. W. Jackson. il Reliable P J 25:861+ D '18
- Winter egg production. J Bd Ag 24:1103-5 Ja '18
- Woman's experience. J. White. Nat Stock & F 40:258 Je 3 '16
- Woman's view of the poultry business based on experience. M. I. Moore. il Reliable P J 23:482+ Je '16
- Women appeal to women in time of national need. Reliable P J 25:51-2 Mr '18
- Word to the poultry-wise. W. H. Bullock. il O Judd Farmer 61:5 O 28 '16



**Poultry—Continued**

Worth while poultry suggestions. F. V. L. Turner. *Prac F* 113:389 N 15 '17

See also Capons and caponizing; Cookery—Poultry; Ducks; Egg laying contests; Eggs; Geese; Guinea fowls; Incubation; Incubators; Peafowl; Phoenix fowls; Pigeons; Roosters; Turkeys; Water birds; also headings beginning Poultry; also American association of instructors and investigators in poultry husbandry; American poultry association; Massachusetts poultry convention; Missouri—Poultry board, State; Missouri state poultry experiment station; Poultry conference, Chicago

**Accounting**

Safe system of poultry accounts. A. E. Vandervort. *Am P Advocate* 25:86 Ja '17

**Bibliography**

Animal industry; United States public documents pertaining to farm animals, poultry, and dairying, for sale by the Superintendent of documents, Washington, D.C. (Price list 38—8th ed) 34p '16 Supt. of doc., Washington, D.C.

Poultry books for public libraries. Ontario Library Review (Toronto) 1:71-3 F '17

Poultry husbandry; a selected bibliography prepared for A. L. A. committee on food information. G. A. Deveneau. 5p mim '17 Univ. of Ill., Coll. of ag., Urbana

**Breeds**

Andalusians and Hamburgs. G. D. Black. *Ohio F* 137:670 My 6 '16

Asiatic fowl. T. F. McGrew. *Am P Advocate* 26:631-2 N '18

Asiatic fowls. T. F. McGrew. *Am P Advocate* 24:524-5 My '16

Beginner chooses a variety of poultry. S. W. Exley. *Am P J* 47:921 Jl '16

Best breeds of poultry. F. H. Valentine. *Country Life* 29:50 F '16

Best fowl in the world. W. H. Card. *Am P Advocate* 25:270 Mr '17

Black giant poultry. *Rural N Y* 77:304 F 23 '18

Black langshans and white plymouth rocks. P. T. Woods. *Am P J* 49:77 Ja '18

Breeds for the farm and farmers as poultry breeders. J. H. Robinson. *Mass Ag Bd B* 1:38-46 '17

Breeds of chickens. Wallaces' *F* 42:1691 D 14 '17

Breeds of poultry. F. S. Jacoby and A. Bayes. *Ohio F* 137:104 Ja 22 '16

Breeds of poultry suitable for exportation to Europe. E. Brown. *Reliable P J* 25:319-20+ My '18

Commercial breeds. D. F. Laurie. *J Dept Ag S Australia* 21:368-70 Jl '18

Fowl efficiency deductions from the egg-laying contests. M. C. Kilpatrick. *Country Gent* 81:854-5 Ap 15 '16

General purpose fowl; no one fowl can be made to fill all demands. T. F. McGrew. *Am P Advocate* 24:312-13 Mr '16

Leghorns vs. buttercups. C. S. Brouillet. *Rural N Y* 75:571 Ap 1 '16

Lessons from the nests. W. R. Merrick. *Country Gent* 82:503 Mr 10 '17

Matters to be considered when selecting a breed or variety. O. W. Aldrich. *il Reliable P J* 23:970+ D '16

Profit in the flock; distinct differences in flesh of various breeds. *Am P Advocate* 25:422 Ap '17

Profitable breeds for farmers. M. A. Jull. *J Ag (Quebec)* 19:246 My '16

Relation of poultry types to war-time production. *Am P Advocate* 26:636-7 N '18; Same. *Reliable P J* 25:762-3 N '18

Report of the committee on separate breed standards. H. W. Jackson. *Reliable P J* 23:777+ O '16

Requirements for a general purpose fowl—what breed fills them best? O. W. Aldrich. *Am P J* 47:70 Ja '16

Selecting a breed. H. C. Sheppard. *Am P Advocate* 25:12-13 D '16

Should we encourage new breeds? W. W. Graves. *Reliable P J* 23:239 Ap '16

Some of the rarer fowls. F. H. Valentine. *il Country Life* 30:48 Ag '16

Some practical breed characteristics. R. E. Huntley. *Am P Advocate* 24:436 Ap '16

Standard values and production characteristics. W. H. Card. *il Reliable P J* 25:764+ N '18

Standard varieties of chickens; the American class. R. R. Slocum. *il Farmers' B* 806:1-18 '17

Standard varieties of chickens; the Mediterranean and continental classes. R. R. Slocum. *il Farmers' B* 898:1-25 '17

Types of poultry. F. W. Kazmeier. *Nat Stock & F* 40:502 Ag 12 '16

Use standard poultry. *Weekly N L* 5:6 Ja 30 '18; Same. *Am P Advocate* 26:264 Mr '18

Utility and fancy. W. H. Card. *Country Gent* 82:62 Ja 13 '17

What is the best laying breed of chickens? *Prog F* 32:686 Je 9 '17

Which breed. *Country Gent* 81:800 Ap 8 '16

Why dual-purpose fowls are favored by majority of farmers. L. J. Brosemer. *Reliable P J* 24:45+ Mr '17

See also Poultry breeders' associations; also names of breeds, e.g. Anconas, Andalusians, Bantams, Brahmas, Buckeye, Buttercups, Campines, Cornish Indian fowl, Dominiques, Dorkings, Faverolles, Hamburgs, Houdans, Langshans, Leghorns, Minorcas, Missouri fluffs, Oregons, Orpingtons, Plymouth rocks, Polish, Rhinelanders, Rhode Island reds, Rhode Island whites, Sussex, Wilsons, Wyandottes

**Broody hens**

Best results with the setting hen. O. E. Hackman. *Am P J* 47:669 Ap '16

Breaking the broody hen. M. F. Uphoff. *il Country Gent* 83:35 Jl 27 '18

Care of broody hens. R. E. Jones. *Am P Advocate* 26:489 Jl '18

How to set a hen and care for her. (Doc. 68) 4p '18; How to build a brood coop for hen and chicks. (Doc. 70) 2p '18 U.S. States relations service, Washington, D.C.

What broody hens cost our country annually. R. F. Palmer. *il Reliable P J* 25:414+ Je '18

**Care of chicks**

Ailments of brooder chicks and their treatment. H. W. Jackson. *il Reliable P J* 25:326+ My '18

Artificial brooding and chick feeding. W. F. Schoppe. *il Mont Ag Exp C* 56:193-207 '16

Baby chick. L. E. Keyser. *Am P Advocate* 24:223 F '16

Baby chick troubles. C. T. Patterson. *O Judd Farmer* 60:8 F 5 '16

Baby chicks and a good ration. *Prac F* 113:128 Mr 15 '17

Baby chicks from shell to perch. J. Raymond. *Country Gent* 81:274 F 5 '16

Baby chicks in 1917. N. W. Sanborn. *Am P Advocate* 25:7 D '16

Boys and girls poultry club; hatching and raising chicks. *il Ia Ag Ext Junior C* 46:1-8 '18

Bringing forth healthy chicks. Mrs. H. L. Miller. *O Judd Farmer* 62:1+ F 3 '17

Bringing up the little chicks. J. G. Halpin. *Hoard's D* 55:936 Je 21 '18

Bringing up young chicks. *Prac F* 112:174 Ap 15 '16

Brooder management. F. C. Brown. *J Ag New Zealand* 15:166-8 S '17

Brooding and feeding baby chicks. T. E. Quisenberry. *Am P Advocate* 25:284 Mr '17

Brooding and feeding little chicks. H. Atwood. *il W Va Ag Exp C* 26:1-15 '17

Brooding and feeding of chicks. A. W. Richardson. *N H Ag Ext C* 31:1-7 '18

Brooding chickens. *Weekly N L* 4:5 Ap 11 '17

Brooding chicks. *Prac F* 112:38 Ja 15 '16

Brooding chicks. M. A. Jull. *il J Ag (Quebec)* 19:224 Ap '16

Brooding farm chickens. E. W. Gage. *il Ohio F* 137:514 Ap 1 '16

Brooding little chicks. R. E. Jones. *Am P Advocate* 26:334 Ap '18

Brooding of chicks. R. Atkinson. *il Purdue Ag* 10:27-8 Mr '16

**Poultry—Care of chicks—Continued**

- Care and feeding of chicks. il (Doc. 69) 4p il '18 U.S. States relations service, Washington, D.C.
- Care and handling of chicks. il Nev Ag Ext B 11:1-15 '17
- Care and management of baby chicks. Mr and Mrs G: R. Shoup. Western Wash Ag Exp B v 4:6-13 Mr '17
- Care of baby chicks. Am P J 48:738 Je '17
- Care of baby chicks. Mrs C. E. Hill. Kimball's D F 14:202 Mr 15 '16
- Care of chicks after they are hatched by hens or incubators. L. J. Brosemer. il Reliable P J 23:207-9 Ap '16
- Care of growing chicks during warm weather. Am P Advocate 25:568 Ag '17
- Care of the chick from birth to maturity. B. Barker. Prac F 113:70 F 15 '17
- Care of the chicks. M. G. Stearns. il Ohio F 141:514 Ap 6 '18
- Care of the growing chicks. F. C. Stevenson. Purdue Ag 11:44-5 My '17
- Caring for chicks until they can care for themselves. J. R. Kessler. Prac F 114:86 Mr 1 '18
- Causes for losses of chicks. il Purdue Ag 11:45 Mr '17
- Chick time and around there. E. L. Vincent. il Fruit-Grower 27:108 F 1 '16
- Chick troubles. W. C. Thompson. N J Ag Exp Hints to Poultrymen v 5 4p Ap '17
- Chick's fifth week. Country Gent 82:912 My 19 '17
- Chicks' first feed. J. R. Kessler. il Country Gent 82:608 Mr 24 '17
- Chick's fourth week. Country Gent 82:879 My 12 '17
- Chicks in hot weather. H. G. Forster. il Country Gent 83:29 J1 13 '18
- Chicks in the berry patch. W. C. Smith. Fruit-Grower 28:219 Ap 1 '17
- Chicks must not chill. L. H. Cobb. Nat Stock & F 40:1364 Mr 10 '17
- Chick's second week. C. L. Opperman. Country Gent 82:815 Ap 28 '17
- Chick's seventh week. Country Gent 82:972 Je 2 '17
- Chick's third week. C. L. Opperman. Country Gent 82:846 My 5 '17
- Common sense method of raising chicks. J. R. Handyside. Am P J 49:604 Je '18
- Conserving the baby chicks. W. C. Thompson. N J Ag Exp Hints to Poultrymen v 6 4p Mr '18
- Culture and chick feed together. Rural N Y 76:576 Ap 21 '17
- Day-old chicks, week-old chicks and pound chicks. F. L. Sewell. il Reliable P J 24:746-7 N '17
- Directions for care and feeding of brooder chicks. H. W. Jackson. il Reliable P J 25:196+ Ap '18
- Early care of baby chicks. Mrs M. L. Johnson. O Judd Farmer 64:20 F 16 '18
- Economical pointers on feeding chicks. M. H. Decker. Am P J 48:173-5 F '17
- Educating brooder chicks. A. M. Ashton. O Judd Farmer 62:14 Ap 14 '17
- Essentials in caring for little chicks. R. E. Jones. Am P Advocate 26:220 F '18
- Feed for chicks. A. G. Phillips. il Country Gent 83:27 Je 8 '18
- Feeding and caring for the chicks. il Hoard's D 53:441 Mr 30 '17
- Feeding and caring for young chicks. Prac F 114:100 Mr 1 '18
- Feeding baby chicks. Prac F 112:110 Mr 1 '16
- Feeding baby chicks. C. L. Opperman. il Country Gent 83:62 Mr 16 '18
- Feeding incubator chicks. I. J. Mathews. Ohio F 139:556 Ap 14 '17
- Feeding of young chicks on grain mixtures of high and low lysine content. G. D. Buckner and others. il Ky Ag Exp B 197:1-21 '16
- Feeding the chicks, and brooding the chicks; Macdonald college method. il J Ag (Quebec) 20:215 Ap '17
- Feeding the young chick. Rural N Y 77:360 Mr 2 '18
- Feeding young chicks. Ohio F 141:513 Ap 6 '18
- Feeding young chicks. Weekly N L 4:7 Ap 18 '17. Same. Am P Advocate 25:373 Ap '17
- Feeding young chicks. F. S. Jacoby. Ohio Ag Ext B v 11, no 8 4p '15-16
- First care of the baby chicks. Reliable P J 25:71 Mr '18
- Fitting the layers. A. G. Phillips. il Country Gent 81:1701 S 16 '16
- For thrifty growth in chicks. G: D. Black. Ohio F 138:257 S 16 '16
- Forced roost. G: R. Shoup. Western Wash Ag Exp B v 6:24-6 My '18
- Further studies of chick mortality: When to feed the baby chick. B. F. Kaupp. il N C Ag Exp B 235:1-22 '16; Same. N C Ag Exp Rep 1916 22p '17
- Getting chicks started. H. A. Roberts. il Country Gent 81:852 Ap 15 '16
- Government urges early hatches. T. E. Quisenberry. Am P Advocate 26:190-1 F '18; Same. Am P J 49:252 F '18
- Growing the chicks. T. F. McGrew. Am P Advocate 25:261-2 Mr '17
- Growth of young chicks. A. E. Vandervort. Am P Advocate 25:120 Ja '17
- Harry gets ready for chicks. Hoard's D 55:444 Mr 29 '18
- Hatching and raising chickens. R. B. Sando. il Field 11 27:206 Mr '17
- Hatching and rearing chicks. F. C. Hare. Am P J 48:511+ Ap '17
- Hatching season of the fancier. C: A. Simmonds. Am P J 47:618 Ap '16
- Helpful chick and brooder experiences. J. H. Robey. il O Judd Farmer 60:5 F 5 '16
- How Petaluma raises chicks. W. R. Sim. Country Gent 82:66 Ja 13 '17
- How to make chick growing easier. M. H. Decker. Am P J 49:412-13 Ap '18
- How to raise chicks to chickens. 13p il n.d. G. E. Conkey co., Cleveland, O.
- Incubation and brooding. P. F. Schowengerdt. il Colo Ag Ext B 137:9-12 '18
- Incubation, brooding and feeding of chicks. R. V. Mitchell. il Del Ag Ext B 3:1-15 '18
- Keep chicks growing. Weekly N L 4:1 J1 18 '17
- Late hatched chicks. A. E. Vandervort. Am P Advocate 24:585 Je '16
- Little travelers. Country Life 29:68 F '16
- Making the November layers. Prac F 112:250 Je 15 '16
- Management and care of early chicks. P. H. Grigsby. Am P J 47:343 F '16
- Methods of feeding chicks. Ohio F 139:464 Mr 24 '17
- Milk in the chick's diet. C: L. Opperman. Country Gent 81:212 Ja 29 '16
- More about day-old chicks. Am P J 47:256-7 F '16
- My way of raising chicks. D. T. Evans. Prac F 114:160 Ap 15 '18
- Necessary steps in the development of a profitable pullet. L. J. Brosemer. Reliable P J 23:361+ My '16
- Poultry game. A. James. il Ohio F 137:186 F 5 '16
- Poultry raising in Wisconsin. J. G. Halpin and J. B. Hayes. il Wis Ag Exp B 261:14-24 '16
- Preparedness in chick rearing. W. C. Smith. Am P Advocate 26:196 F '18
- Prevent annual slaughter of little chicks. il Reliable P J 25:73+ Mr '18
- Prevention of losses among chicks; Rearing chicks; Bacillary white diarrhoea in chicks. Purdue Ag Ext Leaflets 71, 72, 73 ea 4p '17
- Proper care and feeding of chicks in spring. A. E. Vandervort. Am P Advocate 25:292 Mr '17
- Protect chicks from hawks. Country Gent 81:752 Ap 1 '16
- Raising chickens. J. E. Rice. il Tex Ag Ext B 10:54-60 '16
- Raising chicks nature's way. W: Johnstone. Country Gent 81:981 My 6 '16
- Raising the young birds. F. H. Valentine. il Country Life 29:66 Mr '16
- Rearing chickens. Am P Advocate 24:530 My '16
- Rearing chickens. J Ag (Quebec) 20:193 Mr '17
- Rearing chickens. Reliable P J 23:1288 F '17
- Rearing chickens; brooder house construction. L. M. Hurd and H. P. Buchan. il Cornell Reading Course 130:131-60 '17
- Rearing of chickens. J Bd Ag 22:1139-47 F '16
- Rearing of chickens. M. C. Kilpatrick. il Ohio Ag Ext B v 12, no 6 21p '16-17



**Poultry—Care of chicks —Continued**

- Rearing of chicks. D: Buffum. Country Gent 82:1039 Je 16 '17  
 Rearing of chicks. W: H. Lapp. Ia Ag Ext B 60 2p '18  
 Right care of day-old chicks on arrival. il Reliable P J 25:192+ Ap '18  
 Some important problems in growing chicks. T. E. Quisenberry. Am P Advocate 25:464 My '17  
 Standard boxes for the shipping of day-old chicks. H. H. Knapp. il Reliable P J 25: 864-5 D '18  
 Starting chicks. W. G. Smith. Ohio F 141:202 F 9 '18  
 Starting the baby chicks. Mrs R. Eckles. il Fruit-Grower 28:111 F 1 '17  
 Starting the chicks. S. B. Lasater. Country Gent 82:26 Ja 6 '17  
 Successful management of young chickens during the summer. J. B. Morman. il Reliable P J 23:639-40+ Ag '16  
 Successful method of raising chicks. A. J. Myers. Am P J 47:887 Je '16  
 Successful natural brooding of chicks. il Ohio F 142:128 Ag 10 '18  
 Summer management of early hatched chicks. D. C. Kennard. il Purdue Ag 12:556-7+ Je '18  
 Temperature for brooding. F. F. Hunstock. Kimball's D F 15:156 Mr 1 '17  
 Ten rules mean better chickens. Prog F 31: 756 Je 10 '16  
 Test in raising chickens. W. C. Smith. Fruit-Grower 28:109 F 1 '17  
 To get best results from late chicks. O. E. Hackman. Reliable P J 23:408 My '16  
 Troughs for chicks. Country Gent 81:1086 My 20 '16  
 U. S. Department of agriculture's instructions for summer care of growing chicks. Reliable P J 24:503 Ag '17  
 War chicks. Mrs G: R. Shoup. Western Wash Ag Exp B v 5:183-8 Mr '18  
 Weaning the chicks. J. R. Kessler. il Country Gent 82:913 My 19 '17  
 Will you raise the baby chicks? R. F. Palmer. Kimball's D F 16:272 Ap 1 '18  
 Young chickens. C. C. McCurdy. Nat Stock & F 41:146 Ap 28 '17

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**Costs**

- Chicken rearing at Morden hall, 1914-15. J Bd Ag 23:563-76 S '16  
 Cost of egg production. R. G. Kirby. Ohio F 141:651 My 11 '18  
 Cost of laying stock. E: S. Parsons. Country Gent 81:1272 Je 24 '16  
 Cost of poultry; four years' record of a commercial flock. A. G. Philips. il Country Gent 81:1522 Ag 12 '16  
 Cost of poultry production. L. E. Card. Rural N Y 76:1200 O 20 '17  
 Cost of producing a pullet. Purdue Ag 10:26 Mr '16  
 Cost of raising white Plymouth rocks. A. G. Philips. il Ind Ag Exp B 214:1-23 '18  
 Does it pay to keep poultry? T. J. Adamson. il J Ag (Quebec) 21:125 F '18  
 Feed cost of a pullet. L. E. Card. il Country Gent 83:33 My 25 '18  
 Feed cost of producing eggs. N Y Prod R 44:728 S 5 '17; Same. Wallaces' F 42:1255 S 14 '17; Same. Nat Stock & F 41:590 S 15 '17; Same. Weekly N L 5:10 S 19 '17; Same. Jersey B 36:1731 O 31 '17  
 Hopeful poultryman talks. Rural N Y 76:1438 D 22 '17  
 Interesting studies in egg-production costs and profits. J. Dryden. Reliable P J 25:608+ S '18  
 Keeping books on the hens. Mrs C. F. Blend. Prog F 32:8 Ja 6 '17  
 Making poultry keeping pay. C. A. Langston. Am Fruit Grower 38:14 N '18  
 More figures on poultry needs. H. W. Jackson. Nat Stock & F 42:82 Ap 13 '18  
 Poultry costs in western Pennsylvania. T. M. Hoover. Am P J 48:744 Je '17  
 Poultry feed situation. T. E. Quisenberry. Am P Advocate 26:268 Mr '18

- Poultry today is profitable. J. F. Lantz. Am P Advocate 26:258 Mr '18  
 Profit from hens. C. A. Spencer; W. E. Farver. il Nat Stock & F 41:1294 Mr 9 '18  
 Profitable poultry production lowers cost of living. T. W. Harvey. Ohio F 137:615 Ap 22 '16  
 What it really costs us to raise pullets to maturity. A. F. Hunter. Reliable P J 24:262+ My '17

**Diseases and pests**

- Acute hepatitis and nephritis of the hen. E. F. Kaupp. il Am Vet M Assn J 51:421-4 Je '17  
 Apparent recovery of a hen infected with bacillary white diarrhea. G: D. Horton. J Bact 1:625-6 N '16  
 Bacillary white diarrhea of young chicks. L. F. Rettger and others. Conn Storrs Ag Exp B 88:247-51 '16  
 Bacillary white diarrhoea or fatal septicemia of chicks and coccidiosis or coccidial enteritis of chicks. J. R. Beach. Cal Ag Exp C 162:1-8 '17  
 Bacteria and their control. H: C. Stewart. Field 11 26:437 My '16  
 Canker, chicken pox and roup. Mr and Mrs G: R. Shoup. il Western Wash Ag Exp B v 4:12-15 Ja '17  
 Causes of loss in the poultry yard. M. K. Boyer. Am P Advocate 24:526-7 My '16  
 Chicken cholera. Prog F 31:789 Je 17 '16  
 Chicken lice; sodium fluorid, a newly discovered remedy. Weekly N L 4:9 My 2 '17  
 Chicken mite (dermanysus gallinae Redi): its life history and habits. H. P. Wood. il U S Ag B 553:1-15 '17  
 Chicken pox. Country Gent 81:944 Ap 29 '16  
 Chicken tick. C. E. Sanborn and H. R. Painter. il Okla Ag Exp B 118:1-8 '18  
 Coccidia in subepithelial infections of the intestines of birds. P. B. Hadley. J Bact 2: 73-8 Ja '17  
 Coccidiosis in poultry. S. Dodd. Ag Gaz of New South Wales 28:851-7 D '17  
 Colds and bowel trouble. il Country Gent 82: 698 Ap 7 '17  
 Common diseases of poultry (B. 233). B. F. Kaupp. N C Ag Exp Rep 1916 27p il '17  
 Common poultry diseases. A. W. Richardson. N H Ag Ext C 28 4p '17  
 Contagious epithelioma in chickens (chicken pox—swelled head). W. B. Mack and E: Records. il Nev Ag Exp B 84:1-32 '16  
 Control of poultry lice and mites. W. F. Schoppe. il Mont Ag Exp C 64:65-71 '17; Same. Kimball's D F 16:228 Mr 15 '18  
 Crop-bound. Wallaces' F 42:1110 Ag 10 '17  
 Diseases of poultry. See monthly numbers of American poultry advocate  
 Early campaign against lice. F. W. Kazmeier. Ohio F 141:434 Mr 23 '18  
 Epithelioma contagiosum of quail. B. Gallagher. Am Vet M Assn J 50:366-9 D '16  
 Eradicating gapes. Ohio F 137:795 Je 10 '16  
 Eradicating head lice. G: D. Black. Ohio F 138:628 D 23 '16  
 Few common diseases of poultry. I. W. Gorden. Purdue Ag 11:27+ Ja '17  
 Fibrinous enteritis in a hen. B. F. Kaupp. il Am Vet M Assn J 51:562-4 Jl '17  
 Fight poultry lice and mites. J. G. Halpin and J. B. Hayes. il Wis Ag Ext C 56:1-8 '16  
 Fight poultry lice and mites now. Am P J 49:764-5 S '18  
 First aid in the poultry yard. A. J. Bradley. Prac F 112:214 My 15 '16  
 For white diarrhea; catechu. Country Gent 81:752 Ap 1 '16  
 For worms in chickens. Weekly N L 5:3 N 7 '17  
 Fowl cholera and other hemorrhagic septicemia immunization experiments. B. Gallagher. Am Vet M Assn J 50:708-28 F '17  
 Frequency of occurrence of tumors in the domestic fowl. M. R. Curtis. J Ag Research 5:397-404 N 29 '15  
 Gapes. Prac F 112:38 Ja 15 '16  
 How to detect roup. R. H. Needham. Wallaces' F 42:1062 Jl 27 '17  
 How to get rid of mites in poultry houses. Prac F 113:215 Je 1 '17

## Poultry—Diseases and pests—Continued

- How to have hardy stock. M. K. Boyer. *Am P Advocate* 24:719 S '16
- How to have healthy fowls. M. K. Boyer. *Am P Advocate* 26:632 N '18
- Important poultry diseases. D. E. Salmon. *il Farmers' B* 957:1-48 '18
- Infections caused by bacterium pullorum in adult fowls. P. Hadley and others. *bibliog R I Ag Exp B* 172:1-40 '17
- Information about white diarrhoea. G. D. Horton. *Fruit-Grower* 28:92 F 1 '17
- Injurious effects of worms in fowls. *Am P Advocate* 25:334 Mr '17
- Intestinal parasites of poultry, their prevention and treatment. A. B. Wickware. *13p il '17 Canada Ag*
- Intestinal worms. *Reliable P J* 23:1149 Ja '17
- Intestinal worms affecting poultry. Mr and Mrs G. R. Shoup. *il Western Wash Ag Exp B v* 6:41-4 Je '18
- Intradermal test for bacterium pullorum infection in fowls. A. R. Ward and B. A. Gallagher. *U S Ag B* 517:1-15 '17
- Keep fowls free from lice, mites and disease. P. Moore. *Better Fruit* 12:24 Mr '17
- Keeping fowls healthy. M. Purvis. *Breeder's Gaz* 69:78 Ja 13 '16
- Leg weakness in chicks. *Country Gent* 81:753 Ap 1 '16
- Leg weakness in chicks; droopy winged chicks. *Reliable P J* 23:268 Ap '16
- Lesser of the greater loss. *Wallaces' F* 41:770 My 19 '16
- Lice and mites. J. A. Manter. *Wallaces' F* 41:846 Je 9 '16
- Lice and mites of poultry. *Purdue Ag* 12:372 Mr '18
- Lice cause poultry losses. H. C. Kandel. *Prac F* 113:287 Ag 15 '17
- Lice, mites and their eradication. H. E. Eswine. *il Ohio Ag Ext B v* 11, no 5 3p '15-'16
- Lousy flocks should not be tolerated. A. Newlin. *Am P J* 47:791 My '16
- Lymphosarcoma of the fowl. B. F. Kaupp. *il Am Vet M Assn J* 49:470-7 Jl '16
- Main guide post in poultry work. *Prac F* 112:362 O 1 '16
- Many ailments of the farm flock. F. S. Jacoby. *il Ohio F* 139:137+ F 3 '17
- Means of transmitting the fowl nematode. J. E. Ackert. *Science (Science Press, Garrison, N.Y. 15c) n s* 46:394 O 19 '17
- Mercurial ointment, an effective control of hen lice. G. H. Lamson, jr. *J Econ Entom* 10:71-4 F '17
- Mercurial ointment for hen lice. *Wallaces' F* 41:743 My 12 '16
- Mites and lice on poultry. F. C. Bishopp and H. P. Wood. *il Farmers' B* 801:1-26 '17
- Mites, lice and fleas. Mrs G. R. Shoup. *Western Wash Ag Exp B v* 6:26-7 My '18
- More common lice of poultry. D. C. Mote. *il Ohio Ag Exp B v* 3:144-7 My '18
- Morphology of adult and larval cestodes from poultry. J. E. Gutberlet. (Reprinted from *Transactions of the American microscopical society*, v. 35, Jan. '16, p. 23-44) *bibliog il '16 Zoological laboratory, Univ. of Illinois, Urbana*
- Parasites affecting poultry. R. L. Chamberlin. *Am P J* 48:821 Jl '17
- Parasites on poultry. *Green's Fruit Grower* 36:33 Mr '16
- Persistent pest. G. D. Black. *Ohio F* 138:388 O 21 '16
- Possibly pip. *Wallaces' F* 41:980 Jl 14 '16
- Poultry ailments. W. R. Gilbert. *Reliable P J* 23:295 Ap '16
- Poultry disease chart. *J Ag (Quebec)* 21:158 Ap '18
- Poultry diseases. A. B. Wickware. *Ag Gaz of Canada* 4:461-3 Je '17
- Poultry diseases: prevention and cure. *Prog F* 33:8, 218 Ja 5, F 16 '18
- Poultry doctor: simple remedies for common ailments; with chart of diseases. C. L. Opperman. *Country Gent* 81:337-9 F 12 '16
- Poultry farm disinfection. J. B. Paige. *Mass Ag Exp C* 66:1-4 '16
- Poultry in Florida; parasites and diseases of poultry. A. P. Spencer. *il Fla Ag Ext B* 9:18-24 '17
- Poultry lice. B. F. Kaupp. *J Ag (Quebec)* 21:46 S '17
- Poultry mite. *Kimball's D F* 14:73 F 1 '16
- Poultry mite—cause and cure. *Prog F* 31:339 Mr 4 '16
- Poultry notes; autumn troubles and roup. J. Hadington. *Ag Gaz of New South Wales* 28: 217-19 Mr '17
- Poultry pathology observations. *N J Ag Exp Rep* 1916:162-8 '17
- Poultry raising in the South; diseases. F. S. Gammack. *Hampton Leaflets* 7, no 6:21-9 '16
- Prevent poultry diseases. C. W. Turner, jr. *Kimball's D F* 16:414 My 15 '18
- Prevention and treatment of roup. N. E. B. Talcott. *Va Ag Dept B* 115:75-9 '17
- Prevention of gapes. *Nat Stock & F* 42:180 My 11 '18
- Probably improper closing of navel. *Wallaces' F* 41:956 Jl 7 '16
- Real poultry problem. *Reliable P J* 23:444 My '16
- Repair of bone in domestic fowl. B. F. Kaupp. *il N C Ag Exp Tech B* 14:1-17 '17
- Report upon an outbreak of fowl typhoid; with discussion. W. J. Taylor. *bibliog Am Vet M Assn J* 49:35-49 Ap '16
- Round worms in poultry. *Country Gent* 81:517 Mr 4 '16
- Round worms in poultry—life history and control. W. B. Herns and J. R. Beach. *il Cal Ag Exp C* 150:1-7 '16
- Roup. *Kimball's D F* 14:470 Jl 15 '16
- Roup, a disease of poultry. R. A. Craig. *Purdue Ag* 12:140-1 D '17
- Roup, a poultry plague. C. H. Chesley. *Kimball's D F* 14:120 F 15 '16
- Roup, colds and late molters. F. V. L. Turner. *Prac F* 113:408 D 1 '17
- Scaly leg in chickens. *Wallaces' F* 41:272 F 18 '16
- Scaly leg of poultry; control measures recommended to kill mites on chickens. D. C. Mote. *il Ohio Ag Exp B v* 3:176-7 Je '18
- Some common poultry diseases. *la Ag Ext B* 63 4p '18
- Some common poultry parasites. C. A. Lueder. *il W Va Ag Ext C* 142:1-8 '17
- Some external parasites of poultry. D. C. Mote. *il Ohio Ag Exp B* 320:139-56 '17
- Some lice and mites of the hen. G. H. Lamson, jr., and J. A. Manter. *il Conn Storrs Ag Exp B* 86:171-96 '16
- Source of white diarrhoea infection. F. P. Biederwolf. *Am P J* 47:660 Ap '16
- Studies in abdominal purulent conditions of the hen and some studies in the resistance of the fowl to the pus producing organisms. B. F. Kaupp. *bibliog il Am Vet M Assn J* 53:381-406 Je '18
- Studies on fowl cholera; the toxins of bacillus avisepticus. P. Hadley. *bibliog J Bact* 3:277-91 My '18
- Study of the etiology of roup in birds. J. G. Jackley. *bibliog Kan Ag Exp Tech B* 4:1-23 '17; Summary. *Am Vet M Assn J* 52:853-8 Mr '18
- Study of the fermenting properties of bacterium pullorum (Rettger) and bacterium sanguinarium (Moore). S. A. Goldberg. *Am Vet M Assn J* 51:203-10 My '17
- Transmission and prevention of cestode infection in chickens. J. E. Gutberlet. *bibliog Am Vet M Assn J* 49:218-37 My '16; Same (Reprinted). *19p '16 Zoological laboratory, Univ. of Illinois, Urbana*
- Treatment for canker. *Country Gent* 81:173 Ja 22 '16
- Treatment for simple colds. *Reliable P J* 25:749+ N '18
- Trichomoniasis of chicks; a new and highly fatal disease. J. Weinzirl. *J Bact* 2:441-5 Jl '17
- Use of bacterins in the control of fowl cholera. W. B. Mack and E. Records. *bibliog Nev Ag Exp B* 85:1-29 '16
- Value of post mortem examinations. W. C. Thompson. *N J Ag Exp Hints to Poultrymen v* 5 4p D '16
- Vampires of the poultry house. H. Atwood. *J Ag (Quebec)* 19:245 My '16
- Vermis of poultry. *il Rural N Y* 75:568, 600 Ap 1-8 '16



**Poultry—Diseases and pests—Continued**

- Vermion on poultry. F. W. Kazmeier. *Prog F* 31:578 Ap 22 '16  
 Watch for chicken pox. F. F. Hunstock. *Kimball's D F* 14:840 Ja 1 '17  
 West Virginia poultry; colds and roup in poultry. J. R. Koch. *il W Va Ag Dept B* 14:64-7 '16  
 White diarrhea. Wallaces' *F* 41:273 F 18 '16  
 White diarrhea. Wallaces' *F* 42:148 Ja 26 '17  
 White diarrhea. Wallaces' *F* 43:689 Ap 19 '18  
 White diarrhoea; bad brooding; bacterial infection. B. Burr. *Rural N Y* 75:346 F 26 '16  
 Worms in chickens. Wallaces' *F* 41:1447 N 3 '16

*See also* Tuberculosis in poultry

**Egg production**

- Ability of standard-bred fowl to lay eggs. Reliable *P J* 24:1109 F '18  
 About thousand-eggers and long distance layers. T. R. Johnson and others. *il Reliable P J* 25:759-61+ N '18  
 Accurate method of determining which hens are laying. R. H. Waite. *il Reliable P J* 25: 681-2+ O '18  
 Advice on how to get winter eggs in war times. Reliable *P J* 25:687-9 O '18  
 April egg. L. E. Keyser. *Am P Advocate* 24: 454 Ap '16  
 Are white wyandottes entitled to first place as layers? S. C. Babbie. Reliable *P J* 24: 520 Ag '17  
 Are your hens workers? D. E. Warner. *il Country Gent* 82:1428 S 15 '17  
 Back-yard flock of sixteen white leghorns. A. F. Hunter. Reliable *P J* 23:674 Ag '16  
 Blood fat in domestic fowls in relation to egg production. D. E. Warner and H. D. Edmond. *Int R Sci & Prac Ag* 9,no 4:480-2 Ap '18  
 Breeding and selecting fowls for egg production. J. E. Rice. *Mass Ag Bd B* 1:55-79 '17; Same. *Mass Ag Bd Yearbook* 1916,pt 2:8-32 '17  
 Breeding for egg production. E. D. Ball and others. *bibliog Utah Ag Exp B* 148:1-60 '16  
 Breeding for egg production. pt 2. E. D. Ball and B. Alder. *il Utah Ag Exp B* 149:1-71 '17  
 Breeding for egg production. F. W. Kazmeier. *Ohio F* 139:14 Ja 6 '17  
 Breeding standard fowl for prolific egg yield. *il Reliable P J* 25:539-40+ Ag '18  
 Bringing war pullets into laying. G. R. Shoup. *Western Wash Ag Exp B v* 6:101-3 O '18  
 Business of egg production. F. C. Hare. *il Country Life* 29:35-7 F '16  
 Care of poultry in winter. J. Marsh. *il Ohio F* 138:472 N 11 '16  
 Care of pullets for winter eggs. E. L. Hayes. *il S D Ag Ext C* 6:1-4 '18  
 Care that brings the eggs. A. W. Galligher. *Fruit-Grower* 28:129 F 15 '17  
 Case of eggs. F. C. Elford. *J Ag (Quebec)* 20: 244 Je '17  
 Catch the slacker hen. C. W. Turner, jr. *Kimball's D F* 16:50 Ja 15 '18  
 College poultry plants working for high egg production. Reliable *P J* 25:840+ D '18  
 Combination breeding to establish a strain both for egg production and exhibition. T. F. McGrew. *Am P Advocate* 25:8-10 D '16  
 Comment on fecundity and size of egg. J. B. Morman. *Am P J* 48:347-8+ Mr '17  
 Cornell method of selecting fowls for egg production. J. E. Rice. *Cornell Countryman* 15: 195-7 Ja '18  
 Correlation between body pigmentation and egg production in the domestic fowl. J. A. Harris and others (Genetics, 2, no. 1 36-77p. '17). *Exp Sta Record* 38,no 3:276 '18  
 Cull out slacker hens and reduce feed bills. *Weekly N L* 6:8 O 2 '18  
 Cull the slacker hen. J. H. Martin. *Ky Ag Ext C* 61:1-4 '18  
 Cutting out the boarders. C. M. Richardson. *Ohio F* 138:549 D 2 '16  
 Cycles in egg-laying. M. Purvis. *Breeder's Gaz* 69:557 Mr 9 '16  
 Detect the slacker hen. R. E. Jones. *il Country Gent* 83:6 Ap 6 '18  
 Developing high layers. C. T. Patterson. *il Country Gent* 83:32 N 9 '18  
 Discovery of lighting system in Northwest. Reliable *P J* 25:752 N '18  
 Dollar eggs and the farmer's opportunity. F. V. L. Turner. *il Prac F* 112:435 D 1 '16  
 Early hatched layers. B. Burr. *Country Gent* 81:1307 Jl 1 '16  
 Efficient hen—and some others. A. J. Bradley. *Prac F* 112:402 N 1 '16  
 Egg laying factors. *J Ag (Quebec)* 21:78 N '17  
 Egg production. J. Marsh. *il Ohio F* 138:214 S 2 '16  
 Egg production. W. G. Tarbet. *J Bd Ag* 23: 869-74 D '16  
 Egg production in New York. *N Y Prod R* 45: 198 D 12 '17  
 Eggs by artificial daylight. O. B. Stephens. *Scientific Am* (233 Broadway, N.Y. 10c) 116: 305 Mr 24 '17  
 Eliminate the slacker hen. V. G. Aubry. *N J Ag Exp Hints to Poultrymen v* 6 4p Jl '18  
 Engineering for more eggs. A. Marple. *Farm Eng* 5:23 F '17  
 Experiments with laying hens. W. J. Buss. *Ohio Ag Exp B* 291:185-217 '16  
 Extending daylight for the hen. M. B. Dean. *Rural N Y* 77:513 Ap 6 '18  
 External indications of egg production. O. B. Kent. *N Y Ag Dept B* 86:2387-8 Ag '16  
 Facts concerning the poultry industry. F. F. Hunstock. *Hoard's D* 52:876 Ja 12 '17  
 Fall and winter eggs—how to get them. *Purdue Ag* 11:26-7 N '16  
 Fancy vs. bred-to-lay. A. J. Kyle. *il Am P Advocate* 25:88+ Ja '17  
 Fecundity in relation to stamina. A. A. Dunnicliff. *Ag Gaz of New South Wales* 27:507 10 Jl '16; Same. *J Heredity* 7:443-6 O '16  
 Fecundity of hens in relation to size of egg. E. Brown. *J Bd Ag* 23:230-3 Je '16  
 Feeding experiments with laying hens. W. J. Buss. *il Ohio Ag Exp B* 322:199-241 '18  
 Feeding for egg production. H. Atwood. *bibliog W Va Ag Exp C* 27:1-32 '17  
 Feeding for egg production. F. W. Kazmeier. *Tex Ag Ext Farm News v* 3, no 7-B:1-4 O 15 '17  
 Feeding for egg production. P. Moore. *Idaho Ag Exp C* 3 4p '16  
 Feeding fresh air and reaping eggs. R. B. Hanford. *il Prac F* 113:67 F 15 '17  
 5th Irish egg-laying competition; breeding hens for egg production. *J Dept Ag Ireland* 18:33-59 '18; Abstract. *Int R Sci & Prac Ag* 9,no 5:592-3 My '18  
 First step for winter eggs. W. C. Smith. *Fruit-Grower* 27:478 N 1 '16  
 Getting eggs—the poultry problem. F. V. L. Turner. *Prac F* 113:302 S 1 '17  
 Getting eggs when eggs are high. W. Lancesweert. *Am P J* 48:676 My '17  
 Getting fall and winter eggs. Mr and Mrs G. R. Shoup. *Western Wash Ag Exp B v* 4:11-14 O '16  
 Getting winter eggs. J. J. Anglemeyer. *il Prac F* 113:72 F 15 '17  
 Hen as an efficient factor in farm products. H. L. Kempster. *N H Ag Dept Rep v* 34: 54-62 '16  
 Hen strike. M. C. Kilpatrick. *il Country Gent* 81:2034 N 25 '16  
 Hen that lays the golden egg. F. S. Jacoby. *il Ohio F* 140:389+ N 3 '17  
 Hen's annual vacation. G. M. Rommel. *il J Heredity* 8:132-42 Mr '17  
 Hens in the far north. C. S. Phelps. *Country Gent* 82:782 Ap 21 '17  
 Heredity in egg production. *Prac F* 112:461 D 15 '16  
 High scoring hens best winter layers. T. E. Quisenberry. *Am P Advocate* 25:382 Ap '17  
 Hoganizing vs. trap-nesting in determining egg production. H. D. Whitaker. Reliable *P J* 25:170-1+ Ap '18  
 Honor roll egg production: individuals, pens, flocks. *il Reliable P J* 25:537-8+ Ag '18  
 How to get winter eggs. C. H. Chesley. *Nat Stock & F* 40:1281 F 24 '17  
 How to keep the hens from going on a strike. C. E. Thomas. *Prog F* 31:378 Mr 11 '16  
 How to secure winter eggs. C. E. Matteson. *Am P Advocate* 26:87 Ja '18

**Poultry—Egg production—Continued**

- How to select the best laying hens without the trap-nest. L. M. Hurd. *il N Y Farms & Markets Dept Ag B 97:280-4 J1 '17*
- How we get winter eggs. *Prog F 31:144 Ja 29 '16*
- Improving the farm flock. M. A. Jull. *il J Ag (Quebec) 20:176 F 1 '17*
- Influence of early and late moulting on egg production. *Reliable P J 23:142 Mr '16*
- Influence of illumination on production of winter eggs. *il Reliable P J 25:607+ S '18*
- Influence of illumination on the production of winter eggs. J. E. Rice. *Reliable P J 25:868+ D '18*
- Inheritance in fecundity in domestic fowl. M. A. Jull. *il J Ag (Quebec) 21:174 My '18*
- \* Internal factors influencing egg production in the Rhode Island red breed of domestic fowl. H. D. Goodale. *bibliog Am Naturalist (Science Press, Garrison, N.Y. 40c) 52:65-94, 209-32, 301-21 F-Je '18*
- International egg-laying contest. M. Purvis. *Breeder's Gaz 71:116 Ja 18 '17*
- Inter-periodic correlation in the egg production of the domestic fowl. J. A. Harris and others. (*Pro. Nat. Acad. Sci.*, 3, no. 9 565-9p. '17). *Exp Sta Record 38:171-2 F '18*
- Is there anything to the Hogan test? T. E. Quisenberry. *Am P Advocate 26:524 Ag '18*
- Judging fowls for prospective egg production. O. B. Kent. *il Reliable P J 24:1110 F '18*
- Judging hens for egg production. L. L. Jones. *il Purdue Ag 13:66-7 N '18*
- July work for war-time standard production. *Am P Advocate 26:484 J1 '18*
- Laying competition at Harper Adams agricultural college. *J Bd Ag 23:1002-5 Ja '17*
- Laying hens in summer. G. Davis. *O Judd Farmer 61:22 J1 29 '16*
- Length of the laying period as an indication of the laying capacity of fowls. J. E. Rice. *Cornell Countryman 14:462-4, 566-7 Mr-Apr '17*
- Lessons from laying contests. G. D. Black. *Ohio F 138:548 D 2 '16*
- Light-in the poultry house. F. C. Elford. *il Ag Gaz of Canada 5:1045-8 N '18*
- Lighting system for increasing egg production. J. B. Roe and E. C. Waldorf. *il Reliable P J 25:187-8+ Ap '18*
- Lights to make hens lay. R. S. Moseley. *Country Gent 82:1500 S 29 '17*
- Longer day for the hens. *Nat Stock & F 41:730 O 27 '17*
- Looking to the winter egg supply. F. V. L. Turner. *Prac F 113:279 Ag 1 '17*
- Maintenance of egg production during winter. Mr and Mrs G. R. Shoup. *Western Wash Ag Exp B v 5:134-8 D '17*
- Making a family of fall layers. *Prac F 112:314 Ag 15 '16*
- Making artificial daylight for poultry. G. R. Shoup. *il Western Wash Ag Exp B v 6:113-17 N '18*
- Making eggs while the sun shines. W. G. Krum. *il Country Life 34:64-5 My '18*
- Making of an egg; marvelous manufactory of the hen. M. A. Jull. *il Rural N Y 76:139 F 3 '17*
- Management of pullets for winter eggs. M. H. Decker. *il Am P J 47:1188-9 N '16*
- Measurement of the winter cycle in the egg production of domestic fowl. R. Pearl. *bibliog J Ag Research 5:429-37 D 6 '15*
- Missouri poultry experiment station. T. C. Patterson. *il Breeder's Gaz 69:367-8 F 17 '16*
- More about the cost of egg production. F. H. Clark. *Am P Advocate 24:438-9 Ap '16*
- More eggs by lighting chicken coops. G. A. Lowther. *Electrical Review and Western Electrician (608 S. Dearborn st., Chicago 10c) 70:76 Ja 13 '17*
- More evidence of egg-yield value of lighting system. M. E. Atkinson; E. E. Emerson. *il Reliable P J 25:541+ Ag '18*
- More instructions for culling slackers. *Reliable P J 24:648+ O '17*
- Nesting habits of the hen. G. M. Turpin. *bibliog il Ia Ag Exp B 178:211-32 '18*
- New poultry business. J. C. Marquis. *il Country Gent 83:28 N 23 '18*
- New world's egg record claimed for light brahma. *il Reliable P J 23:649 Ag '16*
- Now or never for fall layers. *Prac F 112:330 S 1 '16*
- Official method of judging fowls for egg production. *Nat Stock & F 42:640 O 12 '18*
- Opinions on a theory; how many days will a hen lay in succession? M. K. Boyer. *Am P Advocate 24:788-9 O '16*
- Personally conducted laying test. *Prac F 112:194 My 1 '16*
- Picking the best layers. F. S. Jacoby. *Ohio F 142:306 S 28 '18*
- Picking the business hen. W. R. Merrick. *Country Gent 82:1242 Ag 4 '17*
- Picking the egg producer. H. C. Kandel. *il Country Gent 83:9 J1 20 '18*
- Pigmentation and other criteria for the selection of laying hens. A. F. Blakeslee and others. *bibliog Conn Storrs Ag Exp B 92:95-194 '17*
- Poultry and egg production; with discussion. H. R. Lewis. *il Mass Ag Bd B 1:80-105 '17*
- Poultry committee report at the extension workers' conference. *Purdue Ag 12:141-3 D '17*
- Poultry culture—perpetual laying. *Scientific Am Sup (233 Broadway, N.Y. 10c) 85:123 F 23 '18*
- Poultry situation from a utility breeder's standpoint. J. W. Parks. *Am P Advocate 25:702-3 N '17*
- Present cost of egg production. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v 6, no 2: 1-5 N '17*
- Problem of increasing egg production. J. W. Parks. *il Am P J 48:1128-9 D '17*
- Produce cheaper eggs; superiority of leg-horns as layers. *Weekly N L 4:4 J1 18 '17*
- Produce winter eggs. *Weekly N L 4:1 Ja 21 '17*
- Producing eggs in winter. M. Purvis. *Breeder's Gaz 71:213 F 1 '17*
- Producing guaranteed eggs. *Green's Fruit Grower 36:16 O '16*
- Producing winter eggs. D. T. Hendrickson. *Prac F 112:417 N 15 '16*
- Prolific layers and how to select them. D. E. Warner. *il Field 11 26:24-5 Ja '16*
- Pullets and winter eggs. F. C. Brown. *J Ag New Zealand 14:229-33 Mr '17*
- Quick method of obtaining accurate individual egg records without the trap nest. B. Alder and A. D. Egbert. *il Utah Ag Exp B 162:1-12 '18*
- Rations for laying hens in winter. W. J. Buss. *Ohio Ag Exp B v 1:324-5 N '16*
- Rations for winter egg production. W. J. Buss. *il Ohio F 138:589-90 D 16 '16*
- Real utility hen. W. H. Card. *Am P Advocate 24:426-8 Ap '16*
- Relation between molting wing flights and egg production. F. L. Sewell. *Reliable P J 25:863+ D '18*
- Relation of simultaneous ovulation to the production of double-yolked eggs. M. R. Curtis. *il J Ag Research 3:375-86 F '15*
- Remarkable egg yield of two white wyandottes. *Reliable P J 23:224 Ap '16*
- Remarkable winter egg record of a barred plymouth rock pullet. F. L. Sewell. *il Reliable P J 24:517 Ag '17*
- Selecting the farm flock of laying hens. J. R. Smyth. *Purdue Ag 12:83-5 N '17*
- Selecting the good layers. J. E. Place. *Country Gent 82:1268 Ag 11 '17*
- Selecting the laying hens. *il Rural N Y 76:1345 N 24 '17*
- Selection—early vs. late moulting. *il Purdue Ag 13:21-2 O '18*
- Selection—egg type. H. H. Steup. *Purdue Ag 13:23 O '18*
- Selection of breeding stock for eggs. B. F. Kaupp. *il Am P Advocate 25:278 Mr '17*
- Seventeen years selection of a character showing sex-linked Mendelian inheritance. R. Pearl. *Int R Sci & Prac Ag 7, no 3:404-6 Mr '16*
- Shaping the flock for fall layers. *Prac F 112:268 J1 1 '16*
- Signs of prolificacy in fowls. M. C. Kilpatrick. *il Ohio F 139:340+ Mr 3 '17*



**Poultry—Egg production—Continued**

- Some suggestions about egg records. G. F. Lawrence. Am P Advocate 24:433-4 Ap '16
- Speeding up the hen. L. Danen. Hoard's D 53:586 Ap 20 '17
- Speeding up the laying hen. B. Sando. il Field II 27:377 My '17
- State-wide elimination of non-productive hens. W. F. Kirkpatrick and G. M. Curtis. Reliable P J 24:825-6 D '17
- Studies on the physiology of reproduction in the domestic fowl. R. Pearl. Int R Sci & Prac Ag 9,no 5:595-6 My '18
- Study of egg production in the white leghorns; records of five laying contests. L. E. Card. Conn Storrs Ag Exp B 91:41-90 '17
- Suggestions for increasing egg production in a time of high feed prices. J. E. Dougherty. bibliog Cal Ag Exp C 197:1-7 '18
- Swat the rooster; market infertile eggs during summer months. (C. 16) 8p il n.d. Mo. State poultry experiment station, Mountain Grove
- Systematic selection of layers. W. C. Smith. il Ohio F 142:558 D 7 '18
- That fifty percent lay and how we get it. I. J. Mathews. Ohio F 139:248 F 17 '17
- Timely encouragement on prolific egg yield from opposite side of world. Reliable P J 25:549 Ag '18
- To double the egg yield. Prac F 113:144 Ap 1 '17; Same. Am P Advocate 25:365 Ap '17
- Trap-nesting unnecessary. W. H. Jenkins. Nat Stock & F 41:487 Ag 18 '17
- Twilight sleep has good effect on hens; artificial twilight. Am P Advocate 24:212 F '16
- Use of artificial lighting to increase winter egg yield. L. Banta. il map Reliable P J 25:765-6, 866-7-+ N-D '18
- Utility and fancy. M. K. Boyer. Am P Advocate 25:302 Mr '17
- Vital importance of selection these days. J. E. Rice. Reliable P J 24:745-+ N '17
- Water as a factor in egg production. Am P Advocate 24:794 O '16
- Way to prevent soft-shelled eggs. Country Gent 81:1845 O 14 '16
- West Virginia poultry; constitutional vigor. J. E. Rice. il W Va Ag Dept B 14:23-6 '16
- West Virginia poultry; feeding for eggs. H. Atwood. il W Va Ag Dept B 14:45-52 '16
- What is a hen worth? R. A. Harrison. Country Gent 83:26 Je 1 '18
- What the contests show. H. D. Whitaker. il Country Gent 83:30 N 16 '18
- What will the new flock do? Prac F 112:402 N 1 '16
- When is a cull? F. H. Valentine. Country Gent 81:1041 My 13 '16
- Which shall we keep, half year or full year egg records? D. P. Upham. Reliable P J 24:52-3 Mr '17
- Why don't our hens lay? H. W. Guthrie. Nat Stock & F 40:1122; 41:91, 118 Ja 27, Ap 14-21 '17
- Why hens don't lay well in winter. Nat Stock & F 41:774 N 10 '17
- Wing molt as an indication of production. O. B. Kent. il Cornell Countryman 15:192-3 Ja '18
- Winter care shows now; laying hens. Ag Digest 1:77 Je '16
- Winter cycle of egg production in the Rhode Island red breed of the domestic fowl. H. D. Goodale. bibliog J Ag Research 12:547-74 Mr 4 '18
- Winter egg production. A. R. Lee. U S Ag C 71:1-4 '17; Same. Am P Advocate 25:238 F '17
- Winter egg production. L. F. Strickler. Ohio F 138:606 D 16 '16
- Winter egg secrets. N. S. Green. O Judd Farmer 62:12 Ja 20 '17
- Winter eggs. A. W. Galligher. Fruit-Grower 27:69 Ja 15 '16
- Winter eggs in war time. Am P Advocate 26:296 O '18
- Winter feeding for egg production. R. E. Jones. Am P Advocate 25:93 Ja '17
- Winter poultry problems. L. H. Cobb. Nat Stock & F 41:844 D 1 '17

Works the hens day and night; electricity in the pens. J. P. Jordan. Cornell Countryman 15:199-201 Ja '18

See also Egg laying contests; Eggs, Hatching; Trap nesting

**Feeding**

- Acorns as food for poultry. H. T. Cranfield. J Bd Ag 25:573-6 Ag '18
- Adapting the laying ration to war time conditions. H. W. Jackson. Reliable P J 25:413-+ Je '18
- Alfalfa for poultry. C. B. Allaire. Am P Advocate 26:39 D '17
- Alfalfa for poultry. J. Marsh. Hoard's D 52:606 N 17 '16
- Alfalfa not a poultry feed. Hoard's D 52:173 S 1 '16
- Alfalfa not a poultry feed (?). B. Forbell. Hoard's D 52:355 O 6 '16
- Another war-time poultry ration. Reliable P J 24:511 Ag '17
- Australia leads in high egg records. E. J. Hardy. Am P J 49:691-+ J1 '18
- Available foods and their uses. D. F. Laurie. J Dept Ag S Australia 21:702-4 Ap '18
- Balanced rations. W. J. Buss. Nat Stock & F 42:16 Mr 30 '18
- Balanced rations for hens. F. F. Hunstock. Hoard's D 52:626 N 24 '16
- Balancing ration for layers. O Judd Farmer 64:8 Ja 26 '18
- Beet pulp and cracked peas. Country Gent 81:215 Ja 29 '16
- Behaviour of chickens fed rations restricted to: cereal grains; wheat or maize kernel. E. B. Hart and others. Int R Sci & Prac Ag 9,no 5:594-5 My '18
- Best poultry condiments. M. G. Feint. Ohio F 139:720 My 26 '17
- Best winter green foods for poultry. Reliable P J 24:846-7+, 1085 D '17, F '18
- Binder twine in the crop. Country Gent 81:27 Ja 1 '16
- Boiled alfalfa for laying hens. H. Mitman. Country Gent 81:463 F 26 '16
- Boiled oats as substitute for wheat. W. T. Wittman. Reliable P J 25:854 D '18
- Buckwheat for poultry. Country Gent 81:979 My 6 '16
- Buttermilk as a poultry food. M. K. Boyer. Am P Advocate 26:402 My '18
- Buying poultry feed; how judicious buying may reduce costs. Weekly N L 5:4 F 6 '18; Same. Am P Advocate 26:290 Mr '18
- Cheaper poultry feed. J Ag (Quebec) 21:28 Ag '17
- Cheaper poultry feed. J. R. Kessler. Prac F 113:318 S 15 '17
- Chickens must Hooverize. F. D. Crooks. Penn State F 11:236 Ja '18
- Clover for chickens. Country Gent 81:170 Ja 22 '16
- Clover for poultry. Am P J 48:885 Ag '17
- Commercial fattening of poultry. A. R. Lee. il U S Ag B 21:1-55 '14
- Cornell ration for chick feeding. il Ag Digest 1:76 Je '16
- Cost of egg production. D. F. Laurie. J Dept Ag S Australia 21:583-5 F '18
- Cost of standard poultry feeds. N J Ag Exp Rep 1916:162 '17
- Cottonseed meal: a good feed for laying hens. E. P. Clayton. Miss Ag Exp B 175:1-7 '16; Abstract. Reliable P J 22:1239-+ Ja '16
- Crate fattening chickens. il Kimball's D F 15:876 D 1 '17
- Crate fattening poultry. N Y Prod R 45:544 F 20 '18
- Crate fattening young chickens. F. P. Pritchard and W. R. Gilbert. il Reliable P J 23:707 S '16
- Crate-feeding poultry for market. F. E. Mussehl. il Wis Ag Ext C 66:1-8 '17; Excerpts. Rural N Y 76:685 My 12 '17; Abstract. Country Gent 82:1841 N 24 '17
- Disposing of the cull young stock. O: E. Hackman. Am P J 49:762 S '18
- Early chicks and new feeds. C. H. Chesley. Ohio F 141:282 F 23 '18
- Economies in feeding poultry. D. H. Miller. Country Gent 83:27 F 23 '18

**Poultry—Feeding—Continued**

- Economy in green feeds. H. A. Roberts. Country Gent 82:1501 S 29 '17
- Egg-laying rations. N Y Prod R 44:567 Ag 1 '17
- Egg philosophy. A. Shirer. Nat Stock & F 42: 132 Ap 27 '18
- Egg-producing values of some Texas feeding stuffs. R. N. Harvey. Tex Ag Exp B 220: 1-11 '17
- Experiments on the necessity of adding gravel to poultry food. G. Búzás. Int R Sci & Prac Ag 7, no 7:1002-3 Jl '16
- Experiments with laying hens. W. J. Buss. Ohio Ag Exp B 291:185-217 '16
- Extreme poultry rations uncalled for at present time. H. W. Jackson. Reliable P J 25: 417+ Je '18
- Facts of great value to every poultry keeper. Reliable P J 24:965+ Ja '18
- Fall feeding methods revised. Ohio F 140:375 O 27 '17
- Farm-fed roasters. M. C. Kilpatrick. il Country Gent 81:2017 N 18 '16
- Farm poultry; feeds and feeding. W. R. Graham and F. N. Marcellus. Ontario Ag Dept B 247:36-42, 55-61 '17
- Fattening poultry. C. O. Heath. Country Gent 83:26 Ja 12 '18
- Fattening poultry in the open. il Ohio F 142: 183 Ag 24 '18
- Feed and water rack. J. T. Bartlett, jr. il Country Gent 81:1306 Jl 1 '16
- Feed chickens sour milk. H. L. Kempster. N Y Prod R 42:594 Ag 2 '16; Same. Wallace's F 41:1052 Ag 4 '16; Same. Prog F 31: 991 Ag 12 '16
- Feed cost of egg production; results of three years' experiments at the government poultry farm. H. M. Lamon and A. R. Lee. il U S Ag B 561:1-42 '17
- Feed for chicks. A. G. Philips. il Country Gent 83:27 Je 8 '18
- Feeders and fountains. S. F. Aaron. il Country Gent 83:29 Jl 6 '18
- Feeding baby chicks. Am P Advocate 25:503 Je '17
- Feeding baby chicks. C. L. Opperman. il Country Gent 83:52 Mr 16 '18
- Feeding capons and roasters. S. K. Burdin. Am P Advocate 26:410 My '18; Same. Am P J 49:557 My '18
- Feeding capons, roasters and young stock. S. K. Burdin. il Country Gent 83:26 Je 22 '18
- Feeding cottonseed meal to poultry. J. K. Morrison. Prog F 31:143 Ja 29 '16
- Feeding during molt to improve color and gloss of feathers. L. J. Brosemer. Reliable P J 23:708-9, 868-9+ S, N '16
- Feeding experiments with laying hens. W. J. Buss. il Ohio Ag Exp B 322:199-241 '18
- Feeding for boosters. Nat Stock & F 41:563 S 8 '17
- Feeding for egg production. H. Atwood. biblog W Va Ag Exp C 27:1-32 '17
- Feeding for eggs. J. Dryden. il Ore Ag Ext Coll B 157 (ser. 7, no. 3):1-23 '16
- Feeding for eggs. A. G. Philips. Country Gent 81:1039 My 13 '16
- Feeding for winter eggs. M. H. Decker. Country Gent 83:25 Ja 5 '18
- Feeding for winter eggs. C. S. Greene. Rural N Y 77:24 Ja 5 '18
- Feeding for winter eggs. J. B. Morman. Country Gent 81:34 Ja 1 '16
- Feeding for winter profits. V. M. Couch. Am P Advocate 24:846 N '16
- Feeding hay and oats to poultry. J. R. Kessler. Prac F 113:367 N 1 '17
- Feeding hens for egg production. C. Weeks. Am P J 49:695+ Jl '18
- Feeding kitchen waste. Weekly N L 5:3 N 21 '17
- Feeding laying hens. M. Purvis. Breeder's Gaz 69:493 Mr 2 '16
- Feeding leghorn pullets for early maturity. Nat Stock & F 42:17 Mr 30 '18
- Feeding of laying hens. F. S. Jacoby. Ohio Ag Ext B v 11, no 3 3p '15-'16
- Feeding of poultry. J Bd Ag 24:1105-7; 25:182-6 Ja, My '18
- Feeding of young chicks on grain mixtures of high and low lysine content. G. D. Buckner and others. il Ky Ag Exp B 197:1-21 '16
- Feeding poultry for egg production. J. E. Rice. il Tex Ag Ext B 10:3-26 '16
- Feeding pullets. Weekly N L 5:7 N 7 '17
- Feeding questions. H. W. Jackson. Nat Stock & F 40:481 Ag 5 '16
- Feeding scratch grains. F. Hyde. Country Gent 81:850 Ap 15 '16
- Feeding station rations without wheat, for the fleshing of young chickens. N Y Prod R 46: 134 My 22 '18
- Feeding stunts. L. E. Keyser. Am P Advocate 24:130-1+ Ja '16
- Feeding the chicks. Prac F 112:62 F 1 '16
- Feeding the flock. J. H. Halpin. il Hoard's D 56:422 O 18 '18
- Feeding the growing flock. Prac F 112:136 Mr 15 '16
- Feeding the hens this winter. G. D. Black. Ohio F 140:535 D 8 '17
- Feeding the layers. J Ag (Quebec) 21:77-8 N 17
- Feeding the laying stock. M. A. Jull. J Ag (Quebec) 19:176 F '16
- Feeding the winter layers. A. W. Richardson. N H Ag Ext C 26 4p '17
- Feeding the young chick. Rural N Y 77:360 Mr 2 '18
- Feeding young chicks. Country Gent 81:699 Mr 25 '16
- Feeding young chicks. Ohio F 141:513 Ap 6 '18
- Feeding young chicks under war-time conditions. il Reliable P J 25:191+ Ap '18
- Feeds for poultry. Am P Advocate 24:234 F '16; Same. N Y Prod R 41:710 F 23 '16
- Fish meal; its use as a stock and poultry food. F. C. Weber. U S Ag B 378:1-21 '16
- Food and feeding. M. K. Boyer. Am P Advocate 26:101 Ja '18
- Food for poultry. Gard Chron (Lond) 64:71 Ag 17 '18
- For feeding and watering. H. Mitman. il Country Gent 83:32 My 25 '18
- Fourth annual international egg laying contest; rations and method of feeding. W. F. Kirkpatrick and L. E. Card. il Conn Storrs Ag Exp B 87:201-8 '16
- Garbage-fed poultry. N Y Prod R 46:182 My 29 '18
- Great importance of drinking water for laying hens. D. F. Laurie. J Dept Ag S Australia 20:613-22 Mr '17
- Green feed. T. F. McGrew. Country Gent 81: 70 Ja 8 '16
- Green feed for winter. G. D. Bartlett, jr. Rural N Y 76:1140 S 29 '17
- Green feeds for poultry. M. Walker. Prog F 32:7 Ja 6 '17
- Green food feed to ringlet barred rocks. F. L. Sewell and E. B. Thompson. Reliable P J 24:1089 F '18
- Green food for poultry. H. E. Eswine. Ohio Ag Ext B v 11, no 9 4p '15-'16
- Green food for poultry. W. W. Kulp. il Am P Advocate 25:288 Mr '17
- Grow your own chicken feed. M. Hastings. il Country Life 34:52 Ag '18
- Growing green crops for poultry food. R. L. Chamberlain. Am P J 47:949 Jl '16
- High cost of feeding the underfed hen. D. C. Kennard. Reliable P J 25:881 D '18
- Home grown feeds for poultry. A. W. Richardson. N H Ag Ext C 34 3p '18
- Horse meat proves to be valuable poultry feed. W. T. Wittman. Reliable P J 25:675 O '18
- Housing and feeding poultry. J. T. Bartlett. Prac F 113:287 Ag 15 '17
- How man can control the egg production of his flock. L. R. Wellington. il Reliable P J 24:456 Jl '17
- How much will a hen eat? R. R. Hannas. Country Gent 83:31 O 5 '18
- How to raise the chicks. S. Swaysgood. Am P J 49:564 My '18
- Importance of minerals and green food. C. A. Simmonds. Am P J 48:1130-1 D '17
- Increase your profits by fattening the market chickens. A. G. Phillips and others. Reliable P J 24:521+ Ag '17



**Poultry—Feeding—Continued**

- Influence of war conditions on methods of feeding. J. H. Robinson. *Reliable P J* 24:661 O '17
- Irish potatoes for poultry feeding. M. H. Decker. *Am P J* 47:1373 D '16
- It is profitable to fatten poultry before marketing. A. F. Hunter. *Reliable P J* 24:455 J1 '17
- Kafir and milo for chickens. A. C. Hartenbower. *il Country Life* 30:124 O '16
- King korn. W. H. Card. *Am P Advocate* 25:16 D '16
- Logic of the winter feeding schedule. Mr and Mrs G. R. Shoup. *Western Wash Ag Exp B v* 4:9-15 N '16
- Lower feed bill. H. W. Jackson. *Am P Advocate* 24:216 F '16
- Mangels for chicks. J. R. Kessler. *il Country Gent* 81:122 Ja 15 '16
- Mangels vs. sprouted oats. R. J. Holliday. *Prac F* 112:73 F 15 '16
- Marketing poultry for the table; a striking test of the priming process. F. C. Brown. *J Ag New Zealand* 13:56-9 J1 '16
- Meat scrap and sour milk for egg production. H. L. Kempster and G. W. Hervey. *il Mo Ag Exp B* 155:1-16 '18
- Meeting present-day poultry conditions. M. H. Decker. *Am P J* 48:1044-7 N '17
- Milk as a chick feed. M. Purvis. *Breeder's Gaz* 70:165 Ag 3 '16
- Mineral content of southern poultry feeds and mineral requirements of growing fowls. B. F. Kaupp. *il J Ag Research* 14:125-34 J1 15 '18
- Mineral salts in poultry feeding. J. Wysocki. *Am P Advocate* 24:346+ Mr '16
- Missing elements in all-grain feeds. A. L. Gale. *Am P J* 48:755 Je '17
- More feeding questions. H. W. Jackson. *Nat Stock & F* 40:582 S 2 '16
- Neglected hen feed; horse meat is a cheap and effective egg producer. J. Hillis. *il Country Gent* 83:51 Mr 9 '18
- New way to feed hens. C. L. Opperman. *Country Gent* 83:32 Mr 30 '18
- Notes on poultry feeding. *J Bd Ag* 24:664-7 S '17
- Notes on poultry feeding. *J Bd Ag* 25:186-8 My '18
- Nutrients in feed and egg. W. A. Lippincott. *Country Gent* 81:520 Mr 4 '16
- Nutrition problems. *N J Ag Exp Rep* 1916:148-53 '17
- Plant corn for poultry. *Am P J* 49:422 Ap '18
- Poisonous effects of the rose chafer upon chickens. G. H. Lamson, jr. *Am Vet M Assn J* 49:107-8 Ap '16
- Poultry and grain in England. *Am P J* 49:73 Ja '18
- Poultry feed and feeding results. R. N. Harvey. *Tex Ag Exp B* 206:1-16 '17
- Poultry feed situation. T. E. Quisenberry. *Am P Advocate* 26:268 Mr '18
- Poultry feeding at war-time prices. R. L. Odell. *Reliable P J* 24:760b N '17
- Poultry feeding problems. Mr and Mrs G. R. Shoup. *Western Wash Ag Exp B v* 5:85-8 S '17
- Poultry feeding standards. *Pa Ag Dept B* 306:1-16 '18
- Poultry-feeding tests. F. C. Brown. *il J Ag New Zealand* 14:464-8 Je '17; Same cond. *Int R Sci & Prac Ag* 9 no 1:84-6 Ja '18
- Poultry-feeding tests at Milton. *il J Ag New Zealand* 13:481-2 D '16
- Poultry-feeding tests at Milton; heavy breeds fed without wheat or pollard. *J Ag New Zealand* 16:331-3 Je '18
- Poultry feeding: the need for economy. *J Dept Ag Ireland* 17 no 4:672-3 '17
- Poultry feeding without grain. W. Hooley. *Country Life* 32:76 S '17
- Poultry feeding without wheat. *J Ag New Zealand* 12:138-40, 389-90 F, My '16
- Poultry-feeding without wheat; notes on the Milton experiment. F. C. Brown. *il J Ag New Zealand* 12:468-71 Je '16
- Poultry feeds and methods of feeding. J. C. Graham. *il Mass Ag Bd B* 1:106-30 '17
- Poultry in Florida; poultry feeds. A. P. Spencer. *il Fla Ag Ext B* 9:1-10 '17
- Poultry pointers. *N Y Prod R* 44:154 My 23 '17
- Poultry rations. R. V. Mitchell. *Del Ag Ext C* 6 1p n.d.
- Poultry rations at reduced cost. F. V. L. Turner. *Prac F* 114:124 Mr 15 '18
- Poultry work in winter quarters. P. T. Woods. *Am P J* 49:824-5 O '18
- Poultryman's garden. T. F. McGrew. *Am P Advocate* 26:327 Ap '18
- Practical poultry talks. *Prac F* 112:384 O 15 '16
- Profitable poultry feeding in war times. H. W. Jackson. *Reliable P J* 25:474+ J1 '18
- Proper care and feeding of chicks in spring. A. E. Vandervort. *Am P Advocate* 25:292 Mr '17
- Proper feeding and care. F. F. Hunstock. *Kimball's D F* 15:347 Je 15 '17
- Protein feeds for laying hens. H. L. Kempster. *il Mo Ag Exp C* 82:1-11 '17
- Quantity of feed required by poultry. P. T. Woods. *Am P J* 48:1126-7 D '17
- Question of green food in the South. H. F. Reils. *Reliable P J* 24:301 My '17
- Raise more poultry feed in the South. H. F. Reils. *Reliable P J* 25:95-7 Mr '18
- Ration for laying hens. *Am P Advocate* 26:119 Ja '18; Same. *Am P J* 49:110 Ja '18; Same. *Cornell Countryman* 15:194-5 Ja '18; Same. *Wallaces' F* 43:91 Ja 18 '18
- Rations for laying hens in winter. W. J. Buss. *Ohio Ag Exp B v* 1:324-5 N '16
- Rations for pullets. *Nat Stock & F* 40:844 N 18 '16
- Rations for the backyard flock. *Nat Stock & F* 42:663 O 19 '18
- Rations for winter egg production. W. J. Buss. *il Ohio F* 138:589-90 D 16 '16
- Reasons for fattening surplus fowls for the market. H. W. Jackson. *il Reliable P J* 25:767+ N '18
- Reducing the feed bills without doing injury to the fowls. L. J. Brosemer. *il Reliable P J* 23:971+ D '16
- Relief for crop-bound hens. *Country Gent* 81:273 F 5 '16
- Right use of the wet mash. W. H. Jenkins. *Nat Stock & F* 42:770 N 23 '18
- Satisfactory war-time, wheatless egg laying ration. *Reliable P J* 24:453 J1 '17; Same abridged. *Prac F* 113:231 Je 15 '17
- Shall we feed hulls? H. G. Barnes. *Country Gent* 82:23 Ja 6 '17
- Shoup oat sprouter. Mr and Mrs G. R. Shoup. *il Western Wash Ag Exp B v* 4:112-20 S '16
- Silage for poultry. *Country Gent* 82:1743 N 10 '17
- \* Solving the poultry feeding problem. T. E. Quisenberry. 16p '18 *Am. School of poultry husbandry, Leavenworth, Kansas*
- Sour milk for chicken feeding. H. L. Kempster. *Mo Ag Exp C* 79:1-4 '16
- Sour milk for chicks. *Wallaces' F* 43:1044 J1 12 '18
- Sprouted oats profitable. E. W. Gage. *Ohio F* 141:26 Ja 5 '18
- Sprouting oats for hens. T. F. McGrew. *Country Gent* 81:214 Ja 29 '16
- Standardized war rations for poultry. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 6 4p D '17; Same cond. *Reliable P J* 24:970+ Ja '18
- Standardizing war-time poultry feeds and feeding. J. F. Lantz and others. *Reliable P J* 25:327+ My '18
- Study of the effect of cottonseed meal vs. beef scrap upon the egg production, fertility and vitality of poultry. B. A. Ahrens. *Okla Ag Exp B* 112:1-20 '17
- Study of the proteins of certain insects with reference to their value as food for poultry. J. S. McHargue. *bibliog J Ag Research* 10:633-7 S 17 '17
- Success in the production of winter eggs means good profits. J. B. Morman. *Reliable P J* 22:1235+ Ja '16
- Summer feeding of poultry. A. W. Richardson. *N H Ag Ext C* 36:1-7 '18
- Test compares cost of egg producing feeds. *Am P Advocate* 25:706 N '17
- Valuable work at Ohio state college. *Reliable P J* 24:510 Ag '17

**Poultry—Feeding—Continued**

- Value of meat and fish scraps and skim-milk for laying pullets. Wallaces' F 41:908 Je 23 '16
- Value of meat food in a laying ration. J. C. Ralston. *Purdue Ag* 10:24 Ja '16
- Value of oats for adult fowls and chicks. Reliable P J 24:850+ D '17
- Variety vs. simple rations for laying hens. W. J. Buss. *Ohio Ag Exp B* v 1:163-8 Je '16
- Various amounts of protein in rations for laying hens. W. J. Buss. *Ohio Ag Exp B* v 3:272-4 S '18
- Vegetable foods for winter. *Am P J* 48:1175 D '17
- War chicks. Mrs G. R. Shoup. *Western Wash Ag Exp B* v 5:183-8 Mr '18
- War rations for poultry. C. L. Opperman. *Country Gent* 82:1538 O 6 '17
- War-time poultry feeding. Mrs M. G. Feint. *Am P Advocate* 26:121 Ja '18
- War time poultry feeding. F. E. Mussehl. *Neb Ag Ext Emergency B* 26:1-4 '18
- War time poultry feeding. J. H. Robinson. Reliable P J 24:587+ S '17
- War-time poultry ration. T. E. Quisenberry. *Am P Advocate* 25:578 Ag '17; Same. Kimball's D F 15:556 Ag 15 '17
- War time poultry rations. *Ag Gaz of Canada* 5:262-7 Mr '18
- War time poultry rations. E. I. Farrington. *Country Life* 34:96 Je '18
- War-time poultry rations. H. W. Jackson. *Nat Stock & F* 41:799, 826 N 17-24 '17
- War-time poultry rations. H. W. Jackson. *Nat Stock & F* 41:978 Ja 5 '18
- War time rations. J. G. Halpin. *Am P J* 49:689 Jl '18
- War-time rations for the poultry flock. H. R. Lewis. *N J Ag Dept C* 7 3p n. d.
- Water for poultry. C. C. McCurdy. *il Nat Stock & F* 40:48 Ap 8 '16
- West Virginia poultry; feeding for eggs. H. Atwood. *il W Va Ag Dept B* 14:45-52 '16
- West Virginia poultry; feeding laying hens. H. R. Lewis. *W Va Ag Dept B* 14:38-44 '16
- West Virginia poultry; practical poultry pointers. H. Atwood. *W Va Ag Dept B* 14:68-79 '16
- What and how to feed growing chicks. M. H. Decker. *il Am P J* 49:290-1 Mr '18
- Wheatless chick rations. *Country Gent* 83:40 O 26 '18
- Wheatless ration for the rapid increase of flesh on young chickens. M. E. Pennington and others. *il U S Ag B* 657:1-12 '18
- Why meat scrap, fish scrap, and skim milk pay. E. L. D. Seymour. *Country Life* 30:51 Jl '16
- Winter greens. L. H. Cobb. *Nat Stock & F* 40:700 O 7 '16
- Winter greens for poultry. C. Weeks. *Am P J* 49:760-1 S '18
- Winter rations for laying hens. *Mass Ag Ext C* 51 3p '18
- Winter's hen feed. *Prac F* 112:461 D 15 '16
- Working for winter eggs. *Prac F* 113:354 O 15 '17
- See also Poultry—Care of chicks; Poultry—Egg production; Poultry hoppers; Poultry self feeders
- Fitting for show**
- Dressing up the winners. R. B. Sando. *il Field* 11 26:846+ O '16
- Fall fairs. T. F. McGrew. *Am P Advocate* 25:567-8 Ag '17
- First aid to show birds. Wallaces' F 42:1530 N 9 '17
- Fitting birds for show. J. B. Hayes. *Country Gent* 81:2086 D 2 '16
- Grooming for the show. Wallaces' F 43:1377 S 27 '18
- How to secure exhibition quality. C. H. Latham. *Am P J* 47:1192-3 N '16
- Making feathers fine. F. H. Valentine. *il Country Life* 31:48-9 D '16
- Poultry show season; fitting leghorns. Mrs I. F. Rice. *Am P Advocate* 25:90 Ja '17
- Preparation for fall fairs. T. F. McGrew. *Am P Advocate* 24:630-1 Jl '16
- Preparations of white birds for show room. O. E. Hackman. *Am P J* 48:103 Ja '17

- Preparing birds for exhibition. R. F. Irvin. *N J Ag Exp Hints to Poultrymen* v 5 4p O '16
- Proper carriage of fowls and how to secure it. F. L. Sewell. Reliable P J 24:659-60 O '17
- To win next winter. T. F. McGrew. *Am P Advocate* 26:243-4 Mr '18
- Training exhibition fowls. H. A. Roberts. *Country Gent* 82:1606 O 20 '17
- Valuable hints for us from English and Scotch showmen. L. J. Brosemer. Reliable P J 23:647+ Ag '16
- Washing the show bird. L. T. P. Reinecke. *Country Gent* 81:1484 Ag 5 '16
- Washing white rocks. Wallaces' F 42:1567 N 16 '17

**History**

- Remarks about poultry history. H. E. Sharp. *Am P J* 48:426 Mr '17

**Judging**

- Adventures in poultry judging. M. Purvis. *Breeder's Gaz* 74:226 Ag 15 '18
- Application of decimal system of judging. I. K. Felch. *Am P J* 48:883 Ag '17
- Disqualifications or defects—which? C. H. Latham. *Am P J* 47:752 My '16
- Extension school for judging fowls for egg production. F. L. Sewell. *il Reliable P J* 25:603-5 S '18
- Fine feathers make fine fowls—sometimes. L. A. Stahmer. *il Ag Digest* 2:978-9 My '18
- Following the standard in judging exhibition fowl. D. J. Lambert. *il Reliable P J* 25:606+ S '18
- For and against the removal of standard disqualifications. Reliable P J 23:641-2 Ag '16
- Fowls for exhibition. T. F. McGrew. *Am P Advocate* 25:359-60 Ap '17
- Idaho poultry judging team wins. P. Moore. Reliable P J 25:317 My '18
- If we are denied the score card exhibition. I. K. Felch. *Am P J* 47:664 Ap '16
- In the interest of poultry culture. G. A. Hill. *Am P J* 47:505 Mr '16
- Judging fowls for prospective egg production. O. B. Kent. *il Reliable P J* 24:1110 F '18
- Judging hens for egg production. W. R. Graham. *Ag Gaz of Canada* 5:880-1 S '18
- Judging hens for egg production. L. L. Jones. *il Purdue Ag* 13:66-7 N '18
- Judging of chickens. H. L. Kempster. *il Mo Ag Ext C* 8:1-24 '16
- July work for war-time standard production; culling out the poor layers. *Am P J* 49:698 Jl '18
- Official method of judging fowls for egg production. *Nat Stock & F* 42:640 O 12 '18
- Picking the best layers. F. S. Jacoby. *Ohio F* 142:306 S 28 '18
- Poultry associations going back to use of score card judging. G. M. Curtis. Reliable P J 23:373 My '16
- Question of eliminating so-called non-essential disqualifications from standard of perfection. Reliable P J 25:669+ O '18
- Removal of standard disqualifications. D. L. Orr. Reliable P J 23:211+ Ap '16
- Score card vs. comparison judging. D. T. Heimlich. Reliable P J 25:912 D '18
- Selecting for exhibition. T. F. McGrew. *Am P Advocate* 26:10-11 D '17
- Selecting poultry breeding stock for table fowls. A. G. Oliver. *Prog F* 32:208 F 17 '17
- Standard bred plymouth rocks. T. Hewes. *il Am P J* 48:628-31, 713-15, 781-4, 846-8 My-Ag '17
- Standard values and production characteristics. W. H. Card. *il Reliable P J* 25:613+ S '18
- Suggestions on the art of judging fowls. I. K. Felch. *Am P J* 48:398 Mr '17

**Law**

- Legal aspects of the hen. S. O. Rice. *Country Gent* 83:55 Ja 12 '18

**Marketing**

- Co-operative marketing of poultry products. J. H. Hare. *Ag Gaz of Canada* 5:284-5 Mr '18



**Poultry—Marketing—Continued**

- Co-operative marketing of poultry products. F. W. Kazmeier. Tex Ag Ext B B-10:66-8 '16
- Co-operative poultry marketing. W. W. Thomson. Ag Gaz of Canada 5:501-2 My '18
- Co-operative poultry marketing in Saskatchewan. Int R Sci & Prac Ag 7, no 3:437 Mr '16
- Direct sales from producer to consumer. B. M. Tyson. Am P J 49:19 Ja '18
- Forbids trading in live hens. O Judd Farmer 64:16 F 23 '18
- Fraudulent feeding and cropping of live poultry. N Y Prod R 41:1063 Ap 12 '16
- How to make poultry keeping pay. T. F. McGrew. Am P Advocate 26:555 S '18
- Market distribution of poultry products. E. W. Benjamin. Am P Advocate 24:106 Ja '16
- Market distribution of poultry products. E. W. Benjamin. N Y Ag Dept B 86:2380-6 Ag '16
- Marketing New York's surplus poultry. E. W. Benjamin. Cornell Countryman 15:456+ My '18
- Marketing of poultry products. F. W. Kazmeier. Nat Stock & F 40:678 S 30 '16
- Marketing poultry advantageously. B. M. Tyson. Prac F 113:319 S 15 '17
- Selling baby chicks. Wallace's F 41:828 Je 2 '16
- Successful experience in advertising. A. E. Vandervort. Am P Advocate 26:648 N '18
- Successful poultry advertising. H. C. Shepard. Reliable P J 25:719 O '18
- Texas plan of introducing standard-bred poultry. F. W. Kazmeier. il Reliable P J 24:971 Ja '18
- Why customers understand the value back of my goods. R. H. Whitten. il System on the Farm 3:10-12 Jl '18
- See also Egg marketing associations; Poultry producers of central California

**Photographs and photography**

- Photographing poultry. Field il 27:632 Ag '17

**Prices**

- How much is a standard-bred egg-record bird actually worth? C. T. Patterson. Reliable P J 23:54+ Mr '16
- More figures on poultry needs. H. W. Jackson. Nat Stock & F 42:82 Ap 13 '18
- Present high prices for market poultry and eggs. G. M. Curtis. Reliable P J 23:880-1 N '16

**Protection**

- How I kill chicken hawks and save my fowls. C. C. Conger, jr. il Prac F 114:9 Ja 1 '18

**Small flocks**

- Another backlotter's experience. A. W. Beale. il Am P J 49:184 F '18
- Attractive back yard poultry plant—two practical houses. H. W. Jackson. plan Reliable P J 24:357-8+ Je '17
- Back lot poultry keeping. F. W. Kazmeier. Tex Ag Ext Farm-News v 3, no 12 4p '18; Same. Am P Advocate 26:180+ F '18
- Back-lotters should show their colors. J. C. Blaisdell. Am P J 49:578 My '18
- Back yard flocks. W. H. Card. Am P Advocate 26:348+ Ap '18
- Back-yard poultry. Weekly N L 5:4 Ja 16 '18
- Back-yard poultry and eggs. H. R. Lewis. il Country Gent 82:1395 S 8 '17
- Back yard poultry flock. H. R. Lewis. il N J Ag Exp Hints to Poultrymen v 6 4p Ag '18
- Back yard poultry flock. E. Warren. Am P Advocate 26:342 Ap '18
- Back-yard poultry keeping. R. R. Slocum. il Farmers' B 859:1-22 '17
- Back-yard poultry keeping yields good profits. I. A. Brinkman. il Reliable P J 25:684 O '18
- Back yards profitable. Am P Advocate 26:90 Ja '18
- Beginner's experience. L. B. D'Armond. il Am P J 48:862 Ag '17
- Boy's chicken venture. C. J. Zintheo, jr. il Country Gent 82:213 F 3 '17

- Breakfast eggs from dinner waste. C. L. Opperman. Country Gent 82:1887 D 1 '17
- Care and management of fowls and chicks in summer. T. Hewes. (Am. poultry assn. B. 2) 8p il n.d. Nat. bur. of poultry information. 55 W. Harrison st., Chicago
- City chickens. H. R. Lewis. il map Country Gent 81:1898; 82:136 O 28 '16, Ja 27 '17
- City chickens; experience of a man with a dozen hens. H. R. Lewis. il Country Gent 82:659 Mr 31 '17
- City chickens; success with a small poultry flock. H. R. Lewis. il Country Gent 82:740 Ap 14 '17
- Economy in back lot poultry keeping. W. A. Parsons, jr. Am P J 48:974 O '17
- Efficiency in small flocks of fowls. E. J. W. Dietz. Am P Advocate 25:446-7 My '17
- Egg production in cities, towns and villages. W. R. Graham. Ontario Ag Dept C 2:1-7 '17
- Eggs and poultry for the family table. A. F. Hunter. See monthly numbers of Reliable poultry journal
- Experience in keeping poultry in the city. Conn State Ag Exp B 202:217-24 '18
- Five years with a small flock. M. R. Cranton. Country Gent 81:1342 Jl 8 '16
- Flock on a small lot. H. R. Lewis. Country Gent 82:1124 Jl 7 '17
- For those who are to own a back-yard flock. il Reliable P J 25:59-60+, 199-200+ Mr-Apr '18
- Good record with ten hens. F. C. Sears. il Country Gent 83:30 N 2 '18
- Growing poultry in and at the edge of towns is profitable. F. L. Sewell. il Reliable P J 24:583-4+ S '17
- Have both chickens and a garden. A. F. Hunter. Am P J 49:570 My '18
- Helpful guide for beginners. T. Hewes. (Am. poultry assn. B. 1) 8p il n.d. Nat. bur. of poultry information, 55 W. Harrison st., Chicago
- Helpful hints for the back lotter. R. H. Willmot. Am P J 48:673 My '17
- Hens as a side line. C. P. Reed. il Country Gent 82:1743 N 10 '17
- Home flock. C. J. Fisk. Am P Advocate 26:256 Mr '18; Same. Am P J 49:463 Ap '18
- Little flock well kept. M. H. Decker. il Country Gent 81:214 Ja 29 '16
- Living on a back lot. J. A. Koethen. Am P Advocate 25:424 Ap '17
- Method of back yard poultry keeping that is paying well. W. V. Clarke. il Reliable P J 24:1113+ F '18
- Plan for the assistance and encouragement of urban poultry keepers. Am P Advocate 25:416 Ap '17
- Poultry in back yard. Weekly N L 4:3 Ap 11 '17
- Poultry-keeping in town and country. F. C. Elford. 46p il '17 Canada Ag
- Poultry on allotments and garden plots. J Bd Ag 25:694-8 S '18
- Poultry on back lots. il Rural N Y 77:60 Ja 12 '18
- Poultry raising in city limits. Mrs M. F. Settle. Am P J 49:491 Ap '18
- Poultry runs in urban districts. E. Brown. J Bd Ag 23:652-6 O '16
- Practical case of back-yard poultry keeping. I. K. Felch. Reliable P J 24:909 D '17
- Profit from a small flock. Mrs W. B. Shull. il Fruit-Grower 28:108 F 1 '17
- Quality rather than quantity. H. J. Zeeck. Am P J 48:741 Je '17
- Raise chicks on the city back lot. B. H. Kirchbaum. plan Am P J 49:605 Je '18
- Raising chicks for family use. C. H. Scofield. il Am P J 47:493 Mr '16
- Raising chicks in a back yard. Mrs E. G. Mahood. il Reliable P J 25:84-5 Mr '18
- Side line poultry keeping. E. Warren. See monthly numbers of American poultry advocate
- Start a flock. J. B. Hayes and F. E. Mussehl. il Wis Ag Ext C 73:1-8 '17
- Starting with a war-time flock. P. T. Woods. Am P J 49:150-2 F '18
- Story of a backyard flock. H. L. Kempster. il plan Mo Ag Ext C 26:1-4 '17
- Suburban poultry-keeping: a war-time effort. L. A. Hutchinson. J Bd Ag 23:646-52 O '16

**Poultry—Small flocks—Continued**

- Successful backyard flock. *Am P Advocate* 26: 147 Ja '18  
 Successful back yard poultry keeping. A. F. Hunter. *Reliable P J* 24:1141; 25:89-90 F-Mr '18  
 Successful back yard poultry keeping. H. W. Jackson. *Reliable P J* 25:748A-748B, 834+ N-D '18  
 Twelve reds in town. H. L. Hoag. *il Country Gent* 81:2129 D 9 '16  
 We have our own eggs. J. C. Marquis. *il Country Gent* 83:5+ Ap 13 '18  
 What a dozen hens did. G. R. Smith. *il Country Gent* 82:1467 S 22 '17

**Standards**

See Poultry—Judging

**Study and teaching**

- Experience teaches. M. R. Edwards. *il Ag Digest* 3:28 Jl '18  
 Lessons on poultry for rural schools. F. E. Heald. *il U S Ag B* 464:1-34 '16  
 Poultry demonstration trains are popular. *il Reliable P J* 24:504-5+ Ag '17  
 Poultry extension work in Quebec. A. G. Taylor. *J Ag (Quebec)* 21:108 Ja '18  
 Poultry management; suggestions for teaching the subject in secondary schools. *Ag Educ Monthly (U.S. States relations service)* v 2, no 8 59-66p N '16  
 Poultry study. E. M. Tuttle. *il Cornell Rural School Leaflet* v 11, no 1:70-3 '17  
 Poultry work under the agricultural instruction act. J. W. Mitchell. *Ag Gaz of Canada* 5:41-2 Ja '18  
 Teaching poultry in the high school. J. I. Coe. *il Purdue Ag* 10:19-20 Ap '16

See also American association of instructors and investigators in poultry husbandry; American school of poultry husbandry

**Terminology**

- Definitions of poultry terms in common use. *Reliable P J* 25:93 Mr '18

**Transportation**

- Poultry shippers' law. *Country Gent* 81:1808 O 7 '16  
 Shipping live day-old chicks by parcel post. *Reliable P J* 25:610-12+ S '18  
 Short-time embargo. *Reliable P J* 25:735+ N '18  
 Standard boxes for the shipping of day-old chicks. H. H. Knapp. *il Reliable P J* 25: 864-5 D '18  
 To insure feeding fowls shipped to foreign countries. *il Reliable P J* 24:840 D '17

**Weighing**

- Are your chickens making the proper growth? *il Reliable P J* 25:472 Jl '18

**Australia**

- Poultry industry. W. A. Bagley. (B. 72) 16p *il '17* Tasmania ag. and stock dept. Tasmania, Australia  
 Poultry industry. A. V. D. Rintoul. *J Dept Ag Victoria* 15:505-6 Ag '17  
 Poultry notes. J Hadlington. See monthly numbers of Agricultural gazette of New South Wales  
 What Australia has done in production of record layers. Mrs G. M. Curtiss. *il Reliable P J* 25:685+ O '18

**Bermuda**

- Poultry in the tropics. *Country Gent* 81:648 Mr 18 '16

**California**

- California egg industry. *N Y Prod R* 47:65 N 20 '18  
 California's new egg business. F. D. Cornell. *il Country Gent* 83:7 D 14 '18  
 Petaluma methods. W. R. Sim. *Country Gent* 82:817 Ap 28 '17  
 Where everybody raises chickens. C. A. Lyman. *il Country Gent* 81:1747-8 S 30 '16

**Canada**

- Distribution of hatching eggs to school children in Quebec. A. G. Taylor. *J Ag (Quebec)* 22:96 D '18  
 Experimental farm poultry work in the province of Quebec. F. C. Elford. *il J Ag (Quebec)* 20:196-7 Mr '17  
 Open letter on present poultry conditions in Dominion of Canada. H. B. Donovan. *Reliable P J* 24:276 My '17  
 Poultry fattening and co-operative selling. *Ag Gaz of Canada* 4:394-5 My '17  
 Poultry situation in Canada. W. A. Brown. *il Ag Gaz of Canada* 5:856-9 S '18  
 Prospects for poultry breeding in Canada; with discussion. L. R. Guild. (*In Report, Live stock branch, 1916, p. 41-8*) '17 Ontario ag. dept., Toronto, Canada  
 Quebec's opportunity in poultry raising. M. A. Jull. *il J Ag (Quebec)* 19:177 F '16

**Colorado**

- Poultry raising in Colorado. W. E. Vaplon and others. 15p *il n.d. Colorado state board of immigration, Capitol bldg., Denver*

**Florida**

- Poultry in Florida. A. P. Spencer. *Fla Ag Ext B* 9:18-24 '17

**France**

- Wartime poultry in France. R. Davis. *Country Gent* 82:2028 D 22 '17

**Great Britain**

- Edward Brown of London talks in Des Moines. Wallaces' F 43:760 My 3 '18

**Indiana**

- Records from a Purdue farm flock. A. G. Philips. *il Ind Ag Exp B* 211:1-12 '18

**Kentucky**

- Standardization of poultry in Kentucky. S. J. Lowry and G. M. Curtis. map *Reliable P J* 24:851+ D '17

**Louisiana**

- Louisiana farm flock. A. F. Rolf. *il La Ag Ext C* 14:1-32 '16

**Massachusetts**

- South Shore roasters. E. I. Farrington. *il Country Gent* 81:2053 N 25 '16

**Minnesota**

- Report of poultry section of Northwest agricultural experiment station. *Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 85-7)* '17

**Mississippi**

- Chickens in Mississippi. Mrs M. E. Harvey. *Fruit-Grower* 28:173 Mr 1 '17  
 Helps for Mississippi poultry raisers. E. P. Clayton. *il Miss Ag Ext B* 5:1-24 '17  
 Poultry in Mississippi. *il Rural N Y* 77:305 F 23 '18

**Missouri**

- Missouri is meeting the war situation. T. S. Townsley. *Reliable P J* 24:442 Jl '17

**Montana**

- Flock in Montana. L. E. Harris. *Country Gent* 81:1126 My 27 '16

**New England**

- Way out for the New England poultryman. E. Warren. *Am P Advocate* 26:592-3 O '18

**New Jersey**

- New Jersey's poultry program for 1918. H. R. Lewis. *N J Ag Exp Hints to Poultrymen v* 6 4p Ap '18  
 Practical use and application of poultry investigational work. *N J Ag Exp Rep* 1916:174-7 '17

**New Mexico**

- Poultry raising in New Mexico. (Offic B) 7p '16 State land office, Santa Fe, New Mexico



**Poultry —Continued**

**New Zealand**

Work for the coming month; poultry-keeping. F. C. Brown. See monthly numbers of Journal of agriculture of New Zealand

**North Carolina**

High-class poultry work being done in North Carolina. B. F. Kaupp and G. M. Curtis. Reliable P J 24:827+ D '17

**Ohio**

Poultry finishing plants in Ohio. F. S. Jacoby. il Ohio F 142:369-70 O 19 '18

**Rhode Island**

Rhode Island holds poultry problem meeting. Reliable P J 24:507+ Ag '17

**Southern States**

Poultry raising in the South. F. S. Gammack. il Hampton Leaflets 7,no 6:1-34 '16

**Texas**

Poultry culture in Texas. F. W. Davis. il Tex Ag Dept B 50:1-31 n.d.  
Poultry in Texas. il Tex Ag Ext B 10:1-108 '16  
Texas can add \$30,000,000 each year. Reliable P J 24:445+ J1 '17

**Tunis**

Poultry breeding in Tunis; imported and native breeds. W. Chenevard. Int R Sci & Frac Ag 7,no 12:1805-6 D '16

**United States**

Nation-wide poultry campaign by U.S. Department of agriculture for increased poultry and egg production. Reliable P J 24:669+ O '17  
Necessity of producing an extra pound of poultry this year for every man, woman and child in the United States. E. E. Richards. Reliable P J 24:370 Je '17  
Plan to increase America's meat production 100,000,000 pounds. F. L. Sewell. Reliable P J 24:355-6+ Je '17  
Poultry along the Pacific. W. V. Woehlke. il Country Gent 83:5 Ja 5 '18  
U.S. government poultry campaign. il Am P J 49:24-5 Ja '18  
War at an end. Reliable P J 25:872+ D '18

**Washington**

\* Dairying, poultry and stock raising in the state of Washington. H. F. Giles. 96p il maps '16 Washington State bur. of statistics and immigration, Olympia

**West Virginia**

West Virginia poultry; commercial egg farming. R. V. Hicks. il W Va Ag Dept B 14:10-21 '16  
West Virginia poultry; practical suggestions in handling a farm flock. J. R. Meek. il W Va Ag Dept B 14:53-8 '16

**Wisconsin**

Poultry raising in Wisconsin. J. G. Halpin and J. B. Hayes. il Wis Ag Exp B 261:1-35 '16

**Poultry, Dressed**

Breeding for meat; it is the only way to develop prime roasters. L. F. Payne. il Country Gent 82:781 Ap 21 '17  
Broilers for profit. M. A. Jull. il Country Gent 82:944 My 26 '17  
Choosing a chicken. A. M. Wilson. Am P J 47:142+ Ja '16  
Demonstrations of killing, caponizing and trussing fowl. M. Yates; S. K. Burdin. (In Report, Live stock branch, 1916, p. 31-7) '17  
Ontario ag. dept., Toronto, Canada  
Dressing poultry for market. M. K. Boyer. Am P Advocate 24:830-1 N '16  
Dressing poultry for market. E. P. Snyder. Ohio F 138:312 S 30 '16  
Dry picking and killing. S. E. Hone. Rural N Y 76:214 F 10 '17  
Economic value of the fat fowl. P. T. Woods. il Am P J 49:293-4 Mr '18

Farm poultry; killing and dressing poultry. W. R. Graham and F. N. Marcellus. il Ontario Ag Dept B 247:61-6 '17  
Finishing the broilers. J. R. Kessler. il Country Gent 81:1417 J1 22 '16  
Food value and uses of poultry. H. W. Atwater. U S Ag B 467:1-29 '16; Excerpt. Am P Advocate 25:214 F '17  
How to select table poultry. M. Ryder. Ohio F 139:250 F 17 '17  
Killing and plucking fowls. M. A. Jull. il J Ag (Quebec) 20:111 N '16  
Killing and plucking of poultry. F. C. Brown. il J Ag New Zealand 15:79-84 Ag '17  
Market poultry business. F. E. Mixa. (B. 11) 45p il n.d. Mo. State poultry bd., Mountain Grove  
Modern methods of preparing dressed poultry. W. I. Goodwin. il Breeder's Gaz 72:1148 D 20 '17  
Picking birds in jig time. L. A. Stahmer. il Country Gent 83:32 F 16 '18  
Poultry for the table. M. R. McPheeters. Okla Ag Ext C 44 4p '17  
Poultry in competition with other table meats. il Reliable P J 25:478+ J1 '18  
Poultry meat as an economical food. Mrs. H. A. Daniels. Am P J 48:1132+ D '17  
Poultry should be cheap. Weekly N L 4:3 J1 25 '17  
Preparing poultry produce for market. F. C. Elford. 31p il '16 Canada Ag  
Preserve the quality; approved methods of killing and plucking poultry. M. A. Jull. il Country Gent 82:1651 O 27 '17  
Priming of table cockerels. F. C. Brown. J Ag New Zealand 17:28-31 J1 '18  
Proper method of killing and dry picking fowls, geese and turkeys. B. F. Kaupp. Am P Advocate 26:60 D '17  
Quality of poultry. M. K. Boyer. Am P Advocate 24:718 S '16  
Requirements of a table fowl. M. K. Boyer. Am P Advocate 24:440 Ap '16  
Roosters or roasters? R. B. Hanford. il Country Gent 83:44 Ap 20 '18  
Summer care of surplus stock. M. A. Jull. J Ag (Quebec) 20:17 J1 '16  
Waste in a roaster amounts to 48%. L. F. Payne. il Country Gent 82:337 F 17 '17  
When turkeys are sold. A. E. Vandervort. Nat Stock & F 40:774 O 28 '16

**Marketing**

How success is attained. M. K. Boyer. Am P Advocate 24:198 F '16

**Storage**

Legal status of stored poultry. N Y Prod R 45:1 N 7 '17

**Transportation**

Against ice packing. N Y Prod R 45:904 Ap 17 '18  
Ice packed poultry. C. L. Hatfield. N Y Prod R 45:904 Ap 17 '18  
Refrigeration of dressed poultry in transit. M. E. Pennington and others. il U S Ag B 17:1-35 '13

**Poultry and egg trade conference**

Report of conference, Washington, Feb. 6-7. N Y Prod R 45:493+ F 13 '18

**Poultry association, American.** See American poultry association

**Poultry boards**

See also Missouri—Poultry board, State; Quebec—Poultry, Division of

**Poultry breeders**

**Directories**

Directory of poultry-breeders in British Columbia. (B. 6) 11p '17 British Columbia poultry association, J. R. Terry, sec., Dept. of ag., Victoria, B.C.

R. P. J. monthly directory of breeding stock, hatching eggs and day-old chicks. Reliable P J 25:846-7 D '18

**Poultry breeders' associations**

Co-operate or quit business; poultry organizations. R. Searle. Am P J 49:82 Ja '18

**Poultry breeders' associations—Continued**

Delaware county poultry association holds highly successful field meeting. R. E. Porter. Am P Advocate 26:598-9 O '18  
Need of specialty poultry clubs. O. W. Aldrich. Am P J 48:583 Ap '17  
Poultry associations going back to use of score card judging. G. M. Curtis. Reliable P J 23:373 My '16

See also names of associations, e.g. American poultry association, American white Orpington club, British Columbia poultry association, Connecticut poultry association, Poultry producers of central California, West Virginia state poultry association

**Poultry breeding**

Ability of standard-bred fowl to lay eggs. Reliable P J 24:1109 F '18  
Advice to prospective poultry buyers. O. W. Aldrich. Am P Advocate 24:844 N '16  
Advocate standardbred uniform flocks. E. R. Wright. Am P J 49:713-14 Ag '18  
Advocates two distinct varieties of barred plymouth rocks. M. W. Baldwin. Reliable P J 23:359+ My '16  
A. P. A. committee outline of separate breed standards. G. M. Curtis. Reliable P J 23:55+ Mr '16  
American poultrymen are proud of our white wyandottes. J. S. Martin. Reliable P J 23:967+ D '16  
Another contribution to the barred plymouth rock discussion. M. S. Gannaway. Reliable P J 23:481+ Je '16  
Are our fowls pure-bred? M. K. Boyer. Am P Advocate 24:332 Mr '16  
Barred plym. rocks and their breeding. C. H. Latham. Am P J 47:43-4, 239-40, 611 Ja-F, Ap '16  
Be natural. T. F. McGrew. Am P Advocate 25:531 Jl '17  
Be reasonable in your expectations. C. H. Latham. Am P J 48:176 F '17  
Beauty and egg production. T. E. Quisenberry. il Am P Advocate 24:636 Jl '16  
Beef-type poultry. W. S. Weaver. il Country Gent 81:941 Ap 29 '16  
Breeding and judging silver gray dorkings. W. Westfall. il Am P J 49:414-15 Ap '18  
Breeding and selecting fowls for egg production. J. E. Rice. Mass Ag Bd Yearbook 1916, pt 2:8-32 '17  
Breeding certified layers. M. Mather. il Am P Advocate 24:319-20 Mr '16  
Breeding for constitutional vigor. J. E. Rice. il Tex Ag Ext B B-10:27-45 '16  
Breeding for egg production. E. D. Ball and others. biblog Utah Ag Exp B 148:1-60 '16  
Breeding for egg production. F. W. Kazmeier. Ohio F 139:14 Ja 6 '17  
Breeding for egg production. J. E. Rice. Tex Ag Ext B B-10:46-53 '16  
Breeding for egg production. Mr and Mrs G. R. Shoup. Western Wash Ag Exp B v 4:13-16 F '17  
Breeding for meat; it is the only way to develop prime roasters. L. F. Payne. il Country Gent 82:781 Ap 21 '17  
Breeding for vigor. J. G. Blair. il Country Gent 81:278 F 5 '16  
Breeding layers, and lookers. A. J. Kyle. Am P Advocate 26:96 Ja '18  
Breeding poultry. A. G. Phillips. il Purdue Ag 10:23-4 Mr '16  
Breeding problems. N J Ag Exp Rep 1916:142-7 '17  
Breeding to a standard not opposed to utility. G. D. Black. il Ohio F 139:379 Mr 10 '17  
Breeding Toulouse geese. W. H. Martin, jr. Prog F 33:6 Ja 5 '18  
Breeding white leghorns for exhibition. R. R. Myers. Am P J 47:1378 D '16  
Breeding with and without the Hogan system. A. M. Williams. Am P Advocate 25:654 O '17  
Buff Orpington. W. H. Card. il Country Gent 81:519 Mr 4 '16  
Buff plymouth rock. W. H. Card. il Country Gent 81:334 F 12 '16  
Campine. W. H. Card. il Country Gent 81:649 Mr 18 '16

Columbian wyandottes. W. H. Card. il Country Gent 81:1037 My 13 '16  
Combination breeding to establish a strain both for egg production and exhibition. T. F. McGrew. Am P Advocate 25:8-10 D '16  
Corn poppers enable us to tell who's who among chicks. R. F. Palmer. il Reliable P J 25:329 My '18  
Cornell method of selecting fowls for egg production. J. E. Rice. Cornell Countryman 15:195-7 Ja '18  
Cross-breeding. Wallaces' F 42:1739 D 21 '17  
Cull the flock often and with care. O. E. Hackman. Am P J 49:665 Jl '18  
Dark cornish. W. H. Card. il Country Gent 81:169 Ja 22 '16  
Developing an egg strain. T. J. Adamson. J Ag (Quebec) 20:190 Mr '17  
Don't keep too many roosters. A. G. Phillips. Country Gent 81:1915 O 28 '16  
Double-mating fowls. M. Purvis. Breeder's Gaz 72:280 Ag 30 '17  
E. B. Thompson, barred rock specialist. G. M. Curtis. il Reliable P J 22:1228-9+, 1405+ Ja-F '16  
Establishing a strain of heavy layers. T. F. McGrew. Am P Advocate 24:827-9 N '16  
Establishing a strain of standard bred fowls. T. F. McGrew. il Am P Advocate 24:768-70 O '16  
Experience with sex control. A. J. Myers. Am P J 48:661 My '17  
Experimental modification of germ cells. R. Pearl. Maine Ag Exp B 268:297-303 '17; Same. Maine Ag Exp Rep 1917:297-303  
Extra-early hatching. J. R. Kessler. il Country Gent 81:2167 D 16 '16  
Fancier and his place in the sun. E. H. Johns. Am P J 49:155 F '18  
Fancier—breeder—utilityman. P. T. Woods. Am P J 47:248-9 F '16  
Farm poultry breeding flock. F. E. Mussehl. Kimball's D F 14:121 F 15 '16  
Farm poultry; selection and breeding. W. R. Graham and F. N. Marcellus. il Ontario Ag Dept B 247:4-16 '17  
Farmer's breeding pen. Ohio F 138:443 N 4 '16  
Fecundity and stamina. A. A. Dunncliff, jr. J Heredity 7:443-6 O '16  
Feeding and breeding poultry for egg production. E. Beythien. J Dept Ag S Australia 20:588-9 F '17  
Fertility and age in the domestic fowl. R. Pearl. Int R Sci & Prac Ag 8,no 10:1390-1 O '17  
Fifth annual record of a flock of white plymouth rocks. J. B. Morman. Reliable P J 23:205-6+ Ap '16  
5th Irish egg-laying competition; breeding hens for egg production. J Dept Ag Ireland 18:33-59 '18; Abstract. Int R Sci & Prac Ag 9,no 5:592-3 My '18  
Fifth Missouri egg contest. Reliable P J 23:124 Mr '16  
Fowl's breeding value. W. A. Lippincott. il Country Gent 82:2050-1 D 29 '17  
Get hatchable eggs—avoid having chicks dead in shell. M. M. Jacobs. Reliable P J 24:1111+ F '18  
Golden penciled Hamburg makes its bow to R. P. J. readers. J. A. Gamewell. il Reliable P J 23:973 D '16  
Handling inquiries; selling birds. Wallaces' F 41:96 Ja 21 '16  
Hens, like horses, go in all shapes. Reliable P J 25:757 N '18  
How accurate records helped in establishing a pure bred business. P. H. Hofius. il System on the Farm 2:85-8 Mr '18  
How to become a successful breeder. C. A. Simmonds. Am P J 49:92 Ja '18  
How to get before the public. A. E. Vander-vort. Am P Advocate 24:262-3 F '16  
How to get fertile eggs. M. H. Decker. Fruit-Grower 27:140 F 15 '16  
How to grow the best. T. F. McGrew. Am P Advocate 24:424-6 Ap '16  
How to mate and breed s.c. Rhode Island reds. E. L. Noyes. Am P Advocate 25:336 Mr '17  
How Yesterlaid egg strain was developed. R. C. Lawry. il Reliable P J 25:22-4 Mr '18



**Poultry breeding—Continued**

- Important facts for barred rock breeders. C. H. Latham. Am P J 48:346-7 Mr '17
- Improving the farm flock. M. A. Jull. il J Ag (Quebec) 20:131-2 D '16
- Increasing fecundity; effect of pituitary substance. J Heredit 7:102-4 Mr '16
- Individual merit vs. blood lines. C. A. Simmonds. Am P J 48:970-1 O '17
- Influence of the male on the off-spring. E. B. Templer. Am P Advocate 24:342 Mr '16
- Interview with a master breeder of Rhode Island reds. G. M. Curtis. Reliable P J 22:1415-16 F '16
- Is the male half of the flock? C. A. Simmonds. Am P J 49:69 Ja '18
- Light brahmas. W. H. Card. il Country Gent 81:123 Ja 15 '16
- Light brahmas—one of the oldest and best standard fowls. W. A. Hendrickson. il Reliable P J 24:259-61+ My '17
- Line breeding—inbreeding and double matings. T. F. McGrew. Am P Advocate 26:447-8 Je '18
- Making Rhode Island reds better. A. A. Carver. il Reliable P J 22:1432-3 F '16
- Making the most of a poultry farm. N. W. Sanborn. Am P Advocate 24:91-2, 191-2 Ja-F '16
- Males and breeding vigor. R. E. Huntley. Am P Advocate 24:111 Ja '16
- Males that head the breeding pens. Mr and Mrs G. R. Shoup. Western Wash Ag Exp B v 6:99-101 O '18
- Mating and breeding Columbian ply. rocks. T. J. Enslin. Am P J 49:572 My '18
- Mating and early hatching. V. G. Aubry. N J Ag Exp Hints to Poultrymen v 5 4p Ja '17
- Mating for best results. T. F. McGrew. Am P Advocate 24:193-4 F '16
- Mating for color. T. F. McGrew. Am P Advocate 26:77-8 Ja '18
- Mating for pullets; can the breeder outwit nature? L. F. Strickler. Country Gent 83:45 Ap 20 '18
- Mating of standard poultry for practical results. Reliable P J 25:871+ D '18
- Mating the breeding birds. E. J. W. Dietz. Am P Advocate 25:276 Mr '17
- Mating the breeding birds. F. S. Jacoby and A. Bayes. Ohio F 137:184 F 5 '16
- Mating white wyandottes. Wallaces' F 43:186 F 1 '18
- More about barred plymouth rocks. C. H. Latham. Am P J 48:799 Jl '17
- More about the relation of biology to poultry raising. Reliable P J 23:570-2 Jl '16
- More about the supposed evil results of close inbreeding. M. M. Jacobs; H. V. Tormohlen. Reliable P J 24:267+ My '17
- New standard and double mating. H. E. Sharp. Am P J 47:428-9 Mr '16
- One of his ideal white Orpingtons. G. M. Curtis. il Reliable P J 24:160 Ap '17
- Our erroneous ideas about the evil results of inbreeding. H. V. Tormohlen. Reliable P J 24:49+ Mr '17
- Partridge plymouth rock color; the defects in plumage and how to value them. T. Hewes. il Am P J 49:601-3 Je '18
- Partridge wyandotte. W. H. Card. il Country Gent 81:1087 My 20 '16
- Pedigreed poultry; keeping accurate records. W. A. Lippincott. il Country Gent 81:1181 Je 10 '16
- Pedigreeing chicks. J. H. Martin. il Purdue Ag 10:25 Mr '16
- Pedigreeing poultry. W. A. Lippincott. il Kan Ag Exp C 67:1-16 '18
- Poultry created for food. M. K. Boyer. Am P Advocate 25:569 Ag '17
- Poultry-keeping. F. C. Brown. J Ag New Zealand 14:141-5 F '17
- Poultry raising in Wisconsin. J. G. Halpin and J. B. Hayes. il Wis Ag Exp B 261:5-13 '16
- Poultry situation from a utility breeder's standpoint. J. W. Parks. Am P Advocate 25:702-3 N '17
- Poultry—what to breed and how to manage them. A. C. Bullmore. Ag J of India 12:132-43 Ja '17
- Practical advice on poultry breeding. H. M. Lamon. Am P J 47:1369 D '16
- Practical pointers in raising fancy fowls. W. W. Henderson. Am P J 47:690-1 Ap '16
- Practical question about poultry, and its answer. A. F. Hunter. Reliable P J 24:516+ Ag '17
- Practical system of breeding for the poultryman. A. L. Becker. Purdue Ag 12:347+ Mr '18
- Present workers on A. P. A. separate breed standards. Reliable P J 24:515+ Ag '17
- Problem of increasing egg production. J. W. Parks. il Am P J 48:1128-9 D '17
- Production of eggs for hatching. H. Atwood. bibliog W Va Ag Exp C 24:1-15 '16
- Progress being made in breeding spangled wyandottes. L. Cook. il Reliable P J 23:872+ N '16
- Proper use of valuable male birds. T. E. Quisenberry. Am P Advocate 25:100 Ja '17
- Pure-bred poultry. R. V. Mitchell. Del Ag Ext C 4 4p n.d.
- Purebreds—double mating. G. D. Black. Ohio F 138:36 Jl 8 '16
- Quality poultry requires good care. C. H. Latham. Am P J 47:1288-9 D '16
- Question of eliminating so-called non-essential disqualifications from standard of perfection. Reliable P J 25:669+ O '18
- Raising larger hens. J. B. Morman. il Country Gent 81:171 Ja 22 '16
- Real success impossible without line breeding. G. M. Curtis. Reliable P J 22:1395-6+ F '16
- Reasons for breeding s.c. white leghorns. A. J. Churchill. Am P J 48:261 F '17
- Relation of biology to poultry raising. J. B. Morman. Reliable P J 23:353-4+ My '16
- Remarkable success attained with buff plymouth rocks. C. R. Baker. Reliable P J 24:265-6+ My '17
- Report of the committee on separate breed standards. H. W. Jackson. Reliable P J 23:777+ O '16
- Results of poultry breeding. Int R Sci & Prac Ag 7,no 2:258-9 F '16
- Satisfactory method of pedigreeing fowls. A. G. Philips. il Reliable P J 24:1107-8+ F '18
- Scientific breeding of barred rocks. F. W. Proctor. il Am P J 49:22-3 Ja '18
- Select the best. T. F. McGrew. Am P Advocate 25:700 N '17
- Selecting the breeding hens. R. S. Moseley. Country Gent 81:2130 D 9 '16
- Selection and care of poultry breeding stock. Am P Advocate 26:16 D '17
- Selection of breeders. Mrs C. E. Hill. Kimball's D F 14:246 Ap 1 '16
- Selection of breeders. A. G. Taylor. J Ag (Quebec) 22:82 N '18
- Seventeen years selection of a character showing sex-linked Mendelian inheritance. R. Pearl. Int R Sci & Prac Ag 7,no 3:404-6 Mr '16
- Sex control in poultry breeding. H. E. Sharp. Am P J 47:612-14, 758-60, 848-50, 915-17, 987-90, 1190-1+ Ap-Ag, N '16
- Sex-linked inheritance of (spangling in poultry). E. H. Rucker (J. Am. Assn. Instr. and Invest. Poultry Husb., 3, no. 1 6-7p '16). Exp Sta Record 38, no 3:275 '18
- Shares his knowledge about mating Houdans with our readers. J. Abernethy. Reliable P J 23:643+ Ag '16
- Signs of the times. T. F. McGrew. Am P Advocate 25:495-6 Je '17
- Silver penciled wyandotte. il Country Gent 81:1038 My 13 '16
- Silver wyandotte. W. H. Card. il Country Gent 81:275 F 5 '16
- Single mating for partridge rocks. L. D. Cole. Am P J 47:953 Jl '16
- Specialty breeding barred plym. rocks. P. T. Woods. il Am P J 47:45-7 Ja '16
- Spirit of the fancy in poultry culture. F. L. Sewell. il Reliable P J 25:321-2, 412+ My-Je '18
- Standard bred plymouth rocks. T. Hewes. il Am P J 48:907-8 S '17

**Poultry breeding—Continued**

- Standard values and production characteristics. W. H. Card. *il* Reliable P J 25:680+, 869+ O, D '18
- Studies on the physiology of reproduction in the domestic fowl; the influence of age upon reproduction ability, with a description of a new reproductive index. R. Pearl. Maine Ag Exp B 268:305-6, 307-9 '17; Same. Maine Ag Exp Rep 1917:305-6, 307-9
- Study of general purpose breeding. M. H. Decker. Am P J 47:433-6 Mr '16
- Success or failure with pure bred poultry. C. H. Latham. Am P J 48:31 Ja '17
- Survival of the fittest. C. A. Simmonds. Am P J 47:1054-5 S '16
- Testimony of two long-time experts. Reliable P J 25:833 D '18
- Turkey breeding. Wallaces' F 41:645 Ap 21 '16
- Types of poultry. F. W. Kazmeier. Nat Stock & F 40:502 Ag 12 '16
- Uncertain factors in breeding. E. Brown; T. W. Sturges. Am P J 47:510+ Mr '16
- Urges all to combine utility and beauty. J. W. Parks. *il* Reliable P J 24:849+ D '17
- Utility and fancy in the poultry game. H. R. Lewis. *il* Field II 26:124-5 F '16
- Valuable suggestions about breeding high class red Sussex. F. L. Platt. *il* Reliable P J 23:866-7+, 968-9 N-D '16
- Value of a strain. T. F. McGrew. Am P Advocate 24:715-16 S '16; Same cond. Ag Digest 1:155-6 O '16
- Value of a well-proportioned comb. F. L. Sewell. *il* Reliable P J 23:209 Ap '16
- Value of careful selection. Mrs C. E. Hill. Kimball's D F 14:289 Ap 15 '16
- Value of good breeding. Prac F 113:10 Ja 1 '17
- Value of the standard-bred male on the farm. R. R. Slocum. Reliable P J 25:768-9 N '18
- W. D. Holterman and his aristocrat barred plymouth rocks. L. J. Brosemer. *il* Reliable P J 23:873+, 974-5+ N-D '16
- Weed out the male birds. J. Ag (Quebec) 21: 29 Ag '17
- West Virginia poultry: thoroughbreds vs. mongrels. C. H. Springer. W Va Ag Dept B 14:80-1 '16
- What history tells us about the ancient and modern Sussex. F. L. Platt. *il* Reliable P J 23:362-3+ My '16
- White Orpington. W. H. Card. *il* Country Gent 81:216 Ja 29 '16
- Why not the one grain hen? L. A. Stahmer. Am P J 48:779-80 Jl '17
- Woman's present place in poultrydom and how she won it. Mrs E. W. Mahood. *il* Reliable P J 22:1400-1+ F '16
- Work progressing favorably on separate breed standards. Reliable P J 23:498+ Je '16
- Wrong procedure; abuse of some varieties. T. F. McGrew. Am P Advocate 24:586-7 Je '16
- See also* Egg laying contests; Poultry—Egg production
- Poultry brooders**
- Art of brooding chicks. C. Weeks. Am P J 49: 369+ Mr '18
- Artificial brooding and chick feeding. W. F. Schoppe. *il* Mont Ag Exp C 56:193-207 '16
- Best brooding systems. F. W. Kazmeier. Nat Stock & F 40:112 Ap 22 '16
- Best methods of brooding chickens artificially. Ag Digest 1:27 My '16
- Brooder house. C. C. McCurdy. *il* Nat Stock & F 40:1282 F 24 '17
- Brooder-house ventilation. Country Gent 81: 647 Mr 18 '16
- Brooder stove. Ohio F 137:236 F 12 '16
- Brooder temperatures. N Y Prod R 41:998 Ap 5 '16
- Brooding and feeding little chicks. H. Atwood. *il* W Va Ag Exp C 26:1-15 '17
- Brooding day-old chicks. F. C. Hare. *il* Prog F 33:448 Ap 13 '18
- Brooding with coal-burning stoves. M. H. Decker. *il* Am P J 48:975-6 O '17
- Chicks in brooders. Weekly N L 5:3 Mr 27 '18; Same. Am P Advocate 26:403 My '18
- Chicks in stove brooder. E. I. Farrington. *il* Kimball's D F 16:180 Mr 1 '18
- Coal burning stove brooders. F. H. Cockrell. Am P Advocate 24:314 Mr '16
- Colony brooder. Country Gent 81:577 Mr 11 '16
- Colony brooder houses. A. G. Philips. diags plans Purdue Ag Ext B 52:1-8 '16; Excerpts. Purdue Ag 11:18-19 F '17
- Colony brooders; a simple portable type for many chicks. A. G. Philips. Country Gent 82:741 Ap 14 '17
- Colony brooding. V. G. Aubry. N J Ag Exp Hints to Poultrymen v 5 4p Mr '17
- Experiments in brooding chicks. W. G. Tarbet. J Bd Ag 23:1238-43 Mr '17
- Farm poultry; good colony-brooder house. Kimball's D F 15:156 Mr 1 '17
- Fireless brooder. Wallaces' F 41:272 F 18 '16
- Good and bad brooders. Country Gent 81:273 F 5 '16
- Heat for brooding chicks. F. S. Jacoby and A. Bayes. *il* Ohio F 137:442 Mr 18 '16
- Home-made fireless brooder. R. S. Ketcham. Am P J 47:888 Je '16
- Home-made poultry brooder. M. Purvis. *il* Breeder's Gaz 72:1266 D 27 '17
- Hot-water circulation system of heating brooders. J. Hadlington. plans Ag Gaz of New South Wales 29:331-7 My '18
- How to use colony brooder stoves. J. W. Dwinell. Am P J 49:324 Mr '18
- Important facts in brooding. F. W. Kazmeier. *il* Fruit-Grower 27:104 F 1 '16
- Improved fireless chicken-brooder. F. C. Brown. *il* J Ag New Zealand 13:179-83 S '16
- Incubators and brooders. C. C. Connally. Prog F 32:10 Ja 6 '17
- Incubators to hatch and brooders to brood chicks. Am P Advocate 26:266 Mr '18
- Lantern brooder. D. Scoates. Prog F 31:44 Ja 8 '16
- Mechanical brooding of chicks. *il* Field II 26: 319 Ap '16
- New-type brooder. R. Salkin. *il* Country Gent 83:24 Ja 5 '18
- Oil brooder stove troubles. *il* Country Gent 81:577 Mr 11 '16
- Outside brooding for chicks. O Judd Farmer 62:11 Mr 10 '17
- Poultry raising in Wisconsin. J. G. Halpin and J. B. Hayes. *il* Wis Ag Exp B 261:25-35 '16
- Raising chicks by artificial methods. M. K. Boyer. Am P Advocate 26:176 F '18
- Raising wild mallards in brooders. E. I. Farrington. *il* Country Life 33:94 N '17
- Rearing chickens; brooder house construction. L. M. Hurd and H. P. Buchan. *il* Cornell Reading Course 130:131-60 '17
- Rearing chickens with hen or brooder. P. T. Woods. *il* plans Am P J 47:234+ F '16
- Sensible methods of artificial brooding. F. S. Jacoby. *il* Ohio F 139:393+ Mr 17 '17
- Some pointers on cold weather brooding. M. H. Decker. Am P J 48:27-9 Ja '17
- Stove brooder experiences. E. I. Farrington. Country Life 31:96 Ap '17
- Stove brooders. plan Country Gent 83:29 Ja 26 '18
- Success with poultry. plans J Ag (Quebec) 21: 186 Je '18
- Successful fireless brooder. P. B. Ruggles. Country Life 30:121 O '16
- Tells why incubators and brooders should be used. H. H. Johnson. Reliable P J 25:859-60+ D '18
- Using coal burning colony brooders. M. H. Decker. Am P J 47:232-3 F '16
- Ventilating the brooder room. H. B. Knox. plan Country Gent 83:29 Ja 26 '18
- Wholesale brooding. C. A. Lyman. *il* Country Gent 82:1984 D 15 '17
- Wholesale raising of chicks by use of colony brooders. *il* Reliable P J 25:193-4+ Ap '18
- Poultry clubs**
- Boys' and girls' club work. C. W. Montgomery. *il* Ohio Ag Exp B v 2:61-4 F '17
- Boys' and girls' poultry club lessons and instructions. R. B. Thompson and W. T. Conway. N M Ag Ext C 30:1-11 Mr '18
- Boys' and girls' poultry club work in Wisconsin. Mrs A. J. Schloerb. Reliable P J 25: 542 Ag '18
- Boys' and girls' poultry clubs. A. C. McCulloch. Ag Gaz of Canada 5:513-15 My '18



**Poultry clubs—Continued**

- Distribution of eggs to school children. *il Ag Gaz of Canada* 5:995-1002 O '18
- Girls' and boys' poultry clubs exhibit. *il Am P J* 47:1290-1 D '16
- Largest boys' and girls' poultry club in America. R. F. McWherter. *Reliable P J* 25:477 JI '18
- Organization and conduct of poultry clubs with constitution and by-laws. L. Tunison. *Miss Ag Ext Home Econ B* 8 12p '18
- Organization of boys and girls poultry clubs. L. J. Brosemer. *il Reliable P J* 25:53-4+ Mr '18
- Organized poultry club work in Florida. *Reliable P J* 25:20 Mr '18
- Poultry club work in the South. R. R. Slocum. *il U S Ag Yearbook* 1915:195-200; Excerpts. *Int R Ag Econ* 71:8-10 N '16
- Poultry clubs, 1915. D. J. Taylor. *Ga Ag Coll (Ext)* C 25 8p '16
- Poultry interest in Massachusetts; boys' and girls' clubs established. A. F. Hunter. *Reliable P J* 23:720 S '16
- West Virginia poultry; boys' and girls' poultry clubs increase the poultry industry. C. R. Titlow. *il W Va Ag Dept B* 14:82-5 '16

**Poultry conference, Chicago**

- Meeting at Chicago in April. F. L. Sewell. *Reliable P J* 24:355-6+ Je '17
- Poultry conference, Chicago, April 20, 1917. *Am P Advocate* 25:452 My '17; Same. *Am P J* 48:645 My '17

**Poultry coops**

- Care of chicks after they are hatched by hens or incubators. L. J. Brosemer. *il Reliable P J* 23:207-9+ Ap '16
- Collapsible coop and run. *il Country Gent* 81:851 Ap 15 '16
- Combination sitting and brooding coop. F. H. Jeter. *Prog F* 31:339 Mr 4 '16
- Hatching and brooding coop. C. H. MacGowan. *Country Gent* 81:701 Mr 25 '16

**Poultry extension work**

- Cornell poultry project is a real success. R. S. Moseley. *Reliable P J* 25:410-11+ Je '18
- Poultry demonstration trains are popular. *il Reliable P J* 24:504-5+ Ag '17
- Poultry department extension work. M. A. Jull. *J Ag (Quebec)* 19:245 My '16
- Poultry extension work in Quebec. A. G. Taylor. *J Ag (Quebec)* 21:108 Ja '18
- Poultry work under the agricultural instruction act. J. W. Mitchell. *Ag Gaz of Canada* 5:91-2 Ja '18

**Poultry farm management**

- April a busy month for the poultryman. M. H. Decker. *il Am P J* 47:608-10 Ap '16
- April work in the poultry yard. A. E. Vandervort. *Am P Advocate* 24:444+ Ap '16
- August work in the poultry yard. A. E. Vandervort. *Am P Advocate* 24:672 Ag '16
- Budget of timely topics for April. A. E. Vandervort. *Am P Advocate* 26:366-7 Ap '18
- Can a poultry farm be run profitably on the sale of market eggs alone? W. H. Card. *Am P Advocate* 24:718 S '16
- Close analysis of the labor required in poultry keeping. R. A. Harrison. *il Country Gent* 81:1665 S 9 '16
- Conkey's poultry book; a handy book of reference on poultry raising. 80p *il* 50c '16 G. E. Conkey co., Cleveland, Ohio
- December work in the poultry yard. A. E. Vandervort. *Am P Advocate* 26:38 D '17
- December work with poultry. A. E. Vandervort. *Am P Advocate* 25:30 D '16
- February poultry hints. A. E. Vandervort. *Am P Advocate* 26:171 F '18
- Free range versus confinement for hens. D. E. Warner. *Am P Advocate* 25:328 Mr '17
- Growing chicks and laying hens in May. M. H. Decker. *Am P J* 48:634-5 My '17
- Hens and system—how they quickly pulled me out of debt. W. H. Card. *il System on the Farm* 1:114-16 My '17
- Hints on summer care of poultry. T. R. Lee. *Am P Advocate* 25:533 JI '17
- Home-grown crops for the poultry flock. V. G. Aubry. *N J Ag Exp Hints to Poultrymen* v 6 4p My '18

Important poultry work for May. R. F. Palmer. *il Am P Advocate* 26:408 My '18

Increasing the winter yield of eggs. W. T. Wittman. (3d rev ed) *il Pa Ag Dept B* 219:1-114 '17

General contents: Breeding; Management; Incubation and brooding; Feed and feeding; Houses and yards; Table eggs and egg yields; Diseases

Irrigation on the poultry ranch. C. Weeks. *Am P J* 49:488 Ap '18

January work with poultry. A. E. Vandervort. *Am P Advocate* 24:120-1 Ja '16

July work in the poultry yard. A. E. Vandervort. *Am P Advocate* 24:628-9 JI '16

Labor comparison of dairy and poultry business. W. H. Jenkins. *Nat Stock & F* 41:1176 F '16 '18

Labor-saving devices on noted poultry plant. *il Reliable P J* 25:838-9 D '18

Looking backward—looking forward—better paying poultry. N. W. Sanborn. *Am P Advocate* 26:481-2, 517-19, 553-5, 589-90, 629-30 JI-N '18

Making the most of a poultry farm. N. W. Sanborn. *Am P Advocate* 24:91-2, 191-2 Ja-F '16

March work in the poultry yard. A. E. Vandervort. *Am P Advocate* 24:328-9 Mr '16

May work in the poultry yard. A. E. Vandervort. *Am P Advocate* 24:542-3 My '16

Most intensive egg farm in the world. C. Weeks. *Am P J* 49:542 My '18

No more hired hands. C. H. Newman. *il System on the Farm* 1:148-50 Je '17

November work with poultry. A. E. Vandervort. *Am P Advocate* 24:838-9 N '16

Poultry farm management. R. E. Jones and others. *Conn Ag Coll Ext B* 8:1-15 '17

Poultry management problems. N J Ag Exp Rep 1916:159-61 •17

Poultryman's problems in 1917. H. R. Lewis. *N J Ag Exp Hints to Poultrymen* v 5 4p Je '17

Practical suggestions for the season; breeding stock—hatching eggs—buying and shipping—getting ready for baby chicks—care of chicks. P. T. Woods. *il Am P J* 48:170-3 F '17

Producing standard-bred fowls during war times on one of the largest plants in the world. A. O. Schilling. *il Am P Advocate* 26:328-31 Ap '18

Seasonable suggestions for fall work. P. T. Woods. *Am P J* 49:759-60 S '18

September work in war-time standard poultry production. *Am P Advocate* 26:562 S '18; Same. *Reliable P J* 25:609 S '18

September work with poultry. A. E. Vandervort. *Am P Advocate* 24:744 S '16

Short hints for the month of March. A. E. Vandervort. *Am P Advocate* 24:354 Mr '16

Vandervort's budget of timely topics for May. A. E. Vandervort. *Am P Advocate* 26:420 My '18

Vandervort's budget of timely topics for June. A. E. Vandervort. *Am P Advocate* 26:462 Je '18

Vandervort's timely topics. A. E. Vandervort. *Am P Advocate* 26:308 O '18

Work of a 1,000-hen plant. W. H. Jenkins. *Nat Stock & F* 42:598 S 28 '18

See also Poultry farms

**Poultry farms**

- Applecrest farm again. E. Warren. *Am P Advocate* 24:746-7 S '16
- Artist Schilling spends a week at Owen farms. A. O. Schilling. *il Reliable P J* 25:181+ Ap '18
- Blood will tell. O. H. Barnhill. *il Country Gent* 82:1786 N 17 '17
- Buying a farm for poultry work. P. McCullough. *Am P J* 49:100-1 Ja '18
- Buying a poultry farm. J. E. Moore. *Am P J* 48:559 Ap '17
- Campine egg farm. F. H. Valentine. *il Country Gent* 81:2087 D 2 '16
- Catering to the hen. R. E. Jones. *il Country Gent* 83:12+ Mr 9 '18
- Colorado poultry farm. N. J. Miller. *il Reliable P J* 23:109 Mr '16

**Poultry farms—Continued**

- Commercial poultry plant. G: R. Shoup. plan Western Wash Ag Exp B v 5:68-73 Ag '17  
Country's largest white wyandotte farm. F. W. Hallett. Am P Advocate 25:263-4 Mr '17  
Day on a New Jersey poultry farm. C. S. Greene. Rural N Y 76:1348 N 24 '17  
Development of a 300-hen farm into one with 3000 layers. A. F. Hunter. il Reliable P J 23:210+ Ap '16  
Electrical chicken farm. il Sci Am (233 Broadway, N.Y. 10c) 119:153 Ag 24 '18  
Enlarging the poultry plant. W. C. Smith. Kimball's D F 14:121 F 15 '16  
From Boston to a poultry farm. E. H. Bartlett. Am P J 49:465 Ap '18  
From law to leghorns. H. S. Stabler. il Country Gent 81:5-6 Ja 1 '16  
Has won remarkable success in poultry industry. H. C. Sheppard. Berea, O. A. O. Schilling. Reliable P J 24:963-4 Ja '18  
Home of aristocrat barred rocks. S. Strong. il Reliable P J 24:1184 F '18  
How a man can make a living on a commercial poultry plant. A. J. Kyle. Am P Advocate 25:398 Ap '17  
How careful attention to orders holds trade. H. C. Sheppard. il System on the Farm 1: 247-50 S '17  
How one man escaped from a rolling mill to a paying farm. A. F. Hunter. il Reliable P J 23:64+ Mr '16  
How Yesterday egg strain was developed. R. C. Lawry. il Reliable P J 25:22-4 Mr '18  
It's the man—not the plan. P. K. White. il Am P J 47:478-9 Mr '16  
Keelerville, home of Keeler white wyandottes. S. Strong. il Reliable P J 24:1187 F '18  
Making a living from a combination poultry and fruit farm. A. A. Graham. il Reliable P J 22:1402-4+; 23:56-7+ F-Mr '16  
Making a start with poultry in a most satisfactory way. A. F. Hunter. il Reliable P J 23:569+ J1 '16  
Man seeking health builds profitable poultry business. A. F. Hunter. il Reliable P J 24: 43-4 Mr '17  
Mid-west egg farm ships to eastern egg market. il Reliable P J 25:740-1 N '18  
Modern poultry equipment. J. C. Perry. O Judd Farmer 60:5 F 5 '16  
National farm. Point Fortune. J Ag (Quebec) 20:195 Mr '17  
Owen farms on Martha's Vineyard. P. T. Woods. il Am P J 47:36-8 Ja '16  
Paying poultry farm of W. J. Cocking. Vineland, New Jersey. J. R. Kessler. il Country Gent 82:114 Ja 20 '17  
Poultry and an orchard. H. W. Collingwood. il Country Life 30:40-1 Ag '16  
Poultry farm disinfection. J. B. Paige. Mass Ag Ext C 59 4p '18  
Poultry farm that has paid for the improvements. H. W. Doyle. il Country Gent 81:147 Ja 22 '16  
Poultry farming. W. H. Jenkins. Nat Stock & F 41:93 Ap 14 '17  
Poultry farming on business basis. il Reliable P J 25:620-1 S '18  
Present-day poultry farms. il Am P J 49:289, 409 Mr-Apr '18  
Present day poultry farms. M. F. Delano. Am P J 49:521, 711-13 My. Ag '18; Same (pt 2). Am P Advocate 26:532 Ag '18  
Public poultry farm at the Vineland. (N.J.) training school. M. Fleischer. il Country Gent 81:651+ Mr 18 '16  
Recent visits made by R. P. J. field representative. S. Strong. il Reliable P J 24:852+ D '17  
R. P. J. representative visits Starks farm. S. Strong. il Reliable P J 25:36 Mr '18  
Specialty breeding barred plym. rocks. P. T. Woods. il Am P J 47:45-7 Ja '16  
Story of poultry success of Chas. J. Labahn. Reliable P J 24:759 N '17  
Success in the chicken business. il Wallaces' F 43:895 Je 7 '18  
System and hens. L. V. Chapin. il Country Gent 82:241+ F 10 '17

- \$2000 profit made last year on three acres. A. F. Hunter. il Reliable P J 23:360+ My '16  
Visit to Oak Dale poultry farm. S. Strong. il Reliable P J 24:1180-1 F '18  
Well-conducted specialty farm. P. T. Woods. il plans Am P J 47:244-7 F '16  
Well known Ohio poultry breeders. S. Strong. Reliable P J 25:260 Ap '18  
Where poultry is the back-bone of an ever growing prosperity. L. J. Brosemer. il Reliable P J 23:356 My '16  
White-egg farm. W: H. Dean. il Country Gent 82:1208 J1 23 '17

See also United States government poultry farm

**Equipment**

- Start poultry plant with right equipment. Am P Advocate 24:199 F '16
- Poultry hatcheries**
- Baby chick industry. Am P J 49:308 Mr '18  
Baby chick's big chance. H. A. Roberts. il Country Gent 83:9+ F 23 '18  
Coming—the roosterless farm. M. Hastings. il Country Gent 83:9+ Ag 10 '18  
Development of the day-old chick industry. H. H. Knapp. il Reliable P J 25:213-14 Ap '18  
Directory of day-old chicks available during April, May and June. il Reliable P J 25:178-80 Ap '18  
Distribution of baby chicks. il Ag Gaz of Canada 5:482-5 My '18  
Enormous demand for day-old chicks. Reliable P J 23:533 Je '16  
Future of the baby chick industry. H. H. Knapp. Am P J 48:1153 D '17  
History of the day-old chick industry in America. il Reliable P J 25:189+ Ap '18  
Little chick business as a first aid to the beginner. Mrs C. C. Doorly. Prac F 112:457 D 15 '16  
Little journey to America's largest hatchery. R. E. Porter. il Am P Advocate 26:368-9 Ap '18  
Mammoth day-old chick hatcheries. W: F. Fry. Reliable P J 23:65+ Mr '16  
Matter of mammoth day-old chick hatcheries and their products. Reliable P J 23:74+ Mr '16  
Ohio and the day-old chick business. F. S. Jacoby. il Ohio F 137:157 F 5 '16  
Outlook for chick hatchery development in United States. M. Hastings. il Reliable P J 25:403-5 Je '18  
Outlook in this field is bright. Reliable P J 25:552 Ag '18  
Scheme for the increase of poultry production. J Bd Ag 23:71-3 Ap '16  
World's largest day-old chick hatchery. S. Strong. il Reliable P J 25:166 Ap '18
- See also International baby chick association
- Poultry hoppers**
- Some handy hoppers. W. Richardson. il Country Gent 81:1594 Ag 26 '16
- Poultry houses**
- A-type house. C. C. McCurdy. Nat Stock & F 41:25 Mr 31 '17  
About poultry house construction. E. J. W. Dietz. Am P Advocate 25:96 Ja '17  
Attractive back yard poultry plant—two practical houses. H. W. Jackson. plan Reliable P J 24:357-8+ Je '17  
Back yard poultry house. plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2236: 42 Mr 23 '18  
Back yard poultry plant yields \$3,800. E. W. Mahood. il Reliable P J 24:1133+ F '18  
Building a farm poultry house in northwestern Minnesota. C. E. Brown. plans Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 97-102) '17  
Built and used for poultrymen. rev ed 139p il plans '17 Big four poultry journal, Chicago  
Calico poultry-houses. P. H. Falkner. J Bd Ag 22:969-77 Ja '16  
Cheap henhouse. S. F. Aaron. il Country Gent 81:900 Ap 22 '16  
Cheerful places for fowls?—sure! P. T. Woods. il Am P J 47:753-5 My '16



**Poultry houses --Continued**

- \* Chicken coop that can be added to a private garage. H. Jensen. plan Bldg Age (243 W. 39th st. N.Y. 25c) 40:558-9 D '18
- Chicken houses. R. M. Sherwood. il plans Kan Ag Exp C 61:1-15 '17
- Circular henhouse. R. Schoff. il Country Gent 83:37 O 19 '18
- Colony brooder houses. A. G. Philips. diags plans Purdue Ag Ext B 52:1-8 '16; Excerpts. Purdue Ag 11:18-19 F '17
- Colony house for the fruit farm. M. H. Decker. il Fruit-Grower 27:86 F 1 '16
- Colony sheds for chicks. J. R. Kessler. il Country Gent 82:846 My 5 '17
- Combination garage and hen house. P. B. Ruggles. il plan Country Life 30:70 O '16
- Commercial poultry house equipment. Mr and Mrs G: R. Shoup. plans Western Wash Ag Exp B v 4:3-11 Ag '16
- Concrete floor for poultry house. A. G. Philips. Country Gent 81:1558 Ag 19 '16
- Concrete for the poultry house. H. C. Campbell. il Hoard's D 52:577 N 17 '16
- Current fashions in poultry houses. F. H. Valentine. Country Life 30:54 O '16
- Cutting building costs. H. C. Sheppard. il System on the Farm 2:217 Je '18
- Demonstration poultry houses for Quebec. A. G. Taylor. J Ag (Quebec) 20:194 Mr '17; Same. Ag Gaz of Canada 5:4-6 Ja '18
- Different style of poultry house. D. Prowant. il Nat Stock & F 41:199 My 12 '17
- Do your hens sit in a leafless tree? Prog F 32:6 Ja 6 '17
- Dual-purpose poultry house. J. Haddington. il plans Ag Gaz of New South Wales 27:656-9 S '16
- Egg-getting hints. E. T. Owen. Ohio F 137:136 Ja 29 '16
- Fall building for farm poultry. B. Sando. il Field 11 28:638 S '18
- Farm poultry; construction of poultry houses. W. R. Graham and F. N. Marcellus. il plans Ontario Ag Dept B 247:16-36 '17
- Farm poultry house. J. E. Maxwell. Purdue Ag 12:85-6 N '17
- Farmer's poultry house. J. G. Halpin and L. M. Schindler. il plans Wis Ag Ext C 62: 1-4 '16
- Fix up the poultry house. K. Perkins. Prog F 32:1127 O 27 '17
- Fool-proof poultry house. Fruit-Grower 27: 112 F 1 '16
- Fresh air from health and profit standpoints. M. K. Boyer. Am P Advocate 26:644 N '18
- Good fowls and a good house. H. A. Roberts. il plan Country Gent 83:33 D 21 '18
- Hamburgs in an open-front house. J. A. Gamewell. il Am P J 48:884 Ag '17
- Henhouse construction. G. A. Cosgrove. Rural N Y 75:503 Mr 18 '16
- Hen-house devices. L. A. Stahmer. il Country Gent 83:29 Mr 2 '18
- Hens pay better than horses. Mrs G: L. Russell. il Fruit-Grower 27:78-9 F 1 '16
- Hints on poultry-house construction. J. T. Bartlett. Ohio F 142:84 Jl 27 '18
- His reasons for success. W. B. German. Prac F 112:14 Ja 1 '16
- House essential to egg production. I. J. Mathews. il Ohio F 139:426 Mr 17 '17
- House for a small or back-lot flock. P. T. Woods. Am P J 48:573 Ap '17
- House for 100 leghorns. J. T. Bartlett, jr. il plan Country Gent 81:1736 S 23 '16
- Housecleaning for hens. Country Gent 81:1629 S 2 '16
- Housing and feeding poultry. J. T. Bartlett. Prac F 113:287 Ag 15 '17
- Housing of chickens. J. Dryden. il diags plans Ore Ag Ext B ser 7, no 2:1-18 S '16
- Housing of poultry; a good standard house and runs. A. E. Salisbury. il plan J Ag New Zealand 13:97-104 Ag '16
- Housing poultry. L. Lamb. il Purdue Ag 12:22 O '17
- Housing the laying stock. M. A. Jull. J Ag (Quebec) 22:81 N '18
- Ideas for inside of the poultry house. J. R. Kessler. Prac F 113:409 D 1 '11

- Improvements in henhouse construction. D. W. Hallock. il Rural N Y 75:465 Mr 18 '16
- Increased floor space at lower cost. A. Fifield. System on the Farm 3:228 D '18
- Junior poultry house. J. G. Halpin. il Hoard's D 54:306 S 28 '17
- Litter for the poultry house. Country Gent 81: 273 F 5 '16
- Littering of poultry-houses. A. T. Johnson. J Bd Ag 23:772-3 N '16
- Meeting seven problems to increase my profits. J. W. Taft. il System on the Farm 1: 367-8 D '17
- Missouri poultry house. il plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2243: 38 My 11 '18
- Missouri poultry house. H. L. Kempster. il plan Mo Ag Exp C 80:1-7 '16
- Mrs White's new \$800 poultry house. il Reliable P J 24:1135 F '18
- New idea in housing. T. F. Jager. Prac F 112: 194 My 1 '16
- New poultry-breeding house. il Country Gent 81:688 Mr 25 '16
- New sanitary poultry house. S. K. Burdin. Am P Advocate 25:656 O '17; Same abr. Am P J 48:1014 O '17
- New York state poultry house. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2232: 42 F 23 '18
- Open-air henhouse. L. E. Payne. il plan Country Gent 82:1332 Ag 25 '17
- Piano box hen house. F. S. Jacoby. il Ohio Ag Ext B v 11, no 10 4p '15-'16
- Piano-box poultry house. W. O. Mills. il Country Gent 83:24 Ja 12 '18
- Piano box poultry house for a small flock of chickens. P. E. McCoy. Reliable P J 23:573-4 Jl '16
- Planning winter quarters. G: W. Brown. Ohio F 138:330 O 7 '16
- Plans for a poultry house. plans Green's Fruit Grower 37:30 Mr '17
- Plaster board poultry-house. il Ohio F 137:583 Ap 15 '16
- Portable house and run for chicks. P. B. Ruggles. il Country Life 30:96 S '16
- Portable poultry house. P. Mott. il Country Gent 82:700 Ap 7 '17
- Poultry and fruit; a model poultry house for the farm. W. Gamble. plan J Dept Ag Victoria 15:656-60 N '17
- Poultry brooder house. plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2233:36 Mr 2 '18
- Poultry house. M. E. Dickson. Fruit-Grower 28:109 F 1 '17
- Poultry house. W. E. Vaplon. il plan Colo Ag Ext B 126:1-7 '17
- Poultry house at the farm. C. A. Norman. Purdue Ag 10:28 My '16
- \* Poultry house built by a practical builder and poultryman. H. H. Shepard. il plan Bldg Age (243 W. 39th st, N.Y. 25c) 40: 522-3 N '18
- Poultry house construction. il Ag Digest 1: 393 Ap '17
- Poultry-house construction. Rural N Y 75:64, 96 Ja 8-15 '16
- Poultry-house equipment. C: L. Opperman. Country Gent 81:28-9 Ja 1 '16
- Poultry-house floors. Weekly N L 5:8 N 7 '17; Same. Am P Advocate 26:17 D '17
- Poultry house for the farm. il Building Age (243 W. 39th st. N.Y. 20c) 39:620 N '17
- Poultry-house remodeling. I. J. Mathews. Ohio F 142:507 N 23 '18
- Poultry houses. M. C. Kilpatrick. il plans Ohio Ag Ext B v 12, no 2 32p '16-'17
- Poultry houses. E. J. Peterson. N D Ag Exp C 14:1-4 '16
- Poultry houses. W. F. Schoppe. il plans Mont Ag Exp C 72:49-69 '17
- Poultry houses and equipment for Texas farms. T. J. Conway. Tex Ag Ext B B-10:103-8 '16
- Poultry houses and poultry equipment for Texas. R. N. Harvey and others. plans Tex Ag Exp B 207:1-23 '17
- Poultry houses for New York state. W. G. Krum. il plan N Y Farms & Markets Dept Ag B 97:271-9 Jl '17

**Poultry houses—Continued**

- \* Poultry houses for war time. E. I. Farrington. *il Independent* (119 W. 40th st, N.Y. 10c) 95:162 Ag 3 '18
- Poultry houses properly located. *Am Coop J* 11:960 My '16
- Poultry housing. F. M. Loomis. *il Farm Eng* 3:158 F '16
- Poultry housing. S. R. Stout. *Am P Advocate* 25:727 N '17
- Poultry raising in the South; housing the flock. F. S. Gammack. *Hampton Leaflets* 7, no 6:12-16 '16
- Practical poultry house. plan *Nat Stock & F* 40:970 D 23 '16
- Practical poultry housing. J. H. Robinson. *il plan Mass Ag Ed B* 1:132-48 '17
- Principles of poultry house construction with general and detailed plans. F. C. Elford. 55p *il '16 Canada Ag*
- Pullet laying house. G. R. Shoup. *il plan Western Wash Ag Exp B v* 4:12-20 Jl '16
- Read it, you fresh-air advocates—then think! E. L. Sweetser. *il Am P Advocate* 26:166 F '18
- Roosting quarters. J. R. Kessler. *il Country Gent* 81:1771 S 30 '16
- Sanitation in poultry yards. T. Z. Richey. *Ohio F* 137:12 Ja 1 '16
- Scientific henhouse; built for convenience and efficiency. M. E. Dickson. *il Country Gent* 83:34 My 18 '18
- Scientific poultry house construction. W. C. Dumble. *Am P J* 47:1139 O '16
- Semi-monitor roof poultry houses. H. W. Jackson. *Nat Stock & F* 40:380 Jl 8 '16
- Semi-open-front model for 150 heavy laying hens. H. A. Roberts. *Country Gent* 81:940-1 Ap 29 '16
- Shed roof poultry house. H. Shearer. plan *Farm Eng* 3:174 F '16
- Short cuts for poultrymen. E. I. Farrington. *il Ohio F* 142:182 Ag 24 '18
- Small poultry house and hints on poultry raising. C. H. Burgess. *il diags Mich Ag Ext Club B* 6:1-12 '16
- Some essentials in poultry house construction. F. H. Stoneburn. plan *Field* *il* 27:358 My '17
- Some pointers on cold weather brooding. M. H. Decker. *Am P J* 48:27-9 Ja '17
- Some types of poultry houses built in the West. *il plan Building Age* (243 W. 39th st, N.Y. 25c) 40:142-5 Mr '18
- Southern poultry house. plan *Am Lumberman* (431 S. Dearborn st, Chicago 15c) 2238: 43 Ap 6 '18
- Successful Iowa shed roof poultry house. G. M. Turpin and M. F. P. Costello. *il plans Ia Ag Exp B* 176:175-184 '18
- Suitable litters. F. F. Hunstock. *Kimball's D F* 14:840 Ja 1 '17
- Tennessee open-front poultry house. R. N. Crane and J. Arentson. *il plan Tenn Ag Ext Pub* 70 4p '18
- That new poultry-house. T. Z. Richey. *Ohio F* 138:112 Ag 5 '16
- Town lot poultry house. A. E. Vandervort. *il Am P Advocate* 26:97, 140 Ja '18
- Unique laying house for hens. O Judd Farmer 62:3 F 3 '17
- West Virginia poultry; housing the farm flock. C. E. Weakley, jr. *W Va Ag Dept B* 14:59-62 '16
- Whitewash the poultry houses. K. Perkins. *Prog F* 32:862 Ag 11 '17
- Winter care of the hens. N. A. Nowell. O Judd Farmer 60:15 Ja 22 '16

**Disinfection**

- Disinfecting the hen house. *Purdue Ag* 10:28 My '16
- Poultry house disinfection. *J Ag (Quebec)* 21: 93 D '17

**Equipment**

- Overhauling equipment. *Country Gent* 81:702 Mr 25 '16
- Poultry fixtures. F. W. Kazmeier. *Nat Stock & F* 40:918 D 9 '16

**Lighting**

- Discovery of lighting system in Northwest. *Reliable P J* 25:752 N '18

- Eggs by artificial daylight. O. B. Stephens. *Scientific Am* (233 Broadway, N.Y. 10c) 116:305 Mr 24 '17
- Electric-lighted henhouses. C. A. Lyman. *Country Gent* 83:33 Ja 19 '18
- Extending daylight for the hen. M. B. Dean. *Rural N Y* 77:513 Ap 6 '18
- Influence of illumination on production of winter eggs. *il Reliable P J* 25:607+ S '18
- Influence of illumination on the production of winter eggs. J. E. Rice. *Reliable P J* 25: 868+ D '18
- Light in the poultry house. F. C. Elford. *il Ag Gaz of Canada* 5:1045-8 N '18
- Lighting system for increasing egg production. J. B. Roe and E. C. Waldorf. *il Reliable P J* 25:187-8+ Ap '18
- Lights to make hens lay. R. S. Moseley. *Country Gent* 82:1500 S 29 '17
- Longer day for hens. *Nat Stock & F* 41:730 O 27 '17
- Making artificial daylight for poultry. G. R. Shoup. *il Western Wash Ag Exp B v* 6:113-17 N '18
- More eggs by lighting chicken coops. G. A. Lowther. *Electrical Review and Western Electrician* (608 S. Dearborn st., Chicago 10c) 70:76 Ja 13 '17
- More evidence of egg-yield value of lighting system. M. E. Atkinson; E. E. Emerson. *il Reliable P J* 25:541+ Ag '18
- Use of artificial lighting to increase winter egg yield. L. Banta. *il Reliable P J* 25:765-6+, 866-7+ N-D '18
- Works the hens day and night; electricity in the pens. J. P. Jordan. *Cornell Countryman* 15:199-201 Ja '18

**Ventilation**

- Experience in ventilation. W. H. Jenkins. *Nat Stock & F* 41:921 D 22 '17
- Hens need fresh air. *Weekly N L* 5:4 Ja 23 '17; Same. *Am P Advocate* 26:172 F '18
- Poultry-house ventilation. E. I. Farrington. *Ohio F* 140:456 N 17 '17
- Poultry house ventilation. R. E. Jones. *Am P Advocate* 25:192 F '17
- Ventilate the poultry house. *Prac F* 114:65 F 15 '18
- Ventilation of poultry houses. *Ag Gaz of Canada* 3:709-13 Ag '16
- Ventilation of poultry houses. F. C. Elford. *il Ag Gaz of Canada* 3:681-4 Ag '16
- Ventilation of poultry houses. M. A. Jull. plans *J Ag (Quebec)* 21:93 D '17
- Ventilation of poultry houses. J. L. Phillips. *Am P J* 47:798 My '16
- Poultry industry and trade**
- Advancement of poultry interests. H. E. Noyst. *il Am P J* 49:156 F '18
- Advertising and selling baby chicks. J. A. Martin. *Prog F* 31:103 Ja 15 '16
- Appeals for organization and co-operation. T. E. Quisenberry. *Reliable P J* 21:667+ O '17
- Boost the hen—our country needs the eggs. A. G. Philips and G. M. Curtis. *il Reliable P J* 21:743+ N '17
- Bright future of standard-bred poultry industry in Florida. H. F. Reils. *il Reliable P J* 23:1077+ Ja '17
- British poultry industry under war conditions—and after. E. Brown. *Reliable P J* 24: 359+ Je '17
- Can a man make a living on a commercial farm? E. Warren. *Am P Advocate* 25:265-6 Mr '17
- Carter's St Louis meeting; letter addressed to live poultry shippers. *N Y Prod R* 43: 290 D 13 '16
- Catering to hotel trade. J. R. Kessler. *Country Gent* 81:1559 Ag 19 '16
- Conditions in the poultry field. E. E. Richards. *Reliable P J* 23:238 Ap '16
- Criminal treatment of poultry. *Rural N Y* 75: 739 My 13 '16
- Educating the public. C. D. Cleveland. *Am P J* 48:971-2 O '17
- Educational campaign wins at convention of the American warehousemen's association. *N Y Prod R* 45:185 D 12 '17



**Poultry industry and trade—Continued**

- Efficiency is the foundation of success in every business. C: McAlister. Reliable P J 23:487+ Je '16
- Encourage experienced poultrymen. J. D. Simmers. Am P J 49:666 Jl '18
- Englishman's frank views of poultry industry in America. E: Brown. Reliable P J 24:748-9+ N '17
- Establishing demonstration poultry farms in Indiana. A. G. Phillips and L. L. Jones. Reliable P J 24:668 O '17
- Export eggs and poultry. N Y Prod R 44:624 Ag 15 '17
- Feed prices vs. poultry profits. J. W. Keller. Am P Advocate 25:18 D '16
- Government poultry campaign. Am P J 49:328 Mr '18
- Great injustice to patriotic poultrymen. P. T. Woods. Am P J 49:361 Mr '18
- Has won remarkable success in poultry industry; H. C. Sheppard, Berea, O. A. O. Schilling. Reliable P J 24:963-4 Ja '18
- Help speed up poultry production. H. L. Wilson. Am P J 49:575 My '18
- How Britain has faced her poultry industry problem. E: Brown. Reliable P J 24:585 S '17
- How British poultrymen are meeting the situation. E: Brown. Reliable P J 24:972-3 Ja '18
- How would you answer this letter? Am P J 49:606-7 Je '18
- Interesting address by M. E. Pennington. Wallaces' F 41:495 Mr 24 '16
- Interview at Washington, D.C., with W. F. Priebe. Reliable P J 25:375-6+ Je '18
- Just understanding and a square deal. P. T. Woods. Am P J 48:22-6 Ja '17
- Latest live poultry move; distributing trade in New York city organizing. N Y Prod R 42:706 Ag 23 '16
- Live poultry combinations. N Y Prod R 44:749 S 12 '17
- Live poultry inspection. J. Hartigan. N Y Prod R 42:370 Je 21 '16
- Live poultry investigation. N Y Prod R 42:129+, 177+ My 17-24 '16
- Live poultry prices. N Y Prod R 43:921 Ap 4 '17
- Live poultry trade. il N Y Prod R 42:969-70+ O 4 '16
- Live poultry trade. C. C. Miller. N Y Prod R 46:182 My 29 '18
- Magnitude of the poultry industry as shown by statistics. M. Purvis. il Breeder's Gaz 70:233 Ag 17 '16
- Market distribution of poultry products. E. W. Benjamin. N Y Ag Dept B 86:2380-6 Ag '16
- Marketing problems. N J Ag Exp Rep 1916:168-73 '17
- Missouri association's annual convention at Kansas City. N Y Prod R 41:833+ Mr 15 '16
- Missouri valley cackle; this fall it is about twenty-five per cent off. S: O. Rice. Country Gent 82:1865+ D 1 '17
- More signs of the times. T. F. McGrew. Am P Advocate 25:605-6 S '17
- Most promising future in America for fine table poultry. F. L. Sewell. il Reliable P J 23:567+ Jl '16
- New England poultry industry's appeal. H. P. Gilmore. Am P J 49:426 Ap '18
- Optimism shown by poultry producers. H. T. Woods. Am P J 48:977 O '17
- Outlook for the poultry business. G: R. Shoup. Western Wash Ag Exp B v 5:26-8 My '17
- Perils of the poultry business; are these the facts? C. H. Chandler. Rural N Y 77:394 Mr 9 '18
- Picking profits out of poultry. H: F. Thurston. il Am Coop J 13:132-3 D '17
- Plain talk for plain poultry people. E. R. Johnson. Am P J 49:102 Ja '18
- Poultry as a source of meat. Nonpartisan Leader (Box 575, St Paul, Minn. \$2.50 per yr.) 5:11 D 31 '17
- Poultry conditions thru New England. P. T. Woods. Am P J 48:1047-8 N '17
- Poultry frauds. J. J. Hartigan. N Y Prod R 42:666 Ag 16 '16
- Poultry industry: its importance in agricultural development. H. M. Lamon. (In Pan American scientific congress Proc., 1915, v. 3, p. 460-6) '17
- Poultry industry: market prospects after the war. D. F. Laurie. J Dept Ag S Australia 20:480-2 Ja '17
- Poultry is still a billion dollar industry. F. L. Platt. Reliable P J 25:56+ Mr '18
- Poultry markets. See weekly numbers of New York produce review and American creamery
- Poultry men confer with Chief C. J. Brand. N Y Prod R 44:417 Jl 11 '17
- Poultry outlook for 1916. Rural N Y 75:199 F 5 '16
- Poultry packing & packages. N Y Prod R 43:478 Ja 17 '17
- Poultry world events and progress. Reliable P J 25:655+, 822 O, D '18
- Poultryman's complaint. H. A. Roberts. il Country Gent 82:1726+ N 10 '17
- Poultryman's profits. G: Cugley. Am P Advocate 26:250-1 Mr '18
- Powerful address on saving eggs and poultry as food. H. A. McAleer. il Reliable P J 25:55+ Mr '18
- Practical basis of success for commercial egg plants. F. D. Cornell. Reliable P J 25:476+ Jl '18
- Practical facts and advice from man of experience. T. E. Quisenberry. Reliable P J 24:969+ Ja '18
- Practical lessons learned from a study of the standard-bred poultry business. T. E. Quisenberry. Reliable P J 24:741-2+ N '17
- Present day, war-time, foundation facts about poultry industry of United States. il Reliable P J 25:386-91 Je '18
- Put poultry business on sound basis. F. H. Brown. Am P J 48:879 Ag '17
- Reconstruction period of European poultry industry. E: Brown. il Reliable P J 25:61+ Mr '18
- Review of poultry conditions in twelve states. H. W. Jackson. Reliable P J 24:519 Ag '17
- Right way to increase production. P. T. Woods. Am P J 48:909-10 S '17
- Sample reports about the work of poultry hucksters. G. M. Curtis. Reliable P J 23:216-17 Ap '16
- Seasonable facts of special interest to poultrymen. H. R. Lewis. N J Ag Exp Hints to Poultrymen v 7 4p O '18
- Some reasons for failure in the poultry business. E. J. W. Dietz. Am P Advocate 25:360-2 Ap '17
- Spring egg meetings. N Y Prod R 41:785+ Mr 8 '16
- Strong facts and urgent advice to R. P. J. readers. A. J. Ward. il Reliable P J 24:1097-8+ F '18
- Success with poultry. O. W. Aldrich. Am P J 48:1083 N '17
- Tentative plan for co-operation of United States Department of agriculture and the American poultry association. Reliable P J 24:593 S '17
- This little chicken went to market. M. C. Kilpatrick. il Country Gent 81:1286-7 Jl 1 '16
- To force poultry sales. N Y Prod R 45:37 N 14 '17
- Trade-marks are remembered when the name is forgotten. il System on the Farm 1:329-30 N '17
- Urge no government interference with normal movement of live fowls to market. N Y Prod R 45:431 Ja 30 '18
- Vanishing roaster. E. I. Farrington. Country Gent 82:1984 D 15 '17
- Views and plans of foremost American poultrymen to date. Reliable P J 24:572-80 S '17
- Views of head of United States Food research laboratory on present importance of poultry industry. il Reliable P J 25:381-5 Je '18
- War lessons from English poultrymen. T. E. Quisenberry. Am P Advocate 25:612-13 S '17
- Same. Am P J 48:945 S '17
- War's effects on the poultry business. G: Scott. Am P J 48:886 Ag '17
- Were I to start in the poultry business. Am P J 49:667 Jl '18
- What are we going to do about it? A. G. Taylor. J Ag (Quebec) 21:186 Je '18

**Poultry industry and trade—Continued**

- What co-operation among women in the poultry field means. Mrs. C. S. Valentine. Reliable P J 23:351-2+ My '16
- What is wrong with the egg producer? Mrs. H. A. Daniels. Am P J 48:910+ S '17
- What Uncle Sam is doing for poultry. P. T. Woods. il Am P J 47:982-6, 1050-3, 1118-20 Ag-O '16
- What's wrong with the poultry business? J. C. Marquis. il Country Gent 83:26 Je 15 '18
- Where poultry is the back-bone of an ever growing prosperity. L. J. Brosemer. il Reliable P J 23:355-7+ My '16
- Why and how to hatch early. S. P. Smyth. il Purdue Ag 10:22-3 Mr '16
- Winning world war by advertising nutritious egg to victory. Reliable P J 25:600 S '18
- See also Egg trade; Poultry and egg trade conference; also Harlem and Bronx live poultry associates

**Regulation**

- Discourages the sale of hens. P. T. Woods. Wallaces' F 43:356 F 22 '18
- Embargo on fowls modified. N Y Prod R 45:883 Ap 17 '18
- Food administration explains poultry edict. Am P J 49:472 Ap '18
- Forbids trading in live hens. O Judd Farmer 64:16 F 23 '18
- Legal status of stored poultry. N Y Prod R 45:1 N 7 '17
- Live poultry regulations; dealers sign price agreement. N Y Prod R 45:573 F 20 '18
- Mr Hoover and the American hen; a defense of criticism. J. P. Henry. Am P J 49:410-12 Ap '18
- New poultry embargo. N Y Prod R 45:493 F 13 '18
- Poultry embargo and prospect. E. T. Owen. Ohio F 141:568 Ap 20 '18
- Poultry embargo; order bitterly criticised. H. B. Hole. N Y Prod R 45:685 Mr 13 '18
- Poultry licenses suspended. N Y Prod R 47:97 N 27 '18
- Poultry world events and progress. Reliable P J 25:155+ Ap '18
- Poultryman's dilemma; Vermont operators embarrassed by embargo on hens. N Y Prod R 45:694 Mr 13 '18
- Prohibitive poultry order. L. E. Card. Rural N Y 77:527 Ap 6 '18
- Timely poultry problem. Am P Advocate 26:254 Mr '18

**Statistics**

- Average price per pound received by farmers on first of each month indicated, 1914 and 1915. U S Ag Yearbook 1915:528
- Commercial stocks of dressed poultry and game. U S Food Surveys 1:13-15 Je 29 '18

**Poultry manure**

- Best use of poultry manure. W. H. Jenkins. Nat Stock & F 41:1042 Ja 19 '18
- Chicken manure for young trees. J. P. Stewart. Country Gent 81:1508 Ag 12 '16
- Conserving poultry droppings. H. R. Lewis. il Breeder's Gaz 72:46 Jl 12 '17
- Experience in handling hen manure. E. R. Hewitt. Rural N Y 75:228 F 12 '16
- Fourth annual international egg laying contest; disposition of poultry manure. W. F. Kirkpatrick and L. E. Card. il Conn Storrs Ag Exp B 87:212-16 '16
- Handling gallinaceous fertilizer in a practical way. S. R. Duffy. Gard M 26:50 S '17
- Handling poultry manure. Mr and Mrs G. R. Shoup. il Western Wash Ag Exp B v 5:112-17 N '17
- Poultry manure. Coop Manager & F 6:78 Ja '17
- Poultry manure. Va Ag Dept B 115:154 '17; Same. Am P Advocate 25:103 Ja '17
- Poultry manure should be saved for fertilizer. Am P Advocate 26:375 Ap '18
- Poultry manures; their treatment and use. W. P. Brooks. Mass Ag Ext C 53:1-7 '18 (rev.)
- Problem of handling poultry manure. F. E. Upson. Rural N Y 75:147-8 Ja 29 '16
- Use of hen manure. Rural N Y 77:147 F 2 '18

- Value and preservation of poultry manure. H. E. Eswine. Ohio Ag Ext B v 11, no 7 3p '15-'16
- Value of wood ashes and hen manure. R. L. Watts. Market Growers J 22:172 Mr 1 '18
- Will it pay to ship hen manure? Rural N Y 76:4 Ja 6 '17

**Poultry producers of central California**

- Poultry producers of central California, inc. (In Report Cal. State market director, 1916, p 14-17) '16 Cal. State market director, Sacramento

**Poultry self feeders**

- Automatic poultry feeder. il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26:227 O '16
- 40-quart home-made automatic grain feeder for 45 cents. R. E. Briggs. Am P Advocate 24:202-3 F '16

**Poultry shows**

- Advocates cancelling all classes at poultry shows that are not filled. W. W. Graves. Reliable P J 23:652 Ag '16
- America's greatest quality show, Boston, January, 1916. N. W. Sanborn. il Am P Advocate 24:309-11, 400+ Mr '16
- Another great exhibit of poultry at New York state fair. L. J. Brosemer. il Reliable P J 23:864-5+ N '16
- Big poultry exhibit at New York state fair. Reliable P J 24:527 Ag '17
- Blue ribbon. H. Hovey. Country Life 31:118 D '16
- Boston holds its place among America's great poultry shows. L. J. Brosemer. il Reliable P J 23:1198-1203+ F '17
- Boston poultry show, 1917, awards. Am P Advocate 25:223+, 317+ F-Mr '17
- Boston show, 1918. N. W. Sanborn. Am P Advocate 26:159-62 F '18
- Boston's first poultry show and its latest great exhibition. L. J. Brosemer. Reliable P J 23:51-3+ Mr '16
- Buffalo poultry show, November 22-27, 1915. L. J. Brosemer. il Reliable P J 22:1231+ Ja '16
- Chicago Coliseum poultry event. Reliable P J 24:529 Ag '17
- Chicago Coliseum poultry show. E. Whitney. il Am P J 48:62-3+ Ja '17
- Coliseum show awards, Chicago, Dec. 13-18, 1916. Am P Advocate 25:219, 314 F-Mr '17
- Detroit, Mich., show, Jan. 26-31. W. F. Fry. Reliable P J 23:92 Mr '16
- Echoes of the San Francisco convention. P. T. Woods. Am P J 47:515+ Mr '16
- Educational value of the poultry show. G. H. Smith. Am P J 48:912 S '17
- Every poultry show helps the industry. I. K. Felch. Am P J 48:243 F '17
- Exhibition of Empire poultry association at Grand Central palace, Dec. 7-11, 1915. P. T. Woods. il Am P J 47:76-83+ Ja '16
- Exhibition of N. Y. poultry and pigeon association at Madison Square Garden, Dec. 31, 1915-Jan. 5, 1916. P. T. Woods. il Am P J 47:272-9+ F '16
- 1st annual exhibition by new Kansas City organization, Nov. 26-Dec. 2, 1917. Reliable P J 24:1074+ F '18
- 1st National all-leghorn show, Columbus, Ohio, Nov. 28-Dec. 3, 1917. S. Strong. il Reliable P J 24:1105+ F '18
- 4th annual show of the Chicago poultry breeders' association, Jan. 10-16, 1917. E. Whitney. il Am P J 48:280-1+ F '17
- Good show at Indianapolis, Ind., 1916. W. F. Fry. Reliable P J 22:1498+ F '16
- Good show at Indianapolis; list of awards. W. F. Fry. Reliable P J 24:64 Mr '17
- Grand display of appliances at Madison Square Garden. M. K. Boyer. Am P Advocate 24:220+ F '16
- Great Boston show. P. T. Woods. Am P J 49:243+ F '18
- Great Boston show, Jan. 9-13, 1917. N. W. Sanborn. Am P Advocate 25:167+ F '17
- Great Palace show. P. T. Woods. il Am P J 48:54-5+ Ja '17
- Greater Chicago a poultryman's joy-feast. S. Strong. Reliable P J 24:1101+ F '18
- Greater Chicago poultry show. il Reliable P J 23:1266+ F '17



**Poultry shows—Continued**

- High class poultry exhibit of U.S. Department of agriculture. Reliable P J 25:309-11 Mr '18
- Illinois state show, DeKalb, Ill. W: F. Fry. Reliable P J 22:1505 F '16
- Illinois state show, 1916. F. D. Rogers. il Am P J 47:1A+ F '16
- Indiana state fair. T. Hewes. Am P J 49: 858-9 O '18
- Indianapolis poultry and pet stock show; second annual exhibition. Am P J 49:379 Mr '18
- Judges should help. W. C. Young. Reliable P J 25:913 D '18
- Live stock awards at 1916 Iowa state fair. Ia Ag Bd Yearbook 1916:225-39
- Madison Square Garden poultry show. N. W. Sanborn. Am P Advocate 25:161-2+ F '17
- Madison Square Garden poultry show. P. T. Woods. il Am P J 48:194-5+ F '17
- Madison Square Garden show awards, Dec. 28, 1916-Jan. 3, 1917. Am P Advocate 25: 220+, 315 F-Mr '17
- Madison Square Garden show excels all previous records. L. J. Brosemer. il Reliable P J 23:1192-4+ F '17
- Madison Square Garden show, 1917-18. N. W. Sanborn. Am P Advocate 26:80-3 Ja '18
- Madison Square Garden—the premier poultry show of America; 1916 show. L. J. Brosemer. il Reliable P J 22:1397-9+ F '16
- Madison Square poultry show. L. P. Graham. Field il 26:130 F '16
- Many fine birds at tenth annual New York City Palace show. L. J. Brosemer. Reliable P J 23:1080-1 Ja '17
- Milwaukee coliseum show, Jan. 21-26. W: F. Fry. Reliable P J 23:137-8 Mr '16
- Missouri state poultry show. Reliable P J 23: 1126 Ja '17
- Missouri state poultry show held Dec. 24-29, at Springfield. S. Strong. Reliable P J 25: 80H Mr '18
- New York Palace show, 1916. N. W. Sanborn. il Am P Advocate 25:80-3 Ja '17
- New York state fair, 1916. N. W. Sanborn. Am P Advocate 24:771-3, 898-9 O '16
- New York state fair, Syracuse, Sept. 9-14 '18; list of awards. Am P Advocate 26:606 O '18
- 1915 Chicago coliseum show. W: F. Fry. Reliable P J 22:1233+ Ja '16
- 1915 Grand Central Palace show. L. J. Brosemer. Reliable P J 22:1237-8+ Ja '16
- 1916 Chicago Coliseum poultry show was a genuine success. W: F. Fry and L. J. Brosemer. Reliable P J 23:1075-6+ Ja '17
- 1917 New York state fair poultry show. F. L. Sewell and A. O. Schilling. il Reliable P J 24:650-1+ O '17
- 9th annual Chicago Coliseum show, Dec. 4-9, 1917. S. Strong. il Reliable P J 24:966+ Ja '18
- 9th annual exhibition, Chicago Coliseum, Dec. 4-9, 1917. T. Hewes. il Am P J 49:27+ Ja '18
- Omaha's educational poultry show. F. L. Sewell. Reliable P J 23:1134 Ja '17
- Organizing poultry show associations and show management. S. T. Campbell and W. A. Kiefer. Reliable P J 23:645-6 Ag '16
- Palace show, New York, December, 1915. N. W. Sanborn. Am P Advocate 24:96-9 Ja '16
- Panama-Pacific international exposition show, San Francisco, Nov. 18-25, 1915. H. H. Collier. il Am P J 47:158-9+ Ja '16
- Panama-Pacific international poultry exposition, November 18-25, 1915. F. L. Sewell. il Reliable P J 22:1255-9 Ja '16
- Philadelphia, Pa., poultry show. L. J. Brosemer. Reliable P J 22:1456-7 F '16
- Pittsburgh, Pa., show, Jan. 17-22, 1916. P. K. White. Am P J 47:307+ F '16
- Poultry at the Iowa state fair, 1918. Wallaces' F 43:1270 S 6 '18
- Poultry at the 1918 New York state fair at Syracuse. A. O. Schilling. Reliable P J 25: 661-3 O '18
- Poultry department at the recent Indiana state fair. L. J. Brosemer. il Reliable P J 23:871+ N '16
- Poultry displays at agricultural fairs in war time. il Am P Advocate 26:530-1 Ag '18; Same. Am P J 49:799+ S '18
- Poultry exhibition of Pittsburgh, Jan. 17-22. L. J. Brosemer. Reliable P J 23:120 Mr '16
- Poultry exhibits. F. C. Elford. Ag Gaz of Canada 5:337-9 Ap '18
- Poultry show—do you attend? E. H. Johns. Am P J 48:295+ F '17
- Poultry shows in Canada during war times. H. B. Donovan. Reliable P J 24:375-6 Je '17
- Quincy, Illinois, poultry show. Reliable P J 23:1122 Ja '17
- Quincy, Ill., poultry show. W: F. Fry. Reliable P J 22:1301-3 Ja '16
- Report of the Indianapolis (Ind.) 1918 show. S. Strong. Reliable P J 25:42 Mr '18
- Report of 29th annual New York poultry show, Dec. 28, 1917-Jan. 1, 1918. il Reliable P J 24:1116-17+ F '18
- Rochester, N.Y., show. L. J. Brosemer. Reliable P J 23:116 Mr '16
- Rochester show. Am P Advocate 25:286 Mr '17
- St Louis show also a real success. S. Strong. Reliable P J 25:87 Mr '18
- 2d Chicago show scored another success, Jan. 14-19. W: F. Fry. Reliable P J 23:63+ Mr '16
- 7th annual exhibition of Great mid-west poultry and pet stock association, Chicago Coliseum, Dec. 10-15, 1915. F. D. Rogers. il Am P J 47:116-22+ Ja '16
- 6th annual exhibit held under the auspices of the Cleveland poultry breeders' association, Jan. 7-12, 1918. Reliable P J 24:1094+ F '18
- Show at Rochester, Jan. 27-Feb. 3. Am P Advocate 24:366 Mr '16
- Single comb black Minorcas at Syracuse. Am P Advocate 26:595 O '18
- Success in exhibiting. Am P J 47:1022 Ag '16
- Success in poultry shows depends on good condition. Weekly N L 5:11 J1 31 '18
- 10th annual show of the Philadelphia poultry, pigeon and pet stock association, Dec. 14-18. M. K. Boyer. Am P Advocate 24:108 Ja '16
- 3d annual show of Chicago poultry breeders' assn., Jan. 13-19, 1916. F. D. Rogers. il Am P J 47:296-302 F '16
- 30th annual Boston poultry exhibition. S. Strong. il Reliable P J 25:44-6 Mr '18
- Turkeys and waterfowl at the twenty-seventh annual exhibition at Madison Square Garden, Dec. 15-Jan. 5. M. K. Boyer. Am P Advocate 24:238 F '16
- Turkeys, guineas, geese and ducks at the Madison Square Garden show. Am P Advocate 26:178 F '18
- 20th annual show of Boston poultry association, Boston, Jan. 11-15, 1916. P. T. Woods. il Am P J 47:320-6+ F '16
- 24th annual Illinois state show, Peoria, Jan. 18-22. A. D. Smith. Reliable P J 25:30 Mr '18
- 27th annual exhibition, Madison Square Garden. N. W. Sanborn. Am P Advocate 24: 196-7 F '16
- 29th annual event of the Boston poultry association, Jan. 9-13, 1917. P. T. Woods. il Am P J 48:266-7+ F '17
- 29th annual exhibition, New York city, Madison Square Garden, Dec. 28, 1917 to Jan. 1, 1918. il Am P J 49:153-4+ F '18
- Washington, D.C. fifth annual show, Jan. 16-20, 1917. E. K. DePuy. Am P Advocate 25: 230 F '17
- What can be done for our small poultry shows? A. J. Kyle. Am P J 49:177 F '18
- Winter shows; their influence over the poultry business. T. F. McGrew. Am P Advocate 26:591 O '18

**Poultry surveys**

- New Jersey poultry survey. A. G. Waller. N J Ag Exp Hints to Poultrymen v 6, no 1:1-4 O '17

**Poultry yards**

- Cultivating the poultry yards. Mrs. G: L. Russell. il Wallaces' F 42:249 F 9 '17
- Fall house cleaning in the poultry yard. R. R. Hannas. il Country Gent 83:24 S 7 '18
- Importance of shade and green food. E. M. Mengel. Am P J 48:411 Mr '17
- Improve condition of poultry yard. F. A. Kuhn. Ohio F 139:46 Ja 13 '17
- Midsummer management of poultry yard. M. H. Decker. il Am P J 47:914 Je '16

**Poultry yards—Continued**

- Planting trees for poultry. F. A. Kuhn. Ohio F 141:112 Ja 26 '18  
 Poultry yard pointers for May. M. H. Decker. Am P J 47:761-3 My '16  
 Seasonable ideas. P. W. Shepard. Am P Advocate 25:273 Mr '17  
 Size of poultry yards. J. R. Kessler. Country Gent 81:984 My 6 '16  
 Some things to remember. P. W. Shepard. Am P Advocate 25:226 F '17

**Poultrymen's associations**

- Co-operative poultry efforts. E. W. Gage. il Kimball's D F 16:318 Ap 15 '18  
 Poultry associations going back to use of score card judging. G. M. Curtis. Reliable P J 23:373 My '16  
 Poultry co-operative organizations being formed in many different sections of the country. J. H. Morse. Am P J 49:678 Jl '18

See also Poultry breeders' associations; also Illinois poultry and egg shippers' association; Indiana egg and poultry association; National war emergency poultry federation; New England poultry producers' exchange

**Powder post beetles**

- Egg and manner of oviposition of lyctus planicollis. T. E. Snyder. bibliog il J Ag Research 6:273-6 My 15 '16  
 Household and camp insects. E. P. Felt. il N Y State Museum (Albany) B 194:73-4 F '17  
 Insect depredations in wood. Scientific Am (233 Broadway, N.Y. 10c) 116:405 Ap 21 '17  
 Powder-post damage by lyctus beetles to seasoned hardwood. A. D. Hopkins and T. E. Snyder. il Farmers' B 778:1-20 '17

**Powdery dry-rot**

- Control of the powdery dryrot of western potatoes caused by fusarium trichothecioides. O. A. Pratt. il J Ag Research 6:817-32 Ag 21 '16  
 Powdery dry-rot of potato. W. A. Orton and G. K. K. Link. il (C. T., & F. C. D. C. 1) 4p '18 U.S. Bur. of plant industry, Washington, D.C., Same. Weekly N L 5:5 Ap 3 '18

**Powdery mildew**

- Apple powdery mildew and its control in the arid regions of the Pacific Northwest. D. F. Fisher. bibliog il U S Ag B 712:1-28 '18  
 Apple powdery mildew and its control in the Pajaro valley. W. S. Ballard and W. H. Volck. il map U S Ag B 120:1-26 '14  
 Powdery mildew of apple. Better Fruit 10:11-12 Mr '16; Same. Better Fruit 11:12 My '17  
 Powdery mildew of the apple; experiments with iron sulphide and other sprays for its control. W. J. Allen and W. le Gay Brereton. Ag Gaz of New South Wales 29:408-12 Je '18  
 Powdery mildews of avena and triticum. G. M. Reed. Mo Ag Exp Research B 23:1-19 '16

**Powell, George Harold, 1872-**

- Biggest marketing exchange; California's citrus organization and its manager. J. H. Collins. il Country Gent 81:95-6 Ja 15 '16

**Power**

- Agriculture for beginners; farm power and farm work. W. I. Chamberlain. Nat Stock & F 40:132-3, 180 Ap 29, My 13 '16  
 Power on the dairy farm; with discussion. F. M. White. Wis Dairymen's Assn Rep 1913-1916:217-23 '17  
 Production and distribution of power and its influence on the development of Irish industry. J. F. Crowley. il J Dept Ag Ireland 18,no 1:7-20 '18  
 Remarkable prediction. W. I. Chamberlain. il Nat Stock & F 42:364 Jl 13 '18

See also Electric power; Water power

**Power boats. See Motor boats****Power cost**

- Fertilizer industry and its power requirements. J. E. Mellett. il Gen Electrical Review (Schenectady, N.Y. 20c) 21:96-110 F '18

- Power economy; steam, gas and electricity. O. A. Storvick. N Y Prod R 41:1082+ Ap 19 '16

**Power transmission. See Belting; Gearing****Practice houses. See Home economics—Study and teaching****Prairie dogs**

- Kills 2,000 prairie dogs for \$9.79; less than a half cent for each helper. Weekly N L 6:9 N 6 '18  
 Suggestions for combating prairie-dogs, ground squirrels and other rodent pests. W. L. Burnett. (C. 24) 6p '17 Colo. State entomologist, Fort Collins  
 Susceptibility of the prairie dog to rabies. G. Walters. Am Vet M Assn J 51:702-4 Ag '17  
 Systematic account of the prairie-dogs. N. Hollister. il maps U S Ag No Am Fauna 40: 1-36 '16

**Precooling of fruit. See Fruit, Cooling of****Predatory animals. See Animals, Predatory****Pregnancy**

- Aberhalden test for pregnancy in animals. C. A. Zell. Am Vet M Assn J 52:39-47 O '17  
 Chemical composition of placenta of the cow. F. Fenger. Int R Sci & Prac Ag 9,no 4:470-1 Ap '18  
 Influence of the stage of gestation on the composition and properties of milk. L. S. Palmer and C. H. Eckles. bibliog J Dairy Sci 1:185-98 S '17  
 Nutrients required to develop the bovine fetus. C. H. Eckles. Mo Ag Exp Research B 26: 1-36 '16; Excerpts and summary. Int R Sci & Prac Ag 8,no 6:890-2 Je '17  
 Test of mares. Country Gent 81:1369 Jl 15 '16

**Prehistoric man. See Man, Prehistoric****Preissia**

- Centrosomes in fertilization stages of preissia quadrata (Scop.). Nees. M. Graham. bibliog il Ann Bot 32:415-20 Jl '18

**Prepotency**

- Brigham Young, an illustration of prepotency. il J Heredity 7:51-4 F '16  
 Case of Guernsey prepotency. L. S. Gillette. Breeder's Gaz 73:156 Ja 24 '18  
 Concerning prepotency. P. Popenoe. il J Heredity 7:330-6 Jl '16  
 Finding the prepotent sire. J. M. Hover. J Heredity 7:173-8 Ap '16  
 Influence of sires on production. C. C. Hayden. il Ohio Ag Exp B v 1:211-15 Jl '16  
 Prepotency of dairy sires. B. H. Rawl. il Hoard's D 55:221 Mr 1 '18  
 Question of sex prepotency. H. E. Sharp. Jersey B 36:543-4 Ap 11 '17  
 Sex source of prepotency. P. V. Ewing. Hoard's D 55:380 Mr 22 '18

**Preservation of food. See Food preservation and preservatives****Preservation of plants. See Plants—Collection and preservation****Preserving. See Canning and preserving****Preserving-time; poem. J Home Econ 10:417 S '18****Press clippings. See Clippings****Presses, Fruit crate. See Fruit crate presses****Price, Homer C.**

- Best farmer in Ohio. J. R. McMahon. il pors Country Gent 83:12+ O 19 '18

**Price fixing. See Prices—Government regulation****Prices**

- After the war. C: A. Lyman. Wallaces' F 43: 1726 N 22 '18  
 Avoiding time prices: individual and coöperative effort. Prog F 33:350 Mr 16 '18  
 Boards of trade and the national welfare. J: R. Mauff. (In Nat. conf. on marketing and farm credits, 1916, p. 326-38) \$2 '17 C. W. Holman, sec., Madison, Wis.  
 Cheaper raw materials. W. I. Chamberlain. Nat Stock & F 42:801 D 7 '18  
 Chicago board of trade denies fixing price on futures. J. P. Griffin. Am Coop J 12:763 Ag '17  
 Compulsory production and fixed prices. L. K. Cogswell. Breeder's Gaz 72:172 Ag 9 '17



**Prices —Continued**

- Confessions of a country buyer. Rural N Y 75:974 J1 15 '16
- Costs and prices. R. A. Hayne. Nat Stock & F 42:592 S 28 '18
- Cotton and wool; the results of organization. W. W. Reynolds. Rural N Y 77:953 Ag 10 '18
- Effect of retail prices on fruit. R. E. George. Better Fruit 10:5-6 Je '16
- Factory money for the farmer. E. N. Hurley. Purdue Ag 13:105 D '18
- \* Fair price publication. (*In* Official statement no. 2, p. 4-5) '18 U.S. Food administration, Washington, D.C.
- Farm labor problems. G. D. Black. Ohio F 142:422 N 2 '18
- Farm prices and retail prices compared. Monthly Crop Rep 4:112-13 S '18
- Farm prosperity—business prosperity. Wallaces' F 42:481 Mr 16 '17
- Farmer and war prices. I. H. Walbridge. Hoard's D 56:676 D 6 '18
- Farmers paying mortgages. W. I. Chamberlain. Nat Stock & F 42:652 O 19 '18
- Farmer's share of retail prices. L. D. H. Weld. Il Country Gent 82:1814-15 N 24 '17
- Good business and farming. Wallaces' F 42:818 My 18 '17
- Guessing versus knowing prices. W. I. Chamberlain. Nat Stock & F 42:444 Ag 10 '18
- High prices normal. N Y Prod R 43:206 N 29 '16
- High prices only temporary? Power F 25:15 J1 '16
- Jest supposin'; what would happen if the farmer paid city wages. E. Davenport. Country Gent 83:3+ D 21 '18
- \* Market prices in Ontario. (*In* Report, Bur. of industries, 1917, p. 39) '18 Ontario ag. dept., Toronto
- No price fixing for co-operators. A. N. Steinhart. Am Coop J 11:128 J1 '16
- Price control through industrial organization. J. R. Smith. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:280-7 N '17
- Price fixing. B. H. Hibbard. Am Coop J 11:479-81 Ja '16; Same cond. Wallaces' F 41:222 F 11 '16; Discussion. Am Coop J 11:481-5 Ja '16
- Price history. Wallaces' F 42:847 My 25 '17
- Price maintenance of agricultural products. E. S. Clark. Wallaces' F 42:502 Mr 16 '17
- Price the regulator of supply. C. L. Harlan. Breeder's Gaz 72:174 Ag 9 '17
- Prices and distribution. W. W. Swanson. (*In* Report, United farmers of Alberta, 1917, p. 239+) '18
- Prices then and now. Ohio F 141:404 Mr 16 '18
- Produce prices 20 years ago. O Judd Farmer 65:554 D 14 '18
- Ratio and proportion. Wallaces' F 43:1529 O 18 '18
- Revolving the consumer's dollar backwards. G. H. Powell. Better Fruit 10:5-9 My '16
- Some problems of food control. C. L. Harlan. Breeder's Gaz 72:140 Ag 2 '17
- Why food is costing more. Country Gent 81:1999 N 18 '16
- See also* Index numbers (economics); Marketing; Supply and demand; Value; also subheads Cost of operation, Costs, Price-lists and Prices under names of commodities, etc., e.g. Creameries—Cost of operation, Horses—Costs, Aberdeen-Angus cattle—Price lists, Milk—Prices

**Government regulation**

- Mesures pour prévenir et combattre la hausse des prix. Int Yearbook Ag Leg 1916:361-98 '17

**Bibliography**

- \* List of references on government regulation of prices (supplementary to duplicated list, July 3, 1917). 6p mim (J1 15) '18 U.S. Library of Congress, Division of bibliography, Washington, D.C.

**Australia**

- National aspects of a guaranteed minimum price for wheat, and suggested basis for its equitable determination. A. J. Perkins. J Dept Ag S Australia 22:194-211 O '18

**France**

- Mesures pour prévenir et combattre la hausse des prix. Int Yearbook Ag Leg 1916:372-83 '17

**Germany**

- Arrêté n. 5103 modifiant la loi concernant les prix maxima, du 4 août 1914. Int Yearbook Ag Leg 1916:362-4 '17

**Great Britain**

- \* Fixed food prices in England. (*In* Official statement no. 1, p. 7) '18 U.S. Food administration, Washington, D.C.
- Food control in Great Britain. Wallaces' F 43:394 Mr 1 '18
- Grain (prices) order, 1918. J Bd Ag 25:742-4 S '18
- Règlement de la vente du foin, de la paille d'avoine et du blé en Grande-Bretagne, en Irlande, et dans l'île de Man. Int Yearbook Ag Leg 1916:383-4 '17

**Greece**

- Loi n. 703 concernant les gains exagérés et illicites sur les prix des vivres et autres objets pendant la mobilisation. Int Yearbook Ag Leg 1916:385-6 '17

**Ireland**

- Minimum and maximum prices for grain. J Dept Ag Ireland 18,nol:83-7 '18

**Newfoundland**

- \* Newfoundland fixes maximum prices. J. S. Benedict. (Commerce Reports no. 255) p 413 (O 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Russia**

- Décision du conseil des ministres, confirmée par l'empereur, concernant la fondation d'un comité extraordinaire pour la lutte contre la cherté de la vie. Int Yearbook Ag Leg 1916:392-3 '17

**Sweden**

- Loi portant faculté de taxer certaines marchandises en cas de guerre, de danger de guerre ou dans des circonstances exceptionnelles produites par la guerre. Int Yearbook Ag Leg 1916:394-6 '17

**United States**

- Address of A. C. Townley, president of the National non-partisan league. 33p n.d. Nat. non-partisan league, St Paul
- Against price control at meeting of Merchants association of New York. N Y Prod R 44:1054 O 24 '17
- Agricultural appropriation bill; wheat price-fixing amendment. D: A. Hollingsworth. Congressional Record (Washington, D.C.) 56:5821-2 Ap 20 '18
- Constitutionality of federal regulation of prices on food and fuels. C. Thorne. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:256-68 N '17
- Cost of agricultural production. Wallaces' F 42:1681 D 14 '17
- Cost of producing a bushel of grain. Wallaces' F 42:1105 Ag 10 '17
- Discuss price fixing; egg merchants meet with food administrator. N Y Prod R 45:325 Ja 9 '18
- Don't tie the hands that feed us. Am Coop J 12:651-2 Je '17
- Eat more lamb and fix wool prices. Am Sheep B & W 38:79-80 F '18
- Egg year of 1917-'18; an unprecedented price level maintained. F. G. Umer. N Y Prod R 45:666+ Mr 6 '18
- Expediency of governmental price-fixing for cotton. A. R. Marsh. Econ World (128 Water st, N.Y. 25c) n s 15:154-5 F 2 '18
- Farmer and prices. Wallaces' F 42:1176 Ag 31 '17

## Prices—Govt. regulation—U.S.—Continued

- Farmer and three-dollar wheat. C: M. Harger. Scribner's Magazine (597 5th av, N.Y. 35c) 64:80-6 J1 '18
- Farmers appeal for a square deal. Am Coop J 12:707-8 J1 '17
- Farmer's sad lot. W. I. Chamberlain. Outlook (381 Fourth av, N.Y. 10c) 119:341-2 Je 26 '18
- Farmer's viewpoint. Nat Stock & F 41:1364 Mr 23 '18
- Favors more price-fixing. R. A. Hayne. Nat Stock & F 42:612 O 5 '18
- Feeding the world. B. W. Currie. il Country Gent 82:990-1 Je 9 '17
- Fix price of wheat at \$2.50 per bushel. J: M. Baer. Congressional Record (Washington, D.C.) 56:6143-5 Ap 26 '18
- Fixes \$2.20 basis for 1918 wheat. O Judd Farmer 64:14 Mr 2 '18
- Fixing prices of farm products. Breeder's Gaz 73:705 Ap 4 '18
- Fixing the price of pork. H. R. O'Brien. il Country Gent 83:5 N 30 '18
- Fixing the price of wool. Nat Wool Grower 8: 11-13 My '18
- Food administration announces increase in basis wheat prices. Weekly N L 5:10 J1 24 '18
- Food administration bill. Breeder's Gaz 72:213 Ag 16 '17
- Food administration program. Breeder's Gaz 72:249 Ag 23 '17
- Food bill passes; provisions. Wallaces' F 42: 1134 Ag 17 '17
- Food board cases; number of charges pending against dealers. C. C. Miller. N Y Prod R 47:1+ N 6 '18
- Food control bill passed. Ag Digest 2:565 Ag '17
- Food control situation. Wallaces' F 42:1152 Ag 24 '17
- Government control of wool. Ag Digest 3:30 J1 '18
- Government price fixing. Wallaces' F 42:684 Ap 20 '17
- Government price fixing; wool too high. W. W. Reynolds. Am Sheep B & W 38:454 J1 '18
- Government regulation of prices. L. H. Walker. Rural N Y 77:107 Ja 26 '18
- Government regulation of the prices of food and vegetables. Int R Ag Econ 9,no 3:252-4 Mr '18
- Government regulations for handling wool clip of 1918 issued by War industries board. Am Sheep B & W 38:sup (opposite p. 328) My '18; Same cond. O Judd Farmer 64:573 Je 1 '18; Excerpt. Nat Stock & F 42:255 Je 1 '18
- Government, the speculators and the food supply. A. P. Usher. Cornell Countryman 14: 726-7 Je '17
- Growing crops on contract. Rural N Y 76:775 Je 9 '17
- Hog price set at \$15.50. O Judd Farmer 63:4 N 17 '17
- Is there danger in price fixing? Ag Digest 2: 969 My '18
- Just price. Wallaces' F 43:392 Mr 1 '18
- Legitimate price fixing. Wallaces' F 42:1128 Ag 17 '17
- \* Letter to Senator Simmons. H. Hoover. (In Official statement no. 3, p. 2-3) '18 U.S. Food administration, Washington, D.C.
- Meat policy of the U.S. Food administration. E. D. Durand. Swine World 5:5+ Mr '18
- Mill feed regulations; new price relations between commercial mill feeds and wheat. J. F. Bell. 3p mim '18 U. S. Food administration, Washington, D. C.; Same. Jersey B 37:271 F 20 '18
- More money for wheat growers. O Judd Farmer 64:676 Je 29 '18
- Must the farmer lose? Ag Digest 2:519 J1 '17
- Nasty thing called famine. H. Hoover. Am Sheep B & W 38:172-3 Mr '18
- Necessity for government regulation of prices in war time. C: R. Van Hise. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:224-35 N '17
- New price regulations now effective. Am Sheep B & W 38:404-6 Je '18
- \* November hog price. (In Official statement no. 7, p. 11-13) '18 U.S. Food administration, Washington, D.C.
- November hog prices. W. M. McFadden. Swine World 6:5-6 N '18
- On price fixing. Nat Stock & F 41:260 Je 2 '17
- Outright control of prices by the United States government. O Judd Farmer 63:9 Ag 18 '17
- \* Plans to insure fair wheat price for crops grown in 1919. W. Wilson. (In Official statement no. 4, p. 2) '18 U.S. Food administration, Washington, D.C.
- Policy and scope of Food administration with relation to price fixing. H. Hoover. Weekly N L 5:7-8 Mr 6 '18
- Poultry world events and progress; effect of food control law. Reliable P J 24:563+ S 17
- President and the farmer. New Republic (421 W. 21st st. N.Y. 10c) 14:340-1 Ap 20 '18
- Price control. J. E. Davies. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:288-93 N '17
- Price control and production. G. F. Warren. Wallaces' F 42:1719 D 21 '17
- Price control as the farmer sees it. E. Davenport. Country Gent 82:1219-20 Ag 4 '17
- Price fixing. O Judd Farmer 65:216 S 14 '18
- Price fixing. Power F 26:49 Ag '17
- Price fixing. J. H. Reynolds. Wallaces' F 43: 241 F 8 '18
- Price fixing and cost of farm products. H. C. Taylor. il Hoard's D 56:65+, 254-5 Ag 9, S 20 '18
- Price fixing and food control. Ag Digest 2:573 Ag '17
- Price fixing and food control. J. I. Falconer. Ohio F 140:3 J1 7 '17
- Price fixing by the government. H. Hoover. Am Sheep B & W 38:388 Je '18
- Price-fixing in war time. Ag Digest 2:827 F '18
- Price of bread. Wallaces' F 42:1081 Ag 3 '17
- Price of feed at mills. Rural N Y 77:367 Mr 9 '18
- Price of storage butter 47c. N Y Prod R 45:391 Ja 23 '18
- Prices fixed on sulphuric and nitric acid. Am Fert 49:53 J1 6 '18
- Prices for 1918 binder twine. Power F 27:54 Ap '18
- Prices that stay put. L. A. Schuler. Country Gent 82:1599 O 20 '17
- \* Proclamation guaranteeing price for the wheat crop grown in 1919. W. Wilson. (In Official statement no. 4, p. 1-2) '18 U.S. Food administration, Washington, D.C.
- Reasons for higher prices. W. S. Moore. N Y Prod R 44:318+ Je 20 '17
- \* Regulation of food prices. J: L. Payne. Scribner's M (597 5th av, N.Y. 35c) 64:581-6 N '18
- Rejecting government wheat prices. C: W. Stokes. il Country Gent 82:1307-8 Ag 25 '17
- \* Report on price interpretation. R. Scoville. (In Official statement no. 4, p. 3) '18 U.S. Food administration, Washington, D.C.
- Seedsmen's view of price fixing. Am Flor 50: 128 F 2 '18
- Sensation in wool. O Judd Farmer 64:506 My 11 '18
- Shall the price of cotton be fixed? J: E. Pickett. Country Gent 83:5-6+ S 21 '18
- Some views on price-fixing. Breeder's Gaz 73: 916 My 2 '18
- Speaking of prices. F. Crissey. il Country Gent 82:1667-8+ N 3 '17
- Special regulations governing manufacturers, dealers, brokers and commission merchants in butter. Creamery 7:24-24a N '18
- Statement on fixing wool prices. F. J. Hagenbarth. Nat Wool Grower 7:21 My '17
- Storage egg prices. N Y Prod R 45:391 Ja 23 '18
- Storage egg regulation. N Y Prod R 45:357 Ja 16 '18
- Storage prices fixed; food administration asks that 46c be maximum rate on held butter until January 15. N Y Prod R 45:257 D 26 '17
- Sugar prices and distribution under food control. R. G. Blakey. Quarterly J Econ (Harvard Univ. Press, Cambridge, Mass. \$3 per yr.) 32:567-96 Ag '18
- To fix the price of wool. Nat Wool Grower 7: 38 D '17



**Prices—Govt. regulation—U.S.—Continued**

- Tri-state wool growers' conference to discuss fixing of prices on wool. C. S. Plumb. Ohio F 141:698 My 25 '18
- United States Food administration; policies and plan of operation; wheat, flour and bread. 171p '17 U. S. Food administration, Washington, D.C.
- Not available for general distribution.
- Washington and the farmer. Am Coop J 13: 3+ S '17
- What a woman on the farm thinks of price-fixing. H. C. Bennett. Outlook (381 4th av, N.Y. 10c) 118:531-2 Ap 3 '18
- Wheat farmers' dilemma. T. P. Gore. Forum (118 E. 28th st, N.Y. 25c) 60:257-66 S '18
- Wheat prices for 1918. Power F 27:53 Ap '18
- Where farming fits in the war program. A. E. Taylor. Country Gent 83:5-6+ J1 20; 13 J1 27 '18
- Why fleece wool prices were reduced. J. F. Walker. Nat Stock & F 42:290 Je 15 '18; Same cond. Ohio F 141:794 Je 22 '18
- Why the price of wheat was fixed at \$2.20 a bushel. Prac F 113:320 S 15 '17
- Why wheat prices are fixed. Ag Digest 2:870 Mr '18
- Will the price of meat be fixed? Am Fert 48: 37-8 Ap 27 '18
- Wool at the government's price. G: F: Stratton. il Country Gent 83:13+ Je 29 '18
- Wool price situation. A. W. North. Rural N Y 77:763 Je 8 '18
- Wool regulations. Nat Stock & F 42:188 My 11 '18

**Statistics**

- Prices of articles bought by farmers and amount purchasable with different products. Monthly Crop Rep 4:26-7 Mr '18
- Trend of farm prices and yield per acre of crops combined. Monthly Crop Rep 3:16 F '17
- Prickly pears. See Cactus

**Primost**

- Value of whey as fertilizer and food for man and beast—possibilities in primost. J. L. Sammis. N Y Prod R 45:750 Mr 20 '18; Same. Hoard's D 55:1063 J1 19 '18

**Primroses**

- Descriptive list of greenhouse primulas for indoor decoration. H. J. Moore. (In Ontario horticultural societies, 11th annual report, 1916, p. 96-103) '17 Ontario ag. dept., Toronto, Canada
- New primulas. Gard Chron (Lond) 59:167 Mr 25 '16
- Plant notes. Am Flor 46:878 My 13 '16
- Poisoning by primroses. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:411 Je 30 '17
- Primrose auricula, polyanthus. Mrs D. W. C. Ruff. il Minn Hort 45:305-7 Ag '17
- Primula elatior x Juliae. il Gard Chron (Lond) 63:225 Je 1 '18
- Primula sinopurplea. il Gard Chron (Lond) 62:241 D 15 '17

See also Cape primroses

**Varieties**

- Descriptive list of hardy and semi-hardy primulas. H. J. Moore. (In Report, Horticultural societies of Ontario, 1917, p. 78-81) '18 Ontario ag. dept., Toronto

**Primulas. See Primroses**

- Prince Edward island. See Potatoes—Prince Edward island

**Princess trees**

- Princess tree. R. S. Walker. il Country Life 32:126 Je '17

**Printing, Public**

- Roads and state printing fights. Wallaces' F 42:608-9 Ap 6 '17

**Prison diet**

- Cost of foods from prison to palace hotel. Mrs M. Dewey. bibliog J Home Econ 8:527-32 O '16

**Prison farms. See State farms**

**Privet**

- Single privet plants. S. L. De Fabry. il Country Gent 81:896 Ap 22 '16

**Diseases and pests**

See also Privet mites

**Privet mites**

- Privet mite in the South. E. A. McGregor. il J Econ Entom 9:556-61 D '16

**Privies**

- Chemical closets. (Reprint no. 404 Pub. health reports) 4p '17 U.S. Public health service, Washington, D.C.
- Dry closet system. E: H. McCuistion. Texas Univ (Austin) B 1733:10-15 Je 10 '17
- Indoor sanitary closet. Farm Eng 6:14 F '18
- Safe disposal of human excreta at unsewered homes. L. L. Lumsden and others. (B. 68) 28p il '17 U.S. Public health service, Washington, D.C.
- Sanitary privy. 15p il '16 Minn. State bd. of health, St Paul
- Sanitary privy. E: D. Rich. il plans Mich State Bd of Health (Lansing) Eng B 8:1-15 '16
- Sanitary-privy system for unsewered towns and villages. L. L. Lumsden. (Pub. health B. 89) 28p il '17 U.S. Public health service, Washington, D.C.
- Sanitary privy systems for unsewered communities. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:19-23 Ja '18
- Sewage disposal on the farm. G: M. Warren. U.S. Ag Yearbook 1916:350-60; Same. Separate 712:4-14

**Laws**

- Privies and cesspools. (In Municipal ordinances, 1916, p. 230-3) '17 U.S. Pub. health service, Washington, D.C.

**Produce exchanges**

- Blackboard call as a means of registering exchange bids and offerings. il N Y Prod R 42:902-3 O 4 '16
- Exchange auction calls. N Y Prod R 44:878 O 3 '17
- Exchange question; recent developments in New York. F. G. Urner. N Y Prod R 41: 644+ F 16 '16
- Report of terminal market investigating committee. F. M. Myers. Am Coop J 12:15+ S '16
- Ship to Indianapolis; grain, hay and feed distributing center. Coop Manager & F 6:49-51 F '17
- Steps to organize a new exchange in New York. F. G. Urner. N Y Prod R 41:724 Mr 1 '16
- See also Cotton exchanges; Dairy exchanges; Grain exchanges; also Chicago board of trade; Great Western egg exchange; New York butter and egg exchange; New York mercantile exchange; Wisconsin cheese exchange

**Produce trade**

- Banker's comment upon conditions and activities in the poultry, butter and egg trade. G: H. Wilson. N Y Prod R 42:1066 O 18 '16
- Carlot rate hearing. N Y Prod R 41:977 Ap 5 '16
- Cyrus C. Miller speaks to members of N.Y. mercantile exchange. N Y Prod R 46:531 Ag 7 '18
- Facts for the farmer on conditions vitally important to him as producer and to the wage worker as consumer. 94p il '18 National non-partisan league, St Paul
- Freight handling rules for shipments of dairy and poultry products. N Y Prod R 42:30 Ap 26 '16
- Iowa meeting at Des Moines. N Y Prod R 41:866-7+ Mr 15 '16
- Marketing of farm products, by L. D. H. Weld. Review. N Y Prod R 41:616 F 9 '16
- New rates; effect of freight rate increase upon class tariffs. N Y Prod R 44:377 J1 4 '17
- News from the field. See weekly numbers of New York produce review and American creamery
- Produce and banking. G. H. Wilson. N Y Prod R 41:884-5 Mr 15 '16
- Referee O'Malley's report on the evidence concerning the New York mercantile exchange and others. N Y Prod R 42:297+ Je 14 '16

**Produce trade—Continued**

What's in cold storage; the government is relying on the refrigerated surplus. J. E. Pickett. *il Country Gent* 82:1955-6+ D '15 '17

Wicks resolution introduced in New York legislature and passed by senate. *N Y Prod R* 41:1025+ Ap 12 '16

See also Iowa wholesale egg, butter and poultry dealers' association; Michigan butter, poultry and egg shippers' association; Missouri car lot shippers' association; National poultry, butter and egg association; Ohio butter, egg and poultry association; Western New York butter and cheese makers' association

**Regulation**

Basis and form of returns; effort to obtain more explicit understanding of Food administration regulations. *N Y Prod R* 46:431+ JI 17 '18

Basis of returns; Food administration issues a further statement as to relations of shippers and receivers. *N Y Prod R* 46:708 S 11 '18

Butter and cheese trade representatives discuss restrictive regulations with Food administration. *N Y Prod R* 46:37 My 8 '18

Concurrence déloyale, fraudes dans le commerce et mesures pour les combattre. *Int Yearbook Ag Leg* 1916:399-407 '17

Conference at Washington; representative dealers ask modification of rules affecting butter and cheese. *N Y Prod R* 47:33 N 13 '18

Dealers' licenses suspended on complaint of charging more than permitted profits. *N Y Prod R* 46:1011 O 30 '18

Food agitation; a general review of the week's developments in the trade. *N Y Prod R* 43:261+ D 13 '16

Food board cases; number of charges pending against dealers. C. C. Miller. *N Y Prod R* 47:1+ N 6 '18

Important administration rulings affecting sales of poultry and eggs. *N Y Prod R* 46:112 My 15 '18

Interstate commerce commission decision no. 7969; National poultry, butter & egg association v. Baltimore & Ohio Southwestern railroad company et al. 34-70p '18 U.S. Govt. ptg. office, Washington, D. C.

Mesures concernant la vente anticipée des récoltes. *Int Yearbook Ag Leg* 1916:411-14 '17

Net return rule adopted; U.S. Food administration adopts suggestion of federal food board. *N Y Prod R* 46:395 JI 10 '18

Permissible profits; summary of effect of various rulings governing sales of refrigerator eggs and poultry. *N Y Prod R* 46:627+ Ag 28 '18

Swift & co. penalized for buying storage eggs at a price higher than the seller (C. H. Zinn & co.) was justified in charging. *N Y Prod R* 45:843 Ap 10 '18

**Statistics**

Resumé of statistical review of New York market for the year 1916. *N Y Prod R* 43:393 Ja 3 '17

Resumé of statistical review of New York market, 1915. *N Y Prod R* 41:435 Ja 5 '16

Statistical review of the New York market. See first weekly issue of each month of New York produce review

**Profanity.** See Swearing

**Professions, Choice of.** See Woman—Occupations

**Profit sharing**

Profit sharing on the farm. A. L. Richie. *Rural Manhood* 9:145-6 Ap '18

**Profiteers**

\* Letter to Senator Simmons. H. Hoover. (*In* Official statement no. 3, p. 2-3) '18 U.S. Food administration, Washington, D.C.

**Profits in agriculture.** See Income

**Prohibition**

National prohibition now up. O Judd Farmer 64:10 Mr 9 '18

Prohibition and the farmer. W. J. Bryan. *Country Gent* 82:1163 JI 21 '17

Time to banish booze. *Rural N Y* 77:282 F 23 '18

**Project teaching**

Agriculture correlated with manual training. W. Giese. *il plans Industrial Arts Magazine* (129 Michigan st, Milwaukee, Wis. 25c) 6:477-9 D '17

Project in home economics teaching. W. W. Charters. *J Home Econ* 10:114-19 Mr '18

See also Home project work

**Promethea moths**

Tree foliage eater. E. R. Miller. *il Ohio F* 141:402 Mr 16 '18

**Propagation of plants.** See Plant propagation

**Prophecies**

Causes of the revolution in 1941. H. A. McDonald. *Wallaces' F* 42:1722 D 21 '17

**Proso**

Proso—a grain crop. *Wallaces' F* 42:940 Je 22 '17

**Prospect park, Brooklyn, N.Y.**

Prospect park, Brooklyn, N.Y. *Am Flor* 46:1132 Je 17 '16

**Protection from frost.** See Frost protection

**Protection of birds.** See Birds—Protection

**Proteids.** See Proteins

**Proteins**

Adsorption of tin by proteins and its relation to the solution of tin by canned foods. B. C. Goss. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:144-8 F '17

Biochemical analysis of nutrition. C. L. Alsborg. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:178-9 Mr 24 '17

Digestibility of protein supplied by soy-bean and peanut press-cake flours. A. D. Holmes. *U S Ag B* 717:1-26 '18

Effects of high protein and high energy rations in feeding dairy cows. W. B. Ellett and C. W. Holdaway. *bibliog Va Ag Exp Tech B* 12:29-45 '17; Same. *Va Ag Exp Rep* 1915-1916:29-45 '17

How to select foods; foods rich in protein. C. L. Hunt and H. W. Atwater. *il Farmers' B* 824:1-18 '17

Hydrolysis of the soluble protein of swede turnips. G. Williams. *J Ag Sci* 8:182-215 Mr '17

Immunochemical studies of the plant proteins; proteins of the wheat seed and other cereals. R. P. Wodehouse. *bibliog Am J Bot* 4:417-29 JI '17

Influence of the nature of the diet on the retention of protein. N. Umeda. *Int R Sci & Prac Ag* 7, no 10:1468-70 O '16

Is lysine the limiting amino-acid in the proteins of wheat, maize or oats? E. V. McCollum and others. *Int R Sci & Prac Ag* 8,no 6:901-2 Je '17

Leucine anhydride, a product of the water hydrolysis of protein at high temperatures. S. S. Graves and others. *Am Chemical Soc J* (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr) 39:112-14 Ja '17

Nitrogenous constituents of feeding stuffs. H. S. Grindley. *Am Soc Animal Production Pro* 1915-1916:133-41 '17

Protein decomposition in soils. E. C. Lathrop. *bibliog Soil Sci* 1:509-32 Je '16

Quick method of calculating food values. C. L. Hunt. *J Home Econ* 10:212-18 My '18

Relative value of certain protein and protein concentrates as supplements to maize gluten. T. B. Osborne and L. B. Mendel. *Int R Sci & Prac Ag* 9,no 4:476-7 Ap '18

Study of the proteins of certain insects with reference to their value as food for poultry. J. S. McHargue. *bibliog J Ag Research* 10:633-7 S 17 '17

**Proteolysis**

Proteolysis of streptococcus erysipelatis and streptococcus lacticus compared under different hydrogen ion concentration. A. Itano. *Mass Ag Exp B* 167:178-85 '16

Relation of hydrogen ion concentration of media to the proteolytic activity of bacillus subtilis. A. Itano. *Mass Ag Exp B* 167:133-77 '16



**Protestant school board associations, Canada.**  
Proposed school trustees associations. S.  
Laird. J Ag (Quebec) 20:218 My '17

**Prothallia.** See Gametophytes

**Protoplasm**

Action of Schumann rays on living organisms. W. T. Bovie. bibliog Bot Gaz 61:1-29 Ja '16  
Collocation of plasmas within the cell. L. Legend. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:60-4, 76-7 Ja 26-F '18  
Methods of studying permeability of protoplasm to salts. S. C. Brooks. bibliog Bot Gaz 64:230-49 S '17  
Reaction of plant protoplasm. A. R. Haas. Bot Gaz 63:232-5 Mr '17  
Studies of protoplasmic permeability by measurement of rate of shrinkage of turgid tissues; the influence of temperature on the permeability of protoplasm to water. E. M. Delf. Ann Bot 30:283-310 Ap '16

**Protozoa.** See Flagellata; Soil protozoa

**Proverbs**

Agricultural sayings of the United Provinces. V. N. Mehta. Ag J of India 11:301-7; 12:90-4 J '16, Ja '17  
Useful weather proverbs. J Ag (Quebec) 21:182 Je '18

**Prune and apricot growers' information bureau**

Future of the prune industry: what shall we make it? H. C. Dunlap. Cal State Comm Hort B v 6:149-51 My '17  
Organization for California prune and apricot growers. G. E. Merrill. il Cal State Comm Hort B v 6:143-8 My '17  
Preparedness and the prune. W. V. Woehlke. il Country Gent 81:1427 Jl 29 '16  
Prune and apricot growers. (In Report Cal. state market director, 1916, p 27-37) '16 Cal. State market director, Sacramento  
Prune and apricot growers information bureau. J. C. Shinn. Cal State Comm Hort B v 6:152-4 My '17

**Prunes**

Commercial prune in the Snake River valley. L. G. Dunn. Better Fruit 12:10 Je '18  
Common honey bee as an agent in prune pollination. A. H. Hendrickson. il Cal Ag Exp B 274:127-32 '16  
Common honey bee as an agent in prune pollination. A. H. Hendrickson. il Cal Ag Exp B 291:215-36 '18  
Cultural methods and pruning for plums and prunes. G. H. Howe. il N Y Ag Dept B 79, pt 2:1172-82 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1172-82 '17  
Early history of the Oregon prune industry. H. S. Gile. Better Fruit 13:11 O '18  
Evaporation of prunes. C. I. Lewis and others. il Ore Ag Exp B 145:1-36 '17  
Evaporation of prunes and economical suggestions. A. F. Barss. Better Fruit 13:7 Ag '18  
Growing prunes for market. J. Steel. Fruit-Grower 27:264 Ap 15 '16  
Preparedness and the prune. W. V. Woehlke. il Country Gent 81:1427 Jl 29 '16  
Prune evaporation. F. R. Brown. Better Fruit 12:21 Mr '18  
Prune growers advertise. Country Gent 81:1302 Jl 1 '16  
Prune industry in Douglas county. E. Percy. Better Fruit 13:22 Ag '18  
Prunes in Renmark. J. M. Smith. J Dept Ag S Australia 20:919-21 Je '17  
Pruning the bearing prune tree. V. R. Gardner. il Better Fruit 10:9-11 Mr '16

**Diseases and pests**

Brown-rot of prunes and cherries in the Pacific Northwest. C. Brooks and D. F. Fisher. il U S Ag B 368:1-10 '16  
Lead arsenates, stone fruits, and the weather. G. P. Gray. il J Econ Entom 10:385-92 Ag '17  
Root disease of prunes. M. A. Willis. Phyt 6:368-9 Ag '16  
Spraying prunes and plums. H. P. Barss and A. L. Lovett. Ore Ag Ext B 194:1-4 '17

**Marketing**

Handling and shipping fresh cherries and prunes from the Willamette valley. H. J. Ramsey. Country Gent 81:506 Mr 4 '16; Same cond. Better Fruit 11:11 Jl '16  
Marketing plums and prunes. G. H. Howe. N Y Ag Dept B 79, pt 2:1200-3 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1200-3 '17

See also California prune and apricot growers; Prune and apricot growers' information bureau

**Packing**

Standardization of plum and prune pack. C. Rayburn. Cal State Comm Hort B v 6:330-1 Ag '17

**Statistics**

Commercial stocks of prunes, Jan. 1. U S Food Surveys 1:4-6 Jl 27 '18  
Commercial stocks of prunes, July 1. U S Food Surveys 2:4-6 O 5 '18  
Table showing number of trees and production in bushels of plums and prunes in New York state. N Y Ag Dept B 79, pt 2:1204-5 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1204-5 '17

**Pruning**

Apple as affected by varying degrees of dormant and seasonal pruning. W. H. Alderman and E. C. Auchter. bibliog il W Va Ag Exp B 158:1-56 '16  
Apple culture in Victoria. J. Farrell. il J Dept Ag Victoria 14:711-27; 15:24-35, 140-57, 277-94 D '16 Ja, Mr, My '17  
Apple pruning. C. B. Durham. il Purdue Ag Ext B 45:1-8 '16  
Bringing up a tree in the way it should grow. P. S. Lovejoy. il Country Gent 82:1634-5 O 27 '17  
Bringing up an orchard. F. L. Marble. il Country Life 29:74 Ap '16  
Building an apple tree. F. W. Allen. il Country Gent 81:100 Ja 15 '16  
Consideration of the bulk pruning question. V. R. Gardner. Better Fruit 11:5-6 D '16  
Cultural methods and pruning for plums and prunes. G. H. Howe. il N Y Ag Dept B 79, pt 2:1172-82 Ja '16; Same. N Y Ag Dept Rep 1916, pt 3:1172-82 '17  
Dehorning old apple trees. F. H. Ballou. Country Gent 81:344 F 12 '16  
Does summer pruning pay? Fruit-Grower 28:321 Jl 15 '17  
Effect of pruning peach trees at different heights previous to planting in the orchard. M. A. Blake. il N J Ag Exp B 293:1-30 '16  
Effect of various dressings on pruning wounds of fruit trees (B. 396). G. H. Howe. N Y State Ag Exp Rep 1915:506-17 '16  
Ethics of rose pruning. Gard Chron Am 20:306 Jl '16  
Evergreen pruning. Gard Chron Am 22:58 F '18  
Fall pruning peach trees. M. A. Blake. Rural N Y 77:1183 O 19 '18  
Flowering hedges. Gard Chron Am 22:58 F '18  
Fundamentals that determine peach pruning practice. E. W. Bailey. Ill State Hort Soc Trans 1917:114-21 '18  
Further observations on the effects of pruning, root pruning, ringing and stripping on the formation of fruit buds on dwarf apple trees. A. W. Drinkard, jr. il Va Ag Exp Tech B 17:137-46 '17; Same. Va Ag Exp Rep 1915-1916:137-46 '17  
Grape pruning. F. H. Beach. il Purdue Ag Ext Leaflet 68:1-6 '16  
Growing fruit for home use in the great plains area. H. P. Gould and O. J. Grace. il Farmers' B 727:19-27 '16  
Helpful suggestions. J. S. Underwood. il Green's Fruit Grower 36:18 Ja '16  
How to prune fruit trees, grapevines and berry bushes. Country Gent 82:438 Mr 3 '17  
How to root-prune fruit trees. Gard Chron Am 21:403 N '17  
Influence of pruning on fruit-spur system of apple. V. R. Gardner. Better Fruit 11:14-15+ Ja '17; Same. (In 8th annual report, 1916, p. 66-72) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.

**Pruning—Continued**

- Influence of winter pruning in body building. C. I. Lewis. *Better Fruit* 11:10+ F '17
- June thinning for later winning. J. R. Mat-tern. *il Gard M* 25:284 Je '17
- Lessons in pruning. C. H. Brewer. *il Green's Am Fruit Grower* 38:11 Je '18
- Little pruning book; an intimate guide to the surer growing of better fruits and flowers. F. F. Rockwell. 48p 50c '17 Peck, Stow & Wilcox co., Cleveland, O.
- Making over old or poor trees. *il Gard M* 23:83-4 Mr '16
- October in the orchard. A. S. Colby. *Am Fruit Grower* 38:12 O '18
- Orchard doings, pruning and fruit thinning. *il Country Gent* 82:1144 Jl '14 '17
- Overpruning and its relation to sunscald. C. O. Ormsbee. *Fruit-Grower* 28:279 Je 1 '17
- Paint large pruning cuts. J. E. Hundley. *Better Fruit* 11:14 Jl '16
- Pictorial lessons in pruning. T. Sheward. *il Gard M* 28:116 N '18
- Pointers for pruning apple trees. A. J. Far-ley. *il Field* 11:26:122-3 F '16
- Practice of pruning. *J Dept Ag S Australia* 21:79-82 Ag '17
- Primer of pruning. F. A. Waugh. *il Country Gent* 82:366 F 24 '17
- Principles of apple pruning. C. W. Bailey. *Ill State Hort Soc Trans* 1917:310-19 '18
- Principles of pruning. G. Quinn. *J Dept Ag S Australia* 20:379-82 Je '17
- Principles of pruning. J. C. Whitten. *il Green's Fruit Grower* 37:sup 1 Ap '17
- Propagation and pruning of plants; sugges-tions for teachers in secondary schools. H. P. Barrows. (Doc. 63) 12p '17 U.S. States relations service, Washington, D.C.
- Prune bush fruits in winter. S. Frazier. *O Judd Farmer* 61:6 D 23 '16
- Pruning. W. H. Chandler and H. B. Knapp. *il Cornell Reading Courses* 5, no 104:75-96 '16; Same. *Cornell Ag Exp Rep* 1916, v 2:1157-76 '17
- Pruning. W. H. Chandler. *N Y State Fruit Growers' Assn Pro* 1918:80-5
- Pruning, a fitting winter activity. M. G. Kains. *il Gard M* 24:168-9 D '16
- Pruning and spraying fruit trees. *Prac F* 114:137 Ap 1 '18
- Pruning and spraying the home orchard. C. J. Hayden. *Prog F* 32:92 Ja 27 '17
- Pruning and spraying: what to do each month. *Prog F* 33:187 F 16 '18
- Pruning and training a young lemon orchard. W. H. Fleet. *il Cal State Comm Hort B v* 5:250-62 Jl '16
- Pruning and training grape varieties. F. E. Gladwin. *Rural N Y* 77:1188 O 19 '18
- Pruning and training the tree. J. G. Boyle. *il Fruit-Grower* 27:198 Mr 15 '16
- Pruning apple trees. J. B. Keil. *il Ohio Ag Exp B v* 2:304-7 S '17
- Pruning bearing apple and peach trees. C. J. Hayden. *il Prog F* 31:282 F 26 '16
- Pruning—before bearing. F. A. Waugh. *il Country Gent* 82:434 Mr 3 '17
- Pruning bush fruits. *Fruit-Grower* 28:38 Ja 1 '17
- Pruning bush fruits; with discussion. S. J. Bole. *Ill State Hort Soc Trans* 1916:425-37 '17
- Pruning by principle. H. Currin. *Better Fruit* 13:20 N '18
- Pruning cane fruits. J. S. Underwood. *Green's Fruit Grower* 36:8 My '16
- Pruning evergreens. E. Hemming. *Gard Chron Am* 20:440 O '16
- Pruning experiments with peaches; results of first two seasons. M. A. Blake. *N J Ag Exp C* 83:1-8 '17
- Pruning flowering shrubs. *Gard Chron Am* 22:221 Ag '18
- Pruning for fruit this year. M. G. Kains. *il Gard M* 27:78-9 Mr '18
- Pruning for size. V. R. Gardner. *Better Fruit* 12:5-6 D '17
- Pruning fruit tree roots. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:379 D 15 '17
- Pruning fruit trees. *Gard Chron Am* 20:272 Je '16
- Pruning fruit trees. W. H. Alderman and E. C. Auchter. *il W Va Ag Exp B* 164:1-40 '17
- Pruning fruit trees. N. R. Elliott. *Ky Ag Dept Rep* 1916-1917:455-9 '18
- Pruning fruit trees. W. J. Green. *Ohio F* 139:518 Ap 7 '17
- Pruning fruit trees. C. G. Randell. *Purdue Ag* 12:286-9 F '18
- Pruning fruit trees from nursery to bearing; with discussion. M. G. Kains. *Md Ag Soc Rep* 1916, v 1:135-59 '17
- Pruning fruit trees, vines and bushes. F. M. Clement and F. S. Reeves. *il Ontario Ag Dept B* 248:1-36 '17
- Pruning fruit trees; with special reference to the apple. W. H. Volck. *Cal State Comm Hort B v* 6:80-9 Ap '17
- Pruning grapes in a commercial vineyard. *il Rural N Y* 75:363 Mr 4 '16
- Pruning in the home garden. *il Country Gent* 81:164-5 Ja 22 '16
- Pruning investigations. V. R. Gardner and others. *il Ore Ag Exp B* 139:1-88 '16
- Pruning investigations: second report. J. R. Magness and others. *il Ore Ag Exp B* 146:1-73 '17
- Pruning knife in February. J. W. Firor. *O Judd Farmer* 60:21 F 5 '16
- Pruning necessary for the production of the best fruit. E. F. Cole. *Farm Eng* 3:197 Mr '16
- Pruning newly planted apple trees. E. Moly-neux. *il Gard Chron (Lond)* 61:132 Mr 31 '17
- Pruning of peach trees previous to planting in the orchard. *Rural N Y* 76:314 Mr 3 '17
- Pruning of stone fruit trees. O. B. Whipple. *Better Fruit* 12:5-7 N '17
- Pruning orchards in Iowa. L. Greene. *Wal-laces' F* 41:316 F 25 '16
- Pruning peach trees. W. W. Magill. *il Purdue Ag* 11:43-4 F '17
- Pruning peach trees. J. S. Underwood. *Green's Fruit Grower* 36:2 Ap '16
- Pruning pear trees. A. Farrand. *il N Y Ag Dept B* 79,pt 2:1015-18 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1015-18 '17
- Pruning pointers. E. F. White. *Prog F* 31:9 Ja 1 '16
- Pruning problems in the Hood River valley. G. G. Brown. *il Ore Ag Exp B* 141:48-54 '17
- Pruning raspberry and blackberry plants. W. J. Green. *Ohio F* 137:767 Je 3 '16
- Pruning: repair. F. A. Waugh. *il Country Gent* 82:649 Mr 31 '17
- Pruning shade trees. H. F. Major. *il Mo Ag Exp C* 81:1-6 '16
- Pruning stone fruit trees. O. M. Morris. *Better Fruit* 12:17 F '18
- Pruning the apple and peach. S. F. Fletcher. *Penn State F* 11:265+ F '18
- Pruning the apple tree. C. D. Jarvis. *il Mass Ag Bd B* 2 (5th ed):91-4 '16
- Pruning the bearing apple and pear tree. V. R. Gardner. *il Better Fruit* 10:11+ Ja; 10-11 F '16
- Pruning the bearing prune tree. V. R. Gard-ner. *il Better Fruit* 10:9-11 Mr '16
- Pruning the bearing tree. C. I. Lewis. *Better Fruit* 13:6-7 N '18
- Pruning the farm orchard. W. R. Palmer. *il Purdue Ag* 10:41-3 F '16
- Pruning the farm orchard. S. Van Aken. *Ohio F* 141:464 Mr 30 '18
- Pruning the grape. C. C. Wiggans. *il Coun-try Gent* 82:1896 D 1 '17
- Pruning the peach. M. A. Blake. *il N Y Ag Dept B* 79,pt 2:1084-93 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 3:1084-93 '17
- Pruning the seedless grapes. F. T. Bioletti. *il Cal Ag Exp C* 191:1-12 '18
- Pruning the sweet cherry. O. B. Whipple. *il Better Fruit* 13:5-6 D '18
- Pruning to an ideal. J. Buchanan. *Rural N Y* 75:1239 S 23 '16
- Pruning to increase production. C. M. Weed. *il House Beautiful* (3 Park st, Boston 25c) 43:162-3 F '18
- Pruning transplanted trees. O Judd Farmer 60:10 Mr 18 '16
- Pruning trees at planting. *il Nat Stock & F* 40:14 Ap 1 '16
- Pruning vines. T. Fromm. *J Dept Ag S Aus-tralia* 20:666 Mr '17



**Pruning—Continued**

- Pruning young fruit trees. J. M. Ward. (B. 64) 8p '17 Tasmania ag. and stock dept., Tasmania, Australia
- Pruning young fruit trees. J. C. Whitten. Prog F 32:356 Mr 17 '17; Same. Green's Fruit Grower 37:4 Ap '17
- Renewing old lemon trees. J. D. Culbertson. Cal State Comm Hort B v 5:97-102 Mr '16
- Renovating old apple trees. D. Plank. Rural N Y 75:515 Mr 25 '16
- Scientific pruning and pollenizing the Bing cherry. E. Bowles. Better Fruit 13:7 Jl '18
- Selective draft in the fruit garden; summer pruning and thinning the set. M. G. Kains. Gard M 27:265 Jl '18
- Should pruning wounds be treated? Wallaces' F 41:239 F 11 '16
- Spring pruning of shrubbery. C. H. Chesley. Ohio F 139:484 Mr 31 '17
- Spring work in the orchard. W. J. Green. il Ohio F 137:249+ F 19 '16
- Studies in fruit bud formation. J. R. Magness. (In 8th annual report, 1916, p. 98-105) '17 Oregon state hort. soc., C. D. Mintch, sec., Portland, Ore.; Same. Better Fruit 12: 22 Ja; 25 F '18
- Summer pruning. J. S. Underwood. Green's Fruit Grower 37:10 Je '17
- Summer-pruning dwarf-trained apple trees. il Gard Chron (Lond) 59:332 Je 24 '16
- Summer pruning—is it practical? J. A. Cohill. Country Gent 81:1302 Jl 1 '16
- Summer pruning of a young bearing apple orchard. L. D. Batchelor and W. E. Goodspeed. Better Fruit 12:7-8 Je '18
- Summer pruning of fruit trees. Gard Chron (Lond) 64:17 Jl 13 '18
- Summer pruning of fruit trees. A. Smith. Gard Chron Am 22:191-2 Jl '18
- Thinning fruit. il Country Gent 81:1341 Jl 8 '16
- Thinning fruit. Prac F 112:279 Jl 15 '16
- Thinning fruit. Prac F 113:242 Jl 1 '17
- Thinning fruit. W. J. Green. il Ohio Ag Exp B v 2:227-31 Jl '17
- Thinning fruit. C. I. Lewis. il Country Gent 81:1219 Je 17 '16
- Thinning fruit; it ranks with spraying as a guaranty of good crops. F. C. Sears. il Country Gent 83:25 Je 29 '18
- Thinning-out and heading-back in the apple tree. V. R. Gardner. Better Fruit 12:25+ Mr '18
- Thinning overloaded fruit trees. H. E. Van Deman. Green's Fruit Grower 36:9 Jl '16
- Thinning the fruit crop. S. P. Hollister. Wallaces' F 41:1070 Ag 11 '16
- Top-pruning young trees. W. W. Magill. Purdue Ag 12:481 My '18
- Topping and pinching vines. F. T. Bioletti and F. C. H. Flossfeder. il Cal Ag Exp B 296:371-84 '18
- Training and pruning of fruit trees. R. B. Cruickshank. il Ohio Ag Ext B v 11, no 12: 1-20 '15-16
- Training apple trees. Rural N Y 75:273 F 19 '16
- Trimming bush fruits and grapes. G. J. Foster. Green's Fruit Grower 36:2 Ag '16
- Trimming of apple trees. G. Johnson. il Minn Hort 46:269-73 Jl '18
- Trimming of young trees. G. Bryant. Ill State Hort Soc Trans 1916:375-81 '17
- Vegetation and reproduction with special reference to the tomato. E. J. Kraus and H. R. Kraybill. bibliog il Ore Ag Exp B 149:1-90 '18
- When to prune ornamental plants. Wallaces' F 41:423 Mr 10 '16; Same cond. Gard Chron Am 20:142 Mr '16
- While we prune the orchard. E. M. Patch. il Gard M 28:108-10 N '18
- Why do we prune? E. Van Alstyne. il N Y Ag Dept B 79, pt 1:830-41 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:830-41 '17
- Winter care of the orchard. W. J. Cooper. il Ohio F 141:14 Ja 5 '18
- Winter pruning. S. A. Campbell. il Purdue Ag 13:15 O '18
- Winter versus summer pruning of apple trees. C. C. Vincent. il Idaho Ag Exp B 98: 1-28 '17

**Pruning tools**

- Pruning, a fitting winter activity. M. G. Kains. il Gard M 24:168-9 D '16
- Pruning implements. J. S. Knox. il Country Gent 81:2045 N 25 '16
- See also Fruit culture—Apparatus and equipment

**Prunus**

**Classification**

- Pubescent-fruited species of prunus of the southwestern states. S. C. Mason. il maps J Ag Research 1:147-78 N '13
- Native American species of prunus. W. F. Wight. bibliog il maps U S Ag B 179:1-75 '15

**Diseases and pests**

- Resistance of prunus to artificial inoculation with bacterium tumefaciens. C. O. Smith. il Phyt 6:186-94 Ap '16

**Prussic acid.** See Hydrocyanic acid

**Pseudomonas citri.** See Citrus canker

**Psila rosae.** See Carrot rust flies

**Psychology**

- Heredity and the mind. P. Popenoe. J Heredity 7:456-62 O '16
- Psychology and the war. G. S. Hall. J Heredity 8:442-7 O '17

**Psyllids.** See Plant lice, Jumping

**Pteris aquilina.** See Brakes (ferns)

**Pteronius ribesii.** See Currant worms

**Ptomaine poisoning**

- Ptomaine poisoning in dogs. W. A. Dyer. Country Life 31:160 Ap '17

**Public health**

- Church of the small community. E. R. Groves. Rural Manhood 8:95-8 Mr '17
- Dairying and public health. B. W. Hammer. N Y Prod R 41:852-4 Mr 15 '16
- Forestry and the public health. H. R. Hopkins. Am For 22:417-18 Jl '16
- Health education in rural districts. L. A. Riser. Hoard's D 53:1002 Jl 20 '17
- Health in the city and in the country. il Wallaces' F 42:893 Je 8 '17
- Health in the country. Ohio F 141:89 Ja 19 '18
- Healthiness of rice fields in Italy. O. Bordiga. Int R Sci & Prac Ag 7, no 3:336-8 Mr '16
- Is your county like this? Nat Stock & F 40: 238 My 27 '16
- Laboratory of hygiene for every southern state. Prog F 31:986 Ag 12 '16
- Life, death and speech; typhoid fever prevention. H. Quick. Country Gent 81:1621 S 2 '16
- National menace of rural bad health. Nat Stock & F 40:1404 Mr 17 '17
- Organisation of the rural hygiene service in Spain. Int R Sci & Prac Ag 9, no 5:536-7 My '18
- Practical method of controlling preventable disease in rural districts. A. C. Ellis. Tex Ag Dept B 52:94-99 '16
- Public health in the past and in the future. C. E. A. Winslow. J Home Econ 8:513-20 O '16
- Relationship between cow's milk and the public health. (In Report, Mass. Special milk board, 1915, p. 126-89) '16 Mass. State dept. of health, Boston
- Rural sanitation. W. Giltner. Public Health (Michigan State board of health, Lansing) 5: 486-93 O '17
- Sanitation and health from the food standpoint; with discussion. J. D. Mickle. Assn Am Dairy Food & Drug Offic Pro 1917:37-42
- Value and importance of veterinary service in the interest and welfare of the public health. W. Thomson. Am Vet M Assn J 52: 428-39 Ja '18
- See also Disinfection and disinfectants; Drinking fountains; Malaria; Rural schools—Medical inspection; also American public health association

**Public health boards.** See Health boards

**Public health law**

Décret royal approuvant le règlement portant réorganisation des services et du corps des inspecteurs de l'hygiène rurale en Espagne. Int Yearbook Ag Leg 1916:1235-45 '17

Décret royal portant approbation définitive du règlement de l'institut national d'hygiène Alfonso XIII en Espagne. Int Yearbook Ag Leg 1916:782-6 '17

Loi n. 18 sur le remblayage ou dessèchement des étangs et marais en Egypte. Int Yearbook Ag Leg 1916:612-16 '17

Manual of laws pertaining to the Department of farms and markets; public health law. N Y Farms & Markets Dept Ag B 108:241-8 Je '18

**Public lands**

What should be done for the settler. I. D. O'Donnell. (In Pan American scientific congress Pro., 1915, v. 3, p. 466-8) '17

**Bibliography**

Public domain; government publications concerning public lands, conservation, railroad land-grants, etc. (Price list 20—8th ed) 16p '17 Supt. of doc., Washington, D.C.

**Argentina**

Lands of the state domain. Int R Ag Econ 79:78-9 Jl '17

**Arizona**

See also Arizona—Land commissioner, State

**Australia**

Land settlement in Queensland. Int R Ag Econ 64:77-86 Ap '16

Land settlement in Victoria. Int R Ag Econ 61:85-96 Ja '16

**Canada**

Classification of the crown lands of New Brunswick, by P. Z. Caverhill; Report of the committee on lands, by F. C. Nunnick. (In Report, 1917, p. 81-91, 209-26) il '17 Canada Comm. of conservation, Ottawa

57th annual report for the year ended 31st October, 1917. 206p il map '18 New Brunswick Crown land dept., Fredericton

Report of the Minister of lands for the year ending 31st December, 1916. 80p '17 Minister of lands, Victoria, B.C.

**Michigan**

Biennial report of the Public domain commission from July 1, 1914 to June 30, 1916. 179p il '17 Mich. Public domain commission, Lansing

Proceedings of the Public domain commission, 1916-1917. 400p '16 Michigan Public domain commission, Lansing

**United States**

Farms under the Truckee Carson irrigation project will be thrown open to homestead entry. Irr Age 33:55 Ap '18

Gifts of land and water power. H. Reed. il Irr Age 31:117 Je '16

Government control of grazing on the public lands. A. F. Potter. (In Pan American scientific congress Pro., 1915, v. 3, p. 325-35) '17

Public range lands—a new policy needed. R. Adams. Am J Sociology (Univ. of Chicago Press, Chicago 50c) 22:324-51 N '16

Sawtooth national park and the two mile limit law. H. Sproat. Am Sheep B & W 36: 236 Ap '16

Secretary Lane tells how the government will open up land for food. A. E. Richter. il Country Gent 82:1105 Jl 7 '17

Settlement of public lands in the United States. B. H. Hibbard. Int R Ag Econ 61: 97-117 Ja '16

See also Forest reserves; Homestead law; National parks; Ranges

**Public printing.** See Printing, Public**Public schools**

Agricultural equipment in public schools. il Ag Gaz of Canada 4:699-705 Ag '17

See also Rural schools

**Public speaking****Study and teaching**

See also Oral composition

Puccinia. See Rusts

**Puddings**

My bread puddings. C. B. King. Country Gent 81:720 Mr 25 '16

Puddings in the steamer. E. D. Thompson. Country Gent 81:550 Mr 4 '16

**Puff balls**

Puff balls. A. R. Sweetser. il Ore Univ (Eugene) Ext Bot Ser no 9 4p '17

**Pulleys**

Getting proper belt speed on farm machines. Hoard's D 54:658 N 30 '17

Power of a pulley. Rural N Y 77:428 Mr 16 '18

Pulleys to run separator. Wallaces' F 41: 1027 Jl 28 '16

What sized pulley? R. Olney. Country Gent 82: 481 Mr 10 '17

Why we need a standard belt speed. F. N. G. Kranich. Power F 26:44 Ag '17

See also Belting

**Pumping**

\* Community irrigation pumping plant. E. E. Glass. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:458 N 13 '18

Effect of pumping from a shallow well on the ground-water table. W. W. Weir. J Ag Research 11:339-57 N 12 '17

Pumping for irrigation, with special reference to the Arkansas River valley. J. B. Marcellus. map Kan Ag Ext B 17:1-16 '18

Run-off from the drained prairie lands of southern Louisiana. C. W. Okey. J Ag Research 11:247-79 N 5 '17

**Cost**

\* Cost of irrigation pumping in Chandler district of Salt River project. J. M. Gaylord. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:470 N 13 '18

Cost of pumping for irrigation. O. L. Waller. Wash Ag Exp Pop B 104:1-11 '16

**Pumping machinery**

Investigations of irrigation pumping plants. H. E. Murdock. il Mont Ag Exp B 115:127-48 '17

Land drainage by means of pumps. S. M. Woodward. il plans map U S Ag B 304:1-59 '15

Pump irrigation in Nebraska. E. E. Brackett and O. W. Sjogren. il Neb Ag Exp C 2:1-23 '17

Pumping for irrigation. H. E. Murdock. il Mont Ag Exp C 60:1-37 '17

Pumping for irrigation on the farm. P. E. Fuller. il U S Ag Yearbook 1916:507-20; Same. Separate 703

**Pumpkins**

Dry pumpkins and squash which may not keep in storage. E. L. Kirkpatrick. il Rural N Y 76:1439 D 22 '17

In pumpkin season. M. H. Talbott. Country Gent 81:1989 N 11 '16

Pumpkins in corn. Wallaces' F 43:602 Ap 5 '18

See also Feeding and feeding stuffs—Pumpkins

**Pumps**

Making the pump do its bit. R. H. Smith. il Country Gent 83:19 My 11 '18

New acid-proof pump. Am Fert 48:40 My 25 '18

New acid pump. Am Fert 49:64 Jl 20 '18

Pumping deep wells. N Y Prod R 45:468+ F 6 '18

Pumping from deep well. Rural N Y 75:658 Ap 22 '16

Vacuum chamber for the pump. il plan Rural N Y 77:1331 N 30 '18

Water supply; rams and suction pumps. J. D. Kilpatrick. Field il 26:72 Ja '16

**Punkies**

Punkies, no-see-um or sand flies. R. D. Whitmarsh. il Ohio Ag Exp B v 1:223-4 Jl '16



**Purdue university**

**Agricultural experiment station**

See Indiana agricultural experiment station

**Agricultural extension, Department of**

5th annual report of the department of agricultural extension for the year ending June 30, 1916. *Purdue Ag Ext* 68p '16

6th annual report for the year ending June 30, 1917. *Purdue Ag Ext* 62p n.d.

**College of agriculture**

Agricultural education at Purdue since 1913. *Purdue Ag* 12:570-1 Je '18

Home economics in the winter course. *il Purdue Ag* 10:43 Ap '16

Who's who in agriculture at Purdue. M. L. Fisher. *Purdue Ag* 10:11-18 Ap '16

**Purple martins**

Purple martin. E. S. Jones. *il Ohio F* 139:350 Mr 3 '17

Purple martins. *Ohio F* 141:704 My 25 '18

**Purpura**

*Purpura haemorrhagica* in the horse with addenda of allied affections. F. C. Mahon. *Am Vet M Assn J* 48:742-5 Mr '16

*Purpura hemorrhagica* treated with normal horse serum. L. Schlenker. *Am Vet M Assn J* 49:403-4 Je '16

**Purse crabs**

Tree climbing crab. H. A. Zimmerman. *il Am For* 24:111 F '18

**Pushcarts**

Handy pushcart. *Country Gent* 81:1124 My 27 '16

**Pyotherapy**

Pyotherapy in the treatment of harness wounds. H. Velu. *Am Vet M Assn J* 53:667-8 Ag '18

**Pyracanthas**

Two new pyracanthas from China. A. B. Jackson. *Gard Chron (Lond)* 60:309 D 30 '16

**Pyralis farinalis**. See Meal snout moth

**Pyrausta nubilalis**. See European cornstalk borers

**Pyrenopeziza**

Yellow-leafblotch of alfalfa caused by the fungus *pyrenopeziza medicaginis*. F. R. Jones. *bibliog il J Ag Research* 13:307-30 My 6 '18

**Pyrenothrix**

*Pyrenothrix nigra*, gen. et sp. nov. L. W. Riddle. *il Bot Gaz* 64:512-5 D '17

**Pyridine**

Cause of the disappearance of cumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. *bibliog il Ala Ag Exp B* 195:49-64 '17

Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. *bibliog Ala Ag Exp B* 196:65-82 '17

**Pyrite**

Burning brimstone in pyrites equipment. *plan Am Fert* 46:24-6 Je 9 '17

Canadian pyrites and sulphuric acid. *Am Fert* 49:74+ S 28 '18

Fertilizer materials statistics. (*In Am fertilizer hdbk.*, 1917, p. 32-3) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

Fertilizer materials statistics. (*In Am fertilizer hdbk.*, 1918, p. 34-6) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia

Production of sulphur, pyrite and sulphuric acid in 1916. *Am Fert* 47:46 O 27 '17

Pyrite deposits of Georgia. *Am Fert* 48:82 Je 22 '18

Pyrite resources of Ducktown, Tenn. J. H. Taylor. *Am Fert* 48:60+ Ap 13 '18

\* Situation in regard to manganese, sulphur, pyrite, and some other war minerals; with discussion. J. E. Johnson, jr. *Eng Soc W Pa* (568 Union Arcade bldg., Pittsburgh, Pa. 50c) 33:652-5 Ja '18

Spanish pyrites. *Am Fert* 48:31-2 My 11 '18

Sulphur and pyrite in 1916. P. S. Smith. (*In Am fertilizer hdbk.*, 1918, p. 47-50) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia; Same. *Am Fert* 48:68+ Mr 2 '18

Sulphur and pyrites in 1917. P. S. Smith. *Am Fert* 49:36-42+ Ag 17 '18

Sulphur and pyrites situation in relation to the fertilizer industry. A. D. Ledoux. *Am Fert* 49:113-14 Ag 3 '18

Sulphur, pyrite and sulphuric acid in 1915. W. C. Phalen. *Am Fert* 45:21-30 N 11 '16

Sulfur, pyrite and sulfuric acid in 1917. *Am Fert* 48:31 My 25 '18; Same. *Eng & Mining J* (10th av at 36th st, N.Y. 15c) 105:973-4 My 25 '18

Utilization of pyrite in Illinois coal. E. A. Holbrook. *il Am Fert* 47:25-33 S 15 '17

**Pyronema**

Development of *pyronema confluens* var. *inigneum*. W. H. Brown. *Am J Bot* 2:289-97 Je '15

**Pyronias**

Hybrid between the pear and quince. L. Traub. *il J Heredity* 7:416-18 S '16

**Pyrus malus**. See Apples

**Pythiacystis**

*Pythiacystis* on avocado trees. H. S. Fawcett. *Phyt* 6:433-5 D '16

**Q**

**Quack grass**

Ancient foe makes new raids. *Rural N Y* 75:992 Jl 15 '16

Couch-grass for feeding purposes. *J Bd Ag* 24:1441-4 Mr '18

Eradicating quack grass. Wallaces' *F* 41:524 Mr 31 '16

Experience with quack grass. D. Wooton. *Nat Stock & F* 42:287 Je 15 '18

Fight against quack grass. *il Rural N Y* 76:452 Mr 24 '17

Fighting quack to the death. R. E. Dimick. O Judd Farmer 61:17 Jl 29 '16

Finish fight with quack grass. H. C. Collins. *Rural N Y* 76:405 Mr 17 '17

Getting rid of quack grass. A. H. Frost. *Country Gent* 82:366 F 24 '17

How to eradicate quack grass. *Prac F* 112:270 Je 15 '16

How to kill quack grass. A. L. Stone. *il Hoard's D* 55:643 My 3 '18

Identification of the seeds of species of agropyron. R. C. Dahlberg. *bibliog il J Ag Research* 3:275-82 D '14

More about quack grass eradication. C. F. Myer. *Hoard's D* 51:491 Ap 7 '16

Playing ducks and drakes with quack grass. *Rural N Y* 76:369 Mr 10 '17

Quack grass and western wheat grass. A. N. Hume and S. L. Sloan. *il S D Ag Exp B* 170:496-524 '16; Abstract. *Kimball's D F* 15:270 Ap 15 '17

Quack grass eradication. *Hoard's D* 51:255 Mr 3 '16

Quack grass in spring. R. E. Dimick. O Judd Farmer 60:5 Ap 15 '16

Underground stems of quack-grass. Better Fruit 13:8 Jl '18

**Seed**

Germination of seeds of agropyron repens. R. C. Dahlberg. *Assn Offic Seed Analysts Pro* 1916-1917:21-4 '17

**Quails**

\* Bobwhite. W. S. Taylor. *il Texas Univ (Austin) B* 1748:1-26 Ag 25 '17

Bobwhite quail. H. W. Weisgerber. *Ohio F* 138:624 D 23 '16

Farmer's best friend. *il Nat Stock & F* 40:1440 Mr 24 '17

Farmers' best friend. E. S. Jones. *Ohio F* 137:364 Mr 4 '16

Game-bird of the future. H. W. Lanier. *il Scribner's* (597 5th av., N.Y. 25c) 61:239-49 F '17

**Quails —Continued**

Western quails being exterminated. R. W. Shufeldt. *il Am For* 23:565-6 S '17

**Diseases and pests**

Epithelioma contagiosum of quail. B. Gallagher. *Am Vet M Assn J* 50:366-9 D '16

**Quakers as farmers**

Progressive Quaker township. *il Wallaces' F* 41:863 Je '16

**Quarantine.** See Infectious diseases; Public health; Quarantine, Agricultural

**Quarantine, Agricultural**

Additional list of state and national quarantines against the white pine blister rust. R. G. Pierce. *Phyt* 8:484-6 S '18

Alfalfa weevil and state quarantine. G. P. Weldon. *il Cal State Comm Hort B v* 7:484-7 Ag '18

Boll weevil quarantine regulations. map *Ga Entom Bd C* 25:1-11 '18

Certified—sealed. F. Maskew. *il Cal State Comm Hort B v* 5:164-6 My '16

Cooperación Panamericana en la cuarentena de las plantas, by R. Sundberg; Cooperación en el servicio cuarentenario de plantas entre los países Panamericanos, by J. R. Johnston; Pan American cooperation in plant quarantine, by C. L. Marlatt; Are uniform regulations feasible among the different American countries for the prevention of the introduction and dissemination of diseases of animals? by J. L. Suárez; F. Etchegoyen; R. M. Ximénez; J. Besnard; A. D. Melvin. (*In* Pan American scientific congress, Pro., 1915, v. 3, p. 869-73, 884-8, 888-95, 916-47) '17

Cooperation in the establishment of state quarantines in crop pest laws. J. E. Taylor. *J Econ Entom* 9:299-303 Ap '16

Cooperation of the War trade board requested in the enforcement of the plant quarantine act. (Service and regulatory announcements—Fed. Hort. Bd. 54) p 71-3 '18 U S Ag

Danger of introducing fruit flies into the United States. E. A. Back. *il U S Ag Yearbook* 1917:185-96

Decree of the Italian minister of agriculture, prohibiting the export of various plants and parts of plants. *Int R Sci & Prac Ag* 8,no 3:471-2 Mr '17

Federal horticultural board urged to exercise decisive powers. *Am For* 24:441 Jl '18

How the quarantine division protects the cotton producer. F. Maskew. *il Cal State Comm Hort B v* 5:311-20 S '16

Illinois breeders fight quarantine. O Judd Farmer 60:4 Mr 25 '16

Imports of stock into N.S.W.; the quarantine laws and regulations. S. T. D. Symons. *Ag Gaz of New South Wales* 29:321-9 My '18

Imported insect pests; more than half our crop destroyers have come by accident from other countries. C. Vrooman. *il Country Gent* 82:1636-7 O 27 '17

Independence of American nurseries. D. Fairchild. *il Am For* 23:213-16 Ap '17

Levis animals' quarantine station. J. A. Couture. *il Ag Gaz of Canada* 3:118-20 F '16

Loi n. 1 sur la protection des plantes contre les maladies provenant de l'étranger en Egypte. *Int Yearbook Ag Leg* 1916:854-5 '17

Losses caused by imported tree and plant pests. C. L. Marlatt. *il Am For* 23:75-80 F '17

Peculiar new quarantine order. O Judd Farmer 60:6 F 26 '16

Pine blister disease quarantines. *Am For* 23:302 My '17

\* Plant inspection and quarantine laws, orders and regulations applying in the state of Arizona. 52p '18 Arizona Comm. of ag. and horticulture, Phoenix

Plant quarantine legislation. *Phyt* 8:170-2 Ap '18

Plant quarantine, sweet potatoes and yams. (Service and regulatory announcements—Fed. Hort. Bd. 47) p 143-8 '18 U S Ag

Potato quarantine and the American potato industry. W. A. Orton. *U S Ag B* 81:1-20 '14

Prohibition of the importation of cotton plants, unginned cotton and cotton seed into French colonies. *Ag J of India* 13:723-5 O '18

Prohibition, regulation, and restriction of import into British India of certain plants and seeds. *Ag J of India* 13:359-62 Ap '18

Proposed measures, with rules and regulation now in force, also A list of current quarantine and other restrictive orders. (Service and regulatory announcements—Fed. Hort. Bd. 45) p 119-34 '17 U S Ag

Proposed restrictions of plant importations. *Gard Chron Am* 22:252 O '18

Quarantine on account of Japanese beetle. D. F. Houston. (Service and regulatory announcements—Fed. Hort. Bd. 56) p 91-2 '18 U S Ag

Quarantine regulations and recommendation, Georgia. map *Ga Entom Bd C* 18 10p '16

Regulations governing the export shipment from the Philippine Islands of all plants and the materials used in the packing thereof. *Philippine Ag R* 9,no 2:57-9 '16

Report of the Federal horticultural board for the fiscal year ending June 30, 1917. 16p '17 U S Ag

Rules in fixing periods of quarantine against foot-and-mouth disease. V. A. Moore. *Am Vet M Assn J* 48:442-50 Ja '16

Safeguarding our plants and trees. *il Field II* 27:278 Ap '17

Save us from invading pests. J. G. Sanders. *il map Am For* 23:147-53 Mr '17

Sealing the Jerseys at quarantine. A. L. Tichane. *il Jersey B* 37:185-6 F 6 '18

\* Tick eradication quarantine law. (*In* 5th biennial report, p. 60-7) '18 La. State live stock sanitary bd., Baton Rouge

**Quarternail.** See Anthrax, Symptomatic

**Quassia**

Quassia extract as a contact insecticide. N. E. McIndoo and A. F. Sievers. *bibliog J Ag Research* 10:497-531 S 3 '17

Quassia as a contact insecticide. W. B. Parker. *il U S Ag B* 165:1-8 '14

**Quebec**

See also subhead Canada under special subjects

**Agriculture, Department of**

Report of the Minister of agriculture of the province of Quebec, 1917. 227p *il '17 Quebec ag. dept., Quebec*

**Description and travel**

Impressions of a journey in central Quebec. *il J Ag (Quebec)* 21:71, 86 N-D '17

Little visit to Frontenac county. *J Ag (Quebec)* 22:54 O '18

**Entomology, Bureau of**

Entomological service of Quebec. G. Maheux. (*In* Report, Entom. Soc. of Ontario, 1917, p. 33-6) '18 Ontario ag. dept., Toronto

**Lands and forests, Department of**

Report for the twelve months ended 30th June, 1917. 133p '17 Quebec, Dept. of lands and forests, Quebec

**Poultry, Division of**

Report, 1916-1917. (*In* Report, 1917, p. 120-6) *il '17 Quebec ag. dept., Quebec*

Quebec cheesemakers cooperative agricultural society

Report of operations for year 1916. (*In* Report, Quebec Dairymen's assn., 1916, p. 321-22) '17

Sales depot for Quebec dairymen. *J Ag (Quebec)* 22:95 D '18

7th annual report, 1916. (*In* Report, 1917, p. 200-10) '17 Quebec ag. dept., Quebec

Summary of six months' operations. *J Ag (Quebec)* 20:38 Ag '16

Quebec farmers' experimental union. See Union expérimentale des agriculteurs de Québec



**Quebec homemakers' clubs**

Annual convention, Macdonald college, June 13-14. J Ag (Quebec) 20:20 J1 '16

4th annual convention at Macdonald college, June 20-21, 1917. J Ag (Quebec) 21:30 Ag '17

**Quebec pomological and fruit growing society.**  
See Pomological and fruit growing society of the province of Quebec

**Quebec provincial fair**

Teaching of agriculture at fairs and exhibitions. H. Nagant. Ag Gaz of Canada 3:890-2 O '16

**Quebec seed-growers' cooperative agricultural society**

Report, 1915-16-17. (In Report, 1917, p. 215-18) '17 Quebec ag. dept., Quebec

**Quebec society for the protection of plants from insects and fungous diseases**

Annual winter meeting, Macdonald College, March 21st. J Ag (Quebec) 21:163 My '18

8th annual meeting, Macdonald college, March 14th. J Ag (Quebec) 19:234 My '16

9th annual report, 1916-1917; supplement to the report of the Department of agriculture. 144p il plan '17 The Society, J. M. Swaine, sec., Macdonald college, Ottawa

**Queensland**

See also subhead Australia under special subjects

**Forestry service**

\* Annual report of the Director of forests, 1917. N. W. Jolly. 5p, 4pl '18 Queensland Dept. of public lands, Brisbane

**Quercus.** See Oak

**Quest of the snows;** story. H: Oyen. il See weekly numbers of Country gentleman, Oct. 5-Nov. 23, 1918

**Quichua quinoa.** See Quinoa

**Quick grass.** See Quack grass

**Quicklime.** See Lime

**Quilts**

Revival of quilt piecing. il Nat Stock & F 40: 1030-1 Ja 6 '17

More about patchwork quilts. Mrs D. B. Phillips. il Rural N Y 75:1186 S 9 '16

**Quince rust.** See Orange rust

**Quinces**

Home canning; quinces. A. M. Johnson. Country Gent 82:1434 S 15 '17

Pear versus quince root for the Bartlett. W. P. Tufts. il Cal State Comm Hort B v 7:416-19 Je '18

Petalization in the Japanese quince. A. A. Hansen. il J Heredity 9:15-17 Ja '18

Quince dainties. J. E. Clemmens. Ohio F 138:397 O 21 '16

Quince—fruit of quality. F. A. Waugh. Country Gent 81:1031 My 13 '16

Quince recipes. Rural N Y 75:1243 S 23 '16

Quinces. A. M. Johnson. Country Gent 82:1434 S 15 '17

Quinces in New York state. H. L. Brown. il N Y Ag Dept B 79,pt 2:1209-13 Ja '16

See also Pyronias

**Diseases and pests**

Common diseases of apples, pears and quinces. M. T. Cook. il N J Ag Exp C 80:1-27 '17

Quince rust. F. D. Kern. il Country Gent 81: 795 Ap 8 '16

Spray calendar for apples and quinces. il N J Ag Exp C 93:1-4 '18 (rev. C. 75)

Spray calendar for apples and quinces. N J Ag Exp C 75 2p '17

**Statistics**

Table showing number of trees and production in bushels of quinces in New York state. N Y Ag Dept B 79,pt 2:1214-15 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1214-15 '17

**Quinoa**

Chenopodium quinoa in Columbia. Int R Sci & Prac Ag 7,no 1:82 Ja '16

\* Quinoa, a South American cereal. E: Albes. il Pan Am Union B (17th and B sts, N. W., Washington, D.C. 25c) 47:51-61 J1 '18

**Quinoline**

Cause of the disappearance of cumarin, vanillin, pyridine and quinoline in the soil. W: J. Robbins. bibliog il Ala Ag Exp B 195:49-64 '17

Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. bibliog Ala Ag Exp B 196:65-82 '17

**Quinoa.** See Quinoa

**Quitch grass.** See Quack grass

**Quitter;** a love story. G. E. A. Coley. il Am Coop J 13:474-5+ Ag '18

**Quotations**

Bible and cattle; milk and butter. G: B. Harper. Jersey B 37:113 Ja 23 '18

**R**

**Rabbit traps**

Practical rabbit trap. H. W. Doyle. Country Gent 81:1873 O 21 '16

Rabbit traps. J. M. Walmsley. il Country Gent 81:906 Ap 22 '16

Some rabbit traps. Wallaces' F 42:198 F 2 '17

Tile trap for rabbits. Wallaces' F 41:217 F 11 '16

**Rabbits**

Black Siberian hare; name under which certain rabbits are being exploited as valuable fur producers. Weekly N L 4:2 F 14 '17

Building up a trade for dressed rabbit. C. P. Gilmore. Am P Advocate 26:310 Mr '18

Checked rabbits. W: H. Nobbs. il Am P Advocate 26:432 My '18

Color inheritance in mammals; the rabbit. S. Wright. J Heredity 8:473-5 O '17

Commercial giant rabbit. I. F. Tillinghast. Am P Advocate 25:342 Mr '17

Commercial rabbit. Am P Advocate 26:62 D '17

Cottontail rabbits in relation to trees and farm crops. D. E. Lantz. il Farmers' B 702:1-12 '16

Domestic rabbits. L. S. Crandall. il Country Life 31:80 F '17

Feeding experiments with rabbits. C. J. Davies. J Bd Ag 23:583-5 S '16; Abstract. Int R Sci & Prac Ag 7,no 12:1808-9 D '16

Few don'ts for novice rabbit breeders. W: H. Nobbs. Am P Advocate 26:577 S '18

Hints to possible rabbit breeders. W: H. Nobbs. Am P Advocate 26:433 My '18

Hot weather hints to rabbit breeders. W: H. Nobbs. Am P Advocate 26:542 Ag '18

Housing and feeding rabbits. V. M. Couch. Am P Advocate 26:544 Ag '18

How to make hasenpfeffer. T. Schwenk. Rural N Y 77:93 Ja 19 '18

Killing and dressing rabbits and tanning rabbit skins. W: H. Nobbs. Am P Advocate 26:662 N '18

Light gray Flemish giants. W: H. Nobbs. il Am P Advocate 26:470 Je '18

Local rabbit industry shows remarkable growth in short period; some figures. Am P Advocate 26:580 S '18

New food product to can. il Ladies Home J (Independence sq., Philadelphia 15c) 35:73 My '18

Our supply of rabbit meat. Ohio F 138:632 D 23 '16

Pedigreed New Zealand rabbits. C. A. Warren. Am P Advocate 26:63 D '17

Pennsylvania wants the rabbits. G: D. Gideon. Rural N Y 75:975 J1 15 '16

Poisoning rabbits with strychnine. J Ag New Zealand 15:336-7 D '17

Poisoning rabbits with strychnine. G. H. Blair. J Ag New Zealand 15:150-1 S '17

Preparing rabbits for the table and market. J Bd Ag 25:858-60 O '18

Protecting trees from rabbits. J. Smith. Fruit-Grower 28:283 Je 1 '17

Rabbit destruction. T. P. Glennan. Ag Gaz of New South Wales 29:413-24 Je '18

**Rabbits—Continued**

- Rabbit destruction. F. Lock. J Dept Ag S Australia 21:223-8 O '17
- Rabbit exhibit at the Boston poultry show, Jan. 15-19, 1918. W; H. Nobbs. il Am P Advocate 26:228-9 F '18
- Rabbit hutches. F. G. Dutton. Rural N Y 77:1266 N 9 '18
- Rabbit keeping. il J Bd Ag 25:564-72 Ag '18
- Rabbit pest. H. Munro. J Ag New Zealand 15:206-9 O '17
- Rabbits for utility purposes. J. H. Wagner. il Am P Advocate 25:684-5 O '17
- Rabbits in the orchard. Green's Fruit Grower 36:7 D '16
- Rabbits in wartime. C. P. Gilmore. Am P Advocate 26:144 Ja '18
- Rabbits to eat. V. V. Detwiler. il Country Gent 83:29 Ap 27 '18
- Rabbits vs. New York growers. Rural N Y 75:910 Je 24 '16
- Rabbits versus poultry. H. C. Gilbert. Am P Advocate 25:746 N '17
- Raise rabbits for meat. Weekly N L 4:2 Jl 4 '17
- Raising Belgian hares and other rabbits. D. E. Lantz. il Farmers' B 496:1-16 '17 (rev)
- Raising rabbits for food. E. I. Farrington. il Rural N Y 77:1111 S 28 '18
- Raising rabbits on a city lot. Am P Advocate 26:145 Ja '18
- Rodents in the orchard. D. Wylie. Country Life 30:20 Je '16
- Scheme for rabbit breeding and keeping. J Bd Ag 25:462-4 Jl '18
- Serving the rabbit. M. E. Kramer. O Judd Farmer 62:30 F 17 '17
- Smith family rabbitry. J. F. Bruins. il Hoard's D 55:820 My 31 '18
- Some bits concerning rabbits. W; H. Nobbs. il Am P Advocate 26:506 Jl '18
- Source of food. G. Hough. Nat Stock & F 41:978 Ja 5 '18
- Steel gray Flemish giants. W; H. Nobbs. Am P Advocate 26:379 Ap '18
- Supplies of rabbits and game. J Bd Ag 24:1120-2 Ja '18
- Taking of wild rabbits. R. Sharpe. J Bd Ag 25:281-98, 435-44 Je-Jl '18
- Use of strychnine for destruction of rabbits. J Ag New Zealand 17:164 S '18
- Value of the rabbit. L. G. Young. Rural N Y 75:646 Ap 15 '16
- Various matters of interest to rabbit breeders. W; H. Nobbs. Am P Advocate 26:471 Je '18
- Varying hares of the prairie provinces. N. Criddle. Ag Gaz of Canada 4:260-3 Ap '17
- What to grow for rabbit feed. W; H. Nobbs. Am P Advocate 26:380 Ap '18
- Who owns the rabbit? Rural N Y 75:999 Jl 22 '16
- See also Angora rabbits; Belgian hares; Black Siberian hares; Hares; Rodents

**Diseases and pests**

- Ectopic pregnancy with mummification of the foetus in a rabbit. A. A. Leibold. il Am Vet M Assn J 50:614-16 Ja '17
- Hasstilesia tricolor, a common parasite of rabbits in the United States. M. C. Hall. Am Vet M Assn J 48:453-6 Ja '16
- Little-known rabbit ear mite. A. B. Duckett. il Am Vet M Assn J 48:726-30 Mr '16
- Mortality of rabbits in wet years in consequence of coccidiosis. Int R Sci & Prac Ag 9,no 1:73 Ja '18
- Rabies. See Hydrophobia
- Raccoons
- How to trap mink and coon. A. R. Harding. Nat Stock & F 41:998 Ja 12 '18
- How to trap raccoon. O Judd Farmer 64:17 Ja 12 '18
- Jake. H. M. Seymour. Country Life 31:152 Ap '17
- Talks to young trappers. G; J. Thiessen. il Country Gent 82:1936 D 8 '17
- Tested methods of taking the raccoon and 'possum. G; J. Thiessen. Ohio F 138:526 N 25 '16
- Trapping skunk and raccoon. C; H. Chesley. O Judd Farmer 61:25 N 25 '16

Trapping the raccoon. C. O. Ormsbee. il Country Gent 83:35 N 9 '18

Race characteristics. See Ethnology

**Race problems**

Mankind—racial values and the racial prospect, by Seth K. Humphrey. Review. J Heredity 8:493-9 N '17

**Race tracks**

How to make a race track. E. L. D. Seymour. il Country Life 29:158 Mr '16

**Races**

County boys' relay race. E. J. Arnot. Rural Manhood 8:110-12 Mr '17

Races of man. See Ethnology

Racing. See Dog racing; Horse racing

**Radioactive substances as fertilizers**

Radium and plant growth. Gard Chron (Lond) 60:136 S 16 '16

Use of radio-active material as a fertiliser. Ag Gaz of New South Wales 27:807-8 N '16

Use of radioactive substances as fertilizers. W; H. Ross. U S Ag B 149:1-14 '14

**Radioactivity**

Report on the determination of radioactivity. F. B. Furber. Assn Offic Ag Chem J 2,no 3, pt 1:116-19 N '16

**Radishes**

Cost of growing radishes. A. E. Wilkinson. il Country Gent 81:637 Mr 18 '16

Growing greenhouse radishes. R. M. Hasbrouck. Market Growers J 18:177 Mr 1 '16

Radishes and carrots that will make you proud. il Country Gent 83:48 Mr 9 '18

Radishes and lettuce. Weekly N L 4:2 My 16 '17

Radishes from May to March. A. Kruhm. il Ohio F 137:466 Mr 25 '16

Radishes on sixty acres. il Am Flor 50:36 Ja 19 '18

Radishes under glass. Am Flor 50:280 F 23 '18

Raising radishes for market; a southern winter crop. C. Remington. il Rural N Y 77:196, 229 F 9-16 '18

Recent researches on the chemical and histological characters of radishes cultivated in the presence of sugars. Int R Sci & Prac Ag 7,no 1:55 Ja '16

Winter radishes. il Country Gent 82:1240 Ag 4 '17

**Diseases and pests**

Controlling a radish pest, summarized by F. H. Hall. il N Y State Ag Exp B (Pop. ed.) 442:1-8 '17

Radish maggot and screening. P. J. Parrott. J Econ Entom 10:79-81 F '17

Rheosporangium aphanidermatus, a new genus and species of fungus parasitic on sugar beets and radishes. H. A. Edson. il J Ag Research 4:279-92 Jl '15

**Seed**

Viability of radish seeds (raphanus sativus L.) as affected by high temperatures and water content. H. D. Waggoner. bibliog Am J Bot 4:299-313 My '17; Abstract. Int R Sci & Prac Ag 9,no 1:47-9 Ja '18

**Varieties**

Which radishes and why. A. Kruhm. il Gard M 23:25-6 F '16

Winter radishes; varieties of winter radishes. Prac F 112:310 Ag 15 '16

**Ragwort**

Poisoning of cattle by ragwort. J Bd Ag 24:433-5 Jl '17

Railroad bonds. See Railroads—Securities

Railroad commissions. See Iowa railroad commission

Railroad eight-hour law. See Eight-hour law, Railroad

**Railroad law**

28-hour law regulating the interstate transportation of live stock: its purpose, requirements, and enforcement. H. Goding and A. J. Raub. il plans U S Ag B 589:1-19 '18; Same (pt. 1). Am Sheep B & W 38:703-6 N '18



**Railroad ties**

- Crossties purchased and treated in 1915. A. M. McCreight. U S Ag B 549:1-8 '17  
Farmers may get old ties. Power F 27:32 N '18  
Indian forest records; a further note on the antiseptic treatment of timber, recording results obtained from past experiments. R. S. Pearson. 128p il 4s 6d '18 India government printing co., Calcutta

**Railroad worms.** See Apple maggots

**Railroads**

- Colonization operations of the Canadian Pacific railway company. A. Cameron. (In T: Adams. Rural planning and development, p. 261-2) '17 Canada Comm. of conservation, Ottawa  
Ohai district railway; pioneer enterprise under the local railways act. A. W. Rodger. J Ag New Zealand 17:143-6 S '18  
Railroad appraisal. C. Thorne. Wallaces' F 42:88 Ja '19 '17  
Railway situation. G. E. McIntosh. (In Report. Fruitgrowers' assn., 1916, p. 51-61) '17 Ontario ag. dept., Toronto  
Rural transportation and distribution; railways and highways. (In T: Adams. Rural planning and development, p. 72-101) il '17 Canada Comm. of conservation, Ottawa  
Soldiers of the steel rail. Ag Digest 2:696 N '17  
What the railroads are doing to help win the war. il Ag Digest 2:524 Jl '17  
Who owns the railroads? Ag Digest 2:652 O '17  
See also Freight car service; also Iowa railroad commission

**Freight**

- Car situation. G. E. McIntosh. (In Report, Ontario fruit growers' assn., 1917, p. 14-20) '18 Ontario ag. dept., Toronto  
Carriage of fruit and empties. J Bd Ag 23:490-1 Ag '16  
Claims for loss and damage. Coop Manager & F 8:41 N '18  
Conover grain company secure judgment against carrier for delay in transit. Coop Manager & F 7:38-9 Ja '18  
Damage claims hearings; complaint of National association taken up by Interstate commerce commission at Chicago. N Y Prod R 45:679 Mr 13 '18  
Delays in shipment; excessive charges. Rural N Y 76:795 Je 16 '17  
Egg damage hearing resumed; railroad rules governing inspections and exemption up to five per cent again under fire. N Y Prod R 45:923 Ap 24 '18  
Egg damage hearings finished. N Y Prod R 46:2+ My 1 '18  
Egg damage rules. N Y Prod R 43:337 D 27 '16  
Egg trade wins; justice of their contentions in complaint against egg damage rules upheld by Examiner Thurtell. N Y Prod R 46:723 S 18 '18  
First essential; refrigerator cars for egg shipment. N Y Prod R 42:851 S 20 '16  
From car door to consumer. H. C. Filley. il Neb Ag Exp C 5:1-20 '18  
Increased freight rates. J. W. White. Am Fert 49:31-2 Jl 20 '18  
Larger fertilizer orders will help save car space. Weekly N L 6:10 Ag 7 '18  
Loss of grain on its way to market. il Am Coop J 13:195 Ja '18  
Minneapolis grain freight rate case. J: G. McHugh. Coop Manager & F 8:42-9 S '18  
Movement of perishable traffic. G. D. Dixon. (In Nat. league of commission merchants. 1917 convention, p. 82-90) n.d. 90 W. Broadway, N.Y.  
New effect of railroad breakage. N Y Prod R 42:594 Ag 2 '16  
New freight rates a great disadvantage to Northwest, result in an increase of 66 2/3 per cent. Coop Manager & F 7:38-9 Ag '18  
Proposed consolidation of freight classifications. Am Fert 49:32 N 9; 27-8 N 23 '18  
Proposed increase in freight rates. Better Fruit 13:3 Jl '18

- Question of freight rates; dairy interests heard separately in the classification examination at Chicago. N Y Prod R 47:1 N 6 '18  
Standardization as it is viewed by the railway companies. H. P. Anewalt. Cal State Comm Hort B v 7:45-6 Ja '18  
Sweeping investigation of loss and damage claims on grain shipments. Am Coop J 12:762 Ag '17  
Two sides to the transportation problem. Ag Digest 1:378 Ap '17  
Working for conference with railroad freight carriers. N Y Prod R 42:558 Jl 26 '16  
See also Bills of lading; Freight car service; Freight handling; Freight inspection; Railroads—Rates; Refrigerator cars

**Government operation**

- Clearing the track for democracy. Ag Digest 2:847 F '18  
Government control of railroads. Ag Digest 2:784 Ja '18  
Government operation of American railroads. C. Thorne. Am Coop J 13:185-6+ Ja '18  
Government takes over railroads. O Judd Farmer 64:4 Ja 5 '18  
How railroad control law affects the farmer. H. B. Anderson. Am Coop J 13:341 Ap '18  
Railroad rates and who shall make them? C. Thorne. Am Coop J 13:237+ F '18  
Transportation—past and future. H. G. Wilson. Coop Manager & F 7:86-7 Ag '18  
What our association and national council have done for the farmer. C. Thorne. Coop Manager & F 7:59-63 Mr '18

**Rates**

- Adjustment of grain rate made. W. P. Trickett. Coop Manager & F 8:35 O '18  
Advancing freight rates. Wallaces' F 42:869 Je 1 '17  
Bleeding Kansas. Am Coop J 12:763 Ag '17  
Boston milk hearing. Rural N Y 75:446 Mr 11 '16  
Breeder's win in rate case. Kimball's D F 14:515 Ag 15 '16  
Breeder's win over railroads. M. D. Munn and W. Dinsmore. Hoards D 52:38 Ag 4 '16  
Building up a state; Iowa. C. Thorne. maps Wallaces' F 41:796-7 My 26 '16  
Carlot rate case. W. B. Quarton. N Y Prod R 43:574 F 7 '17  
Carlot rate hearing. N Y Prod R 41:977 Ap 5 '16  
Cottonseed cake rates. Nat Wool Grower 7:57 S '17  
Decision saves \$750,000 every day to producers and consumers. H. B. Anderson. Am Coop J 12:715 Jl '17  
Egg trade wins; justice of their contentions in complaint against egg damage rules upheld by Examiner Thurtell. N Y Prod R 46:723 S 18 '18  
Federal versus state regulation. Wallaces' F 41:1483 N 3 '16  
Fifteen per cent advance rate case closed. C. Thorne. Am Coop J 12:716-18 Jl '17  
Freight advance denied. Wallaces' F 42:984 Jl 6 '17  
Freight increase. Wallaces' F 42:964 Je 29 '17  
Freight rate hearing granted by I. C. C. Am Coop J 12:615-16+ My '17  
Freight rates and the farmer. il Ag Digest 2:652-3 O '17  
Freight rates on food products excessive. C. Thorne. Am Coop J 12:660-2 Je '17  
Freight situation. J. W. White. Am Fert 49:109-12 Ag 3 '18  
Government ownership of freight cars proposed. H. Smith. Am Coop J 12:665 Je '17  
Icing charge decision. N Y Prod R 43:1001 Ap 18 '17  
Important milk rate case. N Y Prod R 42:599 Ag 2 '16  
Important milk rate decision. N Y Prod R 44:533 Ag 1 '17  
Increase in grain rates. C. Thorne. Wallaces' F 43:1164 Ag 16 '18  
Increased freight rates. J. W. White. Am Fert 49:31-2 Jl 20 '18

**Railroads—Rates—Continued**

- Interstate commerce commission decision no. 7669; National poultry, butter & egg association v. Baltimore & Ohio Southwestern railroad company et al. 34-70p '18 U.S. Govt. ptg. office, Washington, D. C.
- Interstate commerce commission decision no. 9536; Willamette valley lumbermen's association v. Southern Pacific company et al. 250-63p '18 U. S. Govt. ptg. office, Washington, D. C.
- Maintenance of any quantity rates on dairy products. J. J. Farrell. N Y Prod R 41:1042 Ap 12 '16
- Milk and cream rate hearing before the interstate commerce commission. O. Erf. Ohio F 137:712 My 20 '16
- Milk producers hunting facts. Rural N Y 75: 389 Mr 4 '16
- Milk rate hearing. N Y Prod R 43:16 N 1 '16
- Milk rate matters. N Y Prod R 42:916 O 4 '16
- Morris & co. brief in I. C. C. carlot rate case — a statement of existing rate conditions. N Y Prod R 43:586 F 7 '17
- National council and the railroads. Am Coop J 14:20+ S '18
- Natural shrinkage rule. J. W. Shorthill. Am Coop J 11:1123 Jl '16
- New freight rates a great disadvantage to Northwest, result in an increase of 66 2/3 per cent. Coop Manager & F 7:38-9 Ag '18
- New railroad rules. Breeder's Gaz 70:173 Ag 3 '16
- New rates; effect of freight rate increase upon class tariffs. N Y Prod R 44:377 Jl 4 '17
- Opposition to increased rates. N Y Prod R 43: 1014 Ap 18 '17
- Proposed advance in freight rates. Nat Wool Grower 7:34 Je '17
- Proposed consolidation of freight classifications. Am Fert 49:32 N 9; 27-8 N 23 '18
- Proposed increase in freight rates. Better Fruit 13:3 Jl '18
- Question of freight rates; dairy interests heard separately in the classification examination at Chicago. N Y Prod R 47:1 N 6 '18
- Railroad and fruit meeting. Rural N Y 75:472 Mr 18 '16
- Railroad freight rates and the farmer. S. O. Dunn. 21p '17 S. O. Dunn, 608 S. Dearborn st., Chicago
- Address delivered before the Illinois agricultural assn. at Peoria, Ill., July 6, 1917
- Railroad freights sharply higher. O Judd Farmer 64:549 My 25 '18
- Railroad rate advance. Wallaces' F 43:872 My 31 '18
- Railroad rates on dairy products. Hoard's D 52:739 D 15 '16
- Railroad rates saved to shippers \$500,000,000 annually. C. Thorne. Am Coop J 13:420 Jl '18
- Rate increase denied on dairy products, oleo, eggs and dressed poultry in carlots. N Y Prod R 44:14 My 2 '17
- Real owners of the railroads. il Ag Digest 2: 562-3 Ag '17
- Refrigeration case won. M. H. Meyer. Hoard's D 53:628 Ap 27 '17
- Rehearing asked. N Y Prod R 44:675 Ag 22 '17
- Stock shippers save money. Country Gent 82: 686 Ap 7 '17
- Tri-state dairy association and railroad men meet; discuss cans and freight rates. Nat Stock & F 41:840 D 1 '17
- What our association and national council have done for the farmer. C. Thorne. Coop Manager & F 7:59-63 Mr '18

**Securities**

- Equipment bonds or car trusts. J. R. Milligan. Ohio F 138:275 S 23 '16
- Fundamentals of railroad bonds. J. R. Milligan. Ohio F 138:99 Ag 5 '16

**Snow protection**

- Controlling snow by tree planting. W. C. Palmer. il Am For 24:38-40 Ja '18

**Ties**

See Railroad ties

**Railroads and agricultural development**

- Address at convention of National agricultural society. J. C. Williams. Ag Digest 1: 419 My 1 '17
- Agricultural work on the Prescott and Northwestern railroad. Prog F 32:1298 D 8 '17
- Cooperating with farmers. C. E. Cassel. 13p nd. Publicity agent, Norfolk & Western railway co., East Radford, Va.
- Dairying along the Illinois Central. il Creamery 5:15-18 Mr '17
- Discussion of ways of increasing agricultural productivity. Railway Age Gazette (Woolworth bldg., N.Y. 15c) 62:1059-61 My 18 '17
- How about Aroostook (Maine)? E. Hungerford. il Country Gent 82:1410-11 S 15 '17
- Opportunities afforded the railroads of the United States for profitable agricultural development work. T. F. Powell. (In Pan American scientific congress Pro., 1915, v. 3, p. 451-5) '17
- Pure breeds replacing southern scrubs. J. C. Clair. Ag Digest 1:303 F '17
- Railroads' part in the South's development. by J. C. Clair; Railroads' interest in cut-over land development, by D. C. Welty. (In Cut-over land conf. of the South, 1917, p. 50-4, 151-5) \$2.50 '17 Southern pine assn., New Orleans, La.
- Relation of the railroad to the farmer. G. A. Cullen. Mass Ag Bd Yearbook 1917, pt 2:99-111 '18; Same. Mass Ag Bd C 82:1-15 '18
- Relation the railroads and farmers bear to each other. H. H. Glass. Tex Ag Dept B 52: 39-50 '16
- Time tables and garden truck. il Gard M 28:24 Ag '18
- What can the railroad do to develop the live stock industry in its territory; with discussion. D. E. Willard. (In Pro., Railway development assn., 1917, p. 22-5) '17 D. C. Welty, sec., Comr. of ag., Missouri Pacific railroad co., St. Louis
- What the railroads are doing in the development of farm and rural communities. J. H. Peyton. (In Agricultural extension, p 103-6) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Railroads and state**
- Studying our railroad problem. Wallaces' F 41:1466 N 10 '16
- Rails (bird)**
- Distribution and migration of North American rails and their allies. W. W. Cooke. maps U S Ag B 128:1-50 '14
- Rain and rainfall**
- Correlation of rainfall and the succeeding crops with special reference to the Punjab. S. M. Jacob. Ag J of India Sci Congress No 1916:86-102 '16
- Note on an enquiry by the government of India into the relation between forests and atmospheric and soil moisture, in India. M. Hill. (Forest B. 33) 41p map 1s 6d '16 Supt. of govt. printing, Calcutta, India
- Quantity of rainfall. Farm Eng 5:8 D '17
- \* Rain and snow in Canada. (In Report, Bur. of industries, 1917, p. 23-5) '18 Ontario ag. dept., Toronto
- Rainfall, irrigation, and the subsoil water reservoirs of the Gangetic plain in the United Provinces of Agra and Oudh. E. A. Molony. Ag J of India 12:84-9; 13:197-205, 460-70 Ja '17, Ap-Jl '18
- Rainfall types of United States. J For 15:915-17 N '17
- Relationship between the average wheat yield and the winter rainfall. A. E. V. Richardson. J Dept Ag Victoria 14:37-40 Ja '16
- Signs of rain. A. W. Kneeland. J Ag (Quebec) 22:39 S '18
- Rain tree.** See Saman
- Rain water**
- Dissolved oxygen in rain-water. E. H. Richards. J Ag Sci 8:331-7 Je '17
- Rain water pipes**
- Roof gutters and leaders. B: A. Howes. il Country Life 30:55 My '16
- Rainier national park.** Mount. See Mount Rainier national park



**Raisins**

Dates, figs and raisins. J. W. Andrews. Kimball's D F 15:401 Je 1 '17  
Delectable raisin. M. E. Kramer. O Judd Farmer 61:26 N 4 '16  
Future of the raisin industry. J. Madison. Cal State Comm Hort B v 6:141-3 My '17  
Making folks eat raisins. J. H. Collins. il Country Gent 81:1356-7 Jl 15 '16  
Raisin industry. G. C. Husmann. il U S Ag B 34:9-15 '16

**Marketing**

See also California associated raisin company

**Statistics**

1917-18 Valencia raisin crop. P. D. Thompson. (Commerce Reports no. 236) p 104-5 (O 8) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Rakes.** See Hay rakes; Sweep-rakes

**Ramie**

Growing and manufacturing ramie. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2283 Ap 21 '17

**Ramularia**

Ramularia root-rots of ginseng. C. L. Zinnsmeister. il Phyt 8:557-71 N '18

**Ranches.** See Live stock farms

**Range management**

Department of range management. il Nev Ag Exp Rep 1917:70-7 '18  
Factors affecting range management in New Mexico. E. O. Wooton. il maps U S Ag B 211:1-39 '15  
Improvement and maintenance of far western ranges. J. T. Jardine. il map Am Sheep B & W 38:498-501 Ag '18  
Pastures and corrals in range lambing. L. H. Douglas. Nat Wool Grower 7:26-7 Je '17  
Prevent waste: graze sheep and cattle together. M. Anderson. il Nat Wool Grower 7:21 D '17  
Progressive cattle range management. A. Leopold. Breeder's Gaz 71:919 My 3 '17  
Range improvement by deferred and rotation grazing. A. W. Sampson. il U S Ag B 34:1-16 '13  
Range sanitation. G. W. Barnes. il Ariz Ag Ext C 6:1-11 '16  
Some phases of live stock production on the range. R. H. Williams. Am Soc Animal Production Pro 1915-1916:186-92 '17  
Succession as a factor in range management. A. W. Sampson. J For 15:593-6 My '17  
Turning poison into mutton. S. Riley. il Nat Wool Grower 7:19-21 Ap '17  
Uncle Sam—range cowman. W. C. Barnes. il Breeder's Gaz 72:203-4 Ag 16 '17

**Rangers, Forest.** See Forest rangers

**Ranges**

Annual address to National wool growers convention. F. J. Hagenbarth. Nat Wool Grower 7:9-12 Ja '17  
Application of the Ferris stockraising homestead bill to our western grazing lands. J. J. Thornber. Am Sheep B & W 36:166 Mr '16  
Assisting to handle the forests. A. F. Potter. Nat Wool Grower 7:26 My '17  
August weather on western ranges. J. C. Alter. Nat Wool Grower 8:25 S '18  
Carrying capacity of grazing ranges in southern Arizona. E. O. Wooton. bibliog il U S Ag B 36:1-40 '16  
Conditions in Arizona. L. E. Verkamp. Nat Wool Grower 7:27 Ja '17  
Developing Australian timber; killing the thin growth in the Australian forest. R. H. Harrowell. Am Sheep B & W 38:145 F '18  
Effects of grazing upon western yellow-pine reproduction in the national forests of Arizona and New Mexico. R. R. Hill. il map U S Ag B 580:1-27 '17  
Forest grazing allowances, 1918; tabulation. Nat Wool Grower 8:24 My '18  
Forest service and the stockmen in 1917. W. C. Barnes. Am Sheep B & W 38:88-9 F '18; Same. Nat Wool Grower 8:15-18 F '18

Forestry and cattle raising on the cut-over pine lands of the Southern states. J. G. Lee. (In Cut-over land conf. of the South, 1917, p. 217-25) \$2.50 '17 Southern pine assn., New Orleans, La.

Government control of grazing on the public lands. A. F. Potter. (In Pan American scientific congress Pro., 1915, v. 3, p. 325-35) '17

Grazing fees in national forests. A. F. Potter. Nat Wool Grower 7:21-3 Ja '17  
Grazing homestead bill. W. C. Barnes. Breeder's Gaz 71:141 Ja 18 '17  
Great Basin experiment station. A. W. Sampson. il Nat Wool Grower 8:19-21 Ap '18  
Great Divide wants 50-50. Am Sheep B & W 36:463 Ag '16  
Great Lakes range; Cloverland, Mich. L. C. Harmon. Am Sheep B & W 38:135-6 F '18  
Help kill this ruinous herd law. Am Sheep B & W 36:326 Je '16  
Hooverizing of water. G. F. Stratton. il Country Gent 83:8+ O 12 '18  
How the Forest service has helped the stockmen. A. F. Potter. il Am For 24:165-9 Mr '18  
Idaho priority law. Nat Wool Grower 7:43 D '17  
Idaho priority law. Nat Wool Grower 8:64-5 Ap '18  
If the rain comes soon. G. F. Stratton. il Country Gent 83:5+ Ap 20 '18  
Improvement and maintenance of far western ranges. J. T. Jardine. il Am Sheep B & W 38:427-9, 635-8 Jl, O '18  
Increased cattle production on southwestern ranges. J. T. Jardine and L. C. Hurtt. il U S Ag B 588:1-31 '17  
Increasing the forage on western range. M. A. Smith. Nat Wool Grower 8:27-8 Mr '18  
Increasing the grazing fees on national forests. Am For 23:177 Mr '17  
Lake that is a sheep trail. W. C. Barnes. il Breeder's Gaz 73:157 Ja 24 '18  
Livestock trails; important features of the 640-acre homestead act. Nat Wool Grower 7:37 Ap '17  
Longest sheep ranges in the world. G. F. Stratton. il Wallaces' F 42:3 Ja 5 '17  
Make applications for stock trails under stock raising homestead law. H. S. Hinricks. Nat Wool Grower 7:35 My '17  
May revoke permits. Weekly N L 5:5 Ja 30 '18  
Meat situation in the United States. pt 2. Live stock production in the eleven far western range states. W. C. Barnes and J. T. Jardine. il maps U S Ag Rep 110:1-98 '16  
Million-acre pastures go begging. G. F. Stratton. il Country Gent 83:8-9+ Ja 12 '18  
National forest finances. T. S. Woolsey, jr. J For 15:597-604 My '17  
Natural revegetation of range lands based upon growth requirements and life history of the vegetation. A. W. Sampson. il J Ag Research 3:93-148 N '14  
New cattle range country. F. S. Hastings. Breeder's Gaz 73:602 Mr 21 '18  
One-night camps vs. established bed-grounds on Nevada sheep ranges. C. E. Fleming. il Nev Ag Exp B 94:1-21 '18  
Open range problems in Florida. F. S. Hastings. Breeder's Gaz 74:96 Jl 18 '18  
Priority right law a misnomer. A. G. Butterfield. Am Sheep B & W 36:480 Ag '16  
Public range lands—a new policy needed. R. Adams. Am J Sociology (Univ. of Chicago Press, Chicago 50c) 22:324-51 N '16  
Range preservation and its relation to erosion control on western grazing lands. A. W. Sampson and L. H. Weyl. il U S Ag B 675:1-35 '18  
Read the 640-acre act; facts regarding the homestead law. Am Sheep B & W 37:138-41 Mr '17  
Reseeding of depleted grazing lands to cultivated forage plants. A. W. Sampson. il map U S Ag B 4:1-34 '13  
Right to use the range. Nat Wool Grower 7:22-3 Ag '17  
Sawtooth national park and the two mile limit law. H. Sproat. Am Sheep B & W 36:236 Ap '16

**Ranges—Continued**

- September weather on western ranges. J. C. Alter. *Nat Wool Grower* 8:21-2 O '18
- Sheep-killing weather on the winter range. J. C. Alter. *Nat Wool Grower* 8:25-6 Mr '18
- Sheep on western ranges. R. M. Wood. *Breeder's Gaz* 73:599 Mr 21 '18
- Sheepmen and cattlemen in Idaho. H. Sproat. *Am Sheep B & W* 36:330-1 Je '16
- Too much grazing starts soil washing and may lead to ruin of good ranges. *Weekly N L* 6:9 O 9 '18
- Uncle Sam's hunters ridding range of predatory animals. *Weekly N L* 6:5 O 23 '18
- Utilization of cut over lands for live stock. F. M. Foote. *W Va Ag Dept B* 30:32-5 '17
- Victory for small flockowners in Idaho. *Am Sheep B & W* 36:144 Mr '16
- Western experiment in pasture improvement. D. D. Casement. *il Breeder's Gaz* 69:15-16 Ja 6 '16
- Will increase charges for grazing on national forests. *Weekly N L* 6:2 D 18 '18

*See also* Grazing; Pastures and meadows

**Ranunculus**

- On the vascular anatomy of the young epicotyl in some ranalean forms. K. B. Blackburn. *il Ann Bot* 31:51-80 Ja '17

**Raoulia**

- New Zealand cushion plants. *Gard Chron (Lond)* 62:210 N 24 '17

**Rape (plant)**

- Dwarf Essex rape. J. F. Duggar. *Am Sheep B & W* 36:175 Mr '16
- Dwarf Essex rape for swine. J. F. Duggar. *Field* 11 26:237 Mr '16
- Grow more rape. J. M. Evvard and W. R. Hechler. *il Ia Ag Exp C* 53:1-12 '18
- Rape as material for silage. A. R. Lamb and J. M. Evvard. *J Ag Research* 6:527-33 Jl 3 '16
- Rape for hog pasturage. C. B. Williams. *N C Ag Ext C* 21:1-4 '16
- Rape for hog pasture. C. M. Baker. *il Hoard's D* 55:730 My 17 '18
- Rape furnishes splendid pasture. *Wallaces' F* 41:762 My 19 '16
- Rape pastures. J. Bd Ag 24:182-7 My '17
- Silage and silage fermentation; rape silage. A. R. Lamb. *Ia Ag Exp* 168:9-10 '16
- Trouble from rape. H. H. Havner. *Nat Stock & F* 42:516 Ag 31 '18

**Seed**

- Turnip- and rape-seed production. A. H. Cockayne. *J Ag New Zealand* 16:311-23 Je '18

**Raphidophora**

- Region of greatest stem thickness in raphidophora. F. C. Gates. *il Am J Bot* 3:65-7 F '16

**Raspberries**

- Black raspberries. *Prac F* 112:231 Je 1 '16
- Black raspberries for evaporation. *il Nat Stock & F* 42:106 Ap 20 '18
- Black raspberry; with discussion. F. Hays. *Ill State Hort Soc Trans* 1917:235-40 '18; Same. *Wis Hort Soc Rep* 48:222-6 '18
- Black raspberry culture. *Rural N Y* 76:378 Mr 10 '17
- Bramble berries for your home garden. J. R. Mattern. *il Gard M* 22:194-5 Ja '16
- The brambles. W. S. Brown. *Ore Ag Ext B* 192:1-8 '17
- Culture of Columbian raspberries. *Green's Fruit Grower* 36:1 Mr '16
- Growing cane berries in western Pennsylvania. B. V. Egbert. *il Market Growers J* 18:307 My 1 '16
- Growing raspberries in matted row; with discussion. E. J. Justin. *il Minn Hort* 46:373-8 O '18
- Growing the raspberry for market. E. I. Farrington. *il Green's Am Fruit Grower* 38:5 Ap '18
- Marketing raspberries. *Country Gent* 82:1031 Je 16 '17
- Notes on raspberry culture. J. A. Paice. *Gard Chron (Lond)* 60:134 S 16 '16
- Notes on the breeding of raspberries. R. D. Anthony. *il N Y State Ag Exp B* 417:75-88 '16

- Pruning raspberry and blackberry plants. W. J. Green. *Ohio F* 137:767 Je 3 '16
- Raspberries. H. F. Maxim. *Maine Ag Dept B v* 17:14-20 S '18
- Raspberries, blackberries and dewberries (C. 33). O. M. Taylor. *N Y State Ag Exp Rep* 1915: 637-46 '16
- Raspberries for dessert. E. H. Durgin. *Country Gent* 81:1385 Jl 15 '16
- Raspberries in New York state. O. M. Taylor. *il N Y Ag Dept B* 79:pt 2:1353-66 Ja '16; Same. *N Y Ag Dept Rep* 1916:pt 3:1353-66 '17
- Raspberries in Pennsylvania. A. Carson. *Penn State F* 9:431-2 O '16
- Raspberries net \$100 an acre. O. H. Worth. *O Judd Farmer* 61:19 Jl 29 '16
- Raspberries on poor soil. A. J. Hartung. *il Fruit-Grower* 27:166 Mr 1 '16
- Raspberry breeding in New York. *J Heredity* 7:333 Ag '16
- Raspberry culture. *Prac F* 112:211 My 15 '16
- Raspberry culture. G. M. Darrow. *il Farmers' B* 887:1-44 '17
- Raspberry culture; with discussion. A. O. Hawkins. *Minn Hort* 45:153-5 Ap '17
- Raspberry notes from Missouri. L. R. Johnson. *il Rural N Y* 77:1188 O 19 '18
- Red raspberries. *il Nat Stock & F* 40:80 Ap 15 '16
- Results in raising new raspberries. C. P. Newman. (*In Report, Quebec Pomological and fruit growing soc.*, 1916, p. 114-20) '16
- St Regis raspberry. *Green's Fruit Grower* 36: 22 S '16
- Starting the red raspberry. *W Va Ag Ext C* 60 3p '16
- Thirty years in raspberries. G. Johnson. *Minn Hort* 44:69-76 F '16
- Training the blackberry and raspberry. W. A. Graham. *Ohio F* 138:3 Jl 1 '16
- Winter covering red raspberries in Minnesota. W. G. Brierley. *il Rural N Y* 77:1327 N 30 '18

**Diseases and pests**

- Orange rust of raspberries and blackberries. H. E. Mern. *Ohio F* 138:119 Ag 12 '16
- Raspberry diseases in Minnesota; with discussion. G. R. Hoerner. *il Minn Hort* 45: 236-43 Je '17
- Why raspberries die out. J. B. Morman. *Country Gent* 81:1542 Ag 19 '16
- See also* Raspberry anthracnose

**Statistics**

- Acreage and yield of raspberries in New York state. *N Y Ag Dept B* 79:pt 2:1367-8 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1367-8 '17

**Transportation**

- Factors governing the successful shipment of red raspberries from the Puyallup valley. H. J. Ramsey. *il U S Ag B* 274:1-37 '15
- Precooling raspberries. E. Smith. *Ag Gaz of Canada* 3:865-6 O '16

**Varieties**

- Fifteen red raspberries and the best three; with discussion. W. J. Moyle. *Wis Hort Soc Rep* 48:120-7 '18
- Varieties. L. R. Johnson. *Market Growers J* 18:51 Ja 15 '16
- Varieties of blackberries and raspberries with notes on their care. J. Oskamp. *il Ind Ag Exp B* 201:1-12 '17

**Raspberry anthracnose**

- Anthracnose disease of the raspberry and related plants. W. H. Burkholder. *bibliog il Cornell Ag Exp B* 395:157-83 '17
- Perfect stage of gloeosporium venetum. W. H. Burkholder. *il Phyt* 7:83-91 Ap '17
- Spraying to control anthracnose on black raspberries. W. C. Dutton. *il Mich Ag Exp Spec B* 88:1-8 '18

**Rat. See Rats****Rat-traps**

- Notes on rat-traps. plans J Bd Ag 24:729-31 O '17



**Ratting.** See Food supply

**Rats**

- Cleaning out rats. Rural N Y 76:571 Ap 14 '17  
 Destruction of rats in East Lothian. W: Law. J Bd Ag 22:1238-44 Mr '16  
 Experimental inbreeding. il J Heredity 7:70-6 F '16  
 Ferrets for killing rats. H. A. Surface. Rural N Y 75:4 Ja 1 '16  
 Get rid of rats. F. L. Wright. Ohio F 142:115 Ag 10 '18  
 Get the rats. Wallaces' F 43:488 Mr 15 '18  
 Getting rid of rats. Wallaces' F 43:722 Ap 26 '18; Excerpts. J Ag (Quebec) 21:xiv My '18  
 House rat: the most destructive animal in the world. D. E. Lantz. il U S Ag Yearbook 1917:235-51  
 House rats and mice. D: E. Lantz. il plan Farmers' B 896:1-23 '17; Abstract. Coop Manager & F 7:36 Ja '18  
 House sparrow and the brown rat in the prairie provinces of Canada. N. Criddle. Ag Gaz of Canada 5:348-9 Ap '18  
 How a house can be made rat-proof. Bldg Age (243 W. 39th st. N.Y. 25c) 40:351 J1 '18  
 How to destroy rats. D: E. Lantz. il Farmers' B 369:1-20 '16  
 Making buildings rat proof. Weekly N L 4:11 My 2 '17  
 Menace of the rodent. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:368; 84:134 Je 9, S 1 '17  
 Rat: a sanitary menace and an economic burden. R. H. Creel. (Reprint 135 Pub. health reports) 8p '17 U.S. Public health service, Washington, D.C.  
 Rat: arguments for its elimination and methods for its destruction. R: H. Creel. 14p n. d. Women's municipal league, 6 Marlborough st., Boston  
 Rat campaign. Women's Municipal League of Boston B v 8:1-39 F '17  
 Rat pest. Coop Manager & F 6:31 Je '17  
 Rat question. Wallaces' F 43:792 My 10 '18  
 Rats. il Del Ag Bd B v 5, no 4:23 Je '16  
 \* Rats and insects as public enemies. W. T. Sedgwick. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:34-5 Ja '18  
 Rats and mice. J: Dougherty. Ohio F 139:161 F 3 '17  
 Rats and mice. C. G. Hewitt. (Crop Protection Leaflet no. 7) 4p '18 Canada Ag  
 Rats and rat riddance. il Mo Ag Bd B v 14: 1-66 N '16  
 Rats and their destruction. B. C. Aston. il J Ag New Zealand 14:178-85 Mr '17  
 Rats: how to exterminate them. R. Sharpe. il J Bd Ag 24:1364-78; 25:27-36 Mr-Ap '18  
 Rats—how to outwit them. il Reliable P J 23: 455 My '16  
 Rats on the farm. E. I. Farrington. il Country Life 33:94 Ap '18  
 Ridding a premises of rats. Rural N Y 76:915 J1 28 '17  
 Rout the rat. G: G. Becker. il Country Gent 81:451 F 26 '16  
 Save food by destroying rats. D: E. Lantz. Coop Manager & F 7:40 Ja '18  
 To make buildings rat proof. Power F 26:21 Ag '17

See also Pack rats; Rice rats; Rodents

**Rattan**

- Rattan of commerce: varieties, sources and uses of an important tropical plant. C. D. Mell. il Scientific Am Sup (233 Broadway, N.Y. 10c) 83:324-5 My 26 '17

**Rattlesnakes**

- Rattlesnake and his poison. il Rural N Y 77: 761 Je 8 '18

**Ravenelia**

- Five undescribed species of ravenelia. W. H. Long. Bot Gaz 61:417-24 My '16  
 Notes on new or rare species of ravenelia. W. H. Long. Bot Gaz 64:57-69 J1 '17

**Rays (fish)**

- Skates and rays. (Econ. C. 34) 7p il '18 U.S. Bur. of fisheries, Washington, D.C.

**Razoumofskya.** See Mistletoe

**Reading.** See Books and reading

**Real estate**

- Financing the suburban home. J: R. McMahon. il Country Gent 81:1073-4 My 20 '16  
 Land promoters. O. B. Batcheler. Wallaces' F 41:881 Je 16 '16  
 Legal fixings for the suburban home. J: R. McMahon. il Country Gent 81:1153-4 Je 3 '16  
 Lure of the land. M. Rosby. Country Gent 81:498 Mr 4 '16  
 Method of valuation of real estate. A. Serpieri. Int R Sci & Prac Ag 8,no 1:139-47 Ja '17  
 Trading a farm for city real estate. S: O. Rice. Country Gent 82:1639 O 27 '17  
 See also Farm tenancy; Farm values; Farms; Land tenure; Land titles; Mortgages; Riparian rights; Single tax; Taxation; Torrens system

**Denmark**

- Working of the Danish land credit associations in 1916. Int R Ag Econ 73:70-3 Ja '17

**Uruguay**

- Uruguay: reform of the land tax from the point of view of agriculture and breeding. Int R Ag Econ 74:108-16 F '17

**Recipes.** See Cookery

**Reclamation of land**

- Alkali soils: some biochemical factors in their reclamation. J. H. Barnes and Barkat Ali. il Ag J of India 12:368-89 J1 '17  
 Bill, introduced in the Senate by G: E. Chamberlain, to increase the productive agricultural area of the United States by the reclamation of arid and swamp lands therein. (Calendar no. 247; S. 758; Report no. 271). 12p '17 Apply to congressmen  
 Bill to promote reclamation of arid and swamp lands. Irr Age 32:59-60 F '17  
 Bringing swamp land to fertility. il Rural N Y 77:719 My 25 '18  
 Chamberlain-Smith bill. W. R. King. il Irr Age 33:13-14 Mr '18  
 Chamberlain-Smith reclamation bill. Irr Age 32:68 Mr '17  
 Cheapest source of increased food supplies. E. G. Nourse. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 6:116-23 F '18  
 Debate: resolved, That arid- and swamp-land reclamation can be undertaken more advantageously by government activity than by private enterprise. W. R. King; C. R. Graves. Irr Age 32: 54-8, 70-6 F-Mr '17  
 Development of peat swamps. R: Reynolds. il J Ag New Zealand 15:9-15 J1 '17  
 Egging on the idle land. G: H. Dacy. il Farm Eng 5:8 Ag '17  
 Engineers who are studying cut-over lands and drainage. Eng News-Record (10th av at 36th st. N.Y. 15c) 81:645 O 3 '18  
 Estuary reclamation at Invercargill. W. J. McCulloch. il J Ag New Zealand 16:187-92 Ap '18  
 Farms for returned soldiers. F. K. Lane. il map Sci Am (233 Broadway, N.Y. 10c) 119: 372-3 N 9 '18  
 First steps taken in great reclamation plan; preliminary survey of Southern waste lands by government engineers. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2262:42 S 21 '18  
 How reclamation projects may be financed and constructed. W. R. King. il Irr Age 32:101-5 My '17  
 Illinois conference on drainage. Breeder's Gaz 69:676-7 Mr 23 '16  
 Irrigated pastures for northern reclamation projects. F. D. Farrell. (Demonstrations on reclamation projects, 2) 16p il '16 U S Ag  
 Irrigation as a means of preparedness for defense. J: M. Hess. il Irr Age 31:183-4 O '16  
 Island reclamation work in Argentina. W: Dawson, jr. (Commerce Reports no. 70) p 1122-3 (Mr 26) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Land reclamation offers a wide engineering field. F. H. Newell. Eng News-Record (10th av at 36th st. N.Y. 15c) 80:119 Ja 17 '18

**Reclamation of land—Continued**

- Land reclamation would provide work and homes for hosts of veterans. A. P. Davis. *Eng News-Record* (10th av, at 36th st, N.Y. 15c) 81:361-4 Ag 22 '18
- Levee construction and electric pumping for a reclamation project. *il Electrical Review* (515 Monadnock blk., Chicago 15c) 71:669-71 O 20 '17
- Loi pour favoriser la mise en valeur des terres arides aux Etats-Unis d'Amerique. *Int Yearbook Ag Leg* 1916:616-20 '17
- Louisiana reclamation project grows to seven thousand acres. A. M. Shaw. *il plan map Eng News-Record* (10th av at 36th st, N.Y. 15c) 79:603-5 S 27 '17
- Man-made playgrounds. C. J. Blanchard. *il Am For* 24:5-12 Ja '18
- Million farms for soldiers. J. R. McMahon. *il Country Gent* 83:7-8 N 9 '18
- Mobilization of our resources. Reclamation Record (Washington, D.C. 50c per yr.) 8: 210-12 My '17
- Paltry \$100,000 appropriated by Congress for land reclamation surveys, and why. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 50:250 S 11 '18
- Preparing land to receive the returning soldiers. F. K. Lane. *Am Fert* 48:66+ Je 22 '18
- Progress in reclamation of arid lands in the western United States. J. B. Beadle. *il map (In Smithsonian Inst. Report 1915, p 467-88) '16 Smithsonian inst., Washington, D. C.*
- \* Railroads and a new era of agricultural development. *Railway Age* (Woolworth bldg., N.Y. 15c) 65:953-4 N 29 '18
- Reclaim alkali land by simultaneous flooding and draining. *Engineering Record* (10th av. at 36th st., N.Y. 15c) 75:496-7 Mr 31 '17
- Reclaiming farm lands for soldiers. R. H. Moulton. *il Hoard's D* 56:356 O 11 '18
- Reclaiming nitre soil in the Grand valley. Colo. E. P. Sandsten. *il Colo Ag Exp B* 235:1-8 '17
- Reclaiming swamp land. Wallaces' *F* 41: 1562 D 1 '16
- \* Reclaiming the desert. C. J. Blanchard. *il Mentor* (114 E. 16th st, N.Y. 20c) 6:1-11 O 15 '18
- Reclaiming the Everglades of Florida. I. Randolph. *il maps J Franklin Inst* (Franklin Institute, Philadelphia 50c) 184:49-72 Jl '17
- Reclaiming the swamp. *Weekly N L* 5:4 Ag 8; 5 Ag 15 '17
- Reclamation of alkaline lands. R. A. Hart. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:405 N 14 '17
- Reclamation of arid steppe soil and of shifting sands in the province of Astrakan, Russia. G. Vysoztkif. *Int R Sci & Prac Ag* 7,no 11:588-96 N '16
- Reclamation of plain land in South Gippsland. T. A. J. Smith. *J Dept Ag Victoria* 14:232-5 Ap '16
- Reclamation of swamp lands. R. B. Henchen. *Penn State F* 10:171-2 N '17
- Reclamation of tidal-swamp lands in North Auckland. R. Rowan. *J Ag New Zealand* 15: 328-31 D '17
- Robbing the Arctic so that Montana may drink. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:154 S 1 '17
- State aid to irrigation and swampland reclamation projects. C. E. Grunsky. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 835-40) '17
- States should help reclamation work. V. Reed. *Irr Age* 31:37 Ja '16
- Swamp and cut-over lands investigation. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 81:469 S 5 '18
- Thousands of acres of unclaimed government lands. J. M. Hess. *Irr Age* 32:187 O '17
- To promote the reclamation of arid lands on the public domain; hearings before the Committee on irrigation of arid lands, on H. R. 262 (Feb. 26, 1916). 28p '16 Apply to congressmen
- Turning a desert into fertile soil. R. H. Moulton. *il Am For* 23:549-50 S '17
- Vast scheme of land reclamation proposed by Secretary Lane. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:612-13 Je 19 '18
- Waste land and agriculture. *Sci Am Sup* (233 Broadway, N. Y. 10c) 85:311 My 18 '18
- When our soldiers come home. F. K. Lane. *Rural N Y* 77:1109, 1130 S 28-O 5 '18; Same cond. *Banker-F* 5:12 N '18
- Work of the Belle Fourche reclamation project experiment farm in 1916. B. Asme. (W. I. A.—14) 28p '17 U S Ag
- Work of the Huntley reclamation project experiment farm in 1916. D. Hansen. (W. I. A.—15) 25p '17 U S Ag
- Work of the Huntley reclamation project experiment farm in 1917. D. Hansen. (W. I. A. C.—22) 29p '18 U S Ag
- Work of the Scottsbluff reclamation project experiment farm in 1916. F. Knorr. (W. I. A.—18) 18p '18 U S Ag
- Work of the Truckee-Carson reclamation project experiment farm in 1916. F. B. Headley. (W. I. A.—19) 18p '18 U S Ag
- Work of the Umatilla reclamation project experiment farm in 1915 and 1916. R. W. Allen. (W. I. A.—17) 37p '17 U S Ag
- Work of the Yuma reclamation project experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) 40p '18 U S Ag
- See also Desert land laws; Drainage; Irrigation; Soils, Alkali
- Reclamation service (United States)**
- Agriculture on government reclamation projects. C. S. Scofield and F. D. Farrell. *il U S Ag Yearbook* 1916:177-98
- Annual conference of Reclamation service. C. J. Blanchard. *Irr Age* 33:11 Mr '18
- Debate: resolved, That arid- and swamp-land reclamation can be undertaken more advantageously by government activity than by private enterprise. W. E. King; C. R. Graves. *Irr Age* 32:54-8, 70-6 F-Mr '17
- Engineering work of the United States reclamation service. A. P. Davis. map (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 283-97) '17
- 15th annual report of the Reclamation service 1915-1916. 805p map cl 75c pa 60c '16 U. S. Reclamation service, Washington, D. C.
- Preliminary work on great federal irrigation program needed now. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 80:392 F 28 '18
- Reclamation from the viewpoint of the settler. E. Gillette. *Irr Age* 31:119-21 Je '16
- Reclamation service information. *Irr Age* 33: 105 Je '18
- Reclamation service problem. E. Gillette. *Irr Age* 32:198-9 N '16
- Results of the irrigation work of the U. S. Reclamation service. Municipal and County Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 55:75 Ag '18
- Return to the reclamation fund of the cost of construction. E. E. Roddis. *Irr Age* 33:51-2 Ap '18
- Settlers with small farms most successful on United States reclamation projects. F. K. Lane. *Engineering Record* (10th av. at 36th st., N.Y. 15c) 74:705-6 D 9 '16
- Summary Reclamation service results. *Irr Age* 32:84 Ap '17
- Reconstruction (European war)**
- Advertise to ease period of reconstruction. G: F. Lord. *Am Fert* 49:31-2 N 23 '18
- Agricultural reconstruction. *J Bd Ag* 25:385-402 Jl '18
- Our part in restoring the farming of Europe. E: Brown. *il Country Gent* 83:6-7 N 2 '18
- Problems of reconstruction. *Am Fert* 49:38-9 D 7 '18
- Quaker reconstruction in France. J. T. Nichols. *il Wallaces' F* 42:1723 D 21 '17
- Secretary tells farming results; agriculture's after-the-war tasks. *Weekly N L* 6:1+ D 4 '18
- Record associations.** See Live stock breeders' associations; also names of associations, e.g. National society of record associations



**Recreation**

- Church of the small community and the conservation of recreation. E. R. Groves. Rural Manhood 7:6-8 Ja '16
- Community recreation achievement. A. C. Hurd. Rural Manhood 8:120-2 Mr '17
- Increased food production and music. M. Schoen. J of Educ (6 Beacon st., Boston 6c) 86:540-1 N 29 '17
- Labor and recreation. A. Boss. il Hoard's D 54:761+ D 21 '17
- Man-made playgrounds. C. J. Blanchard. il Am For 24:5-12 Ja '18
- Municipal use of the national forests for public recreation. H. S. Graves. il Am City—Town and County ed (Tribune bldg., N.Y. 35c) 16:1-4 Ja '17
- Opportunity of the association in rural health and recreation. J. B. Modisett. Rural Manhood 8:147-9 Ap '17
- Playgrounds on national forests. il Am For 22:712-17 D '16
- Recreation for the country woman. B. Boyle. il Purdue Ag 10:44-5 F '16
- Recreation in the rural community. W. W. Diehl. Ill Farmers Inst Househld Sci 1917: 107-11 '18
- Recreational use of public forests in New England. A. Chamberlain. Soc Am For Pro 11:271-80 Jl '16
- Recreational uses of the national forests. H. S. Graves. il Am For 23:133-8 Mr '17
- Rural recreation. L. W. Raper. School and Soc (Science Press, Garrison, N.Y. 10c) 6:331-9 S 22 '17
- Use of the national forests of the West for public recreation. E. A. Sherman. Soc Am For Pro 11:293-6 Jl '16
- Use of the New York state forests for public recreation. G. D. Pratt. Soc Am For Pro 11: 281-5 Jl '16
- Use of the southern Appalachian forests for recreation. J. S. Holmes. Soc Am For Pro 11:286-92 Jl '16

See also Amusements; Entertainments; Games

**Recreation centers.** See Social centers

**Rectum**

**Diseases**

- Recto-vaginal fistula and recto-vaginal fissure. R. C. Moore. Am Vet M Assn J 52:456-62 Ja '18
- Red aschersonia**
- Red aschersonia; usefulness as a whitefly destroyer. Fla State Plant Bd Quar B v 1: 177-8 Jl '17

**Red bugs, Apple.** See Apple red bugs

**Red cross**

- American Red cross campaign. J. P. Wallace. Wallaces' F 43:825 My 17 '18
- Barracks A. R. C.—American Red cross. P. L. Buttrick. il Am For 24:458-62 Ag '18
- Call for service and sacrifice in the Red cross war fund campaign. J. P. Wallace. Wallaces' F 43:850 My 24 '18
- Christmas roll call for the Red cross. Wallaces' F 43:1818 D 13 '18
- Farmers and the Red cross. C. S. Clark. Hoard's D 56:663 D 6 '18
- Mobilizing the nation's children for Red cross. E. Evans. J Home Econ 9:559-61 D '17
- Publicity via Red cross. E. J. Weaver. Am Flor 50:974 Je 1 '18
- Red cross and the high school sewing course. G. Gray. J Home Econ 10:414-16 S '18
- Red cross Christmas. Kimball's D F 15:388 D 15 '17
- Red cross rural nursing. F. F. Clement. il Ohio F 137:114 Ja 22 '16
- Until the war stops. M. P. Mortensen. Hoard's D 54:578 N 16 '17
- What farm women can do for the Red cross. Prac F 113:204 My 15 '17
- What the Red cross has done. M. G. Scheitlin. Banker-F 5:2-3 My '18

**Red gum**

Commercial uses of red gum. il Am For 22: 644-6 N '16

Red gum; identification and characteristics. S: B. Detwiler. il map Am For 22:641-4 N '16

See also Eucalyptus

**Red-hot poker plant.** See Torch-lilies

**Red oak.** See Oak

**Red polled cattle**

- Developing red polled cattle. G. P. Grout. il Field II 27:293 Ap '17
- Dual purpose cattle as a side line. il O Judd Farmer 61:1 S 23 '16
- Fixing the dual type in red polls. G: P. Grout. Breeder's Gaz 74:9 Jl 4 '18
- Government red poll dairy herd. J Dept Ag Victoria 16:157-65 Mr '18
- Production and red polled ancestors. W. Blair. Breeder's Gaz 69:128 Ja 20 '16
- Record of a dual-purpose breed. H. A. Martin. il Breeder's Gaz 72:1143 D 20 '17
- Red poll and farm conditions. F. Nelson. 18p '17 Frank Nelson, sec., Ohio Red poll breeders' association, London, O.
- Red poll dairy cattle. R. R. Kerr. il J Dept Ag Victoria 15:76-90 F '17

**Red-rot.** See Heart rot

**Red spiders**

- Control of red spiders; with discussion. E. R. de Ong. il Cal State Comm Hort B v 7:112-20 Mr '18
- Greenhouse red spider attacking cucumbers and methods for its control. S. C. Vinal. bibliog Mass Ag Exp B 179:153-82 '17
- Machine gun work with a new formula on red spiders in Tulare county. P. R. Jones. Cal State Comm Hort B v 7:455-7 Jl '18
- Pesky red spiders. A. C. Fleury. il Country Gent 81:857 Ap 15 '16
- Red spider on cotton. E. A. McGregor and F. L. McDonough. bibliog il map U S Ag B 416:1-72 '17
- Red spider on cotton and how to control it. 2d rev ed E. A. McGregor. il map Farmers' B 831:1-15 '17 (Reprint of B. 735)
- Spraying with black leaf 40 to control aphids and red spider on hops. (B. 3-L) 8p il '16 Kentucky tobacco product co., Louisville

**Red spruce.** See Spruce

**Red whitefly fungus.** See Red aschersonia

**Redemption of Buckley;** story. G: F. Stratton. il Country Gent 83:18-19 Mr 2; 20-1 Mr 9; 18+ Mr 16 '18

**Red-headed adventure;** story. M. F. Rittenhouse. il Country Gent 83:18-19 Ja 5 '18

**Redstarts**

Redstart. E. S. Jones. Ohio F 139:650 My 5 '17

**Redwood**

- Motor car house built of one piece of redwood weighing three tons. R. H. Moulton. il Am For 24:528-30 S '18
- Redwood lumber and its uses. il Am For 22: 329-31 Je '16
- Redwood trees; photographs. Am For 23:354-7 Je '17
- Redwoods; identification and characteristics. S: B. Detwiler. il Am For 22:323-8 Je '16
- Use of redwood by railroads. E. E. Myers. Railway Review (537 S. Dearborn st., Chicago 15c) 61:77-8 Jl 21 '17

**Re-education of soldiers.** See Soldiers, Disabled —Re-education

**Reforestation.** See Forest planting

**Refrigeration, American association of.** See American association of refrigeration

**Refrigeration and refrigerating machinery**

- Ammonia accidents. J: A. Starr. N Y Prod R 43:442 Ja 10 '17
- Ammonia losses. T: G. Thurston. N Y Prod R 42:630+ Ag 9 '16
- Application of refrigeration to the handling of milk. J: T. Bowen. map U S Ag B 98:1-88 '14
- Artificial refrigeration. Creamery 4:23-4 Ap '16; Same abr. N Y Prod R 41:1086 Ap 19 '16
- Cause of tank explosion. W. E. Parsons. N Y Prod R 43:20 N 1 '16
- Comparison of costs in using ice and mechanical refrigeration. A. D. Greenlee. N Y Prod R 41:846+ Mr 15 '16

**Refrigeration and refrigerating machinery—Cont.**

- Conservation steps for saving ammonia in refrigeration. C. W. Merrill. *Am Fert* 48:33-4 Je 8 '18
- Creamery refrigeration. Creamery 4:37 Ag '16
- Creamery refrigeration. N Y Prod R 41:432-3 Ja 5 '16
- Facts about creamery refrigeration. J. H. Speed. Creamery 4:34-5 Mr '16
- Farm ice house. Country Gent 81:631 Mr 18 '16
- Farm refrigeration. Hoard's D 51:11 Ja 23 '16
- Hardening ice cream, and delivery troubles. B. H. Walker. Creamery 5:50+ JI '17
- Homely experiments in iceless refrigeration. A. F. Loomis. *il Country Life* 33:74 N '17
- Ice cream refrigeration. N Y Prod R 43:616 F 14 '17
- Ice cream refrigeration and cooling systems. W. F. Luick. N Y Prod R 41:1003 Ap 5 '16
- Keeping things cold without ice. *il Farm Eng* 5:7 My '17
- Leakage in ammonia pipes. N Y Prod R 44:952 O 10 '17
- Mechanical refrigeration. Creamery 5:51 F '17
- Method for refrigerating fish. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:263 Ap 27 '18
- Motor-driven refrigerating machines in an ice-cream plant. *il Electrical Review* (515 Monadnock blk., Chicago 10c) 71:143 JI 28 '17
- Refrigerating plant. A. G. Solomon. N Y Prod R 42:764 S 6 '16
- Refrigeration of dressed poultry in transit. M. E. Pennington and others. *il U S Ag B* 17:1-35 '13
- Save ammonia. N Y Prod R 46:828 O 2 '18
- Still air or blast; interesting experiences in hardening ice cream. M. Neilson. N Y Prod R 43:658 F 21 '17
- Tight screw joints for ammonia piping. N Y Prod R 45:860 Ap 10 '18
- Various methods of refrigeration and its advantage to the public. G. H. McKay. *il N Y Ag Dept B* 79,pt 1:662-8 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:662-8 '17

See also Cold storage; Cooling; Milk cooling; Refrigerator cars; Refrigerators; also American association of refrigeration

**Refrigerator cars**

- First refrigerator cars. P. Earle. *il Country Gent* 81:1501 Ag 12 '16
- Icing charge decision. N Y Prod R 43:1001 Ap 18 '17
- Icing charges revoked; Interstate commerce commission sustains the claims of shipping interests. N Y Prod R 43:961 Ap 11 '17
- Improved transportation service for perishable products, by G. C. White; Transportation of perishable commodities—need of co-operation by shippers with carriers, by E. F. McPike. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 400-25, 439-51) '17
- Interstate commerce commission decision no. 7969; National poultry, butter & egg association v. Baltimore & Ohio Southwestern railroad company et al. 34-70p '18 U. S. Govt. ptg. office, Washington, D. C.
- Loading and transporting western cantaloupes. A. W. McKay. *il (Doc.—Markets)* 10 16p '18 U S Ag
- Losses in shipping. Country Gent 81:809 Ap 8 '16
- Refrigeration case won. M. H. Meyer. Hoard's D 53:628 Ap 27 '17
- Special refrigerator car services. Ag Gaz of Canada 3:508-10 Je '16
- Use of brine tank refrigerator cars for fruit shipments. E. Smith. 15p '17 Canada Ag; Same cond. Ag Gaz of Canada 4:110-14 F '17

**Bibliography**

- Transportation of perishable products. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 423-5, 449-51) '17

**Refrigerators**

- Built-in refrigerator. Rural N Y 75:180 F 5 '16
- Cold storage for milk and produce. G. B. Fiske. Rural N Y 75:417 Mr 4 '16
- Concrete ice chest. E. V. Laughlin. Country Gent 81:904 Ap 22 '16

- Farm refrigerator. Rural N Y 77:347 Mr 2 '18
- Has the ice blanket any use? J Home Econ 9:84 F '17
- Homemade ice box. H. A. Roberts. Country Gent 82:511 Mr 10 '17
- Homemade refrigerator, easily made, will keep food without ice. Weekly N L 5:15 Je 19 '18
- How to make an iceless refrigerator. Jersey B 36:819 My 23 '17
- Iceless cooler. L. A. Markham. Prog F 31:42 Ja 8 '16
- Iceless refrigerator. *il Rural N Y* 75:800 My 20 '16; J Home Econ 8:323-4 Je '16; Ohio F 138:59 JI 15 '16; Wallaces' F 41:1024 JI 28 '16; O Judd Farmer 61:37 JI 29 '16
- Iceless refrigerator. R. H. Byrd. *il Wallaces' F* 43:1108 Ag 2 '18
- Iceless refrigerators. W. H. Dean. *il Country Gent* 81:369 F 12 '16
- Keep the ice box clean. Weekly N L 5:7 F 20 '18
- Refrigerator. N Y Prod R 44:830-1 S 26 '17
- Refrigerator physics. *il Ohio F* 141:656 My 11 '18
- Score card for refrigerators. W. A. Evans. J Home Econ 9:118-20 Mr '17

See also Cold storage; Refrigeration and refrigerating machinery

Refuse and refuse disposal. See Garbage

**Regeneration (botany)**

- Further experiments on correlation of growth in bryophyllum calycinum. J. Loeb. *il Bot Gaz* 62:293-302 O '16
- Regeneration of bryophyllum calycinum. E. L. Braun. *il Bot Gaz* 65:191-3 F '18

Registration of title. See Land titles—Registration and transfer

**Reindeer**

- Reindeer—a source of food. H. Bragg. Canadian Municipal J (Coristine bldg., Montreal \$1.25 per yr.) 14:118-19 Ap '18
- \* Reindeer meat as beef supply. D. Gove. *il Overland* (259 Minna st, San Francisco 10c) n s 72:199-205 S '18
- Reindeer of Alaska. A. Fearing. *il Country Life* 30:130 My '16

Rejuvenescence. See Regeneration (botany)

Relationship. See Consanguinity

Relaxation. See Amusements

**Relief maps**

- New forest fire lookout map. E. Fritz. *il Sib-ley J* (Cornell univ., Ithaca, N.Y. 20c) 31:150-3 Mr '17

**Religion**

- My greatest asset; story. E. Baird. Ohio F 142:124-5 Ag 10 '18
- Religious nature of boys. C. Holbrook. Rural Manhood 8:112-15, 158-60 Mr-Apr '17
- Social control: rural religion. C. O. Gill. (*In* Am. sociological soc., Pub. v. 11, p. 106-12)
- What holds men true in war. A. T. Macdonald. Rural Manhood 9:147-9 Ap '18

**Religion, Primitive**

- Village religion of India. O. O. Stanchfield. Rural Manhood 8:248-51 Je '17

Renguera. See Sheep—Diseases and pests

**Rennet**

- Amount of rennet to use in making cheese. N Y Prod R 41:1012 Ap 5 '16
- Calves' vells for the rennet-supply. J Ag New Zealand 14:133-4 F '17
- Directions for using soluble powdered pepsin as a substitute for rennet. J. A. Ruddick. J Ag (Quebec) 20:16 JI '16
- Experiments on the preparation of home-made rennet. A. Todd and E. C. V. Cornish. J Bd Ag 24:307-12 Je '17
- Experiments with pepsin to replace rennet. D. W. Steuart. J Bd Ag 24:57-9, 313-15 Ap, Je '17
- Home-made rennet. N Y Prod R 44:946 O 10 '17
- Home-made rennet; methods of preparing calves' stomachs and extracting the rennet. N Y Prod R 42:72 My 3 '16
- Pepsin and rennet. N Y Prod R 43:248+ D 6 '16
- Pepsin as a substitute for rennet in cheese-making. Creamery 4:18 Ag '16



**Rennet—Continued**

- Pepsin as a substitute for rennet in the manufacture of cheese. *Ag Gaz of Canada* 3:789 S '16
- Pepsin vs. rennet. *N Y Prod R* 44:486 J1 18 '17
- Preparation of home-made rennet. A. Todd and E. C. V. Cornish. *J Bd Ag* 23:459-62, 549-55 Ag-S '16
- Probable scarcity of rennet for the manufacture of cheese. J. A. Ruddick. 4p '16 *Canada Ag*
- Rational preparation of rennet from the stomach of the calf, sheep and goat. *Int R Sci & Prac Ag* 7,no 2:293 F '16
- Rennet-making; saving of calves' vells. *il J Ag New Zealand* 13:224-6 S '16
- Rennet situation. *N Y Prod R* 42:316 Je 14 '16
- Rennet situation. J. L. Sammis. *N Y Prod R* 42:156 My 17 '16
- Rennet substitutes. *N Y Prod R* 44:366 Je 27 '17
- Rennet substitutes. J. A. Ruddick. *N Y Prod R* 42:544 J1 26 '16
- Rennet substitutes; further Canadian investigations. *N Y Prod R* 43:906+ Mr 28 '17
- Saving calf rennets. J. L. Sammis. *Hoard's D* 52:2 J1 28 '16
- Substitute for rennet in cheese making. H. Vanderhoof. *Jersey B* 35:1601 O 11 '16
- Substitutes for rennet in cheese making. *Ag Gaz of Canada* 3:607-8 J1 '16
- Use of pepsin and other substitutes for rennet in cheesemaking. G. H. Barr. (*In Reports, Dairymen's assns.*, 1916, p. 55-9) '17
- Ontario ag. dept., Toronto
- Use of pepsin as a rennet substitute in Cheddar cheesemaking. P. S. Lucas. *il Ore Ag Exp B* 155:1-15 '18

See also Junket

**Rent**

See also Farm tenancy

**Laws**

- Loi n. 187 sur la taxation des loyers au Danemark. *Int Yearbook Ag Leg* 1916:1230-2 '17
- Renting of live stock. See Cattle—Renting; Live stock—Renting; Sheep—Renting
- Reports, Crop. See Crop reports
- Reproduction**
- Breeding problems. H. D. Bergman. *Ia Ag Coll Offic Pub v* 14,no 36:206-17 '16
- Does the female osmia decide the sex of the egg. J. H. Lovell. *Am Bee J* 56:275 Ag '16
- Striking reproductive habit. A. A. Hansen. *il J Heredity* 9:85-6 F '18
- Studies on the physiology of reproduction in birds. O. Riddle and others (Am. J. Physiol. 41,no 3:387-437; 42:151-62 '16). *Exp Station Rec* 37:772-4 D '17
- Studies on the physiology of reproduction in the domestic fowl; pituitary feeding. R. Pearl. *Int R Sci & Prac Ag* 9,no 5:595-6 My '18
- Studies on the physiology of reproduction in the domestic fowl; the influence of age upon reproduction ability, with a description of a new reproductive index. R. Pearl. *Maine Ag Exp B* 268:305-6, 307-9 '17; Same. *Maine Ag Exp Rep* 1917:305-6, 307-9
- Why the mule is infertile. *Field H* 27:450 Je '17

See also Embryology; Fecundity; Plants, Reproduction in; Regeneration (botany); Spermatogenesis; Sterility in animals; Sterility in plants

**Reptiles as food**

- Edible reptiles. *il Literary Digest* (354 4th av. N.Y. 10c) 56:23-4 Ja 12 '18

**Reservoirs**

- Farm reservoirs. S. Fortier. *il Farmers' B* 828:1-36 '17
- Where every drop of water counts; pictures. *Country Gent* 83:sup Ag 20 '18
- Windmill's better half; methods for building small storage reservoirs. P. A. Ewing. *il Farm Eng* 3:168+ F '16

Resins. See Gums and resins

Resources committee, Organization of. See Organization of resources committee

**Respiration calorimeters**

- Improved respiration calorimeter for use in experiments with man. C. F. Langworthy and R. D. Milner. *bibliog il J Ag Research* 5:299-348 N 22 '15
- Respiration calorimeter, partly automatic, for the study of metabolic activity of small magnitude. C. F. Langworthy and R. D. Milner. *il J Ag Research* 6:703-20 J1 31 '16
- Respiration of fruit.** See Fruit, Respiration of
- Respiration of plants.** See Plants, Respiration of
- Respiration of vegetables.** See Vegetables, Respiration of
- Rest rooms**
- Advantages of a rest room. *Prog F* 33:776 J1 6 '18
- Rest rooms for women in marketing centers. A. M. Evans. *il U S Ag Yearbook* 1917:217-24
- Rest rooms in town. *Ohio F* 140:228 S 15 '17
- Rural rest-room. G. Hegger. *Woman's Home Companion* (381 4th av., N.Y. 15c) 44:12 F '17
- Where farm women rest. M. E. Bemis. *il Country Gent* 81:1923 O 28 '16
- Woman's rest room. E. Carlsen. *Kimball's D F* 16:178 Mr 1 '18

**Restaurants**

- Inexpensive restaurants in Christiana and in Vienna, and a shop-girls' restaurant in Copenhagen. H. W. Atwater. *J Home Econ* 8:301-4 Je '16

See also Tea rooms and tea houses

**Retaining walls**

- Keeping the farm at home. G. S. Howe. *il Country Gent* 82:685 Ap 7 '17
- Retaining walls; construction and materials used. W. H. Butterfield. *il Gard M* 24:48-9 S '16
- What we may learn from the army; rivetting. W. F. Rowles. *Gard Chron (Lond)* 63:214 My 25 '18

Retired farmers. See Farmers, Retired

Revetments. See Retaining walls

Rhabdocnemis. See Sugar-cane beetle borers

Rhagoletis fausta. See Cherry fruit flies

Rhagoletis pomonella. See Apple maggots

**Rheosporangium**

- Rheosporangium aphanidermatus, a new genus and species of fungus parasitic on sugar beets and radishes. H. A. Edson. *il J Ag Research* 4:279-92 J1 '15

**Rheumatism**

- How to be cheerful though rheumatic. E. S. Knapp. *Rural N Y* 75:474 Mr 18 '16

**Rhinoceros beetles**

- Oryctes rhinoceros in the Philippines. D. B. Mackie. *il Philippine Ag R* 10,no 4:315-34 '17

**Rhinelanders (poultry)**

- Rhinelanders. A. Schwarz. *il Am P J* 48:815 J1 '17
- Rhinelanders the phenomenal egg layers. W. Berberich. *Am P J* 48:432 Mr '17

**Rhizina**

- Development of the ascocarp of rhizina undulata Fr. H. M. Fitzpatrick. *bibliog il Bot Gaz* 63:282-96 Ap '17
- Observations on rhizina inflata. J. R. Weir. *bibliog il J Ag Research* 4:93-6 Ap '15
- Sexuality in rhizina undulata Fries. H. M. Fitzpatrick. *bibliog il Bot Gaz* 65:201-26 Mr '18

**Rhizoctonia**

- Behaviour of different forms of rhizoctonia violacea. J. Erickson. *Int R Sci & Prac Ag* 7,no 6:890-1 Je '16
- Form of potato disease produced by rhizoctonia. G. B. Ramsey. *il J Ag Research* 9:421-6 Je 18 '17
- New strain of rhizoctonia solani on the potato. J. Rosenbaum and M. Shapovalov. *il J Ag Research* 9:413-20 Je 18 '17
- Notes on an artificial culture of rhizoctonia crocorum. W. Diehl. *Phyt* 6:336-40 Ag '16

**Rhizoctonia—Continued**

- Parasitic rhizoctonias in America. G: L. Pel-  
tier. bibliog il Ill Ag Exp B 189:283-390 '16  
Pathogenic action of rhizoctonia on potato.  
H. T. Güssow. il Phyt 7:209-13 Je '17  
Rhizoctonia. H. Hasselbring. Bot Gaz 64:169-  
71 Ag '17  
Rhizoctonia disease of tomatoes. Better Fruit  
11:13 Je '17  
Rhizoctonia of the fig. J. Matz. il Phyt 7:110-  
18 Ap '17  
Species of the genus rhizoctonia injurious to  
plants cultivated in India. Int R Sci & Prac  
Ag 7, no 1:156-8 Ja '16  
See also Tomato blight

**Rhizopertha dominica.** See Grain borers, Lesser**Rhizopus**

- Chemotropism in rhizopus nigricans. A. H.  
Graves. bibliog il Bot Gaz 62:337-69 N '16  
Rhizopus rot of strawberries in transit. N. E.  
Stevens and R. B. Wilcox. bibliog il U S  
Ag B 531:1-22 '17  
Some changes produced in strawberry fruits  
by rhizopus nigricans. N. E. Stevens and  
L. A. Hawkins. bibliog Phyt 7:178-84 Je '17

**Rhode Island**

See also subhead Rhode Island under Ag-  
riculture, Fruit culture, Potatoes, Poultry

**Fisheries, Commissioners of inland**

- 48th annual report, 1917. 28p '18 R.I. Comrs.  
of inland fisheries, Providence

**Forestry, Commissioner of**

- 11th annual report, 1917. 10p '17 R. I. Com-  
missioner of forestry, Providence  
\* 12th annual report, 1917. 9p '18 R.I. Com-  
missioner of forestry, Providence

**Rhode Island agricultural experiment station**

- 29th annual report. B. L. Hartwell. Rhode  
Island State Coll B (Kingston) 12:16-24 F  
'17  
30th annual report, 1917. R I Ag Exp Rep  
1917:35-42

**Rhode Island reds (poultry)**

- Appreciation of the R.I. reds. Mrs J. A. Mar-  
tin. Prac F 112:194 My 1 '16  
Combining egg yield with show points in R. I.  
reds. H. Forbes. Am P Advocate 25:707 N '17  
History and description. W. H. Card. il Coun-  
try Gent 81:30 Ja 1 '16  
How to distinguish the sex of the day-old  
Rhode Island reds. W: F. Fry. il Reliable  
P J 23:483+ Je '16  
How to mate and breed s.c. Rhode Island  
reds. E. L. Noyes. Am P Advocate 25:336  
Mr '17  
Interview with a master breeder, Lester  
Tompkins. G. M. Curtis. Reliable P J 22:  
1415-16 F '16  
Making Rhode Island reds better. A. A. Car-  
ver. il Reliable P J 22:1432-3 F '16  
Mating of Rhode Island reds to produce win-  
ning color. A. A. Carver. Reliable P J 23:  
1191+ F '17  
Partnership Rhode Island red business that  
is a success. Reliable P J 23:119 Mr '16  
Popular Ohio farm fowl. F. S. Jacoby and A.  
Bayes. il Ohio F 137:844 Je 24 '16  
Rhode Island red. T. F. McGrew. Am P Ad-  
vocate 25:78-9 Ja '17; Same cond. Field Il  
27:36 Ja '17  
Rhode Island reds as fanciers' fowls. W. H.  
Card. Am P Advocate 26:396-7 My '18  
Rose comb R.I. reds—why I breed them. J. E.  
Moore. Am P J 49:417 Ap '18  
Single comb Rhode Island red. O. E. Brune.  
Am P J 48:824 Jl '17  
Single comb Rhode Island red—why? M. E.  
Chase. Am P J 47:995 Ag '16  
Twenty-five years with Rhode Island reds.  
F. W. C. Almy. Reliable P J 25:667 O '18  
War-time breed that buys liberty bonds.  
W. H. Card. il Am P Advocate 26:398-9 My  
'18  
Why the Mahoods prefer Rhode Island reds.  
Reliable P J 25:837 D '18  
Winning articles in r. c. R. I. red contest.  
Am P J 49:297-9 Mr '18

Winter cycle of egg production in the Rhode  
Island red breed of the domestic fowl. H.  
D. Goodale. bibliog J Ag Research 12:547-74  
Mr 4 '18

**Rhode Island state college****Extension service**

Report of the extension service. H. Edwards.  
Rhode Island State Coll B (Kingston) 12:  
25-8 F '17

**Rhode Island whites (poultry)**

- Gaining popular favor. il Reliable P J 24:1189  
F '18  
Rhode Island whites. F. W. Bubb. Am P Ad-  
vocate 25:285 Mr '17  
Rhode Island whites. Mrs C. M. Vertrees. Am  
P Advocate 25:282 Mr '17

**Rhodes grass**

Rhodes grass. P. H. Rolfs. il Fla Ag Exp B 138:  
183-90 '17; Same. Fla Ag Dept Quar B v  
27:5-12 Jl '17

**Rhodesia.** See subhead Rhodesia under Agricul-  
ture; Agriculture, Cooperative; Cattle; Milk  
supply**Rhododendrons**

- Color harmony in planting rhododendrons.  
H. J. Koehler. Gard M 27:154 Ap '18  
Cultural notes on rhododendrons. Gard Chron  
Am 21:370 O '17  
Culture of rhododendrons. A. Robertson. il  
Gard Chron Am 21:99 Mr '17  
Hardy rhododendrons. E. H. Wilson. il Gard  
M 23:288-92 Je '16  
Rhododendron as a thermometer. S. L. Bastin.  
il Country Life 34:80-b Jl '18  
Rhododendron forcing. B. B. C. Felix. Am  
Flor 47:1229 D 23 '16  
Rhododendron lacteum and rhododendron  
fiatolacteum. il Gard Chron (Lond) 59:168  
Mr 25 '16  
Rhododendron praecox. il Gard Chron (Lond)  
63:112 Mr 16 '18  
Rhododendron roylei. W. Watson. Gard Chron  
(Lond) 64:38 Jl 27 '18  
Rhododendron spinuliferum. il Gard Chron  
(Lond) 63:248 Je 15 '18  
Rhododendrons. Gard Chron (Lond) 62:230 D  
8 '17  
Rhododendrons and lime. Scientific Am Sup  
(233 Broadway, N.Y. 10c) 82:375 D 9 '16  
Rhododendrons and lime. A. Grove. Gard  
Chron (Lond) 59:65 Ja 29 '16

**Diseases and pests**

Rhododendron bug. Gard Chron (Lond) 59:  
272 My 20 '16

**Rhubarb**

- Cellar forced pie plant. Fruit-Grower 27:17 Ja  
1 '16  
Cellar-forced pieplant. Ohio F 137:107 Ja 22 '16  
Cellar-forced rhubarb. Mrs G: Riedinger. il  
Ohio F 140:518 D 1 '17  
Danger of eating rhubarb leaves. Scientific  
Am (233 Broadway, N.Y. 10c) 117:82 Ag 4 '17  
Easy money in rhubarb. il Rural N Y 76:699  
My 19 '17  
Experience with rhubarb; symposium. Market  
Growers J 21:257-9 D 1 '17  
Experiences with rhubarb; symposium. Mar-  
ket Growers J 19:268-9 D 1 '16  
Forced rhubarb for winter use. E. L. Kirk-  
patrick. Ohio F 138:414 O 28 '16  
Forcing early rhubarb. Mrs C. W. Hunt. il  
Country Gent 81:1966 N 11 '16  
Forcing rhubarb. J. T. Rosa, jr. Rural N Y  
76:1368 D 1 '17  
Forcing rhubarb for market. G: W. Kerr.  
Country Gent 82:1795 N 17 '17  
Home canning; rhubarb. A. M. Johnson. Coun-  
try Gent 82:887 My 12 '17  
Home garden; forcing rhubarb and asparagus.  
il Country Gent 83:32 N 16 '18  
Identification of emodin-bearing drugs. W. S.  
Hubbard. J Industrial & Eng Chemistry  
(Easton, Pa. 60c) 9:518-21 My '17  
Market rhubarb in March. F. Paul. O Judd  
Farmer 60:12 Mr 4 '16  
Packing rhubarb for market. C. E. Brehm. il  
Country Gent 81:1374 Jl 15 '16  
Rhubarb. Am Flor 50:382 Mr 9 '18  
Rhubarb as a standby. H. T. Schmidt. Mar-  
ket Growers J 18:150 F 15 '16



**Rhubarb—Continued**

- Rhubarb as food and medicine. Mrs J. S. Emmons. *Green's Fruit Grower* 36:19 My '16  
Rhubarb, asparagus, and suchlike. *il Country Gent* 82:732 Ap 14 '17  
Rhubarb culture. J. L. Stahl. *il Western Wash Ag Exp B v 4:9-11 Ja '17*  
Rhubarb culture (C. 38). C. C. Carstens. *N Y State Ag Exp Rep* 1915:665-8 '16  
Rhubarb for market. C. E. Brehm. *il Country Gent* 81:162 Ja 22 '16  
Rhubarb, notes on its history, and the use of its leaves as a vegetable. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:94-5 Ag 11 '17  
Rhubarb plant. L. Mosbaek. *Minn Hort* 44: 465-6 D '16  
Rhubarb preserves. *Rural N Y* 75:962 Jl 8 '16  
Rhubarb recipes. H. A. Lyman. *O Judd Farmer* 60:22 My 6 '16  
Success with rhubarb. A. A. Eastman. *Market Growers J* 23:207 D 1 '18  
Tested rhubarb recipes. H. A. Lynan. *Rural N Y* 77:421 Mr 16 '18  
Ways of using rhubarb. L. Brewer. *il Cornell Reading Courses* 5, no 107:95-107 '16; Same. *Cornell Ag Exp Rep* 1916, v 2:1063-73 '17  
Wholesome rhubarb. V. C. Lee. *O Judd Farmer* 64:587 Je 1 '18  
Wholesome rhubarb ways. M. G. Feint. *O Judd Farmer* 60:26 Ap 8 '16

**Rhus**

- Fats from *rhus laurina* and *rhus diversiloba*. J. B. McNair. *Bot Gaz* 64:330-6 O '17  
Flavones of *rhus*. C. E. Sando and H. H. Bartlett. *Am J Bot* 5:112-19 Mr '18  
Secretory canals of *rhus diversiloba*. J. B. McNair. *bibliog Bot Gaz* 65:268-73 Mr '18

**Ribes.** See Currants; Gooseberries

**Rice**

- Absorption of nutrients as affected by the number of roots supplied with the nutrient. F. L. Gile and J. O. Carrero. *bibliog J Ag Research* 9:73-95 Ap 16 '17  
Agricultural situation for 1918; rice; produce more rice for consumption and export. maps *U S Ag C* 89:1-24 '18  
Assimilation of colloidal iron by rice. P. L. Gile and J. O. Carrero. *J Ag Research* 3: 205-10 D '14  
Assimilation of iron by rice from certain nutrient solutions. P. L. Gile and J. O. Carrero. *bibliog J Ag Research* 7:503-28 D 18 '16  
Correlative characters of the rice plant. H. O. Jacobson. *Philippine Ag R* 9,no 2:74-119 '16; Abstract. *Int R Sci & Prac Ag* 8,no 1:60-6 Ja '17  
Cultivation trials in ricefields with a Moline tractor in Italy. A. Tarcheth. *Int R Sci & Prac Ag* 9,no 3:342-3 Mr '18  
Differences of humidity in ripe paddy. *Int R Sci & Prac Ag* 7,no 1:64 Ja '16  
Eat more rice. *Weekly N L* 5:5 My 8 '18  
Effects of meteorological factors on the growth and yield of rice in the Vercelli district, Piedmont, Italy. B. Marcarelli. *Int R Sci & Prac Ag* 9,no 5:539-41 My '18  
Experiments on the artificial hybridisation of rice in Java. L. Kock. *Int R Sci & Prac Ag* 8,no 9:1240-1 S '17  
Fertiliser trials with tetraphosphate in Piedmont rice fields, Italy. *Int R Sci & Prac Ag* 8,no 2:230-2 F '17  
Healthiness of rice fields in Italy. O. Bordiga. *Int R Sci & Prac Ag* 7,no 3:336-8 Mr '16  
History of rice. *Ag J of India* 12:471-2 Jl '17  
Importance and character of the milled rice imported into the United States. F. B. Wise. *il U S Ag B* 323:1-8 '15  
Improvement of the rice crop in Bengal by pure line selection. R. S. Finlow. *Ag J of India* 12:280-2 Ap '17  
Irrigation of rice in California. R. D. Robertson. *il Cal Ag Exp B* 279:254-70 '17  
Learning to eat rice. A. E. Richter. *il Country Gent* 82:1344 S 1 '17  
New eight million dollar crop. C. Crow. *il Country Gent* 82:1554-5 O 13 '17  
Observations on the inheritance of anthocyan pigment in paddy varieties. G. P. Hector. *Int R Sci & Prac Ag* 8,no 8:1113-14 Ag '17

- Progress report, substation no. 4, Beaumont, Texas, 1909-1914. H. H. Laude. *il Tex Ag Exp B* 200:1-18 '16  
Resumé of work of plant industry division, 1916; rice work. A. M. Burton. *il Philippine Ag R* 10,no 4:361-8 '17  
Reversible transformability of allelomorphs in rice in Japan. H. Terao. *Int R Sci & Prac Ag* 9,no 1:49-51 Ja '18  
Rice. (*In* Geography of the world's agriculture, p. 46-9) maps 17 *U S Ag*  
Rice cultivation, Koyuga. T. A. J. Smith. *J Dept Ag Victoria* 14:493-4 Ag '16  
Rice culture. A. P. Spencer. *Fla Ag Ext C* 5:1-4 '18  
Rice farmer uses a gas tractor. F. W. Burnett. *il Power F* 26:34 N '17  
Rice fields as a factor in the control of malaria. S. B. Freeborn. *bibliog J Econ Entom* 10:354-9 Je '17  
Rice growing in Florida. H. S. Elliot. *Fla Ag Dept Quar B v 27:27-31 Ap '17*  
Rice-growing in New South Wales. *Ag Gaz of New South Wales* 27:799-800 N '16  
Rice in the Americas. 24p *il '17 Pan American union, Washington, D.C.*  
Rice investigations. *Philippine Ag R* 9,no 2: 55-6 '16  
Rice vs. potatoes. *Ohio F* 139:418 Mr 17 '17  
Rice yield ruined. R. Gotthold. *Scientific Am* (233 Broadway, N.Y. 10c) 117:154-5 S 1 '17  
The Southern rice growers' association has decided that the propitious time to start a rice advertising campaign is the present, when prices are soaring. The rice crop was plentiful and since rice is nutritious and its price still comparatively low, the advantages of advertising are clear. A three-year campaign has been decided on, with an expenditure of \$300,000 each year. Rice growers, millers, brokers, and manufacturers of rice-framing machinery are expected to participate.—*Business Digest*  
Sowing and transplanting rice on the dago method, peculiar to some parts of the Philippines. S. Apostol. *Int R Sci & Prac Ag* 7,no 7:969-70 Jl '16  
Testing, storage and preparation of unpolished rice. W. M. Ottow. *Int R Sci & Prac Ag* 7,no 12:1737-8 D '16  
Toxic action of soluble aluminium salts upon the growth of the rice plant. K. Miyake. *Int R Sci & Prac Ag* 9,no 5:552-4 My '18  
Tractor's place in the rice fields. A. L. Dahl. *il Power F* 27:13 Jl '18  
Transplanting in the control of wild rice in Italy. B. Marcarelli. *Int R Sci & Prac Ag* 9, no 2:187-8 F '18  
Why America should develop greater rice fields to solve the food problem. *il Current Opinion* (63 W. 36th st, N.Y. 25c) 62:436-7 Je '17  
*See also* Cookery—Rice; Rice beer; Rice flour; Rice milling

**By-products**

- By-products of the decortication of rice in the feeding of milking cows. R. Giuliani. *Int R Sci & Prac Ag* 8,no 1:102-4 Ja '17  
By-products of the decortication of rice (pula vergine) in the feeding of working oxen; experiments in Italy. A. Pirocchi. *Int R Sci & Prac Ag* 8,no 10:1387-9 O '17  
Composition of rice and its by-products. G. S. Fraps. *Tex Ag Exp B* 191:1-41 '16  
Fattening swine on rice by-products. H. E. Dvorachek. *Ark Ag Exp B* 128:1-24 '16  
New use for rice hulls has occasioned the installation of a plant in New Orleans to make a bone-black substitute out of rice hulls the charred rice hulls being used as a substitute for bone black in the refining of sugar. It is said that this will bring much additional revenue to the rice industry of the South, as it furnishes a commercial use for rice hulls  
Use of rice hulls as a fuel in Italy. *Scientific Am* (233 Broadway, N.Y. 10c) 117:497 D 29 '17  
Utilization of rice and its by-products. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:377 D 14 '18

**Rice—By-products—Continued**

Waste product of the rice field now used in the sugar refinery. *Scientific Am* '233 Broadway, N.Y. 10c) 117:36 J1 14 '17

**Composition**

Ash composition of upland rice at various stages of growth. P. L. Gile and J. O. Carrero. *J Ag Research* 5:357-64 N 29 '15

Composition of rice and its by-products. G. S. Fraps. *Tex Ag Exp B* 191:1-41 '16

Organic phosphoric acid of rice. A. R. Thompson. *bibliog J Ag Research* 3:425-30 F '15

**Grading**

Instructions for the sampling, handling, analyzing, and grading of samples of milled rice. F. B. Wise. (Markets doc. 16) 6p '18 U S Ag

**Laws**

Arrêté n. 3 du ministère de l'agriculture et du commerce portant règlement visant l'encouragement et l'amélioration de la culture du riz et des autres céréales au Japon. *Int Yearbook Ag Leg* 1916:575-6 '17

Décret n. 2,223 portant règlement concernant la culture du riz sur le continent en Portugal. *Int Yearbook Ag Leg* 1916:576-82 '17

**Marketing**

How advertising turned losses to profits. J. E. Cabaniss. *System on the Farm* 1:369 D '17

See also Pacific rice growers' association

**Morphology**

Morphology and conditions of growth of transplanted rice in Piedmont, Italy. B. Marcarelli. *Int R Sci & Prac Ag* 8,no 4:597-9 Ap '17

**Seed**

Some studies on the germination of the seed of *oryza sativa* and *zea mays*. I. Nagai. *Int R Sci & Prac Ag* 8,no 8:1109-10 Ag '17

**Standards**

Standards for milled rice. (Markets doc. 15) 10p '18 U S Ag

**Statistics**

Commercial stocks of cleaned and rough rice, Jan. 1. U S Food Surveys 1:9-12 J1 20 '18

Commercial stocks of cleaned rice, July 1. U S Food Surveys 2:8-10 O 1 '18

Commercial stocks of rice in the United States on August 31, 1917. U S Ag C 99:13-16 '18

Rice in the United States and other countries, including imports and exports. See United States Department of agriculture Yearbooks

**Varieties**

Two notable new varieties of rice grown in Italy. E. Marcarelli. *Int R Sci & Prac Ag* 8,no 4:595-7 Ap '17

**Rice beer**

Bákhár, the Indian rice beer ferment. *Int R Sci & Prac Ag* 7,no 2:283-6 F '16

**Rice cleaning machines**

Vasino paddy cleaning machine, fitted to a threshing machine. A. Tarchetti. *Int R Sci & Prac Ag* 7,no 7:1009-10 J1 '16

**Rice flour**

Use rice flour to save wheat. *il U S Ag C* 119: 1-4 '18

Rice growers' association, Pacific. See Pacific rice growers' association

Rice hulls. See Feeding and feeding stuffs—Rice

**Rice milling**

By-products of rice milling. J. B. Reed and F. W. Liepsner. U S Ag B 570:1-16 '17

Census of manufacturers: 1914; rice cleaning and polishing. H. J. Zimmerman. 9p '16 U.S. Bur. of the census, Washington, D.C.

Milling of rice and its mechanical and chemical effect upon the grain. F. B. Wise and A. W. Broomell. *il U S Ag B* 330:1-31 '16

**Rice rats**

Rice rats of North America. E. A. Goldman. *il U S Ag No Am Fauna* 43:1-100 '18

Rice weevils. See Corn weevils

**Richardias**

Embryo sac of *richardia africana* Kth. M. R. Michell. *bibliog il Bot Gaz* 61:325-36 Ap '16

Yellow-flowered *richardias*. *Gard Chron* (Lond) 60:50 J1 29 '16

**Richardson, Jenness J.**

Another leader departs. H. G. Van Pelt. *por Kimball's D F* 15:196 Mr 15 '17

Col. J. J. Richardson. R. M. Gow. *Jersey B* 36:346 Mr 7 '17

Death of the Honorable J. J. Richardson. *por Jersey B* 36:307-8 F 28 '17

Portrait. *Breeder's Gaz* 70:231 Ag 17 '16

Sketch. *por Breeder's Gaz* 71:456 Mr 1 '17

Tribute to the late J. J. Richardson. R. Oliver. *Jersey B* 36:391 Mr 14 '17

Richweed. See White snakeroot

**Ricinodendron**

Contribution to the chemical study of the nuts of sanga-sanga or *ricinodendron africanum*. *Int R Sci & Prac Ag* 9,no 4:456-7 Ap '18

**Riding. See Horsemanship****Riggs school, Lakeville, Conn.**

Farmers in the making. F. B. Riggs. *Hoard's D* 53:346 Mr 16 '17

Rind disease. See Sugar cane—Diseases and pests

**Rinderpest**

Anti-rinderpest serum preparation at the Muktesar laboratory, India. P. W. Shilston. *Int R Sci & Prac Ag* 8,no 5:760-1 My '17

Coccidiosis in cattle and carabaos in the Philippine Islands and its relation to rinderpest; with discussion. C. H. Schultz. *bibliog Am Vet M Assn J* 48:687-705 Mr '16

Development of ideas regarding the preparation and use of anti-rinderpest serum. A. R. Ward. *bibliog il Am Vet M Assn J* 49:456-70 J1 '16

Experiments on the treatment of rinderpest with various drugs. W. H. Boynton. *il Philippine Ag R* 10,no 3:272-98 '17

Note on the use of organ extracts in place of virulent blood in immunization and hyperimmunization against rinderpest. W. H. Boynton. *bibliog Philippine Ag R* 10,no 4:448-55 '17

Observations on the immunity to rinderpest of the Nellore (Indian) cattle and of the various Nellore-native grades. S. Youngberg. *bibliog Philippine Ag R* 10,no 4:436-47 '17

Preliminary report on the virulence of certain body organs in rinderpest. W. H. Boynton. *bibliog Philippine Ag R* 10,no 4:410-33 '17

Rinderpest in swine with experiments upon transmission from cattle and carabaos to swine and vice versa. W. H. Boynton. *il Philippine Ag R* 9,no 4:288-336 '16; Abstract. *Int R Sci & Prac Ag* 8,no 11:1107-8 N '17

Ringings of trees. See Trees, Ringing of

Ringneck pheasants. See Pheasants

**Riparian rights**

Doctrine of riparian rights (in the western United States). A. E. Chandler. (*In* Pan American scientific congress Proc., 1915, v. 3, p. 861-8) '17

Encroaching on our streams. *Ohio F* 137:400 Mr 11 '16

Rights in flowing streams. *Rural N Y* 76:850 J1 7 '17

See also Water rights

Ripening of fruit. See Fruit, Ripening of

River birch. See Birch

**Rivers**

See also Levees; Riparian rights; Water power

**Bank protection**

Saving the farm from the river. E. C. Blomeyer. *il Country Gent* 82:78 Ja 13 '17

**Rivets**

Rivets and riveting. S. F. Aaron. *Country Gent* 83:24 J1 27 '18

**Road drag competitions**

Road drag competitions in Canada. *Ag Gaz of Canada* 3:542-5 Je '16



**Road drags**

- How to use the road drag. Power F 26:40 My '17
- Road drag and how it is used. *il Farmers'* B 597:1-15 '17 (rev.)
- Road drag offers simple, inexpensive method of highway maintenance. Weekly N L 6:8 N 20 '18
- Split log drag. *il J Ag (Quebec)* 20:7 J1 '16

**Road engines. See Tractors**

**Road law. See Highway law**

**Road making machinery**

- Road building with mechanical power. C. V. Hull. *il Power F* 25:7-8 Ap '16
- Road drag used in gravel road construction. J. C. Worrell. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:365 N 7 '17
- Selection, operation and maintenance of road building machinery. Good Roads (150 Nassau st., N.Y. 10c) n s 13:262-3 Ap 28 '17
- Value of a tractor in building earth roads. J. B. Woods. *il Am City—Town and county ed (Tribune bldg., N.Y. 35c)* 17:10-13 J1 '17

*See also Road drags*

**Road materials**

- Commercial deposits of road materials in Illinois, Wisconsin, Iowa, Missouri, Indiana. maps Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 48:96-7 Ag 1 '17
- Limit use of oil and coal products in highway work. Weekly N L 5:7 My 29 '18
- Methods for the examination of bituminous road materials. P. Hubbard and C. S. Reeve. U S Ag B 314:1-48 '15
- Relation between the properties of hardness and toughness of road-building rock. P. Hubbard and F. H. Jackson, jr. J Ag Research 5:903-7 F 7 '16
- Relation of mineral composition and rock structure to the physical properties of road materials. E. C. E. Lord. *il U S Ag B* 348:1-26 '16
- Road material surveys in 1915. L. Reinecke. (Memoir 99, Geological ser. no. 82) *il maps '17 Canada Geological survey, Ottawa*
- Selection of proper materials for town and country roads. J. P. Nash. *il Am City—Town and county ed (Tribune bldg., N.Y. 35c)* 17:213-18 S '17
- Standard forms for specifications, tests, reports, and methods of sampling for road materials. U S Ag B 555:1-52 '17
- Typical specifications for bituminous road materials. P. Hubbard and C. S. Reeve. U S Ag B 691:1-60 '18
- Typical specifications for non-bituminous road materials. P. Hubbard and F. H. Jackson, jr. U S Ag B 704:1-40 '18

*See also Asphalt; Bituminous materials*

**Testing**

- Expansion and contraction of concrete and concrete roads. A. T. Goldbeck and E. H. Jackson, jr. *il U S Ag B* 532:1-31 '17
- Methods for the determination of the physical properties of road-building rock. F. H. Jackson, jr. U S Ag B 347:1-27 '16
- Methods for the examination of bituminous road materials. P. Hubbard and C. S. Reeve. U S Ag B 314:1-48 '15
- Methods of determining the road making qualities of deposits of stone and gravel. L. Reinecke. *il Good Roads (150 Nassau st., N.Y. 10c)* n s 13:293-7 My 19 '17
- Physical tests for the materials used in building gravel and sand-clay roads. R. M. Green. Good Roads (150 Nassau st., N.Y. 10c) n s 14:85-6+ Ag 18 '17
- Recommended changes in testing road materials. Municipal Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 53:102-3 S '17
- Report of Bureau of tests. F. L. Roman. (*In* 5th Report, 1913-1916, p. 193-281) '17 Ill. State highway dept., Springfield
- Report of the road materials committee of the American society for testing materials. Good Roads (150 Nassau st., N.Y. 10c) n s 14:6-+ J1 7 '17
- Results of physical tests of road-building rock. P. Hubbard and F. H. Jackson, jr. U S Ag B 370:1-100 '16

- Results of physical tests of road building rock in 1916 and 1917. P. Hubbard and F. H. Jackson, jr. U S Ag B 670:1-29 '18
- Results of physical tests of road-building rock in 1916, including all compression tests. P. Hubbard and F. H. Jackson, jr. U S Ag B 537:1-23 '17
- Test road building rock. Farm Eng 3:280 Je '16

**Road surveys**

- Economic surveys of county highway improvement. J. E. Pennybacker and M. O. Eldridge. *il maps U S Ag B* 393:1-86, pl 1-36 '16

**Roadrunners**

- \* Roadrunner now said to be friend of men. *il Sci Am Sup (233 Broadway, N.Y. 10c)* 86:328 N 23 '18

**Roads**

- Automobile booster for good roads. H. Quick. Country Gent 81:259 F 5 '16
- Bad roads are expensive. W. A. Semmons. *il Kimball's D F* 14:370 Je 1 '16
- Benefits of improved roads. *il Farmer' B* 505:1-20 '16
- Best road. C. H. Chesley. Hoard's D 51:160 F '18 '16
- Building of good roads. E. A. Stevens. Farmers' Nat Congress Pro 1916:25-30
- Building roads. M. Coverdell. Farm Eng 4:77 N '16
- Building roads with motor power. P. T. Hines. *il Power F* 27:14 F '18
- Cheaper and better roads. Ohio F 138:567 D 9 '16
- Cheaper good roads. C. W. Bloom. Ohio F 138:318 O 7 '16
- Considerations governing the choice of the various types of road construction. L. V. Edwards. Good Roads (150 Nassau st, N.Y. 10c) n s 14:231-3 N 3 '17; Same abr. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48:371-2 N 7 '17
- Construction of roads on the farm. Power F 25:26 F '16
- County aid to local road builders. B. H. Piepmeyer. *il Breeder's Gaz* 69:1063 My 18 '16
- Design of public roads. C. H. Moorefield. U S Ag Yearbook 1917:265-81
- Do we need good country roads? Power F 27:48 Je '18
- Early spring highway work. C. H. Chesley. Hoard's D 53:515 Ap 13 '17
- Economical road building. A. A. Jeffrey. Country Gent 81:689 Mr 25 '16
- Effect of the war upon 1917 road work. Good Roads (150 Nassau st., N.Y. 10c) n s 13:325-7, 337-9, 353-4, 382 Je 2-16, 30 '17
- Farm women tell what it means to live in the land of mud. Banker-F 3:2 S '16
- Farmer and good roads—what they will mean to him. C. du Pont. Banker-F 3:10 J1 '16
- Farmer pays for bad roads. M. G. Kirkpatrick. *il Farm Eng* 4:85 N '16
- General conclusions of Am. Soc. C. E. committee on road grades, widths and thickness and crown of surfacing. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:155-7 F 6 '18
- Good roads. H. C. Campbell. *il Farm Eng* 3:269 Je '16
- Good roads and bridges. J. Wright. Farm Eng 4:44 S '16
- Good roads and civilization. Prog F 33:1144 O 19 '18
- Good roads and fruit selling. M. B. Davis. Fruit-Grower 27:430 S 15 '16
- Good roads community builder. M. B. Davis. O Judd Farmer 60:28 F 5 '16
- Good roads everywhere to revive our dying, isolated communities. C. H. Davis. *il Banker-F* 3:4 S '16
- Good roads for peace or war. H. C. Campbell. Prac F 114:117 Mr 15 '18
- Good roads; how to make them. *il Farm Eng* 4:47 S '16
- Good roads make market for the farmer. Farm Eng 3:280 Je '16
- Good roads mean dollars to the farmer. A. S. Rosing. *il Power F* 27:9-10 Je '18
- Grass strips in roads. Breeder's Gaz 69:1345 Je '29 '16

## Roads—Continued

- Highways to victory; we are learning what good roads can do to win the war. J: Hillis. il Country Gent 83:5 Ag 3 '18
- Hints on using the highways. C: H. Chesley. Prac F 113:229 Je 15 '17
- I have a better roads dream. H. A. Von Nieda. il Power F 27:26+ N '18
- Importance of the cheaper types of roads. il Good Roads (150 Nassau st., N.Y. 10c) n s 13:333-4 Je 9 '17
- Influence of grading on the value of fine aggregate used in Portland cement concrete road construction. F. H. Jackson, jr. J Ag Research 10:263-74 Jl 30 '17
- Keeping the wheels rolling. J. Wright. Farm Eng 5:6 F '17
- \* Land reclamation and highway development must go together. F. K. Lane. Municipal Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 55:183-5 N '18
- Landscape designing of national highway. Am Flor 46:1237 Jl 1 '16
- Law of the road. W. I. Chamberlain. Nat Stock & F 42:736 N 16 '18
- Make roads fit for traffic. W. W. Marr. O Judd Farmer 60:11 Ap 8 '16
- Mobilizing the highways. H. C. Campbell. il Kimball's D F 16:249 Ap 1 '18
- Need of heavy traffic roads. E: N. Hines. Power F 26:14 D '17
- Our old stone roads. il Am P Advocate 24:488 Ap '16; Same. Breeder's Gaz 69:891 Ap 20 '16
- Permanence in road building. Power F 25:53 D '16
- Public roads and preparedness. P. Fassig. Ohio F 137:734 My 27 '16
- Public spirit and the road drag will work wonders. Banker-F 3:10 F '16
- Recent developments in the design and construction of road surfaces. H. E. Breed. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:18-20 Ja 2 '18
- Reducing rural road construction costs by increasing efficiency of operation. W. Huber. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:415-17 My 2 '17
- Road building. M. M. Hunting. il Country Life 29:124+ Mr '16
- Road building. J. L. Long. il Farm Eng 5:5 N '17
- Roads benefit every farm. O Judd Farmer 60:11+ Ap 8 '16
- Roads—good and bad. il Scientific Am (233 Broadway, N.Y. 10c) 118:12-13 Ja 5 '18
- Roads not public property. Gard Chron Am 21:59 F '17
- Roads on the farm. J Ag (Quebec) 21:sup7 D '17
- Roads or trails—which? H. E. Tweed. Ohio F 137:679 My 13 '16
- Roads, war and peace. J. A. Idall. O Judd Farmer 64:13 Ja 26 '18
- Safeguarding roads for winter use. Power F 25:38 O '16
- Save more, earn more with good roads. J: S. Crandell. il Kimball's D F 16:563 Jl 15 '18
- Slippery modern roads. Breeder's Gaz 69:80 Ja 13 '16
- Snow and the country road. R. H. Smith. il Rural N Y 75:321 F 26 '16
- Solving a road problem. M. Coverdell. Farm Eng 3:264 My '16
- Some road building ideas. H. Gough. Prac F 113:213 Je 1 '17
- Spring road work. Weekly N L 4:11 Ap 25 '17
- Spring road work. P. T. Hines. Prog F 31:577 Ap 22 '16
- Standard type of farmers' roads. Prac F 112:231 Jl 15 '16
- Tractor in road making. E. R. Wiggins. il Country Gent 81:2190 D 23 '16
- Tractors excel horses in road making. A. L. Dahl. il Power F 27:13 D '18
- Tractors reduce cost in road building. E. A. Sorenson. il Power F 27:9 Mr '18
- Traffic on country roads. Wallaces' F 43:898 Je 7 '18
- Value of permanent rural roads. Power F 26:48 O '17
- Waste in road building. Power F 25:16 O '16
- What good roads mean to the farm women—told by one. Mrs N. K. Jones. il Banker-F 3:6 F '16
- What good roads mean to the school-children of the country. il Banker-F 3:5 F '16
- Women road agents; by means of good meals they have held up the men for good roads. T: J. Murphy. Country Gent 82:1825 N 24 '17
- See also Dust prevention; Pavements; Road materials; Road surveys; Roadside planting

## Accounting

See Highway accounting

## Administration

See Highway administration

## Bibliography

Roads; United States government publications for sale by the superintendent of documents, Washington, D.C. (Price list 45—7th ed) 8p '16 Supt. of doc., Washington, D. C.

## Contracts

Would rate state highway contractors on past performance. S. E. Fitch. Eng News-Record (10th av at 36th st, N.Y. 15c) 81:125-7 Jl 18 '18

## Convict labor

Convict labor for road work; with appendix: A digest of state laws. J. E. Pennybacker and others. bibliog il plans U S Ag B 414:1-218 '16

Making the Rockies accessible; difficult road construction by convict labor. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:502-3 D '17

Report on experimental convict road camp, Fulton county, Ga. H. S. Fairbank and others. il U S Ag B 583:1-64 '18

Use of convict labor on the public highways. il (In 5th Report, 1913-1916, p. 149-61) '17 Ill. State highway dept., Springfield

## Cost

Construction and maintenance of roads and bridges from July 1, 1913, to Dec. 31, 1914. U S Ag B 284:1-64 '15

Cost of Minnesota state rural highways. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 47:424 My 2 '17

Cost of state roads. Power F 25:44 My '16 Highway construction by counties of western states in 1916 and work proposed for 1917; tables. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:336-9 Ap 4 '17

Interesting comparison of road cost. E. A. Trego. il Power F 25:40 S '16

Report of Bureau of maintenance. B. H. Piepmeier. il maps (In 5th Report, 1913-1916, p. 89-132) '17 Ill. State highway dept., Springfield

Road costs in Illinois analyzed. Eng Record (239 W. 39th st., N.Y. 15c) 75:214 F 10 '17 Town and county highway data; cost of highway construction in 1917; tabulation. Municipal J (243 W. 39th st., N.Y. 10c) 43:260-1 S 13 '17

Two 60-horsepower gas tractors build dirt road for \$60 a mile. E. R. Morgan. il Eng News-Record (10th av. at 36th st., N.Y. 15c) 78:268 My 3 '17

Unit prices for road work in 1916 in Minnesota. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:421 My 2 '17

## Drainage

Directions for tile draining roads. Power F 25:51 D '16

Drainage problems encountered on Maine highways. H. W. Leavitt. il Good Roads (150 Nassau st, N.Y. 10c) n s 14:243-4 N 10 '17

Draining country roads with dynamite. Eng News-Record (10th av at 36th st, N.Y. 15c) 79:869 N 8 '17

Improper drainage the cause of most highway failures. A. A. Young. il Eng News-Record (10th av at 36th st, N.Y. 15c) 80:543-6 Mr 21 '18; Discussion. 1145-7 Je 13 '18



Roads—Drainage—Continued

Some of the phenomena of road drainage. C. C. Wiley. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:301-4 Ap '18  
Unusual road drainage, Lincoln highway, Ohio. *il Eng News-Record* (10th av. 36th st., N.Y. 15c) 79:373 Ag 23 '17

Finance

Bonding a county for road building. *il Breeder's Gaz* 71:271-2 F 8 '17  
Comparative analysis of economic effect of road improvements in eight counties. J. E. Pennybacker and O. Eldridge. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 49:499-501 D 6 '16

Expenditures and projects authorized, 1917 by State highway commission, classified by counties. map Oregon Voter (Portland, Ore. 10c) 12:79 Ja 19 '18

Federal aid for road maintenance; text of two bills introduced in Congress. *Good Roads* (150 Nassau st, N.Y. 10c) n s 15:284 Je 8 '18

Federal aid in fighting mud; a hundred and fifty million dollars for good roads. C. H. Claudy. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:14-15 Ja 6 '17

Federal aid rules and regulations. C. H. Davis. *Good Roads* (150 Nassau st, N.Y. 10c) n s 14:228 O 27 '17

Federal government appropriations \$14,550,000 to help states build good roads. *Municipal Eng* (702 Wulsin bldg., Indianapolis, Ind. 25c) 53:161 O '17

Financing pavement construction by taxing vehicles. C. A. Mullen. *Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 49:562-3 Je 5 '18

Highway bonds: a compilation of data and an analysis of economic features affecting construction and maintenance of highways financed by bond issues, and the theory of highway bond calculations. L. I. Hewes and J. W. Glover. *il maps U S Ag B* 136:1-78 '17; 25c U.S. Supt. of doc., Washington, D.C.

Highway problems in New York state. H. E. Breed. *Good Roads* (150 Nassau st., N. Y. 10c) n s 14:185-6 O 6 '17

Maintenance of improved highways as a continuing expense of states, counties and townships. E. W. James. *Economic World* (128 Water st, N.Y. 25c) n s 13:126 Ja 27 '17

One year's experience with the federal aid road law. L. W. Page. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:1-4 Ja '18

Policy and program of government in road construction under the new federal aid law. L. W. Page. *Good Roads* (150 Nassau st., N.Y. 10c) n s 13:116-18 F 17 '17

Progress in federal aid; nearly 400 projects involving aid amounting to about \$11,000,000 submitted in 18 months. *Good Roads* (150 Nassau st, N.Y. 10c) n s 15:248 My 11 '18

Progress of federal aid road work. *Municipal J* (243 W. 39th st., N.Y. 10c) 41:705-6 D 7 '16

Proposed Illinois state highway system a notable advance in the financing of highway construction. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:16-17 Ja 2 '18

Proposed method for maintaining a county road system. J. F. Witt. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:463-4 D 5 '17

Public road mileage and revenues in the central, mountain, and Pacific states, 1914; and appendix: tables showing road revenues and expenditures. U S Ag B 389:1-56, i-lxxv '17

Public road mileage and revenues in the New England states, 1914. U S Ag B 388:1-74 '17

Public road mileage and revenues in the southern states, 1914; and appendix: tables showing road revenues and expenditures. U S Ag B 387:1-52, i-lxxi '17

Public road mileage and revenues in the United States, 1914; a summary based upon bulletins 386, 387, 388, and 389. U S Ag B 390:1-11 '17

Report of the Bureau of audits. (*In* 5th Report, 1913-1916, p. 285-314) '17 Ill. State highway dept., Springfield

Road costs marked in plain figures. J. L. Long. *il Farm Eng* 7:20 Ap '18

Shall we issue bonds to build roads? S. E. Bradt. *Banker-F* 3:7 F '16

State highway mileage and expenditures for the calendar year 1916. U S Ag C 74:1-8 '17

Status of federal aid road projects. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 50:20 J1 3 '18

To pull Illinois out of the mud. *il map Banker-F* 5:12-13 O '18

Toll system for road maintenance. J. S. Callison. *Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 17:500-1 D '17

Foundations

Country road of the city street type. E. A. Trego. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 16:573-4 Je '17

Frost action

Injury of roads by frost. F. W. Sarr. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:200-3 Mr '18

Law

See Highway law

Location

Locating and planning of country roads. W. A. Obenchain. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 16:453-9 My '17

Road surveys and plans. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:205-8 Mr '18

Maintenance and repair

Care of roads. Ohio F 137:374 Mr 11 '16  
Construction and maintenance of roads and bridges from July 1, 1913, to Dec. 31, 1914. U S Ag B 284:1-64 '15

Earth-road maintenance handled by contract in Kentucky county. C. S. Bennett. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 79:758-9 O 13 '17

Good road maintenance. W. N. Lowry. *Penn State F* 9:301-2 Ja '16

Gravel road protection and maintenance. J. P. Nash. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:5-10 Ja '18

Highway maintenance. Ohio F 142:570 D 7 '18

Maintaining gravel roads. *Power F* 27:23 F '15

Maintenance and repair of improved roads. C. C. Brown. *Municipal J* (243 W. 39th st, N.Y. 10c) 43:485-6 N 15 '17

Maintenance methods for sand-clay and topsoil roads. R. T. Brown. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:569-70 Je 5 '18

Maintenance of earth roads. J. H. Mullen. *Good Roads* (150 Nassau st, N.Y. 10c) n s 14:332-3 D 29 '17; Abstract. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:20-1 Ja 2 '18

Maintenance of gravel roads. P. D. Sargent. *Good Roads* (150 Nassau st, N.Y. 10c) n s 14:333-4+ D 29 '17; Same cond. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 79:1193-4 D 27 '17

Maintenance of roads. G. D. Black. Ohio F 138:318 O 7 '16

Method of maintaining state aid roads in Illinois. B. H. Piepmeier. *il Eng & Contracting* (608 S. Dearborn st., Chicago \$3 per yr.) 47:224-6 Mr 7 '17

Methods and costs of road maintenance, repair and reconstruction in New York state in 1916. *il Good Roads* (150 Nassau st., N.Y. 10c) n s 14:13-16 J1 14 '17

More mileage thru proper maintenance. D. T. Brown. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 17:497-9 D '17

Motorizing maintenance. W. L. Ulrich. *il Am City—Town and county ed* (Tribune bldg., N.Y. 35c) 18:197-9 Mr '18

Operating cost of highways. A. N. Johnson. *Sci Am Sup* (233 Broadway, N.Y. 10c) 85:280 My 4 '18

Oregon county awards prizes for maintenance of roads. H. W. Holmes. *Eng News-Record* (10th av. at 36th st., N.Y. 15c) 78:387-8 My 24 '17

**Roads—Maintenance and repair—Continued**

- Patrol system for municipal road maintenance. C. A. French. Am City (Tribune bldg., N.Y. 35c) 18:226-7 Mr '18
- Patrol system of road maintenance in North Carolina. D. H. Winslow. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:13-14 Ja '18
- Progress reports of experiments in dust prevention and road preservation, 1913. U S Ag B 105:1-46 '14
- Progress reports of experiments in dust prevention and road preservation, 1914. U S Ag B 257:1-44 '15
- Progress reports of experiments in dust prevention and road preservation, 1916. U S Ag B 586:1-78 '18
- Proposed Dallas county road maintenance system. J. F. Witt. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:105-7 F '18
- Report of Bureau of maintenance. B. H. Piepmeyer. il maps (In 5th Report, 1913-1916, p. 89-132) '17 Ill. State highway dept., Springfield
- Road improvements menaced by car shortage. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:506 D '17
- Road maintenance a prime asset. J. M. Keyes. il Am City (Tribune bldg., N.Y. 35c) 18:134-5 F '18
- Road types often condemned by improper maintenance. B. H. Piepmeyer. il Eng News-Record (10th av. at 36th st., N.Y. 15c) 79: 538-9 S 20 '17
- Roller and roter in road maintenance. il Breeder's Gaz 70:1063 D 7 '16
- Township road maintenance in Illinois. B. H. Piepmeyer. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 50:14 Jl 3 '18
- Uniform method of cost accounting for road work. E. N. Hines. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:401-5 My '18

**Models**

- Road models. il U S Ag B 220:1-24 '15

**Statistics**

- Expenditures and projects authorized, 1917 by State highway commission, classified by counties. map Oregon Voter (Portland, Ore. 10c) 12:79 Ja 19 '18
- 5th report of the Illinois State highway department for the years 1913-1916. 314p il maps Ill. State highway dept., Springfield Includes reports of Bureau of roads; Bureau of bridges; Bureau of maintenance; Bureau of tests; Bureau of audits

**Surface treatment**

- Bituminous surface treatments for gravel and broken stone roads. J. Adler. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:295-300 Ap '18
- Intelligent use of road oil reduces maintenance. T. R. Agg. il Eng News-Record (10th av. at 36th st., N.Y. 15c) 78:412-13 My 24 '17

**Taxation**

- Single tax and good roads everywhere. Am City—Town and County ed (Tribune bldg., N.Y. 35c) 16:16 Ja '17

**Terminology**

- Bituminous macadam and bituminous concrete. Good Roads (150 Nassau st., N.Y. 10c) n s 13:25 Ja 13 '17

**Tractive resistance**

- Hard-surfaced roads save tractive effort. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:203-4 Mr '18

**Alabama**

- See also Alabama—Highway commission, State

**Arizona**

- What road improvement has done for the Yuma valley in Arizona. il Good Roads (150 Nassau st., N.Y. 10c) n s 15:27-8 Ja 19 '18

**Canada**

- Annual report on highway improvement, Ontario, 1916. 30p il map Ontario Dept. of public highways, Toronto
- Highways of the provinces. il Ag Gaz of Canada 5:1067-77 N '18
- Regulations respecting highways, 1916; appendix to the annual report of the Department of public highways. 11p '16 Dept. of public highways, Toronto, Ontario
- Rural highways. il Ag Gaz of Canada 3:525-42 Je '16
- Rural transportation and distribution; railways and highways. (In T: Adams. Rural planning and development, p. 72-101) il '17 Canada Comm. of conservation, Ottawa

**Colorado**

- Majestic highways of Colorado invite travel. Commercial (Denver civic and commercial assn. 5c) 9:21 Ja 24 '18

**Connecticut**

- See also Connecticut—Highway commissioner

**Florida**

- National highways in Florida. Mrs K. Munroe. il Am For 22:659-60 N '16

**Illinois**

- \* Coöperative road-building by Illinois and its counties. C. M. Hathaway. il Am City—Town and County ed (Tribune bldg., N.Y. 35c) 19:85-90, 176-82 Ag-S '18
- Good roads. S. E. Eradt. il Ill Farmers Inst Rep 1917:149-60 '17
- Illinois road campaign launched. map O Judd Farmer 63:1 N 3 '17
- Method of maintaining state aid roads in Illinois. B. H. Piepmeyer. il Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:224-6 Mr 7 '17
- Proposed Illinois state highway system a notable advance in the financing of highway construction. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:16-17 Ja 2 '18
- Road building in Vermilion county. il map O Judd Farmer 61:3 Ag 12 '16
- Road men want state bond issue. O Judd Farmer 61:4 D 30 '16
- Road statement by governor. O Judd Farmer 64:11 Ja 5 '18
- State road system will expand. O Judd Farmer 65:381 O 26 '18
- Thirty counties plan road bonds. O Judd Farmer 60:5 Ap 1 '16
- To pull Illinois out of the mud. il map Banker-F 5:12-13 O '18
- \* Township road maintenance in Illinois. B. H. Piepmeyer. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 50:14 Jl 3 '18
- Unusual ceremony; dedicating a first stretch of permanent highway. Power F 25:35 Ag '16
- Vote for road bonds. F. O. Lowden. O Judd Farmer 65:396 N 2 '18

- See also Illinois—Highway department, State

**Indiana**

- Indiana roads. G. E. Martin. il Purdue Ag 10: 16-18 Ja '16
- Plan for securing good roads in Indiana. E. W. Johnson. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:399-400 N '17

**Iowa**

- Better roads commission report to Governor G. W. Clarke. 14p map n.d. Better roads commission, Des Moines, Ia.
- Common sense applied to the road question. D. W. Norris. Wallaces' F 41:822 Je 2 '16
- Disagrees with Mr Norris on Iowa roads question. C. E. Hewitt. Wallaces' F 41:887 Je 16 '16
- Good roads and community life. J. E. Brindley and J. S. Dodds. il maps Ia Ag Coll B v 15:1-31 Ja 1 '18
- Iowa road conference. Wallaces' F 41:312 F 25 '16



**Roads—Iowa—Continued**

- Iowa road expenditures. Wallaces' F 41:897 Je 23 '16  
 Old law vs. the new. F. R. White. il Wallaces' F 41:1297-8+ O 6 '16  
 Plain talk on the road question. Wallaces' F 41:792 My 26 '16  
 Rejoinder on the road question. D. W. Norris. Wallaces' F 41:948 Jl 7 '16  
 Report on Iowa road question. Wallaces' F 42:48+ Ja 12 '17  
 Road question. Wallaces' F 41:761 My 19 '16  
 Roads and state printing fights. Wallaces' F 42:608-9 Ap 6 '17  
 State aid for main highways. J. C. Davis. 12p '16 Better roads commission, Des Moines, Ia.  
 What Iowa spends for roads and bridges; table. Wallaces' F 41:530 Mr 31 '16  
 Your road money in danger. Wallaces' F 42:393 Mr 2 '17

*See also* Iowa—Highway commission, State

**Kansas**

- Why Kansas hasn't better roads—does this fit your state, too? J. T. Kincaid. il Banker-F 3:10 Je '16

**Kentucky**

- Estimated number of miles of turnpike in each county in the state of Kentucky and state aid. Ky Ag Dept Rep 1916-1917: 379-81 '18  
 New road laws. Good Roads (150 Nassau st, N.Y. 10c) n s 15:179-80+ Mr 30 '18

**Maryland**

- Value of farm lands in Maryland and change of value owing to good roads. F. B. Bomberger. (In Maryland. Conference on taxation. Proceedings, 1916, p. 40-9) '16 Legislative reference dept., Baltimore, Md.

**Massachusetts**

*See also* Massachusetts—Highway commission

**Michigan**

- Michigan composite highway. il Breeder's Gaz 69:1330 Je 29 '16  
 Road building in Michigan during 1917 and proposed work for 1918. L. C. Smith. Municipal Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 54:123-4 Mr '18

**Minnesota**

- \* Connecting the markets towns in Pipestone county, Minnesota. G. S. Redmon. il Am City—Town and County ed (Tribune bldg., N.Y. 35c) 19:271 O '18  
 Cost of Minnesota state rural highways. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 47:424 My 2 '17  
 Unit prices for road work in 1916 in Minnesota. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:421 My 2 '17

**Missouri**

- Right roads in Wright county. L. J. Haynes. il Wallaces' F 41:1327 O 13 '16

**New Jersey**

- State highway system. (In Inaugural address of Walter E. Edge, Gov. of New Jersey, p 9-13) '17 Executive dept., Trenton, N. J.

**New York**

- Good roads aid schools. (In Elementary education, p. 551-63) maps '17 Univ. of the state of N.Y., Albany  
 Highway law; laws of 1909, chapter 30 constituting chapter 25 of the consolidated laws as amended, acts of legislature 1910-1917 with annotations and the general highway traffic law, 1917. 317p '17 N.Y. State commission of highways, Albany  
 Highway legislation in New York. Good Roads (150 Nassau st, N.Y. 10c) n s 14:222, 224 O 27 '17  
 Highway problems in New York state. H. E. Breed. il Good Roads (150 Nassau st, N.Y. 10c) n s 14:185-6, 191-4, 205-6, 217-19 O 6-27 '17

- Methods and costs of road maintenance, repair and reconstruction in New York state in 1916. il Good Roads (150 Nassau st., N.Y. 10c) n s 14:13-16 Jl 14 '17  
 New York state's experience with various types of road construction under various traffic conditions. H. E. Breed. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:289-94 Ap '18 (to be cont)

*See also* New York (state)—Commissioner of highways, State

**New Zealand**

- Good-roads movement. M. H. Wynyard. J Ag New Zealand 17:216-19 O '18

**North Carolina**

- Mecklenburg roads. W. J. Harsha. il Country Gent 81:756 Ap 1 '16

**Ohio**

- Modern awakening of an old Ohio town. Rural N Y 77:975 Ag 17 '18

**Oregon**

- Constitution and statutes relating to roads, highways, bridges and ferries, including the laws of 1917. 216p '17 Ore. Sec. of state, Salem  
 Expenditures and projects authorized, 1917 by state highway commission, classified by counties. map Oregon Voter (Portland, Ore. 10c) 12:78-9 Ja 19 '18  
 Forest road apportionments—1917, 1918, 1919. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 9:433 Je 23 '17  
 Highway improvement in Oregon; papers presented at conference, Portland, Jan. 3-4, 1917; 8th annual commonwealth conference of the University of Oregon. il map Commonwealth Review (Univ. of Oregon, Eugene) 2:363-482 Ja '17  
 More good roads for less money. E. W. Gage. il Kimball's D F 16:652-3 S 1 '18  
 Oregon county awards prizes for maintenance of roads. H. W. Holmes. Eng News-Record (10th av. at 36th st., N.Y. 15c) 78:387-8 My 24 '17

**Pennsylvania**

- Pennsylvania highway system; with discussion. W. D. Uhler. Pa Ag Dept B 283:68-81 '16  
 Report of committee on construction and maintenance of earth roads. Pa Ag Dept B v 1:13-22 Ap '18  
*See also* Pennsylvania—Highway department, State

**United States**

- Announcement by the United States highways council of its policy in approving highway work. Municipal J (243 W. 39th st, N.Y. 10c) 45:168 Ag 31 '18  
 Apportionment of federal road funds. Breeder's Gaz 70:203 Ag 10 '16  
 \* Bad road conditions retard the delivery of produce and supplies. il Am City—Town and County ed (Tribune bldg., N.Y. 35c) 19:263-5 O '18  
 \$85,000,000 for rural roads. N Y Prod R 42:514 Jl 19 '16  
 Extent of the rural roads, 1916. Municipal J (243 W. 39th st, N.Y. 10c) 43:422 N 1 '17  
 Federal aid for roads. F. Harrison. Breeder's Gaz 70:52 Jl 13 '16  
 Federal aid in fighting mud; a hundred and fifty million dollars for good roads. C. H. Claudy. il Scientific Am (233 Broadway, N.Y. 10c) 116:14-15 Ja 6 '17  
 Federal aid to highways. J. E. Pennybacker and L. E. Boykin. map U S Ag Yearbook 1917:127-38; Same. Separate 739  
 Federal approval is now required for practically all highway construction. Weekly N L 6:2 S 11 '18  
 Government money for roads. Wallaces' F 41:792 My 26 '16  
 Highway construction by counties of western states in 1916 and work proposed for 1917; tables. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:336-9 Ap 4 '17

**Roads—United States—Continued**

- Making the Rockies accessible; difficult road construction by convict labor. *il* Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:502-3 D '17
- Must resume highway work without delay. Weekly N L 6:2 D 11 '18
- 1918 highway construction projects of several states. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:336-40 Ap 3 '18
- 1918 highway construction prospects of four states. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:435 My 1 '18
- 1918 highway program should be considered from a national standpoint. L. W. Page. Eng News-Record (10th av at 36th st., N.Y. 15c) 80:206-7 Ja 31 '18; Same. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 49:146-7 F 6 '18
- Object-lesson and experimental roads, and bridge construction, 1912-13. U S Ag B 53: 1-34 '13
- Opening up the national forests by road building. O. C. Merrill. *il* U S Ag Yearbook 1916: 521-9; Same. Separate 69c
- Policy and procedure of U. S. Highways council during the war. Municipal Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 55:91-2 S '18
- President favors pushing construction of highways. Weekly N L 6:1 D 18 '18
- Progress reports of experiments in dust prevention and road preservation, 1915. U S Ag B 407:1-71 '16
- Public road mileage and revenues in the central, mountain, and Pacific states, 1914; and appendix: tables showing road revenues and expenditures. U S Ag B 389:1-56, i-lxxv '17
- Public road mileage and revenues in the middle Atlantic states, 1914. U S Ag B 386: 1-27 '16
- Public road mileage and revenues in the New England states, 1914. U S Ag B 388:1-74 '17
- Public road mileage and revenues in the southern states, 1914; and appendix: tables showing road revenues and expenditures. U S Ag B 387:1-52, i-lxxi '17
- Public road mileage and revenues in the United States, 1914; a summary based upon bulletins 386, 387, 388, and 389. U S Ag B 390:1-11 '17
- Public roads in the United States. J. E. Penny-backer. (*In* Pan American scientific congress Pro., 1915, v. 6, p. 18-31) '17
- Results of good roads. Power F 26:36 Ap '17
- Road improvements menaced by car shortage. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:506 D '17
- Road mileage and construction in the United States. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:508 D '17
- Road problems in the Ozarks. *il* Missouri School of Mines and Metallurgy (Rolla) B 9:1-23 Ja '17
- Roads reported to Washington by the states as vitally necessary to the transportation system and as aids to increased agricultural production. Municipal Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 54:163-7 Ap '18
- Shall we stop in the middle of the road? P. S. Rose. *il* Country Gent 83:5-6+ Je 29 '18
- Should cities share cost of county roads? Ag Digest 1:214 D '16
- State highway mileage and expenditures for the calendar year 1915. U S Ag C 63:1-8 '16
- Two national necessities: uniform motor truck laws and uniform motor truck roads. C. Lloyd. Independent (119 W. 40th st., N.Y. 10c) 93:282 F 16 '18
- Uncle Sam and the country roads. Prac F 112:276 Jl 15 '16
- Uncle Sam sets a good example—85 millions for good roads. Banker-F 3:3 S '16
- War policy in road building stated by Secretary Houston. Weekly N L 5:1+ Jl 10 '18; Same. Power F 27:49 Ag '18; Same cond. Ag Digest 3:12 Jl '18
- What good roads would mean to the farmer's market. A. P. Anderson. *il* Banker-F 3:4 F '16

What it costs Uncle Sam's farmers to stay in the land of mud. L. M. Tobin. Banker-F 3:2-3 F '16

See also Highway law; also United States—Public roads and rural engineering, Office of; United States highways council; also Columbia highway; Lincoln highway

**Washington**

See also Washington (state)—Highway commissioner, State

**West Virginia**

Bond issues for road work in West Virginia. A. D. Williams. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:505 D '17

**Roads, Bituminous**

Sand and asphaltic oil roads. A. W. Dean. *il* Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:493-6 D '17

**Roads, Brick**

Brick roads; with typical specifications, inspection and testing. V. M. Peirce and C. H. Moorefield. *il* U S Ag B 373:1-40 '16

Vitrified brick as a paving material for country roads. C. H. Moorefield and V. M. Peirce. U S Ag B 23:1-34 '14

Vitrified brick pavements for country roads. C. H. Moorefield and V. M. Peirce. U S Ag B 246:1-38 '15

**Roads, Concrete**

Apparatus for measuring the wear of concrete roads. A. T. Goldbeck. *il* J Ag Research 5:951-4 F 14 '16

Building concrete roads on grades. H. E. Breed. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:11-12 Ja '18

Concrete facts about concrete roads. 24p *il* '16

Portland cement assn., Chicago; Same. Irr Age 32:139-40 Jl '17

Concrete road. E. N. Hines. 13p '16 Portland cement assn., Chicago

Concrete road pays for itself. Power F 27:36 D '18

Concrete roads in rural communities. J. D. F. Boggs. *il* Purdue Ag 11:16-18 Ap '17

Concrete roads on hills. Nat Stock & F 40: 812 N 11 '16

Expansion and contraction of concrete and concrete roads. A. T. Goldbeck and F. H. Jackson, jr. *il* U S Ag B 532:1-31 '17

Hard-surfaced roads save tractive effort. *il* Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:203-4 Mr '18

Portland cement concrete pavements for country roads. C. H. Moorefield and J. T. Voshell. *il* U S Ag B 249:1-34 '15

Road question. Power F 25:23+ Ag '16

Specifications for concrete roads, streets and alleys. 32p '16 Portland cement assn., Chicago

**Roads, County**

County highway work in 1916; data from more than six hundred counties; tables. Municipal J (243 W. 39th st., N.Y. 10c) 42: 480-94, 742 Ap 5, My 31 '17

Highway construction by counties of western states in 1916 and work proposed for 1917; tables. Eng & Contracting (608 S. Dearborn st., Chicago \$3 per yr.) 47:336-9 Ap 4 '17

Material and labor cost on Los Angeles county road; tabulation. Eng News-Record (10th av at 36th st., N.Y. 15c) 81:944 N 21 '18

**Roads, Earth**

Care of earth roads in winter. F. T. Sheets. *il* Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:401-3 N '17

Construction and maintenance of earth roads. L. V. Edwards. *il* Wash Ag Ext Pub Ser 1, no 20:1-35 '16

Cost and location of earth roads. Prac F 112:206 My 15 '16

Dry-shod dirt road. J. E. Pickett. *il* Country Gent 83:6-7 My 11 '18

Earth roads. *il* (*In* 5th Report, 1913-1916, p. 135-49) '17 Ill. State highway dept., Springfield

Earth, sand-clay, and gravel roads. C. H. Moorefield. *il* U S Ag B 463:1-68 '17



**Roads, Earth—Continued**

- Maintenance methods for sand-clay and top-soil roads. R. T. Brown. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49: 569-70 Je 5 '18
- Maintenance of earth roads. J. H. Mullen. Good Roads (150 Nassau st, N.Y. 10c) n s 14:332-3 D 29 '17; Abstract. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:20-1 Ja 2 '18
- Making a dirt road. Wallaces' F 41:897 Je 23 '16
- Report of committee on construction and maintenance of earth roads. Pa Ag Dept B v 1:13-22 Ap '18
- Spring work on earth roads. Power F 26:33 My '17
- Width of wagon tires recommended for loads of varying magnitudes on earth and gravel roads. E. B. McCormick. U S Ag C 72:1-6 '17

**Roads, Experimental**

- Experiment on sand roads by the Wisconsin highway commission. H. J. Kuelling. il Good Roads (150 Nassau st, N.Y. 10c) n s 14:229-30 N 3 '17; Same. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 48: 362-3 N 7 '17; Same. Municipal J (243 W. 39th st, N.Y. 10c) 43:396-8 O 25 '17
- Experimental roads in the vicinity of Washington, D.C. B. A. Anderton and J. T. Pauls. U S Ag C 77:1-8 '17
- Government experimental road work in 1915. Good Roads (150 Nassau st., N.Y. 10c) n s 12:233-4 D 2 '16

**Roads, Gravel**

- Gravel road protection and maintenance. J. R. Nash. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:5-10 Ja '18
- Gravel roads. 3d ed F. F. Rogers. (B. 2) 24p il plans '17 Mich. State highway dept., Lansing
- Maintenance of gravel roads. P. D. Sargent. Good Roads (150 Nassau st, N.Y. 10c) n s 14:333-4+ D 29 '17; Same cond. Eng News-Record (10th av at 36th st, N.Y. 15c) 79: 1193-4 D 27 '17
- Methods and cost of building gravel roads in Kane county, Illinois. G. N. Lamb. il Municipal & County Eng (702 Wulsin bldg., Indianapolis, Ind. 25c) 54:227-8 Je '18

**Roads, Macadamized**

- To save macadam roads. Prac F 112:290 Ag 1 '16

**Roads, Oiled**

- Farmers' oiled road. il Wallaces' F 43:871 My 31 '18
- Oil roads and oil machinery. O Judd Farmer 60:19 F 19 '16
- Oiled country road. il Wallaces' F 41:815 Je 2 '16
- Road oiling in Illinois. il O Judd Farmer 61: 13 S 23 '16
- Use of road oil. Ia Ag Coll B v 16:1-8 Ja 23 '18
- Use of road oils. il (In 5th Report, 1913-1916, p. 144-9) '17 Ill. State highway dept., Springfield

**Roads, Sand and oil. See Roads, Bituminous**

**Roads, Tarred**

- Observations on the damage done to trees by tarring the streets of Milan, Italy. U. Brizi. Int R Sci & Prac Ag 9,no 5:626-7 My '18

**Roadside planting**

- Effect of roadside trees. G. A. Pearson. Soc Am For Pro 11:248-9 Ap '16
- Fruit trees by the roadside. E. White. il Green's Am Fruit Grower 37:5 D '17
- Observations on the damage done to trees by tarring the streets of Milan, Italy. U. Brizi. Int R Sci & Prac Ag 9,no 5:626-7 My '18
- Planting fruit trees by the roadside. C. A. Green. Green's Fruit Grower 36:6 Je '16
- Roadside planning and planting. L. W. Page. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 16:109-12 F '17
- Roadside planting. J. S. Holmes. il Am City—Town and county ed (Tribune bldg., N.Y. 35c) 18:310-12 Ap '18

- Roadside trees in North Carolina. J. S. Holmes. (Press B. 162) 8p '18 N. C. Geological and economic survey, Chapel Hill, N.C.

**Roadway orchards. H. L. Spooner. Green's Fruit Grower 36:3 Ap '16**

- Silviculture for country roadsides. R. T. Fisher. (B. 123) 4p il '18 Mass. forestry assn., 4 Joy st, Boston
- State board of forestry subsidizes tree planting. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:17-18 Jl '17

**Robber crab. See Purse crabs**

- Roberts, Isaac Phillips, 1833-Grand old man and the good old days; symposium of Roberts night, March 15, 1917. 100s Cornell Countryman 14:632-40 My '17
- Professor Roberts and the State college of agriculture. A. D. White. Cornell Countryman 14:641-3 My '17

**Roberval household science school**

- Report, 1917. (In Report, 1917, p. 60-2) il '17 Quebec ag. dept., Quebec

**Robins**

- Case for the robin. Rural N Y 77:977 Ag 17 '18
- Food of the robins and bluebirds of the United States. F. E. L. Beal. U S Ag B 171:1-31 '15

**Rochester, New York**

- How one city improved its gardens. R. B. Woodward. il Gard M 23:333-5 Jl '16

**Rock gardens**

- Alpine plants for the rock garden. Mrs L. S. Chanler. il Mass Hort Soc Trans 1918,pt 1: 17-32 '18
- American rock gardens. R. Rothe. Gard Chron Am 22:256 O '18
- Building a rock garden. W. E. Davis, jr. il Gard M 28:56-7 S '18
- Bulbs for the rock garden. Gard Chron Am 21:48 F '17
- Choice bulbs for the rock garden. Gard Chron Am 21:340 S '17
- Color in the rock garden. Gard Chron Am 20: 193 Ap '16
- Constructing and planting a rock garden. T. Cole. il Gard Chron Am 20:267-70 Je '16
- 8 x 15 ft. rock garden. R. S. Sturtevant. il Gard M 27:271 Jl '18
- Garden made on a rock ledge. E. I. Farrington il Gard M 25:96-7 Mr '17
- Ibroxhill rock garden, Bellahouston Park, Glasgow. J. Whitton. il Gard Chron (Lond) 63:241 Je 15 '18
- Jays of rock gardening. F. C. Morgan. il Gard Chron Am 22:15-16 Ja '18
- Miniature rock garden for decorative purposes. C. Elliott. Gard Chron Am 22:74 Mr '18
- Planting the alpine or rock garden. G. H. Chisholm. il Gard Chron Am 20:346-8 Ag '16
- Pleasures of rock gardening. J. F. Piper. il Gard Chron Am 20:228-30 My '16
- Quickly developed rock garden. il Gard Chron Am 20:63 F '16
- Rock and water garden at Grove park, Weston-super-Mare. il Gard Chron (Lond) 60:277 D 9 '16
- Rock garden in September. W. N. Craig. Gard Chron Am 20:387 S '16
- Rock garden in springtime. J. S. Golding. Gard Chron Am 21:143-4 Ap '17
- Rock gardens. Minn Hort 45:267-8 Je '17
- Rock gardens. R. Rothe. il Art World (2 W. 45th st, N.Y. 35c) 3:73-5 O '17
- Rock gardens. M. M. Twinney. il Gard Chron Am 21:238-41 Je '17
- Rock gardens for America. N. H. Ellsworth. il House Beautiful (3 Park st., Boston 25c) 41:234-5 Mr '17
- Rock gardens; right way to build them and what to plant. R. Rothe. il Country Gent 83: 51 Ap 13 '18
- Rockery idea in edgings. A. Rathbone. il Gard M 25:230 My '17
- Simple rock garden effects. H. S. Adams. il Gard M 23:156 Ap '16
- Sussex rock-garden. F. J. Hanbury. il Royal Hort Soc J 42,pts 2-3:271-81 S '17

**Rock roses. See Sun roses**

**Rocks**

- Further studies of the nitric nitrogen content of the country rock. R. Stewart and W. Peterson. *il Utah Ag Exp B* 150:1-20 '17
- Papa rock as a soil-dressing. J Ag New Zealand 12:303-4 Ap '16
- Relation between the properties of hardness and toughness of road-building rock. P. Hubbard and F. H. Jackson, jr. *J Ag Research* 5:903-7 F 7 '16
- Relation of mineral composition and rock structure to the physical properties of road materials. E. C. E. Lord. *il U S Ag B* 348: 1-26 '16
- Results of physical tests of road-building rock. P. Hubbard and F. H. Jackson, jr. *U S Ag B* 370:1-100 '16
- Results of physical tests of road-building rock in 1916, including all compression tests. P. Hubbard and F. H. Jackson, jr. *U S Ag B* 537:1-23 '17
- Toughness of bituminous aggregates. C. S. Reeve and R. H. Lewis. *il J Ag Research* 10:319-30 Ag 13 '17
- See also* Stone

**Rocks, Removal from land.** *See* Clearing of land

**Rockwell (Iowa) farmers' cooperative society** 29th annual meeting, Mar. 2. *Coop Manager & F* 7:54 Ap '18

**Rocky Mountain national park**

- Geologic story of the Rocky Mountain national park, Colorado. W. T. Lee. 89p *il maps* 30c '17 U.S. National park service, Washington, D.C.
- Rocky Mountain national park. M. Daniels. *il Am For* 22:724-9 D '16

**Rocky Mountain spotted fever ticks.** *See* Spotted fever ticks

**Rocky mountains**

- Battle along the timberline. E. Mills. *il Country Life* 31:25-8 D '16
- Foothills vegetation in the Colorado front range. A. C. Vestal. *bibliog il Bot Gaz* 64: 353-85 N '17

**Rod of Aaron; story.** F. Tilden. *il Country Gent* 83:18-19+ Ja 12 '18

**Rodents**

- Commercial fruit growing. *Country Gent* 82: 1326 Ag 25 '17
- Control of rodent pests; directions for killing ground squirrels, pocket gophers, rabbits, and field mice. C. J. Sorenson. *il Utah Ag Exp C* 29:1-12 '18
- Cooperative campaigns for the control of ground squirrels, prairie-dogs, and jack rabbits. W. B. Bell. *il U S Ag Yearbook* 1917: 225-33; Same. Separate 724
- Destroy animal pests. *Weekly N L* 5:6 Ja 2 '18
- Destroying rodent pests on the farm. D. E. Lantz. *il U S Ag Yearbook* 1916:381-98; Same. Separate 708
- Insects and rodents injurious to stored products. E. N. Cory and H. S. McConnell. *il Md Ag Ext B* 8:122-44 D '17
- Poisoned grain baits for rodents. M. R. Miller. *Cal State Comm Hort B v* 7:206-9 Ap '18
- Protect trees from rodents. E. L. Kirkpatrick. *Ohio F* 140:534 D 8 '17
- Protect trees from rodents. J. S. Underwood. *Green's Fruit Grower* 36:3 N '16
- Protection of trees from rodents. F. H. Ballou. *il Ohio F* 138:565 D 9 '16
- Rodent injury to trees. W. W. Magill. *il Purdue Ag* 12:78 N '17
- Rodent pests of the farm. D. E. Lantz. *il Farmers' B* 932:1-23 '18
- Rodents of Colorado in their economic relation. W. L. Burnett. (C. 25) 31p *il '18 Colo. State entomologist, Fort Collins*
- Suggestions for combating prairie-dogs, ground squirrels and other rodent pests. W. L. Burnett. (C. 24) 6p '17 *Colo. State entomologist, Fort Collins*

*See also* Gophers; Ground squirrels; Hares; Mice; Moles; Muskrats; Prairie dogs; Rabbits; Rats; Rice rats; Voles; Woodchucks

**Röntgen rays.** *See* X-rays

**Roesleria**

**Roesleria pallida.** Sacc. J. S. Bayliss-Elliott and W. B. Grove. *il Ann Bot* 30:407-14 JI '16

**Rolled oats.** *See* Oats, Rolled

**Roller towels.** *See* Towels

**Rollers, Farm**

- Home-made power roller. *Ohio F* 137:415 Mr 18 '16
- Rollers and packers. T. Butler. *Prog F* 32: 119 F 3 '17

**Rome****Social life and customs**

- Menus of the ancient Roman world. C. G. Harcum. *J Home Econ* 10:343-7 Ag '18

**Roof gardens**

- Vegetables and chickens 200 feet high. W. D. Goodwin. *il Rural N Y* 75:1205 S 16 '16
- Watering the garden by long-distance telephone. *Sci Am* (233 Broadway, N.Y. 10c) 119: 105 Ag 10 '18

**Roofs**

- Can farm roofs be bettered? *il Power F* 25: 50 Ja '16
- Farmer his own builder. H. A. Roberts. *Country Gent* 82:1784 N 17 '17
- Masonry roof. W. G. Kaiser. *il Am Soc Ag Eng Trans* 10, no 2:68-72 '17
- Permanent fireproof barn roof. H. R. Richardson. *il Country Gent* 82:221 F 3 '17
- Question of barn roofs. H. Shearer. *plan Farm Eng* 3:208 Mr '16
- Roofing farm buildings. J. Marsh. *Ohio F* 142: 346 O 12 '18
- Roofs seen from the garden. W. H. Butterfield. *il Gard M* 23:247-8 My '16
- Round roofed barn. L. J. Fletcher. *il Farm Eng* 3:251 My '16
- Rust-proof metal roofs. Kimball's D F 14:16 Ja 15 '16
- Uses of wood; the place of the wooden roof in civilization. H. Maxwell. *il Am For* 24: 473-82 Ag '18

*See also* Gambrel roofs; Gutters (roof); Shingles; Trusses

**Roosters**

- Help save a million dollars. H. H. Steup. *Purdue Ag* 12:555-6 Je '18
- Swat the rooster! H. R. Lewis. *Country Gent* 82:1039 Je 16 '17
- Swat the rooster; market infertile eggs during summer months. (C. 16) 8p *il n.d. Mo. State poultry experiment station, Mountain Grove*
- Why do roosters crow? M. Purvis. *il Breeder's Gaz* 70:1199 D 21 '16

**Root blight.** *See* Fire blight

**Root crops**

- Crop for land and livestock. A. G. Morrell. *il Country Gent* 81:781-2 Ap 8 '16
- Culture of root crops. L. R. Johnson. *il Rural N Y* 75:652 Ap 22 '16
- Culture of root crops. H. S. Osler. *Maine Ag Dept B v* 18:18-24 Je '18
- Culture of root plants in view of the feeding dairy cows; with discussion. H. Bois. (*In* Report, Quebec Dairymen's assn., 1916, p. 208-17) '17
- Forage and root crops. C. S. Knight. *il Nev Ag Exp B* 86:15-20 '17
- Gathering the root crop quickly. R. W. De Baun. *il Country Gent* 81:1903 O 28 '16
- Growing root crops. G. F. Smith. *Market Growers J* 18:154 F 15 '16
- History of roots. P. A. Boving. *J Ag (Quebec)* 20:44 Ag '16
- Home garden; root crops for winter. *il Country Gent* 83:34 My 25 '18
- Important root crops of the market garden. H. F. Tompson. *il Mass Ag Bd B* 5:138-46 '18 (3d ed. rev.)
- Important root crops of the Philippines. F. C. Kingman and E. D. Doryland. *il Philippine Ag R* 10, no 4:335-49 '17
- Mangels or Swedes; some pointers for seedling. P. A. Boving. *J Ag (Quebec)* 19:256 Je '16
- Potatoes, sweet potatoes, and other starchy roots as food. C. F. Langworthy. *U S Ag B* 468:1-28 '17
- Relative value of field roots; analyses of mangels, turnips and carrots. (*In* Experimental farms, 1916. v. 1, p. 115-21) 45c '17 *Canada Ag*



**Root crops—Continued**

- Root crop culture in South Dakota. M. Champlin and G. Winright. *il S D Ag Exp B* 180:824-53 '18
- Root crops; high price of grain makes healthful roughage more essential than ever. D. S. Blair. *il Field* 11 28:242-3+ Ap '18
- Root-growing in middle Taranaki. J. W. Deem. *J Ag New Zealand* 17:90-5 Ag '18
- Roots; harrowing, wheel hoeing and thinning. P. A. Boving. *J Ag (Quebec)* 20:4 J1 '16
- Spring preparation for roots. E. A. Lods. *J Ag (Quebec)* 20:222 My '17
- Start root crops for winter supply. A. Kruhm. *il Gard M* 23:330-1 J1 '16
- Summer care of the root field. E. A. Lods. *il J Ag (Quebec)* 20:233 Je '17
- Turnips and other root crops. A. L. Dacy. *W Va Ag Ext C* 194 4p '18
- Turnips, beets, and other succulent roots, and their use as food. C. F. Langworthy. *U S Ag B* 503:1-18 '17
- Two Peruvian root crops. *Rural N Y* 75:1053 Ag 5 '16
- See also* names of root crops, e.g. Beets, Carrots, Ginseng, Mangels, Onions, Parsnips, Peanuts, Potatoes, Rutabagas, Sal-sify, Turnips

**Diseases and pests**

- Cabbage root maggot and its control in Canada; means of controlling root maggots. A. Gibson and R. C. Treherne. *p* 36-56 *il '16 Canada Ag*
- Rot of turnips and Swedes. J. Vanderleck. *il J Ag (Quebec)* 20:76 O '16
- See also* Onion maggots; Root maggots

**Seed**

- Experimental work with field root seed growing. F. S. Browne. *il Ag Gaz of Canada* 3: 786-8 S '16
- Field root and vegetable seed growing in the maritime provinces. S. J. Moore. *Ag Gaz of Canada* 4:122-3 F '17
- Field root seed production. *Ag Gaz of Canada* 3:807-9 S '16
- Home-grown versus commercial seed of field roots. *J Ag (Quebec)* 21:88 D '17
- Root seed growing in Canada. Ontario Ag Dept B 260:36-43 '18
- Root-seed production. L. C. Raymond. *il J Ag (Quebec)* 22:36-7 S '18
- Root seed production at Macdonald college. P. A. Boving. *il Ag Gaz of Canada* 3:894-8 O '16
- Storage of roots for seed production. L. C. Raymond. *il J Ag (Quebec)* 22:74 N '18

**Storage**

- Construction of root cellar. G. B. Fiske. *plan Rural N Y* 75:1127 Ag 26 '16
- Root and vegetable cellars. Mrs W. W. Burdett. *Rural N Y* 75:1231 S 23 '16
- Storage of roots for seed production. L. C. Raymond. *il J Ag (Quebec)* 22:74 N '18
- Storing root crops on the farm. *il plans Hoard's D* 54:213 S 14 '17
- Vegetable or root storage cellars. H. C. Campbell. *il plans Hoard's D* 54:212 S 14 '17
- Winter storage of roots. P. H. Aldrich. *Vt Ag Exp B* 203:3-9 Mr '17

*See also* names of crops, subhead Storage

**Varieties**

- Choice of root crop varieties. E. A. Lods. *il J Ag (Quebec)* 20:166 F '17
- Co-operative experiments at Matamoras; manurial and root-variety trials. J. W. Hadfield. *J Ag New Zealand* 13:214-24 S '16
- Root-gallworm. *See* Nematodes
- Root grafting. *See* Grafting
- Root-knot nematodes. *See* Nematodes
- Root maggots
- Radish maggot and screening. P. J. Parrott. *J Econ Entom* 10:79-81 F '17
- Relation of the common root maggot (*pegomyia fusciceps* Zett.) to certain crops in Louisiana. E. S. Tucker. *J Econ Entom* 10: 397-406 Ag '17

Swat the vegetable fly. *Country Gent* 83:29 Ja 19 '18

*See also* Cabbage maggots

Root-nematode. *See* Nematodes

**Root rot**

- Polyporus dryadeus, a root parasite on the oak. W. H. Long. *bibliog il J Ag Research* 1:239-50 D '13
- Ramularia root-rots of ginseng. C. L. Zinnsmeister. *il Phyt* 8:557-71 N '18
- Resistance in tobacco to the root-rot disease. J. Johnson. *il Phyt* 6:167-81 Ap '16
- See also* Apple black rootrot

Root worms. *See* Nematodes

**Roots**

- Absorption of ions by living and dead roots. H. V. Johnson. *Am J Bot* 2:250-4 My '15
- Acid excretion of roots. H. Coupin. *Int R Sci & Prac Ag* 8,no 12:1204-5 D '17
- Development of the root system of cirsium arvense and medicago sativa with reference to their vegetative reproduction; observations carried out in Russia. J. Paczoskij; F. Berg. *Int R Sci & Prac Ag* 8,no 4:563-5 Ap '17
- Economic significance of the root-development of agricultural crops. A. Howard and G. L. C. Howard. *il Ag J of India Sci Congress No* 1917:17-28
- Epidermal cells of roots. E. A. Roberts. *bibliog Bot Gaz* 62:488-506 D '16
- Exchange of ions between the roots of lupinus albus and culture solutions containing one nutrient salt. R. H. True and H. H. Bartlett. *Am J Bot* 2:255-78 Je '15
- Exchange of ions between the roots of lupinus albus and culture solutions containing two nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 2:311-23 J1 '15
- Exchange of ions between the roots of lupinus albus and culture solutions containing three nutrient salts. R. H. True and H. H. Bartlett. *Am J Bot* 3:47-57 F '16
- Fruit tree root systems; spread and depth. A. B. Ballantyne. *il Utah Ag Exp B* 143:1-15 '16
- Growth of the root system of medicago sativa. *Int R Sci & Prac Ag* 7,no 8:1088-9 Ag '16
- \* Have roots an intelligence? S. L. Bastin. *il St Nicholas* (353 4th av, N.Y. 25c) 46:78-80 N '18
- Influence of the medium upon the orientation of secondary terrestrial roots. R. M. Holman. *il Am J Bot* 3:407-14 O '16
- New method adopted in Russia for studying the root system of cultivated plants. *Int R Sci & Prac Ag* 7,no 2:204-5 F '16
- On the relation of root growth and development to the temperature and aeration of the soil. W. A. Cannon. *Am J Bot* 2:211-24 My '15
- Orientation of primary terrestrial roots with particular reference to the medium in which they are grown. R. M. Holman. *bibliog il Am J Bot* 3:274-318 Je '16
- Pin money in roots and herbs. Mrs H. M. Woodward. *Ohio F* 137:83 Ja 15 '16
- Root systems of agricultural plants. E. C. Miller. *bibliog Am Soc Agron J* 8:129-54 My '16
- Root systems of certain desert plants. M. S. Markle. *il Bot Gaz* 64:177-205 S '17
- Roots of a plant. *Gard Chron Am* 20:321 J1 '16
- \* Some biological features of roots. W. A. Cannon. *il Sci Am* (233 Broadway, N.Y. 10c) 119:373 N 9 '18
- Stimulation of root growth in cuttings by treatment with chemical compounds. O. F. Curtis. *bibliog il Cornell Ag Exp Memoir* 14:75-138 '18
- Studies on the root system of plants, in reference to selection and drought resistance. A. P. Modestov. *Int R Sci & Prac Ag* 7,no 7:954-60 J1 '16
- See also* Corn—Roots; Geotropism; Grain—Roots; Root crops; Trees—Roots

**Roots, Fossil**

Roots in bennettites. M. C. Stopes. *il Ann Bot* 31:257-9 Ap '17

**Rope**

Cattle ropes. R. Cecil Wood and S. Subrahmanya Ayyar. *il Ag J of India* 12:579-82 O '17

Use of rope on the farm. V. Overholt. *il Ohio Ag Ext B v 12, no 5 48p* '16-'17

*See also* Knots and splices

**Roquefort cheese.** *See* Cheese**Rose.** *See* Roses**Rose aphid**

Aphis on rosebushes. J Ag (Quebec) 20:22 JI '16

Fighting the rose aphid. *Better Fruit* 10:26 Ap '16

How to protect rose bushes from the rose aphid. *Prog F* 31:703 My 27 '16; Same. *Better Fruit* 10:16 Je '16; Same cond. *Green's Fruit Grower* 37:2 Je '17

Rose aphid (*macrosiphum rosae* L.). H. M. Russell. *il U S Ag B* 90:1-15 '14

**Rose canker**

Rose canker and its control. P. J. Anderson. *il Mass Ag Exp B* 183:11-46 '18

**Rose chafers**

Beetle damages vegetables, fruits and flowers. *Green's Fruit Grower* 36:1a Ag '16

Poisonous effects of the rose chafer upon chickens. G. H. Lamson, jr. *Am Vet M Assn J* 49:107-8 Ap '16

Rose chafer. *il Conn State Ag Exp Rep* 1916, pt 2:111-15 '17

Rose-chafer. L. B. Smith. *Va Ag Dept B* 115:138-41 '17

Rose-chafer: a destructive garden and vineyard pest. F. H. Chittenden and A. L. Quaintance. *il Farmers' B* 721:1-8 '16; Same cond. *Gard Chron Am* 20:285 Je '16

**Rose curculio**

\* Red rose beetle. S. Marcovitch. (C. 36) 4p *il* '16 *Minn. State entomologist, St Paul*

**Rose floats**

Rose floats. *il Am Flor* 46:418-19 Mr 18 '16

**Rose plantain.** *See* Plantago**Rose scale**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v 16, no 26:101-2* '16

**Roselle**

Roselle plant. H. E. Zimmerman. *il Am For* 24:299 My '18

**Rosemary pageant.** *See* Pageants**Roses**

American beauty at Wyndmoor. *il Am Flor* 49:1038 D 1 '17

Am. rose society visits test garden. *il Am Flor* 46:1036-7 Je 3 '16

Among the roses; new novelties. *il Gard M* 25:88 Mr '17

Annual and perennial blossoms—and roses. *il Country Gent* 81:938-9 Ap 29 '16

Arlington rose garden inspection. *il Am Flor* 50:970 Je 1 '18

Autumn rose show in London. *Am Flor* 46:7-8 Ja 22 '16

Bedding tea roses. *il Gard Chron (Lond)* 60:287-8 D 16 '16

Best outdoor roses for the amateur. G. C. Thomas, jr. *il Country Life* 29:27-32 Mr '16

Better roses. J. H. McFarland. *il Country Gent* 83:52 F 23 '18

Care of Christmas stock. *il Am Flor* 49:1037 D 1 '17

Care of plants after holidays. *Am Flor* 48:3 Ja 20 '17

Care of the plants after Easter. *Am Flor* 48:740 Ap 21 '17

Care of young stock. *Am Flor* 50:866; 51:92 My 18, Ag 3 '18

Carrying plants through pruning time. *Am Flor* 46:391 My 27 '16

Changing names of roses. *Am Flor* 46:531 Ap 1 '16

Charles H. Totty's new roses. *Am Flor* 46:118 F 5 '16

Climbers of merit; roses. A. J. Fish. *Gard M* 23:342 JI '16

Climbing roses. E. Molyneux. *il Gard Chron (Lond)* 60:288 D 16 '16

Climbing roses; notes on the newer varieties and methods of culture. W. E. Bontrager. *Ohio Ag Exp B v 3:93-4 Mr* '18

Commercial growers' rose display at National flower show. *il Am Flor* 46:578 Ap 8 '16

Confessions of a novice. *Gard Chron (Lond)* 60:39 JI 22 '16

Culture of garden roses. A. C. Beal. *il Cornell Reading Course* 121:191-215 '17

Cutting and pruning. *Am Flor* 49:490 S 22 '17

Cutting bench. *Am Flor* 46:221-2 F 19 '16

Death of Jules Gravereaux, famous rosarian. *Gard M* 23:342 JI '16

Dr W. Van Fleet, rose hybridizer. *Am Flor* 47:1234 D 23 '16

Don't hurry winter protection of roses. S. C. Hubbard. *il Gard M* 28:89-90 O '18

E. G. Hill's seedling roses. *il Am Flor* 48:56-7 Ja 27 '17

Essentials in planting roses. *Gard Chron Am* 22:21 Ja '18

Ethics of rose pruning. *Gard Chron Am* 20:306 JI '16

Fall preparations. *Am Flor* 47:548 S 30 '16

Fertilizers for roses. F. W. Muncie. *Am Flor* 46:420-1 Mr 18 '16

Field-grown roses for cut-flowers. *Gard Chron Am* 21:55 F '17

Fragrance in roses. *il Gard Chron (Lond)* 63:214 My 25 '18

Fragrant roses for the garden. *Gard Chron Am* 20:77 F '16

Grafting. *Am Flor* 46:6-7 Ja 22 '16

Growing roses from seed. *Gard Chron Am* 20:471 N '16

Guarding the Easter crop. *Am Flor* 46:727 Ap 22 '16

Handling the Christmas cut. *Am Flor* 49:1144 D 15 '17

Hardy roses and their culture. G. Norris. *il Gard Chron Am* 21:145-6 Ap '17

History and botanical relationships of the modern rose. E. H. Wilson and F. A. Wilson. *il Gard M* 24:96-7 O '16

Home garden; fall thoughts about roses for spring planting. *il Country Gent* 83:29 N 30 '18

Hugh Dickinson's new roses. *Am Flor* 49:50 JI 28 '17

Imperfection of pollen and mutability in the genus *rosa*. R. D. Cole. *il Bot Gaz* 63:110-23 F '17

In praise of single roses. G. Bunyard. *Royal Hort Soc J* 42, pt 1:145-7 O '16

Is there a small work on rose species? *Gard Chron (Lond)* 59:155 Mr 18 '16

John Cook, veteran rose hybridizer. *Am Flor* 46:1240 JI 1 '16

June care of indoor roses. *Am Flor* 48:1110 Je 9 '17

List of hybrid perpetual roses. P. H. Mitchell. (*In Report, Horticultural societies of Ontario, 1917, p. 82-4*) '18 Ontario ag. dept., Toronto

Making the rose garden. S. L. Bastin. *il Gard M* 25:128 Mr '17

Manuring and production of roses. *Am Flor* 48:1204 Je 23 '17

March care; summer struck cuttings. *Am Flor* 48:506 Mr 24 '17

Metropolitan show of the National rose society. *il Gard Chron (Lond)* 60:22-3 JI 8 '16

Mid-summer work. *Am Flor* 47:165 Ag 12 '16

Mulching. *Am Flor* 46:320 Mr 4 '16

National rose society exhibition. *Gard Chron (Lond)* 59:226 Ap 22 '16

National rose society's awards. *Gard Chron (Lond)* 62:29 JI 21 '17

New rose culture. S. A. Hamilton. *il Country Gent* 81:514 Mr 4 '16

New roses. *Gard Chron (Lond)* 59:147 Mr 11 '16

New roses. E. G. Hill. *Am Flor* 46:222-3 F '19 '16

Newer climbing roses of merit. E. I. Farrington. *il Gard M* 27:72-3 Mr '18

Newer roses in the greenhouse. *il Gard Chron (Lond)* 59:101 F 19 '16

Notable hybrid teas. *il Gard Chron Am* 21:273 JI '17



**Roses—Continued**

Novelties in climbing and pillar roses. W. Easlea. Gard Chron (Lond) 62:95 S 8 '17  
 On planting roses. Gard Chron (Lond) 62:220 D 1 '17  
 Our hardy roses—their habits and needs. A. Smith. il Gard Chron Am 20:114-16 Mr '16  
 Outdoor roses for northern gardens. H. J. Staples. il Gard M 23:160-1 Ap '16  
 Penetration of scion by stock. G. B. Patvardhan. il J Heredity 9:187-8 Ap '18  
 Perpetual-flowering shrub roses. Gard Chron (Lond) 60:145 S 23 '16  
 Planting. Am Flor 46:1131 Je 17 '16  
 Plea for rose hedges. E. T. Ellis. Gard Chron Am 20:193 Ap '16  
 Pot pourri rose garden. Am Flor 45:1346 Ja 8 '16  
 Potting off the cuttings. Am Flor 50:404 Mr 16 '18  
 Preparing for the Christmas cut. Am Flor 47: 809, 1148 N 4, D 16 '16  
 Propagating the rose. Am Flor 48:230 F 17 '17  
 Rambler roses for Easter. il Am Flor 50:3 Ja 19 '18  
 Renaming roses with German titles. F. Mil-toun. Am Flor 50:405 Mr 16 '18  
 Rosa gentillana. il Gard M 23:339 JI '16  
 Rosa gigantea and Fortune's yellow rose. R. A. Rolfe. Gard Chron (Lond) 60:11-12 J 8 '16  
 Rosa moyesii. Gard Chron (Lond) 62:106 S 15 '17  
 Rosary; seasonable hints. il Gard Chron (Lond) 63:242 Je 15 '18  
 The rose. Green's Fruit Grower 37:2 JI '17  
 Rose American pillar and its origin. W. Easlea. il Gard Chron (Lond) 62:196 N 17 '17  
 Rose and carnation production. F. W. Muncie. Am Flor 48:382 Mr 10 '17  
 Rose culture. M. Frydholm. il Minn Hort 44: 162-4 Ap '16  
 Rose growing efficiency. il Am Flor 49:197-8 Ag 18 '17  
 Rose growing for cut blooms. F. J. Knecht. Am Flor 48:384 Mr 10 '17  
 Rose growing in vicinity of Philadelphia. Am Flor 49: 1264 D 29 '17  
 Rose growing tendencies in America. Am Flor 49:151 Ag 11 '17  
 Rose hedges. Gard Chron (Lond) 59:217-18 Ap 22 '16  
 Rose Los Angeles. il Am Flor 46:880 My 13 '16  
 Rose novelties of 1917. il Gard Chron Am 21: 439 D '17  
 Rose outdoors. C. W. Johnson. Am Flor 49: 49 JI 28 '17  
 Rose; preparing for timely cutting. Am Flor 49:753 O 27 '17  
 Rose propagating. Am Flor 50:6 Ja 19 '18  
 Rose season. Gard Chron (Lond) 62:120 S 22 '17  
 Roses and how they are originated. E. G. Hill. Gard Chron Am 22:199 JI '18  
 Roses for lawn and border. H. Kaldahl. Minn Hort 46:244-8 Je '18  
 Roses for the arbor and trellis. Gard Chron Am 20:503 D '16  
 Roses for the Arizona home. J. J. Thornber. Ariz Ag Exp Timely Hints no 122:1-8 '16  
 Roses for the home. F. L. Mulford. il maps plan Farmers' B 750:1-36 '16  
 Roses of May. il Gard Chron (Lond) 60:27 JI 15 '16  
 Roses of proven worth. Am Flor 49:1264 D 29 '17  
 Roses of recent introduction. D: R. William-son. Gard Chron (Lond) 64:87 Ag 31 '18  
 Roses to adorn home grounds. il Va Ag Dept B 112:14-16 My '16  
 Roses under glass. Gard Chron (Lond) 59: 182-3 Ap 1 '16  
 Roses without heat. Am Flor 51:183 Ag 17 '18  
 Select varieties of roses. Gard Chron (Lond) 61:121 Mr 24 '17  
 Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. il Maine Ag Dept B v 15:21-6 S '16  
 Some new roses. il Gard Chron (Lond) 64:23 JI 20 '18  
 Some of the best decorative roses. Gard Chron (Lond) 61:155 Ap 14 '17

Some recent Chinese roses. R. A. Rolfe. Gard Chron (Lond) 60:37 JI 22 '16  
 Some roses of recent introduction. Gard Chron (Lond) 60:246 N 18 '16  
 Specially useful roses. Gard Chron (Lond) 63: 64, 92, 123, 163 F 16, Mr 2, 23, Ap 20 '18  
 Spring care of young rose stock. Am Flor 46:591-2 Ap 8 '16  
 Standard roses. Rural N Y 75:322 F 26 '16  
 Starting the young stock. Am Flor 50:1245-6 JI 13 '18  
 Summer care of outdoor roses; roses from frost to frost. il Gard Chron Am 22:114-15 Ap '18  
 Summer care of young plants. Am Flor 47:6; 49:102 JI 22 '16, Ag 4 '17  
 To the growers of roses. Better Fruit 11:21 D 16 '16  
 Transplanting roses in summer. L. Lennox. Gard M 25:294 Je '17  
 Unusual methods of training roses. Gard Chron (Lond) 59:212 Ap 15 '16  
 Use of commercial fertilizers in growing roses. F. W. Muncie. Ill Ag Exp B 196:511-64 '17  
 Wichuraiana rose Evangeline. Gard Chron (Lond) 60:109 S 2 '16  
 Winter care of roses and other outdoor plants. Gard Chron Am 22:277 N '18  
 With the growers; W. H. Elliott, Madbury, N.H. Am Flor 47:489 S 23 '16  
 Woman and her rose garden. I. H. Hardie. il Country Life 32:60-1 Je '17  
*See also* American rose society; National rose society (English)

**Bibliography**

List of books about roses. H. Yeargain, comp. St Louis Pub Lib B p 70-2 F '18

**Diseases and pests**

Control of rose diseases. Gard Chron (Lond) 64:105 S 14 '18  
 Control of rose diseases. S. S. Pennock. Am Flor 46:1181 Je 24 '16  
 Crown canker disease of rose. L. M. Massey. il Phyt 7:408-17 D '17  
 Diseases of roses. L. M. Massey. bibliog il Mass Hort Soc Trans 1918, pt 1:81-101 '18  
 Diseases of roses. L. M. Massey. (In Ontario horticultural societies, 11th annual report, 1916, p. 47-54) '17 Ontario ag. dept., Toronto, Canada  
 Experiments for the control of black-spot and powdery mildew of roses. L. M. Massey. Phyt 8:20-3 Ja '18  
 Investigation of diseases of the rose. Gard Chron Am 21:245 Je '17  
 Investigation of rose diseases. L. M. Massey. Gard Chron Am 20:475 N '16  
 Rose disease investigations. L. M. Massey. Am Flor 43:1109 Je 9 '17  
 Rose diseases. L. M. Massey. Am Flor 47:1148 D 16 '16  
 Rose diseases and how to control them. Gard Chron Am 20:475 N '16  
 Trained plant pathologist to investigate diseases of roses. H. H. Whetzel. Am Flor 47: 344 S 2 '16  
*See also* Rose aphid; Rose canker; Rose curculio

**Nomenclature**

Code of nomenclature. E. A. White. Am Flor 49:338 S 1 '17

**Roseworthy agricultural college**

Annual speech day celebrations. J Dept Ag S Australia 20:735-40 Ap '17  
 Roseworthy agricultural college. il J Dept Ag S Australia 21:533-46 F '18  
 Roseworthy agricultural college; harvest report, 1916-17. W. J. Colebatch. J Dept Ag S Australia 20:623-48 Mr '17  
 Roseworthy agricultural college harvest report—1917-1918. W. J. Colebatch. J Dept Ag S Australia 21:623-34, 686-91, 759-66 Mr-May '18  
 6th report on the permanent field experiments, seasons 1904-1915. W. J. Colebatch and R. C. Scott. J Dept Ag S Australia 20: 464-79 Ja '17

Rosin. *See* Gums and resins

## Rotation of crops

- Adjusting rotations to meet unexpected conditions. R. L. Baird. *System on the Farm* 1:104-5 My '17
- Alfalfa and farm management. A. E. Grantham. *il Prac F* 113:314 S 15 '17
- Always have a cover crop on the land in winter. W. F. Massey. *Prog F* 31:976 Ag 12 '16
- Building up the sandy farm. W. Harper. *il Country Gent* 81:1108 My 27 '16
- Crop rotation. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 48-55) '17
- Crop rotation. W. I. Chamberlain. *Nat Stock & F* 40:693 O 7 '16
- Crop rotation and soil fertility. R. C. Doneg-hue. *il N D Ag Exp B* 126:197-251 '18
- Crop rotation, diversification, and living at home. W. F. Massey. *Prog F* 31:535 Ap 15 '16
- Crop rotation for western New York. A. C. Weed. *Rural N Y* 77:5 Ja 5 '18
- Crop rotation investigations; field T experiments. A. C. Arny. *il Minn Ag Exp B* 170:1-55 '17
- Crop rotations and soil fertility. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:84-9 '16
- Crop rotations for upper Wisconsin. E. J. Del-wiche. *il Wis Ag Exp B* 222:1-20 '16
- Crop systems for Arkansas. A. D. McNair. *il Farmers' B* 1000:1-24 '18
- Crop systems for Indiana dairymen. L. Taylor. *Jersey B* 36:128 Ja 24 '17
- Cropping systems for the moister portion of eastern Washington and Oregon and northern Idaho. L. W. Fluharty. *U S Ag B* 625:1-11 '18
- Cropping systems for the South: why crops should be rotated. B. L. Moss. *il Prog F* 31:534 Ap 15 '16
- Dairy farm cropping system. E. B. Stookey. *Western Wash Ag Exp B v* 4:6-9 Ja '17
- Does crop rotation maintain the fertility of the soil? J. E. Greaves. *Sci Monthly* (Science Press, Garrison, N.Y. 30c) 6:458-66 My '18
- Double spin of crop rotation. J. A. Dimock. *il Country Life* 31:52 N '16
- Dry farm crop rotations and cultural methods. A. Atkinson and others. *Mont Ag Exp B* 116:1-54 '17
- Effect of different rotation systems and of fertilizers on the protein content of oats. R. W. Thatcher and A. C. Arny. *Am Soc Agron J* 9:344-8 O '17; Same cond. *Int R Sci & Prac Ag* 9,no 2:153-6 F '18
- Eight-field system of farming in Russia. *Russian Review* (31 E. 7th st., N.Y. 75c) 3:45-9 Ja '17
- Farm management practice of Chester county, Pa. W. J. Spillman and others. *il U S Ag B* 341:83-6 '16
- Farm sources of soil fertility. A. Agee. *N J Ag Dept B* 8:253-90 '17
- Fitting legumes into a systematic rotation. D. H. Otis. *Hoards D* 56:616- N 29 '18
- Grain farming in the corn belt. C. Vrooman. *Farmers' B* 704:12-17 '16
- Grasses for rotation. *Wallaces' F* 41:118 Ja 28 '16
- Green manure in the rotation. L. W. Meeks. *Rural N Y* 75:147 Ja 29 '16
- How to get rich lands; crop rotations and soil fertility. T. Butler. *Prog F* 32:993 S 22 '17
- How to get rich lands; crop rotations—special rotations to meet special needs. T. Butler. *Prog F* 32:1013 S 29 '17
- Importance of crop rotation. *Va Ag Dept B* 128:2-4 My '18
- Keeping up the grain land. E. E. Miller. *il Country Gent* 82:1728 N 10 '17
- Lessons in cropping from the experiences of 1916. J. F. Duggar. *Prog F* 31:1432 D 9 '16
- Livestock, crops and labor; rotation system of this Missouri farmer. W. L. Nelson. *il Country Gent* 82:1924 D 8 '17
- Management of sandy-land farms in northern Indiana and southern Michigan. J. A. Drake. *Farmers' B* 716:15-21 '16
- Model rotation plan. *Wallaces' F* 42:6 Ja 5 '17; Same cond. *Ag Digest* 1:301 F '17
- Northeastern Ohio rotation. C. H. Sapp. *Nat Stock & F* 40:886 D 2 '16
- Notes on the relation of insect control to cultural practices in western Ontario. H. F. Hudson. *Ag Gaz of Canada* 5:1136-8 D '18
- Observations on the wheat harvest of 1916. C. G. Williams. *Ohio Ag Exp B v* 1:323-4 N '16
- One-man farm, 100 acres and no hired help. T. C. Merrick. *System on the Farm* 2:53 F '18
- Planning a rotation system. K. Perkins. *Prog F* 32:154 F 3 '17
- Potato and alfalfa rotation. A. E. Grantham. *Prac F* 114:174 My 1 '18
- Proper use of capital in farming. A. Boss. (*In* Minnesota farmers' institute annual, 1916, p. 48-54) '16 Extension division, University Farm, St Paul
- Replanning the farm. J. C. Beavers. *Country Gent* 81:1300 Jl 1 '16
- Report on soils and crops, 1915; with discussion. F. Menges. *Pa Ag Dept B* 278:158-65 '16
- Results of experiments, 1915; permanent rotation tests—Werrabee. A. E. V. Richardson. *J Dept Ag Victoria* 14:147-8 Mr '16
- Rotating for bigger crops and fertility. G. Gardiner. *il Field* 11 26:20-1 Ja '16
- Rotating for corn. *il Wallaces' F* 43:35 Ja 11 '18
- Rotation and manure experiments on the Wisconsin drift soil area. W. H. Stevenson and P. E. Brown. *la Ag Exp B* 167:463-76 '16
- Rotation for sandy loam soil. T. Butler. *Prog F* 33:1303 N 30 '18
- Rotation, manure and fertilizer experiments. V. M. Shoesmith. *Mich Ag Bd Rep* 1917:328-36
- Rotation of crops. J. Ag (Quebec) 21:9 Jl '17
- Rotation of crops. O. S. Morgan. *il N Y Farms & Markets Dept Ag B* 97:249-54 Jl '17
- Rotation of crops. D. P. Witter. *N Y Ag Dept B* 86:2464-9 Ag '16
- Rotation on the wheat farm. H. Ross. *Ag Gaz of New South Wales* 27:77-80 F '16
- Rotational experiments at Roseworthy agricultural college. W. J. Colebatch and R. C. Scott. *J Dept Ag S Australia* 20:464-79 Ja '17
- Rotations and tillage methods in western Nebraska. W. P. Snyder and W. M. Osborn. *Neb Ag Exp B* 155:1-48 '16
- Rotations for the corn belt. L. L. Rummell. *il Country Gent* 82:1961 D 15 '17
- Rotations for wheat. *Weekly N L* 5:1 S 12 '17
- Rotations including both corn and potatoes. C. G. Williams. *Ohio F* 141:215 F 16 '18
- Rotations to meet requirements of livestock farmer in provinces. (*In* Experimental farms, 1916. v. 1, p. 195-382) *il 45c* '17 Canada Ag
- Sequence of annual crops at Saskatoon. J. Bracken. *Ag Gaz of Canada* 3:152-3 F '16
- Simple way to increase crop yields. H. A. Miller. *il Farmers' B* 924:14-24 '18
- Some effects of successive cropping to barley. W. F. Gericke. *Am Soc Agron J* 9:325-32 O '17
- Some profits in crop rotation. J. Marsh. *Hoards D* 52:426-7 O 20 '16
- Study of crop rotations. M. Ryder. *Coop Manager & F* 6:93 Mr '17
- Suggested rotation for alfalfa. A. E. Grantham. *Prac F* 114:48 F 1 '18
- Suggested rotation for the New England district. R. H. Gennys. *Ag Gaz of New South Wales* 28:167-70 Mr '17
- Suggested rotation for western New York. *Rural N Y* 76:189 F 10 '17
- Tillage and rotation experiments at Nephi, Utah. P. V. Cardon. *U S Ag B* 157:1-45 '15
- Treating wheat or oat stubble fields. A. E. Grantham. *Prac F* 113:233 Je 15 '17
- Twenty-year comparison of different rotations of corn, potatoes, rye and grass. B. L. Hartwell and S. C. Damon. *R I Ag Exp B* 167:1-38 '16
- Value of crop rotation. A. Boss. *J Ag (Quebec)* 19:147 Ja '16



**Rotation of crops—Continued**

Wheat in the rotation. *il* Wallaces' F 43:1079 JI 26 '18  
Work of the San Antonio experiment farm in 1916. C. R. Letteer. (W. I. A.—16) 22p *il* '17 U S Ag

**Rothamsted experimental station**

\* Rothamsted in war time. Nature (St Martin's st, London, W. C. 6d) 102:34 S 12 '18

**Rough-headed corn stalk-beetles.** See Corn-stalk beetles, Rough-headed

**Round-headed apple-tree borers**

Beware of the apple-tree borer; photographs. Country Gent 83:sup ii Mr 2 '18  
Control of the round-headed apple-tree borer. G: G. Becker. *il* Ark Ag Exp C 42 4p '18  
Control of the round-headed apple tree borer. G: G. Becker. J Econ Entom 10:66-71 F '17  
Controlling apple borer. O Judd Farmer 60: 10 F 26 '16

**Roundworms.** See Ascaris

**Roup.** See Poultry—Diseases and pests

**Rowan, Robert A.**

Sketch. F. L. Sewell. *por* Reliable P J 25:677 O '18

**Royal horticultural society**

Exhibition of British-grown fruits. Gard Chron (Lond) 62:153, 162-3 O 13-20 '17  
113th annual general meeting. Gard Chron (Lond) 61:77-8 F 17 '17  
R. H. S. scientific committee. Gard Chron (Lond) 64:16 JI 13 '18  
Visit to Wisley gardens. Gard Chron (Lond) 60:51-2 JI 29 '16

**Royal institute for agricultural experiments, Tripoli**

Royal institute for agricultural experiments, Tripoli. G. Mangano. *Int R Sci & Prac* Ag 7,no 11:1579-82 N '16

**Royal society of Danish agriculture**

Activity of the Royal society of Danish agriculture in 1915-1916. *Int R Ag Econ* 77: 9-14 My '17

**Rubber**

Characteristics of hard rubber. Power F 25: 54 S '16  
Development of rubber cultivation in Burma. Ag J of India 12:155-6 Ja '17  
Influence of various factors on the quality of rubber. O. De Vries. *Int R Sci & Prac* Ag 8, no 10:1418-21 O '17  
Manurial experiments with young rubber at Kuala Lumpur F. M. S. F. G. Spring. *Int R Sci & Prac* Ag 7,no 5:689-90 My '16  
Researches on the coagulation of rubber, in Java. O. De Vries. *Int R Sci & Prac* Ag 8, no 10:1421-4 O '17  
Rubber culture in the Philippines. P. J. Wester. *il* Philippine Ag R 10,no 3:201-20 '17  
Rubber industry and what science has done for it. J. B. Farmer. *Sci Am Sup* (233 Broadway, N. Y. 10c) 86:178-9 S 21 '18  
Rubber-producing plants in southern Italian Somaliland. *Int R Sci & Prac* Ag 7,no 1:70-1 Ja '16  
Variation in plantation rubber. *Int R Sci & Prac* Ag 7,no 1:72 Ja '16

See also Para rubber trees

**Rubber plants**

Ficus elastica. W. H. Taplin. *Am Flor* 46:1038 Je 3 '16

**Rubber tires.** See Tires

**Rubus**

Orange rust of rubus in Canada. R. E. Stone. *il* Phyt 8:27-9 Ja '18  
Orange rusts of rubus. J. C. Arthur. *map* Bot Gaz 63:501-15 Je '17  
Sterility as the result of hybridization and the condition of pollen in rubus. C. S. Hoar. *bibliog il* Bot Gaz 62:370-88 N '16  
See also Blackberries; Dewberries; Raspberries

**Rugs**

Art in braided rugs. H. Waugh. *il* Ohio F 137: 824 Je 17 '16  
Choosing your rugs. G. R. Wilmot. *il* Country Gent 81:1889 O 21 '16

Crocheted rug. *il* O Judd Farmer 60:22 My 6 '16

Essentials of oriental rugs. A. U. Dilley. *il* map Country Life 33:27-40 N '17

Rag carpets and rugs. C. B. Williams. *Nat Stock & F* 41:447 Ag 4 '17

Rugmaking in the home. J Ag (Quebec) 20: 134 D '16

Use for old ratine. E. E. Gates. *il* Country Gent 81:1493 Ag 5 '16

See also Carpets; House decoration

**Rumania**

See also subhead Rumania under Agricultural credit, Agriculture

**Rumex acetosella.** See Sheep sorrel

**Rummage sales.** See Jumble sales

**Rural architecture.** See Architecture, Domestic; Bungalows; Farm buildings; Landscape gardening

**Rural church.** See Country church

**Rural cooperation.** See Agriculture, Cooperative

**Rural credits bill.** See Agricultural credit—United States

**Rural education, Conference of.** See Conference of rural education

**Rural education associations**

Rural education associations and their activities. (School agricultural C. 7) 16p '17  
Dept. of educ., Regina, Saskatchewan

**Rural free delivery**

Must farmers pay more for mail than other people pay? C. Poe. *Prog F* 32:887 Ag 13 '17

Rural route changes. M. Cauls. Wallaces' F 41:90 Ja 21 '16

Rural route changes; use of autos. P. H. Donlon. Wallaces' F 41:27 Ja 7 '16

**Rural housing problem.** See Housing problem, Rural

**Rural life.** See Country life; Farm life

**Rural motor express**

Organizing a rural motor express. *il* Power F 27:22+ JI '18

Rural motor express. Good Roads (150 Nassau st, N.Y. 10c) n s 15:312+ Je 22 '18

Rural motor express. J. C. Marquis. *il* Country Gent 83:10-11 Je 1 '18

Rural motor express lines. Kimball's D F 16: 869 N 15 '18

Rural motor express to conserve foodstuffs and labor and to supply rural transportation. (B. 2) 6p '18 U.S. Council of nat. defense, Washington, D.C.

**Rural nurses.** See Nurses and nursing

**Rural organization, Office of markets and.** See United States—Markets, Bureau of

**Rural schools**

Agricultural education in rural schools. W. H. Rothenberger. *Prac F* 112:251 Je 15 '16

Agricultural school museums. J. C. Magnan. Ag Gaz of Canada 3:886-7 O '16

Beautification of rural schools. R. B. Cruickshank. *il* Ohio F 138:377-8 O 21 '16

Beautification of school grounds. Ag Gaz of Canada 3:270-80 Mr '16

Beautifying school property. C. H. Sapp. *il* Ohio F 138:290 S 23 '16

Beginning and developing a rural school. A. Stoltzfus. Texas Univ (Austin) B 1729:1-60 My 20 '17

Better playgrounds at country schools. *Prog F* 32:1329 D 22 '17

Better teachers for rural schools. B. E. Hyde. Country Gent 81:18 Ja 1 '16

Bird study in the rural school. 3d ed T: L. Hankinson. Normal School B (Eastern Illinois State Normal School, Charleston) 53: 1-19 JI 1 '16

Bucking up the school board. H. C. Bennett. *il* Country Gent 82:1778-9, 1882-3 N '17, D 1 '17

Cheap teacher. E. Trayne. O Judd Farmer 61: 24 N 18 '16

Christian rural high school movement. H. D. Maydole. Rural Manhood 9:186-8 My '18

## Rural schools—Continued

- Consolidated school teaches agriculture and domestic science. C. C. Burns. Banker-F 3:7 Ag '16
- Correlating agriculture with the public school subjects in the northern states. C. H. Lane and F. E. Heald. *il U S Ag B* 281:1-42 '15
- Country school. Mrs R. Rhoads. *Wallaces' F* 41:1124 Ag 25 '16
- Country school; if education means more than books look to the school grounds. F. A. Waugh. *il Country Gent* 83:13+ S 14 '18
- Country school of to-morrow. F. T. Gates. (Occasional papers, no. 1) 15p '16 General educ. bd., 17 Battery place, N.Y.
- Declaration of principles of the second annual national conference for training rural teachers. (Rural school letter, 1915-16, no 2) 5p mimeo '16 U.S. Bureau of education, Washington, D. C.
- Demand for better rural schools. S. Laird. *J Ag (Quebec)* 20:2 J1 '16
- Develop our greatest resource—boys and girls. F. K. Lane. Banker-F 3:13 Mr '16
- Discussion of rural schools. *Nat Stock & F* 40:101+ Ap 22 '16
- Domestic science in the rural school. Mrs H. L. Lawson. *Industrial Arts Magazine* (129 Michigan st, Milwaukee, Wis. 25c) 7: 305-7 Ag '18
- Educating our future farmers. *il Ag Digest* 2:958 My '18
- English experiment in rural education. S. Laird. *J Ag (Quebec)* 19:232 My '16
- Example of a vitalized school. M. H. Bishop. *Education* (120 Boylston st, Boston 35c) 37: 577-8 My '17
- Example of school ground improvement. B. A. See. *il Ag Gaz of Canada* 4:983-4 N '17
- Exercises with plants and animals for southern rural schools. E. A. Miller. *bibliog il U S Ag B* 305:1-63 '15
- First aid to citizen-makers. J. D. Eggleston. *Education* (120 Boylston st, Boston 35c) 37: 579-89 My '17
- Fitting the school to the community. R. Thomas. *il Prog F* 33:749 Je 29 '18
- Function of the rural teacher. R. L. Fleming. *Ohio F* 140:310 O 6 '17
- Getting ready for school. B. Bell. *Fruit-Grower* 27:399 Ag 15 '16
- Getting the school into the hearts of the people. *il Prog F* 33:745 Je 29 '18
- Give 7,000,000 children a chance. J. L. McBrien. Banker-F 5:2-3 J1 '18
- Greatest triumph at the point of greatest resistance. N. C. Smitheman. *il Community Center* (70 5th av., N.Y. 10c) B no 3 p 7-9 Mr 17 '17
- Hand work in the rural schools. C. A. King. *il Industrial Arts Magazine* (129 Michigan st, Milwaukee, Wis. 25c) 6:164-5 Ap '17
- Handbook for rural school trustees. J. C. Werner. *Idaho State Bd Educ (Boise)* B v 3:1-44 Je '17
- Health essentials for rural school children; proposed by the Joint committee on health problems in education of the National education association. T. D. Wood. 23p bibliog n.d. Dr T: D. Wood, chm., 525 W. 120th st, N.Y.
- Home economics teacher in the rural schools. H. Graham. *J Home Econ* 10:157-61 Ap '18
- Horticulture in the public schools. J. G. Boyle. *il Purdue Ag* 10:12-14 Ja '16
- How about your rural schools? *il Banker-F* 5:11 Ap '18
- How not to train rural teachers. E. Hyatt. (*In Pro.*, Nat. educ. assn., 1916, p. 1025-8) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- How we made better use of our schoolhouse. *il Prog F* 31:804 Je 24 '16
- Improving the school grounds. B. W. Anspen. *il Md Ag Ext B* 10:1-24 '18
- Inspector and rural science. J. H. Hunter. *Ag Gaz of Canada* 4:608-10 J1 '17
- Joint closing exercises for rural schools. *il Wallaces' F* 41:842 Je 9 '16
- Landscape improvement of rural school grounds. J. W. Gregg. (B. 20) 52p *il plans* '17 Cal. State bd. of educ., Sacramento
- Minimum health requirements for rural schools; proposed by the Joint committee on health problems in education of the National education association. T: D. Wood. 8p n.d. Dr T: D. Wood, chm., 525 W. 120th st, N.Y.
- Modernizing our rural schools. J. A. Herr. *Penn State F* 11:87+ Mr '18
- Mothers' club on rural schools. F. Malcolm. *Rural N Y* 76:236 F 17 '17
- My work in a rural school. R. Lowrey. *Mo Ag Bd B v* 14:25-31 Ap '16
- National conference on rural education at the University of Pennsylvania. School and Soc (Science Press, Garrison, N.Y. 10c) 5: 508-10 Ap 28 '17
- National conferences on rural education and rural life. School and Soc (Science Press, Garrison, N.Y. 10c) 5:389-90 Mr 31 '17
- National welfare and rural schools. T: D. Wood. (*In Pro.*, Nat. educ. assn., 1916, p. 232-40) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- New conception of the rural school problem. W: B. Aspinwall. *Education* (120 Boylston st, Boston 35c) 37:541-4 My '17
- New force in rural education. R. P. Crawford. *Country Life* 32:142 O '17
- Nursery stock for school planting. *il Ag Gaz of Canada* 4:802-9 S '17
- Observation and practice in courses for training rural teachers. C. J. Anderson and W. Edsall. *School Review* (Univ. of Chicago Press, Chicago 20c) 25:16-25 Ja '17
- Old-fashioned school. H: Wallace. *il Wallaces' F* 42:89 Ja 19 '17
- \* One-room school. W. S. Dakin. *School and Soc* (Science Press, Garrison, N.Y. 10c) 8: 378-9 S 28 '18
- Organize to protect rural schools. Mrs H. D. Converse. *Rural N Y* 77:742 Je 1 '18
- Our schools and the war. W: F. Feagin. *Prog F* 32:734 Je 30 '17
- Present day country schools. *Prac F* 114:76 F 15 '18
- Problems of the rural school; with discussion. Brother Bede. *Catholic Educ Assn (F. W. Howard, sec., 1651 E. Main st, Columbus, Ohio)* B v 14:226-39 N '17
- Rallying round a school. A. M. Kimball. *il Country Gent* 83:17+ Ja 19; 58-9 Ja 26 '18
- Rational program for rural education. P. Smith. *Education* (120 Boylston st, Boston 35c) 37:545-7 My '17
- Regenerating the rural school. F. L. Holmes. *il O Judd Farmer* 60:28 Mr 25 '16
- Relation of public schools to road improvement. J. D. Eggleston. *il Good Roads* (150 Nassau st, N.Y. 10c) n s 13:203-5 Mr 31 '17
- Retaining trained teachers in rural schools. S. Laird. *J Ag (Quebec)* 22:51 O '18
- Revitalized course of study. J. C. Muerman. *Education* (120 Boylston st, Boston 35c) 37: 569-71 My '17
- Rights of the country school. *Rural N Y* 77: 419 Mr 16 '18
- Rural child labor problem; with discussion. A. C. Monahan. *Child Labor B* (105 E. 22d st., N.Y. 50c) 6:50-6 My '17
- Rural education. P. P. Claxton. *Farmers' Nat Congress Pro* 1916:88-98
- Rural education. H. W. Foght and others. (*In Report, U.S. Comr. of educ., 1916, v. 1 p. 77-95*) '16 U.S. Bur. of educ., Washington, D.C.
- Rural education. J. Y. Joyner. (*In Pro.*, Nat. educ. assn., 1916, p. 269-74) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.; Same. *Nat Educ Assn J* (5758 Ellis av, Chicago) 1:269-74 N '16
- Rural home and the farm woman. D: B. Johnson. (*In Pro.*, Nat. educ. assn., 1916, p. 36-40) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Rural school and the reading habit. H: N. Sanborn. (*In Pro.*, Nat. educ. assn., 1916, p. 626-32) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Rural school architecture. S. Laird. *il plan J Ag (Quebec)* 22:87 D '18
- Rural school consolidation. *il Ohio F* 142:126 Ag 10 '18
- Rural school grounds. E. H. Barbour. *il (In Nebraska Horticulture v. 6, no. 12, p. 114-19) (F)* '17 Neb. state hort. soc., Lincoln



**Rural schools—Continued**

- Rural school supervision. K. M. Cook and A. C. Monahan. (B. 48) 63p '17 U.S. Bur. of educ., Washington, D. C.
- Rural school survey. School and Society (Science Press, Garrison, N.Y. 10c) 5:203-4 F 17 '17
- Rural school teacher in fiction. S. Laird. J Ag (Quebec) 20:159 Ja '17
- Rural schoolhouses; building plans, requirements, suggestions. (B. 54) 76p il plans n. d. Mich. dept. of public instruction, Lansing
- Rural-teacher preparation in county training schools and high schools. H. W. Foght. (B. 1917, 31) 71p '17 U.S. Bur. of educ., Washington, D.C.
- Rural teachers for the rural schools. E. C. Lindemann. il Hoard's D 52:575 N 17 '16
- Rural worker and the country school. E. R. Groves. Rural Manhood 8:337-9+ N '17
- School as a factor in community life. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:515-16 D '17
- School as a factor in the mental hygiene of rural communities. T. Clark. Nat Conf Charities and Correction, Pro (Wm. T. Cross, 315 Plymouth Court, Chicago \$2) 1916: 215-23
- School that serves the community. E. G. Anderson. il Manual Training Magazine (Peoria, Ill. 25c) 19:30-3 O '17
- \* Service of Teachers college to rural education. M. Carney. Teachers Coll Record (525 W. 120th st. N.Y. 40c) 19:147-55 Mr '18
- Some remarkable achievements in rural schools. A. E. Winship. Nat Educ Assn J (5753 Ellis av., Chicago) 1:1019-23 Je '17
- Standard rural schools; requirements and suggestions. 18p '16 Kan. State dept. of educ., Topeka, Kan.
- Standard rural schools; the county standard school; the state standard school. (B. 7) 10p '16 Pa. State bd. of educ., Harrisburg
- Status and need of rural supervision. A. C. Monahan. (In Pro., Nat. educ. assn., 1916, p. 58-63) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Suggestion as to vitalizing the country schools thru our present teachers. J. D. Eggleston. (In Pro., Nat. educ. assn., 1916, p. 58-63) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Taking care of our educational plants. J. D. Burton. Prog F 31:815 Je 24 '16
- Teachers' cottages and rural home economics. J. Preston. il J Home Econ 8:109-12 Mr '16
- To lessen failures. R. A. Hayne. Nat Stock & F 42:780 N 30 '18
- Training of rural teachers. C. L. Phelps. Elementary School J (Univ. of Chicago Press, Chicago 20c) 17:662-7 My '17
- Truth about the country school—this man taught one. C. H. Oathout. il Banker-F 3:6 Ja '16
- Two communities that made over their schools. C. Wilson. il Prog F 31:803 Je 24 '16
- Variation in elementary courses in agriculture. Ag Gaz of Canada 5:375-81 Ap '18
- Vitalizing a rural school course. A. S. Woodward. Education (120 Boylston st, Boston 35c) 37:563-8 My '17
- Vitalizing the teaching of agriculture in rural schools. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:325-8 O '17
- Waking up the village school. J. L. Ashlock. il Country Gent 81:1785-4 O 7 '16
- Water supply of rural schools. S. A. Wardlow. O Judd Farmer 61:24 N 11 '16
- What about their school? M. P. Connolly. Country Gent 81:1004 My 6 '16
- What good roads mean to education and the citizenship of the future. H. J. Tice. il Banker-F 3:13 O '16
- What good roads mean to the school-children of the country. il Banker-F 3:5 F '16
- What school improvement associations can do for the rural schools. P. P. Claxton. Town (Women's Civic League, Baltimore, Md. 5c) 2:4-6 My 5 '17
- What the country school should teach. E. L. Daughtry. Prog F 33:759 Je 29 '18
- What the farmers themselves can do to improve rural schools. S. Laird. J Ag (Quebec) 22:17+ Ag '18
- What the rural school can do. M. M. Holmes. (In Report, United farmers of Alberta, 1917, p. 303+) '18; Excerpts. Ag Gaz of Canada 5:816-17 Ag '18
- See also Farm day; Home project work; School farms; School surveys; Schoolhouses; Schoolhouses as social centers

**Consolidation**

- City comforts for country teachers; the Alberta, Minnesota, consolidated rural school. G: E. Vincent. il Review of Reviews (30 Irving place, N.Y. 25c) 55:403-8 Ap '17
- Colorado converted. C. G. Sargent. il Banker-F 5:15 Jl '18
- Community that cooperates. B. Hilbun. Prog F 31:1467 D 23 '16
- Consolidated school. C. J. Collingsworth. Wallaces' F 42:108 Ja 19 '17
- Consolidated school as a community center. J: H. Cook. (In Am. sociological soc., Pub. v. 11, p. 97-105)
- Consolidated school experience. Wallaces' F 42:364 F 23 '17
- Consolidated school question. A. M. Deyoe. Wallaces' F 41:1028 Jl 28 '16
- Consolidated schools. J. R. Boyle. (In Report, United farmers of Alberta, 1917, p. 263+) '18
- Consolidated schools. W. A. Robinson. Wallaces' F 42:530 Mr 23 '17
- Consolidated schools and agricultural education. il Ag Gaz of Canada 5:511-13 My '18
- Consolidation in Indiana. L. Driver. il Banker-F 5:10-11 Jl '18
- Consolidation of rural schools. Ag Digest 1: 213 D '16
- Consolidation of rural schools. il Neb Educ B (Lincoln) 3:1-25 Jl '17
- Consolidation of rural schools in Quebec. J Ag (Quebec) 20:vii D '16
- Consolidation of rural schools in the provinces. il Ag Gaz of Canada 3:362-7 Ap '16
- Consolidation of school districts. (In Elementary education, p. 277-449) '17 Univ. of the state of N.Y., Albany
- Consolidation of schools. (In Agricultural extension, p. 79-83) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago
- Consolidation of schools and agricultural education. S. E. Lang. Ag Gaz of Canada 5:287-8 Mr '18
- Consolidation of schools and transportation of pupils. (B. 56) 80p il n.d. Dept. of educ., Montgomery, Ala.
- Consolidation of schools and transportation of pupils. J. T. Calhoun. (B. 10) 54p il '17 Miss. Dept. of pub. educ., Jackson
- Don't hamper schools. Banker-F 5:5 Jl '18
- Example of what consolidation has done. J. N. Stewart. Prog F 31:801 Je 24 '16
- Get-together schoolhouse; consolidated school at Enumclaw, Washington. P. E. Triem. il Country Gent 81:645+ Mr 18 '16
- How Mississippi is getting better schools. W. F. Bond. Prog F 32:734 Je 30 '17
- How school consolidation betters a neighborhood. B. Hilbun. Prog F 31:93 Ja 15 '16
- How we got our consolidated school. Mrs R. R. Scott. Prog F 31:1466 D 23 '16
- How we may get efficient rural schools. P. P. Claxton. il Prog F 31:802+ Je 24 '16
- Indiana sees the value of consolidated schools—how's your state? G. I. Christie. Banker-F 3:12 Je '16
- Isolated rural high school. il Wallaces' F 41: 1402 O 27 '16
- Little stories of community cooperation. Prog F 31:1478 D 23 '16
- Minnesota's schools; consolidation establishes itself. C. C. Swain. Banker-F 5:15 O '18
- Ohio county consolidates. W. S. Fogarty. il Banker-F 5:14 Jl '18
- One-teacher school always inefficient. C. C. Wright. Prog F 31:522 Ap 8 '16
- Progress of consolidation in the United States. Ag Gaz of Canada 3:367 Ap '16
- Rural consolidated school. il Wallaces' F 43: 227 F 8 '18

**Rural schools—Consolidation—Continued**

- Rural consolidated schools super-excellent for elementary education. J. C. Webb. J of Educ (6 Beacon st., Boston 6c) 86:569-71 D 6 '17
- Rural education and consolidation. D. E. Phillips. School and Soc (Science Press, Garrison, N.Y. 10c) 7:191-4 F 16 '18
- Rural school consolidation in the provinces. Ag Gaz of Canada 4:901-2 O '17
- \* Rural school improvement in Colorado. C. G. Sargent. (B. ser. 17, no. 9) 62p il maps '18 Colo. ag. college, Fort Collins
- School question. E. D. Lawrence. Wallaces' F 41:1500 N 17 '16
- State aid succeeds; North Dakota's consolidation. N. C. MacDonald. map Banker-F 5: 13 J1 '18
- Township school law. School and Soc (Science Press, Garrison, N.Y. 10c) 7:297-9 Mr 9 '18
- Township system of schools proposed for New York. T: B. Stoel. Rural N Y 76:231 F 17 '17
- What consolidation means. J. C. Muerman. il Banker-F 5:6-7 J1 '18
- What co-operation has meant to a Tennessee community. W. C. McKenzie. il Prog F 32: 252 F 24 '17
- What the consolidated school means to the children of the country. L: M. Tobin. il Banker-F 3:2-5 Ag '16
- Wonderful change wrought by consolidation. Mrs J. W. Stewart. Prog F 31:803 Je 24 '16

**Courses of study**

- Lessons in elementary agriculture for Alabama schools; outlined by months. E. A. Miller. U S Ag B 258:1-36 '15
- Lessons on cotton for the rural common schools. C. H. Lane. il U S Ag B 294:1-16 '15
- Lessons on poultry for rural schools. F. E. Heald. il U S Ag B 464:1-34 '16
- Lessons on tomatoes for rural schools. E. A. Miller. il U S Ag B 392:1-18 '16
- New course of study for the rural elementary public schools of Nevada. 125p '16 Nev. State bd. of educ., Carson City
- Simple course in home economics for rural schools with suggestions for school noon lunch. M. E. Gearing and others. Texas Univ (Austin) B 49:1-162 S 1 '16
- Some exercises in farm handicraft for rural schools. H. O. Sampson. il U S Ag B 527:1-38 '17
- Some suggestions for improving the rural school curricula. G. C. Creelman. (In Pro., Nat. educ. assn., 1916, p. 947-53) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.

**Medical inspection**

- Physical care of rural school children. T. Clark. Pub Health Repts (U. S. Public Health Service, Washington, D. C.; 5c Supt. of doc.) 31:2759-64 O 6 '16

**Sanitation**

- Country school sanitation. H. Mason. Ohio F 138:14, 35 J1 1-8 '16
- Disposal of sewage in rural school districts. C. G. Gillespie and M. S. McNaught. il plans Cal State Bd of Educ (Sacramento) B 17 16p '16
- Rural school sanitation, including physical and mental status of school children in Porter county, Indiana. T. Clark and others. (Pub Health B 77) 127p bibliog il '16 U. S. Public health service, Washington, D. C.; 15c Supt. of doc.
- Sewage disposal for school buildings in Ohio. R. S. Durrell and D. E. Adams. plans Ohio Pub Health Journal (Ohio State Bd of Health, Columbus) 7:326-38 Ag '16

**Standardization**

- Standardization of rural schools in Kansas. 44p il map plan '17 Kan. State supt. of pub. instruction, Topeka
- Standardized rural schools. J Ag (Quebec) 22: 33 S 18
- \* Wisconsin first-class rural schools; requirements for special state aid. 14p '17 Wis. State sup. of public instruction, Madison

**Alabama**

- Clean-up and school improvement day, January 12, 1917. (B. 45) 31p il '17 Ala. Dept. of educ., Montgomery
- Why every farmer in Alabama should vote for the educational amendment. W: F. Feagin. Prog F 31:1098 S 16 '16

**Arkansas**

- School in the Arkansas pine woods. L. A. Markham. il Prog F 31:801 Je 24 '16

**California**

- Normal school and rural education in California. J. B. Sears. Education (120 Boylston st., Boston 35c) 37:410-26 Mr '17
- Reorganizing a county system of rural schools; schools of San Mateo county, California. J. H. Williams. (B. 16) 50p '16 U.S. Bur. of educ., Washington, D.C.

**Canada**

- Consolidation of rural schools in the provinces. il Ag Gaz of Canada 3:362-7 Ap '16
- Demand for better rural schools. S. Laird. J Ag (Quebec) 20:26 Ag '16
- Efficiency of rural schools. S. Laird. J Ag (Quebec) 20:51-2 S '16
- Manual training and household science in rural schools. A. H. Leake. Ag Gaz of Canada 5:809-11 Ag '18
- New system of training for rural teachers. S. Laird. J Ag (Quebec) 20:119 D '16
- New training for rural teachers in Quebec. S. Laird. J Ag (Quebec) 19:157 Ja '16
- Our rural school course of study. S. Laird. J Ag (Quebec) 20:70 O '16
- Some school questions from the farmer's point of view. S. Laird. J Ag (Quebec) 20: 183-4 Mr '17
- War and rural education. S. Laird. J Ag (Quebec) 21:129 Mr '18
- Women's institutes and the rural school. Ag Gaz of Canada 5:74-8 Ja '18
- See also Protestant school board associations; also School fairs—Canada

**Colorado**

- Reaching rural schools in Colorado. V. E. Rowton. il Manual Training Magazine (Peoria, Ill. 25c) 18:336-9 Ap '17

**England**

- Public elementary schools and food supply in war time. J Bd Ag 23:33-40 Ap '16

**Illinois**

- One room and consolidated country schools of Illinois, 1916. 5th ed (C. 100) 80p il map plans '16 Ill. Supt. of public instruction, Springfield
- School is community center in Stockland, Ill. il O Judd Farmer 60:5 My '13 '16

**India**

- Rural education in its relation to agricultural development. D. Clouston. Ag J of India 12:216-23 Ap '17

**Iowa**

- Best that Lucas county grows; school exhibit. J. C. Cunningham. il Wallaces' F 41: 307 F 25 '16

**Kansas**

- Standardization of rural schools in Kansas. 44p il map plan '17 Kan. State supt. of pub. instruction, Topeka

**Kentucky**

- Farm day; a Kentucky plan to interest her farmers of tomorrow. J. Speed. il Country Gent 81:663 Mr 18 '16

**Massachusetts**

- Vitalizing rural school work in Massachusetts. G. C. Smith. Education (120 Boylston st., Boston 35c) 37:572-6 My '17

**Minnesota**

- City comforts for country teachers; the Alberta, Minnesota, consolidated rural school. G: E. Vincent. il Review of Reviews (30 Irving place, N.Y. 25c) 55:403-8 Ap '17



**Rural schools—Minnesota—Continued**

Minnesota's schools; consolidation establishes itself. C. C. Swain. Banker-F 5:15 O '18

**Mississippi**

How Mississippi is getting better schools. W. F. Bond. Prog F 32:734 Je 30 '17  
Mississippi county to have South's model schools. Prog F 31:62 Ja 8 '16

**Missouri**

Call of the country school to Missouri. U. W. Lamkin. Mo Ag Bd Yearbook 1917:19-26  
Remarks at country life conference. E. W. Major. Mo Ag Bd B v 14:38-43 Ap '16  
Rural progress in Missouri. W. L. Nelson. Mo Ag Bd B v 14:8-10 Mr '16

**Nevada**

New course of study for the rural elementary schools of Nevada. 125p '16 Nev. State bd. of educ., Carson City

**New England**

Rural school supervision in New England. L. A. Averill. Education (120 Boylston st, Boston 35c) 38:361-73 Ja '18

**New York**

Elementary education; report for the year ending July 31, 1916. T: E. Finegan. il 938p '17  
Univ. of the state of N.Y., Albany  
Contains much information in regard to rural schools in N.Y.  
Fair review of the N. Y. school law. R. Hall. il Rural N Y 77:105-6 Ja 26 '18  
New York rural school bill. Rural N Y 76: 416 Mr '17  
New York school law. R. C. Hitchings. Rural N Y 77:146 F 2 '18  
New York school law; a critical study of it. Rural N Y 77:3 Ja 5 '18  
New York school law; the article referring to bonds. Rural N Y 77:6 Ja 5 '18  
New York (state)—Gov. Whitman discusses the widespread discontent among the rural communities due to the passage of the so-called township law which provides for the consolidation of certain rural schools. He recommends an amendment to the law, which will still allow the citizens of a district to vote on the amount of money to be expended for school purposes, instead of leaving the financial question to be decided by the town board of education. He considers that the law has failed to accomplish properly the purposes for which it was enacted  
Plea for the school law. J. Van Wagenen, jr. Rural N Y 77:212 F 9 '18  
Proposed repeal of the township school law in New York. School and Soc (Science Press, Garrison, N.Y. 10c) 7:257-8 Mr 2 '18  
Rural school extension work by the New York state college of agriculture. E: M. Tuttle. (In Pro., Nat. educ. assn., 1916, p. 632-6) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.  
Rural schools in New York. H. H. Lyon. il Rural N Y 75:583, 621 Ap 8-15 '16  
School question on Long Island. D. W. Hallock. Rural N Y 76:1439 D 22 '17  
Township education law. T: E. Finegan. N Y Farms & Markets Dept Ag B 105:36-63 Mr '18  
Township system of schools proposed for New York. T: B. Stoel. Rural N Y 76:194, 231, 279 F 10-24 '17

**North Carolina**

School that educates both old and young. R. Thomas. il Prog F 32:733 Je 30 '17

**North Dakota**

Problem of rural school betterment. N. C. Macdonald. 31p il My '17 State dept. of educ., Bismarck, N.D.  
Rural schools are improving. R. Harmon. Nonpartisan Leader (Box 941, Fargo, N. D. \$2.50 per yr) 5:11-12 N 15 '17  
Sixth annual report of the state inspector of consolidated graded, graded, and rural schools for the year ending June 30, 1917. 43p il '17 State dept. of educ., Bismarck, N.D.

Standardization of one-room rural schools in North Dakota. J of Educ (6 Beacon st., Boston 6c) 86:542 N 29 '17  
State rural school manual giving laws and regulations for standardization as state rural, graded, and consolidated graded schools. 13p '17 N.D. State bd. of educ., Bismarck

**Ohio**

Manual arts in the Ravenna township school. C: A. Bennett. il plan Manual Training Magazine (Peoria, Ill. 25c) 18:150-6 D '16

**Oklahoma**

Causes of absence from rural schools in Oklahoma. E: N. Clopper. il map Child Labor B (105 E. 22d st., N.Y. 50c) 6:90-113 Ag '17

**Scotland**

Ideal rural school of Scotland. S. Laird. J Ag (Quebec) 19:186-7 Mr '16

**Southern states**

Correlating agriculture with the public-school subjects in the Southern states. C. H. Lane and E. A. Miller. il plan U S Ag B 132:1-41 '15  
Rural supervision in the mountains of the South. J. Burkes. (In Pro., Nat. educ. assn., 1916, p. 1023-31) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.  
Seven plans for better schools. Prog F 32:739 Je 30 '17  
Southern county inspired; community achievements followed good rural schools. C. Williams. il Banker-F 5:12 Jl '18  
Suggested course of study for county training schools for negroes in the South (Trustees J: P. Slater Fund Occas. Papers, no. 18 73p. '17). Exp Sta Record 38:397-8 Mr '18  
What the rural schools in the South must be and do after the world war. C. C. Hanson. 32p n. d. U.S. Bur. of educ., Washington. D.C.

**Tennessee**

Passing of the Andy Johnson school. F. R. Miller. il Country Gent 81:1825 O 14 '16

**Texas**

Million dollar appropriation country schools; general report, distribution, minimum requirements and recommendations. W. F. Doughty. (B 54) 72p '16 Texas Dept. of educ., Austin  
School grounds, school buildings and their equipment. W. F. Doughty. (B. 65) 64p il plans '17 Tex. Dept. of educ., Austin  
State aid for country schools: the two million dollar appropriation. W. F. Doughty. (B. 67) 71p '17 Tex. Dept. of educ., Austin  
Study of rural schools in Travis county, Texas. E. E. Davis. il Texas Univ (Austin) B 67:1-53 D 1 '16  
What the schools can do for the boys and girls. A. Dille. Tex Ag Dept B 52:78-86 '16

**Virginia**

Better farm day programme for the public schools of Virginia. J. H. Montgomery. Va Ag Dept B 110:19-31 Mr '16

**Wisconsin**

Economic factors which influence rural education in Wisconsin. E. Merritt and K. L. Hatch. maps Wis Ag Exp Research B 40:1-51 '16  
Rural school. (In Education in Wisconsin, 1914-16, p. 51-9) '17 Dept. of public instruction, Madison, Wis.  
Training of teachers for the country schools of Wisconsin. A. Reynolds. 72p '17 Wis. State supt. of pub. instruction, Madison  
\* Wisconsin first-class rural schools; requirements for special state aid. 14p '17 Wis. State supt. of public instruction, Madison  
Rural surveys. See Social surveys  
Rural teachers' reading circle, National. See National rural teachers' reading circle  
Russell, Mount  
Peak of Mount Russell. M. Daniels. il Am For 22:679 N '16

## Russia

See also subhead Russia under special subjects, e.g. Agriculture—Russia, Forests and forestry—Russia

## Description and travel

My observations on life in Russia at the end of last century. A. Kirby. J Ag (Quebec) 21:112, 127 Ja-F '18

## Education

See also Agronomic institute of Moscow

## Industries and resources

Peasantry of Russia. N. E. Hansen. il Wal-laces' F 42:1716 D 21 '17

## Land tenure

See Land tenure—Russia

## Russian agricultural congress

4th congress, Petrograd, February 22, 1916. Int R Ag Econ 66:129-30 Je '16

## Russian oleasters. See Oleasters

## Russian thistles

Russian thistle, its control and eradication. Cal State Comm Hort B v 6:442-3 N '17

## Russian wolfsounds. See Borzoi

## Russula

Illustrations of fungi. W: A. Murrill. il Mycol 8:121-4 My '16

Methods for satisfactory field work in the genus russula. G. S. Burlingham. Mycol 9: 243-7 Jl '17

New species of russula from Massachusetts. G. S. Burlingham. Mycol 10:93-6 Mr '18

## Rustic shoulder-knot moths

Caterpillar on the ears of wheat. W. Somerville. il J Bd Ag 23:236-8 Je '16

## Rusts

Aecial stage of puccinia oxalidis. W. H. Long and R. M. Harsch. Bot Gaz 65:475-8 My '18

Another strain of puccinia graminis. L. E. Melchers and J: H. Parker. Kan Ag Exp C 68 4p '18

Biologic forms of puccinia graminis on cereals and grasses. E. C. Stakman and F. J. Piemeisel. bibliog il J Ag Research 10:429-96 Ag 27 '17

Biological observations of roestelia cancellata, a rust attacking the pear. A. Trotter. Int R Sci & Prac Ag 8,no 1:161-3 Ja '17

Black or stem rust of wheat. 15p '17 Canada Ag

Californian thistle rust as a check on the spread of Californian thistle. A. H. Cockayne. Int R Sci & Prac Ag 7,no 3:451 Mr '16

Can biologic forms of stemrust on wheat change rapidly enough to interfere with breeding for rust resistance? E. C. Stakman and others. bibliog il J Ag Research 14:111-24 Jl 8 '18

Carduaceous species of puccinia; species occurring on the tribe vernoniae. H. S. Jackson. Bot Gaz 65:289-312 Ap '18

Cultures of aecidium tubulosum and a. passifloricola. H. E. Thomas. Phyt 8:163-4 Ap '18

Cultures of uredineae in 1915. J. C. Arthur. Mycol 8:125-41 My '16

Cultures of uredineae in 1916 and 1917. J. C. Arthur. Mycol 9:294-312 S '17

Cultures with melampsorae on populus. J. R. Weir and E. E. Hubert. Mycol 10:194-8 Jl '18

Dwarfing of barley and the specific resistance of certain graminiae to several species of uredineaceae and ustilaginaceae. E. Henning. Int R Sci & Prac Ag 7,no 3:443 Mr '16

Endophyllum-like rusts of Porto Rico. E. W. Olive and H. H. Whetzel. il Am J Bot 4: 44-52 Ja '17

Fungi of New Mexico. P. C. Standley. Mycol 8:150-69 My '16

Grain rust in the prairie provinces. Ag Gaz of Canada 3:861-4 O '16

Greenhouse experiments on the rust resistance of oat varieties. J: H. Parker. bibliog il U S Ag B 629:1-16 '18

Host relationships of the North American rusts, other than gymnosporangiums, which attack conifers. A. S. Rhoads and others. bibliog Phyt 8:309-52 Jl '18

How to control hollyhock rust. Gard Chron Am 21:158 Ap '17

Infection of timothy by puccinia graminis. E. C. Stakman and F. J. Piemeisel. bibliog J Ag Research 6:813-16 Ag 21 '16

Influence of the host on the morphological characters of puccinia ellisiana and puccinia andropogonis. W. H. Long. J Ag Research 2:303-19 Jl '14

Internal uredinia. J. F. Adams. il Mycol 8: 181-2 My '16

Life history and parasitism of eocronartium muscicola. H. M. Fitzpatrick. bibliog il Phyt 8:197-218 My '18

Negative heliotropism of urediniospore germ-tubes. F. D. Fromme. il Am J Bot 2:82-5 F '15

North American species of puccinia on carex. F. D. Kern. Mycol 9:205-38 Jl '17

Notes on forest tree rusts. J. R. Weir and E. E. Hubert. Phyt 8:114-18 Mr '18

Notes on the overwintering of forest tree rusts. J. R. Weir and E. E. Hubert. Phyt 8:55-9 F '18

Nuclear behavior in the promycelia of caeoma nitens Burrill and puccinia peckiana Howe. L: O. Kunkel. bibliog il Am J Bot 1:37-47 Ja '14

Observations on forest tree rusts. J. R. Weir and E. E. Hubert. il Am J Bot 4:327-35 Je '17

Occurrence of puccinia graminis tritici-compacti in the southern United States. E. C. Stakman and G. R. Hoerner. il Phyt 8:141-9 Ap '18

On specialisation in parasitic fungi with special reference to the specialisation of rust on cereals. L. Montemartini. Int R Sci & Prac Ag 7,no 12:1849-50 D '16

Orange rusts of rubus. J. C. Arthur. map Bot Gaz 63:501-15 Je '17

Origin and development of the galls produced by two clear cedar rust fungi. J. L. Weimer. bibliog il Am J Bot 4:241-51 Ap '17

Plasticity of biologic forms of puccinia graminis. E. C. Stakman and others. bibliog il J Ag Research 15:221-50 O 28 '18

Puccinia subnitens and its aecial hosts. E. Bethel. Phyt 7:92-4 Ap '17

Recent cultures of forest tree rusts. J. R. Weir and E. E. Hubert. Phyt 7:106-9 Ap '17

Relation between puccinia graminis and plants highly resistant to its attack. E. C. Stakman. bibliog il J Ag Research 4:193-200 Je '15

Relation of some rusts to the physiology of their hosts. E. B. Mains. bibliog il Am J Bot 4:179-220 Ap '17

Rust (uredo ricini) of the castor-oil plant in Morocco. G. Arnaud. Int R Sci & Prac Ag 8, no 12:1291-2 D '17

Rusts and smuts. T. Butler. Prog F 31:1385 D 2 '16

Rusts and smuts collected in New Mexico in 1916. P. C. Standley. Mycol 10:34-42 Ja '18

Rusts occurring on the genus fritillaria. C: C. Rees. il Am J Bot 4:368-73 Je '17

Selected cycles in gymnoconia peckiana. G: F. Atkinson. Am J Bot 5:79-83 F '18

Structure of the uredinium in pucciniastrum agrimoniae. C. A. Ludwig and C. C. Rees. il Am J Bot 5:55-60 F '18

Third biologic form of puccinia graminis on wheat. M. N. Levine and E. C. Stakman. J Ag Research 13:651-4 Je 17 '18

Two new forest tree rusts from the Northwest. H. S. Jackson. Phyt 7:352-5 O '17

Uredinales of Costa Rica based on collections by E. W. D. Holway. J. C. Arthur. Mycol 10:111-54 My '18

Uredinales of Guatemala based on collections by E. W. D. Holway. J. C. Arthur. Am J Bot 5:325-36, 420-46, 462-89 Je, O-N '18

Uredinales of Porto Rico based on collections by F. L. Stevens; with descriptive list. J. C. Arthur. Mycol 8:16-33 Ja '16

Uredinales of Porto Rico based on collections by H. H. Whetzel and E. W. Olive. J. C. Arthur. Mycol 9:55-104 Mr '17



**Rusts—Continued**

Uredinales of the Andes, based on collections by Dr and Mrs Rose. J. C. Arthur. *Bot Gaz* 65:460-74 My '18

Wheat-rust; a New Zealand observation. R. Waters. *il J Ag New Zealand* 13:41-6 Jl '16

Wintering of *coelosporium solidaginis*. E. B. Mains. *Phyt* 6:371-2 Ag '16

See also Apple rust; Barberries; Cronartium; Gymnosporangium; Melampsora; Peridermium; Pine blister rust; Ravenelia

**Bibliography**

Brief list of references on wheat rust. U. S. Library of Congress. 2p '17

Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 10c)

**Classification**

Uredinales found upon the onagraceae. G. R. Bisby. *Am J Bot* 3:527-61 D '16

**Nomenclature**

Notes on some methods and terms employed in studying the uredinales. H. R. Rosen. *Phyt* 8:581-3 N '18

**Rutabagas**

Crop of yellow turnips. J. S. Woodward. *Rural N Y* 76:697 My 19 '17

Selection of some varieties of Swede resistant to *plasmiodiophora brassicae*, in Denmark. C. I. Christenson. *Int R Sci & Prac Ag* 9, no 3:317-19 Mr '18

Variety tests of Swede turnips. *J Ag (Quebec)* 21:167 My '18

See also Feeding and feeding stuffs—Rutabagas

**Analysis**

Hydrolysis of the soluble protein of Swede turnips. G. Williams. *J Ag Sci* 8:182-215 Mr '17

**Statistics**

Commercial stocks of turnips and rutabagas. U S Food Surveys 1:15-16 Jl 24 '18

**Rutaceae**

*Pelea* and *platydesma*. J. F. Rock. *il Bot Gaz* 65:261-7 Mr '18

**Rutherglen bugs**

Rutherglen bug. W. W. Froggatt. *il Ag Gaz* of New South Wales 27:270-2 Ap '16

**Rye**

Abruzzi rye a great cover and grazing crop. D: R. Coker. *Prog F* 32:891 Ag 18 '17

Abruzzi rye, the great winter cover crop. *Prog F* 33:213 F 16 '18

Carman's wheat-rye hybrids. C. E. Leighty. *il J Heredity* 7:420-7 S '16

Changes in the chemical composition of rye seed through the action of some forms of *fusarium*. A. Pomaskij. *Int R Sci & Prac Ag* 7, no 7:960-2 Jl '16

Comparative tests of 3 varieties of rye at Torestop, Sweden. H. von Feilitzen. *Int R Sci & Prac Ag* 7, no 6:817-18 Je '16

Continuous growing of wheat and rye with and without a legume as green manure. *il N J Ag Exp Rep* 1916:380-3 '17

Cultivation of rye as a grain crop. *J Bd Ag* 24:731-3 O '17

Culture of rye; a substitute for wheat. *il Rural N Y* 77:869 Jl 13 '18

Culture of rye in the eastern half of the United States. C. E. Leighty. *il maps Farmers' B* 756:1-16 '16

Experience with Abruzzi rye. C. O. Carpenter. *Prog F* 31:1148 S 30 '16

Fall rye—an easily grown and high yielding crop for Quebec. R. Summerby. *il J Ag (Quebec)* 22:4 Jl '18

Fall wheat and fall rye for Quebec. J. Murray. *J Ag (Quebec)* 21:39 S '17

Five-chance crop. G: H. Dacy. *Country Gent* 81:1500 Ag 12 '16

Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; fall-sown wheat and rye. U S Ag C 103:1-13 '18

Green rye as manure. J. W. Damewood. *Rural N Y* 75:188 F 5 '16

Growing rye in Florida. H. S. Elliot. *Fla Ag Dept Quar B v* 27:8-12 O '17

Help fill the nation's flour barrel. R. A. Moore and E. J. Delwiche. *Wis Ag Ext C* 90 4p '17

Hogging rye unprofitable. W. L. Robinson. *Ohio F* 142:30 Jl 13 '18

How to grow winter wheat and rye. Hoard's D 54:152 Ag 31 '17

Injuries to rye and wheat grain produced by threshing, and their consequences. J. N. Wallden. *Int R Sci & Prac Ag* 7, no 8:1108-9 Ag '16

Most favourable times for sowing wheat and rye at Alnarp. L. Forsberg. *Int R Sci & Prac Ag* 8, no 12:1216-17 D '17

New strain of rye selected at Svalöf. E. W. Ljung. *Int R Sci & Prac Ag* 7, no 3:357-8 Mr '16

Place of rye on the farm. Jersey B 35:1740 N 1 '16

Plant some Abruzzi rye. C. R. Hudson. *Prog F* 31:1049 S 2 '16

Planting ideas on wheat and rye. A. E. Grantham. *Prac F* 114:287 S 1 '18

Population analyses and inheritance studies concerning self-sterility, self-fertility, and sterility in rye. N. Heribert-Nilsson (*Ztschr. Pflanzenzücht.*, 4, no. 1 44p. '16). *Exp Sta Record* 38, no 3:236-7 '18

Questions about rye. T. Butler. *Prog F* 33:855 Ag 3 '18

Rosen rye. F. A. Spragg and J. W. Nicolson. *il Mich Ag Ext B* 9:1-3 '17

Rye. (*In* Geography of the world's agriculture, p. 27-8) maps '17 U S Ag

Rye a worth while crop for Illinois. W. L. Burlison. *il O Judd Farmer* 65:48 Jl 20 '18

Rye acreage also to be expanded. *Weekly N L* 5:2 Ag 15 '17

Rye and vetch for orchard cover. A. N. Brown. *il Country Gent* 83:22 Ag 17 '18

Rye as a green manure. L. W. Meeks. *Rural N Y* 75:548 Ag 1 '16

Rye as a green manure crop. J. S. Eagon. *Market Growers J* 18:280 Ap 15 '16

Rye as green manure. *Rural N Y* 75:100 Ja 15 '16

Rye for cover. E. E. Miller. *Country Gent* 81:1552 Ag 19 '16

Rye for the southern farm. E. F. Cauthen. *Prog F* 33:1038 S 21 '18

Rye growing in the southeastern states. *Farmers' B* 894:1-14 '17

Rye-growing in uncultivated rice-fields in Italy. B. Marcarelli. *Int R Sci & Prac Ag* 9, no 1:59-60 Ja '18

Rye in the Coastal Plain. B. Howard. *il Country Gent* 83:8 S 28 '18

Rye in the South. *Weekly N L* 4:8 Ag 1 '17

Rye increase urged. *Weekly N L* 5:4 O 3 '17

Some inquiries about rye. T. Butler. *Prog F* 33:1159 O 26 '18

Sowing rye to turn under. T. Butler. *Prog F* 33:1183 N 2 '18

Speaking up for rye. map *Country Gent* 81:2172 D 16 '16

Studies on the contamination of the pollen of rye with the help of indicator plants in Sweden. N. Heribert-Nilsson. *Int R Sci & Prac Ag* 9, no 2:170-2 F '18

Suggestions for fall, winter and early spring planting. *Fla Ag Dept Quar B v* 28:8-12 O '18

Twenty-year comparison of different rotations of corn, potatoes, rye and grass. B. L. Hartwell and S. C. Damon. *R I Ag Exp B* 167:1-38 '16

Value of rye. J. W. Ingham. *Rural N Y* 75:1124 Ag 26 '16

Wheat and rye. F. App. *N J Ag Exp C* 87:1-4 '17

Wheat and rye. C. A. Zavitz. *il Ontario Ag Dept B* 261:1-30 '18

Wheat and rye conference between the officials of the Department and representatives of the eleven central winter wheat-growing states, Chicago. *Weekly N L* 6:2 Ag 14 '18

Same abr. *Breeder's Gaz* 74:161 Ag 1 '18

Wheat and rye conference held for ten central wheat states. *Weekly N L* 6:2 Ag 14 '18

**Rye**—*Continued*

- Wheat and rye production in Georgia. R. R. Childs. il Ga Ag Coll (Ext) B 136:13-16 '17 (reprint)
- Wheat and rye production in Iowa. W. R. Hechler. il Ia Ag Exp C 37 8p '17
- Wheat, rye and barley: useful facts about soils, culture, etc. J. F. Duggar. Prog F 31: 829 J1 '16
- Where rye beats wheat. W. C. Smith. il Country Gent 82:1552 O 13 '17
- Why not grow more rye? C. A. LeClair. il Country Gent 83:8+ S 7 '18
- Winter rye. Country Gent 82:1279 Ag 18 '17
- Winter rye. Prac F 112:344 S 15 '16

**Diseases and pests**

- Ergot in rye. Hoard's D 54:526 N 2 '17
- Ergot in rye and how to remove it. A. G. Johnson and R. E. Vaughan. il Wis Ag Ext C 94 4p '18; Same. Hoard's D 55:180 F 22 '18
- See also Rye smut

**Prices**

- Profits and losses in rye production during the past sixty years. Wallaces' F 43:953 Je 21 '18

**Seed**

- Supply of seed wheat, oats and rye in the cotton belt. U S Seed Rep 2:7 S '18

**Statistics**

- Commercial stocks of rye, Jan. 1. U S Food Surveys 1:9-10 Je 8 '18
- Commercial stocks of rye, July 1. U S Food Surveys 2:9-11 S 9 '18
- Condition of winter wheat and rye; average for past ten years on April 1. Am Fert 44: 26 Ap 15 '16
- \* Rye and buckwheat in Ontario. (*In* Report, Bur. of industries, 1917, p. 31) '18 Ontario ag. dept., Toronto
- Rye in the United States and other countries, including exports and imports. See United States Department of agriculture Year-books
- Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no 4) p 33-41 (O) '16 Bur. of statistics, Int. inst. of ag., Rome
- Winter wheat and rye. Am Fert 48:31 Ja 5 '18

**Varieties**

- Golden variety of rye. J. Williamson. J Heredity 8:568 D '17
- Results of variety tests of wheat, oats and rye (B. 232). G. M. Garren. N C Ag Exp Rep 1916 28p '17
- Wheat-rye hybrids. E. A. McFadden. il J Heredity 8:335-6 J1 '17; Same abridged. Ag Digest 2:567 Ag '17

**Rye flour****Statistics**

- Commercial stocks of rye flour, Jan. 1. U S Food Surveys 1:11-13 Je 8 '18
- Commercial stocks of rye flour, July 1. U S Food Surveys 2:14-16 S 9 '18

**Rye grass**

- Branching-headed rye-grass. A. W. Green. il J Ag New Zealand 12:122-4 F '16
- Comparative trials with rye grasses. E. Breakwell. Ag Gaz of New South Wales 28: 317-18 My '17
- History, cultivation and improvement of lolium perenne at Svalöf, Sweden. H. Witte. Int R Sci & Prac Ag 8,no 2:235-7 F '17
- Popular description of grasses; the rye or lolium grasses. E. Breakwell. il Ag Gaz of New South Wales 29:274-80 Ap '18

**Rye smut**

- Notes on the control of rye smut (*Urocystis occulta*). E. A. Bessey and W. K. Makemson. il Mich Ag Bd Rep 1917:305-7
- Rye smut. E. C. Stakman and M. N. Levine. il map Minn Ag Exp B 160:1-19 '16

**S****Sabal.** See Palmettos**Sabetha, Kansas**

- Country town enlists for war. R. P. Crawford. Country Gent 82:1225 Ag 4 '17

**Sablefish**

- Sablefish, alias black cod; an introduction to one of the best and richest of American food fishes. (Econ. C 23) 6p '17 U. S. Bur. of fisheries, Washington, D.C.

**Sacbrood.** See Bees—Diseases and pests**Saccharin.** See Sugars**Saccharometers**

- Balling degree of fruit juices. W. V. Cruess. Cal State Comm Hort B v 5:286-9 Ag '16
- Syrup gauge for syrup makers. J. F. Duggar. Prog F 32:1122 O 27 '17

**Saccharomycetes**

- Parasitic saccharomycete of the tomato. A. Schneider. il Phyt 6:395-9; 7:52-3 O '16, F '17

See also Wine yeast

**Saccharose**

- Commercial use of saccharose-inverting bacteria for the manufacture of lactic acid, acetic acid and acetone. G. Mezzadroll. Int R Sci & Prac Ag 8,no 5:787-9 My '17

**Sacramento river**

- From San Francisco to Siskiyou. W. C. Barnes. Breeder's Gaz 70:234 Ag 17 '16

**Sacred Jewish citron.** See Etrogas**Sadler, W. G., 1848-1917**

- Sketch. por Am Fert 48:26 Ja 5 '18

**Sage**

- Sage. E. I. Farrington. Country Gent 82:1031 Je 16 '17
- Sages of California. F. C. Pellett. il Am Bee J 57:493-4 D '17

**Sagendorph, Arthur H.**

- Best farmer in Massachusetts. J. R. McMahon. il Country Gent 83:6-7 Mr 9 '18

**St Bernard dogs**

- Dog of the Alpine monks. W. A. Dyer. il Country Life 35:57-60 D '18

**St.-Hyacinthe dairy school**

- Provincial dairy school at St Hyacinthe. il Kimball's D F 14:595 S 15 '16
- 35th annual report, 1916. 390p '17 Quebec ag. dept., Quebec

**St John's bread.** See Carob**Ste.-Anne de la Pocatiere agricultural school**

- Report, 1916-1917. (*In* Report, 1917, p. 45-53) il '17 Quebec ag. dept., Quebec

**Salad plants.** See Greens, Edible**Salads**

- Food value of salads. Ia Ag Ext Home Econ C 8:1-2 '17-'18
- Good salad recipes. Prog F 31:515 Ap 8 '16
- My favorite salad and its dressing; symposium. Prac F 114:179 My 1 '18
- Plant now and grow salad in your cellar all winter. A. M. Burke. il Gard M 25:288 Je '17
- Salads. O Judd Farmer 65:18 J1 6 '18
- Salads. V. M. Kellar. Md Ag Ext Letter no 34 3p n.d.
- Salads and salad dressings. B. Bell. Fruit-Grower 27:526 D 15 '16
- Salads for late summer and fall. F. F. Rockwell. Gard M 23:340 J1 '16
- Why and how of salads. Nat Stock & F 42:206 My 18 '18
- Wide-awake girls learn to make salads. Mrs W. N. Hutt. Prog F 31:512 Ap 8 '16

**Sale catalogs.** See Catalogs, Trade**Salesmen and salesmanship**

- Middle western and western salesman's conference. Am Fert 49:34-5 O 12 '18
- Principles of salesmanship. J. F. Dechant. Am Fert 47:60+ N 24 '17
- Selling fertilizers plus service. O. M. Kile. Am Fert 46:82+ Je 23 '17
- Seven deadly sins of salesmanship. Am Fert 46:76 Je 23 '17



**Salicylic aldehydes**

Field tests of fertilizer action on soil aldehydes. J. J. Skinner and C. F. Noll. *il Am Soc Agron J* 8:273-98 S '16

**Salix.** See Willow

**Salmon, Daniel Elmer, 1850-1915**

Commendation of work of Salmon memorial committee. R. W. Ellis. *Am Vet M Assn J* 49:148-9 Ap '16

Proceedings of the A. V. M. A.; Salmon memorial committee. *Am Vet M Assn J* 49:130-3 Ap '16

Salmon memorial address. W. H. Hoskins. *Am Vet M Assn J* 48:456-9 Ja '16

**Salmon**

\* Determination of the hexabromide and iodine numbers of salmon oil as a means of identifying the species of canned salmon. H. S. Bailey and J. M. Johnson. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:999-1001 D '18

Supply of canned salmon in the United States. *U S Ag C* 98:1-13 '18

**Salsify**

Carrots, salsify, parsnips. *Country Gent* 82:772 Ap 21 '17

Easy to grow salsify. M. G. Kains. *Fruit-Grower* 27:177 Mr 1 '16

Salsify or vegetable oyster. L. O. Knapp. *Rural N Y* 77:496 Mr 30 '18

**Salt**

Influence of salt on the changes taking place in storage butter. R. M. Washburn and A. C. Dahlberg. *bibliog J Dairy Sci* 1:114-26 J1 '17; Summary. *N Y Prod R* 45:302 Ja 2 '18

Salt; intaglio pictures for the children. *il Country Gent* 82:32 Ja 6 '17

Simple salt test. F. W. Bouska. *J Dairy Sci* 1:279-83 S '17

**Salt cedars.** See Tamarisks

**Salted meat.** See Meat, Salted

**Salt peter, Chile**

Caliche beds in California found to be small. *Am Fert* 49:72 S 28 '18

Caliche deposits of Atacama desert, Chile, and the minerals they contain. F. MacCoy. *il Eng & Mining J* (10th av. at 36th st., N.Y. 15c) 103:1059-60 Je 16 '17

Carbon and nitrogen changes in the soil variously treated: soil treated with lime, ammonium sulfate and sodium nitrate. R. S. Potter and R. S. Snyder. *bibliog il Soil Sci* 1:76-94 Ja '16

Chilean nitrate. *il Pan Am M* (70 5th av., N.Y. 25c) 25:273-98 S '17

Chilean nitrate beds. *Am Fert* 47:54+ Ag 4 '17

Chilean nitrate industry. A. W. Allen. *il Eng & Mining J* (10th av. at 36th st., N.Y. 15c) 103:230-3 F 3 '17

Chilean nitrate industry. A. H. Rogers and H. R. Van Wagenen. *Am Fert* 48:46+ Mr 16 '18

Chilean nitrate industry. T. W. Voetter. *Am Fert* 45:44 S 30 '16

Chilean nitrate situation. *Am Fert* 45:40 S 2 '16

\* Chilean nitrate technology. *Eng & Mining J* (10th av at 36th st., N.Y. 15c) 106:679-80 O 12 '18

Comparison between the effects of manuring potatoes with nitrate of soda and sulphate of ammonia. A. Zasukhin. *Int R Sci & Prac Ag* 7,no 8:1114-15 Ag '16

Date selected for sale of nitrate lands. T. W. Voetter. *Am Fert* 46:50 Mr 3 '17

Effect of sodium nitrate applied at different stages of growth on the yield, composition, and quality of wheat. J. Davidson and J. A. Le Clerc. *Am Soc Agron J* 9:145-54 Ap '17

Effect of sodium nitrate applied at different stages of growth on yield, composition, and quality of wheat. J. Davidson and J. A. Le Clerc. *Am Soc Agron J* 10:193-8 My '18

Experiments with nitrate of soda as a fertilizer. G. G. Brown. *Better Fruit* 13:14-16 D '18

Fertilizing with nitrate. C. I. Lewis. *Country Gent* 81:159 Ja 22 '16

Genesis of the Chilean nitrate deposits. J. T. Singewald, jr., and B. L. Miller. *bibliog (In Pan American scientific congress Pro., 1915, v. 8, p. 873-80)* '17

Government nitrate of soda. *Am Fert* 48:56 Ap 27 '18

Government to buy nitrate of soda for fertilizers. *Am Fert* 47:36 O 13 '17

Great problem of nitrogen. *Rural N Y* 76:1255 N 3 '17

Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D. A. Coleman. *Soil Sci* 4:345-423 N '17

Influence of the mechanical composition of the soil on the availability of nitrate of soda and dried blood. *il N J Ag Exp Rep* 1916:369-80 '17

Labor-saving problem of Chilean nitrate field. V. L. Havens. *Am Fert* 44:36-8 Ap 1 '16

Lack of ships threatens Chile nitrate industry. *Am Fert* 44:25 My 13 '16

Method of sale of nitrate of soda to farmers by the United States government. *U S Ag C* 78:1-11 '18

Minimum sale prices of Chilean nitrate lands. *Am Fert* 46:40 Mr 31 '17

New source of potash; present development and future possibilities of extraction from Chile nitrate. C. M. Barton. *Metallurgical & Chemical Eng* (10th av at 36th st., N.Y. 25c) 18:248 Mr 1 '18

Nitrate delivered to farmers. *Am Fert* 49:48 Ag 17 '18

Nitrate deposits in Amargosa sink (Calif.) reported on by geological survey. *Eng & Mining J* (10th av. at 36th st., N.Y. 15c) 106:264 Ag 10 '18

Nitrate for early vegetables. *O Judd Farmer* 60:12 F 19 '16

Nitrate for timothy. T. W. Harvey. *Country Gent* 81:112 Ja 15 '16

Nitrate in Amargosa valley, Southeastern California. *Am Fert* 49:32 Ag 17 '18

Nitrate industry. E. Cuevas. *(In Pan American scientific congress Pro., 1915, v. 8, p. 37-68)* '17

Nitrate industry. E. Cuevas. *Chilean nitrate propaganda*, 25 Madison av., N.Y.

Nitrate industry in Chile. I. B. Hobsbawn. *Metallurgical & Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:253-9 Mr 1 '17

Nitrate industry in Chile. I. B. Hobsbawn and J. L. Grigioni. *Metallurgical & Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:525-8 My 1 '17

Nitrate of soda and sulphate of ammonia; annual review of the market for the year 1915. *Am Fert* 44:34-41 Mr 18 '16

Nitrate of soda for apples. M. L. Williams. *Country Gent* 82:162 Ja 27 '17

Nitrate of soda for fertilizers. *Weekly N L* 5:1 O 10 '17; Same. *Better Fruit* 12:8 N '17; Same. *Prog F* 32:1162 N 3 '17; Same. *Coop Manager & F* 7:72 D '17

Nitrate of soda in 1915. L. J. Kenna. *Am Fert* 46:46+ Ja 6 '17

Nitrate of soda in 1917. *Am Fert* 48:29 Mr 16 '18

Nitrate of soda on cantaloupes. W. F. Allen. *Market Growers J* 18:335 My 15 '16

Nitrate of soda situation. *Am Fert* 46:31-2 Je 9 '17

Nitrate properties in Chile. *Am Fert* 46:34d F 3 '17

Nitrate situation. *Am Fert* 45:26 S 30 '16

Nitrate situation in Chile. F. Provost. *Pan-Am Magazine* (70 5th av., N.Y. 25c) 27:183-7 Ag '18

Nitrates for early vegetables. J. B. Morman. *Country Gent* 81:844 Ap 15 '16

Nitrogen and apples—nitrogen a stimulant. *Better Fruit* 10:29+ Mr '16

Production and sale of inorganic nitrates and ammoniates; nitrate of soda. *(In Report on the fertilizer industry, p. 17-32)* '16 U.S. Federal trade comm., Washington, D.C.

**Saltpeter, Chile—Continued**

Progress of the nitrogen industry. A. Bertrand. *Int R Sci & Prac Ag* 9,no 5:544-5 My '18

Sulphate of ammonia and nitrate of soda; annual review of the market for the year 1916. *Am Fert* 46:34a-g Mr 3 '17

Sulphate of ammonia in place of nitrate of soda. E. F. Cauthen. *Prog F* 31:270 F 19 '16

Twenty years' work on the availability of nitrogen in nitrate of soda, ammonium sulfate, dried blood and farm manures. J. G. Lipman and A. W. Blair. *il Soil Sci* 5:291-301 Ap '18

Use of nitrate of soda. K. D. Scott. *Rural N Y* 77:442 Mr 23 '18

Value of nitrate of soda in crop production. J. G. Lipman and A. W. Blair. *il N J Ag Exp B* 323:1-34 '18

Why garden soils need nitrates. J. B. Mormon. *Gard M* 25:118 Mr '17

Winter spraying with solutions of nitrate of soda. W. S. Ballard and W. H. Volck. *il J Ag Research* 1:437-44 F '14

**Bibliography**

Influence of ammonium sulfate on germination and growth. I. Wolkoff. *Soil Sci* 5:468-79 Je '18

Influence of sodium nitrate upon nitrogen transformations in soils with special reference to its availability and that of other nitrogenous manures. D. A. Coleman. *Soil Sci* 4:423-32 N '17

**Statistics**

Chilean nitrate production and shipments. *Am Fert* 45:25 Jl 8 '16

Chilean nitrate statistics for February. T. W. Voetter. *Am Fert* 44:40 Ap 29 '16

Fertilizer material statistics. (*In Am. fertilizer hdbk.*, 1918, p. 27-8) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia

Fertilizer materials statistics; nitrate of soda. (*In Am. fertilizer hdbk.*, 1917, p. 23-5) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia

Improvement in the nitrate industry. T. W. Voetter. *Am Fert* 44:53 Ap 1 '16

International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 26-33 My '18 *Int. inst. of ag., Rome*

International movement of fertilisers; nitrogenous fertilisers. *Int Crop Report and Ag Statistics* (*Int. inst. of ag., Rome*) 7th year, no 9 p 641-9 S '16

**Salts**

Equilibria in solutions containing mixtures of salts; the system water and the sulfates and chlorides of sodium and potassium. W. C. Blasdale. *J Industrial & Eng Chemistry* (*Am. Chemical Soc., Easton, Pa.*) 60c 10:344-7 My '18

Methods of studying permeability of protoplasm to salts. S. C. Brooks. *bibliog Bot Gaz* 64:230-49 S '17

Potash salts and other salines in the Great Basin region. G. J. Young. *il U S Ag B* 61:1-96 '14

See also Nitrates; Phosphates

**Salts as fertilizer**

Action of neutral salts on humus and other experiments on soil acidity. L. J. Gillespie and L. E. Wise. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 40:796-813 My '18

Chemical composition of the plant as further proof of the close relation between antagonism and cell permeability. D. D. Waynick. *Cal Univ Pub Ag Sci v* 3,no 8 135-242p, 13-24pl '18 (\$1.25)

Fertilizing effect of salt. *Rural N Y* 75:586 Ap 8 '16

Fundamental interrelationships between certain soluble salts and soil colloids. L. T. Sharp. *Cal Univ Pub Ag Sci v* 1, no 10:291-339 '16 (50c)

Influence of salts on the bacterial activities of the soil. J. E. Greaves. *bibliog Soil Sci* 2:443-80 N '16

Influence of various salts on the growth of soybeans. J. W. Shive. *Soil Sci* 1:163-70 F '16

Moisture equivalent determinations of salt-treated soils and their relation to changes in the interior surfaces. L. T. Sharp and D. D. Waynick. *Soil Sci* 4:463-9 D '17

Physiological balance of nutrient solutions for plants in sand cultures. A. G. McCall. *bibliog il Soil Sci* 2:207-54 S '16

Preliminary experiments on some effects of leaching on the soil flora. C. B. Lipman and L. W. Fowler. *bibliog Soil Sci* 1:291-7 Mr '16

Salt as a fertilizer. *Country Life* 31:16a Ja '17

Some effects of salt-treated soils on absorption by seeds. W. F. Gericke. *bibliog Soil Sci* 3:271-8 Mr '17

**Salutations**

Greeting customs in foreign lands. C. S. Lowden. *Ohio F* 138:73 Jl 22 '16

**Salvias**

*Salvia dichroa*. R. I. Lynch. *il Gard Chron* (Lond) 63:123 Mr 23 '18

**Saman**

Saman or rain tree. *il Am For* 22:424-5 Jl '16

**Samoyed dogs**

Samoyed dogs. E. K. Scott. *il Country Life* 35:66 D '18

**Samplers**

Quaint old tale the sampler tells. *il Country Life* 29:104 Ap '16

**Sampling**

Sampling tubes for manure, alfalfa or other organic materials. A. D. Shamel. *il Rural N Y* 76:668 My 12 '17; Same. *Cal State Comm Hort B v* 6:225-8 Je '17

See also Feeding and feeding stuffs—Sampling; Fertilizers, Commercial—Sampling; Grain sampling; Seed sampling; Soil sampling

**Sand**

Home testing sand for concrete making. *Country Life* 35:68 N '18

**Sand-burs**

*Solanum rostratum*—a new weed plant. T. G. B. Osborn. *il J Dept Ag S Australia* 20:783-4 My '17

**Sand dunes**

Michigan's shifting sands; their control and better utilization. F. H. Sanford. *il Mich Ag Exp Spec B* 79:1-31 '16; Same. *Mich Ag Bd Rep* 1916:385-413

Planting experiments on the sand-dunes of the Oregon coast. T. T. Munger. *J For* 15:1007-9 D '17

Sand dunes on old Cape Cod; photographs. R. H. Cahoon. *il Country Life* 31:54-5 F '17

Sand flies. See Punkies

**Sandalwood**

Sandalwoods of Hawaii; a revision of the Hawaiian species of the genus *santalum*. J. F. Rock. *il Hawaii Ag Bd Bot B* 3:1-43 '16

**Sandalwood oil**

Production of sandalwood oil in Mysore, British India. *Int R Sci & Prac Ag* 9,no 1:20-1 Ja '18

**Sanders, James Harvey**

Beginnings of live stock journalism; the story of how the founder of the *Gazette* came to engage in this work. A. H. Sanders. *il Breeder's Gaz* 70:1176-7 D 21 '16

**Sandwiches**

Picnic sandwiches. M. Allen. *O Judd Farmer* 61:22 Jl 15 '16

Sandwiches. *la Ag Ext Home Econ C* 7:1-3 '17-'18

Sandwiches in the school house. Wallaces' *F* 41:227 F 11 '16

See also Lunches

Sandy soils. See Soils, Sandy

San Francisco, California

**Schools**

Lux school of industrial training. *J Home Econ* 8:170-2 Ap '16

Sanitary affairs. See Public health



**Sanitary chemistry.** See Food—Analysis; Food adulteration and inspection; Food chemistry; Water—Analysis

**Sanitation**

Animal parasites and rural sanitation. W: A. Riley. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 99-109) il '17

Cost of poor sanitation. R. F. Crane and J. L. Crane, jr. *Farm Eng* 7:14-15 Ap '18

Farm sanitation. W. F. Beck. *Prac F* 114:175 My 1 '18

Farm sanitation. C. L. McArthur. il *Ark Ag Exp* B 127:1-24 '16

Farm sanitation. E. J. McCaustland. *Mo Ag Bd Yearbook* 1916:564-70

Farm sanitation. C: D. Rice. *Swine World* 5:53 Je '18

Getting ready for school. G. V. Gray. il *Farm Eng* 4:52+ S '16

Inspection of grocery stores and markets; with discussion. H. C. Smith. *Assn Am Dairy Food & Drug Offic Pro* 1916:194-203

More disease in rural districts than in cities. T: D. Wood. *Green's Fruit Grower* 36:16 Ag '16

Practical farm sanitation. G. H. Conn. *Hoard's D* 52:248 S 15 '16; Same. *Ohio F* 141:181 F 9 '18

Public and home sanitation. il *Ia Ag Ext Home Econ* B 5:1-24 '17-'18

Range sanitation. G. W. Barnes. il *Ariz Ag Ext* C 6:1-11 '16

Rural hygiene. J. N. Hurty. (*In* Pan American scientific congress Pro., 1915, v. 9, p. 393-9) '17

Rural sanitation. Cal State Bd of Health (Sacramento) *Monthly B* v 12 p 74-81 Ag '16

Rural sanitation. 30p il '16 Wash. State bd. of health, 930 Henry bldg., Seattle

Rural sanitation. W. Giltner. *Public Health (Michigan State board of health, Lansing)* 5:486-93 O '17

Rural sanitation; with discussion. W. S. Rankin. (*Pub Health B* 82) p 76-89 (N) '16 U. S. Public health service, Washington, D. C.

Sanitary engineering. *Farm Eng* 3:147, 178, 204, 262 Ja-Mr, My '16

Sanitary measures to prevent hog cholera. R. Graham. *Ill Ag Exp C* 203:1-8 '17

Sanitary-privy systems for unsewered towns and villages. L. L. Lumsden. (*Pub. health B*. 89) 25p il '17 U.S. Public health service, Washington, D.C.

Sanitation and public health from the food standpoint; with discussion. J. D. Mickle. *Assn Am Dairy Food & Drug Offic Pro* 1917: 37-42

Sanitation in food control; with discussion. G. G. Frary. *Assn Am Dairy Food & Drug Offic Pro* 1916:101-15

Sanitation in stables, yards, and pastures. F. B. Hadley. *Hoard's D* 54:59 Ag 10 '17

Sanitation of food stores and markets. D. B. Armstrong. *J Home Econ* 8:577-83 N '16

Water supply and sanitation. *Texas Univ (Austin) B* 1733:1-38 Je 10 '17

Contents: Stream pollution, by V. M. Ehlers; Dry closet system, by E: H. McCuistion; Bacteriology and sanitation, by I. M. Lewis; Filtration and sterilization of water, by R. G. Tyler; Septic and Imhoff tanks, by M. C. Welborn

See also Barns and stables—Sanitation; Cheese factories—Sanitation; Creameries—Sanitation; Disinfection and disinfectants; Public health; Rural schools—Sanitation; Sewage disposal

**Sanitation, Household**

Health insurance against house sewage. H. C. Campbell. il *Hoard's D* 51:279 Mr 10 '16

Sanitation in the home. Mrs W. N. Hutt. *Prog F* 31:1178 O 7 '16

Some sanitary suggestions for the country home. R. N. Whitfield. *Prog F* 32:765 Jl 7 '17

Survey of sanitation in farm homes. *Domestic Eng* (407 S. Dearborn st, Chicago 10c) 79:212 My 12 '17

**San Joaquin valley milk producers' association**  
California's state milk producers' association. *Hoard's D* 54:794 D 28 '17

**San Jose scale**

Dormant spray for the San Jose scale. G: G. Becker. *Ark Ag Exp* B 141:1-11 '18

Facts concerning insect pest of the orchard. E. F. White. *Prog F* 31:472 Ap 1 '16

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il *N Y State Coll For B* v 16, no 26:95-7 '16

Keep on spraying for the scale. T: J. Headlee. *Rural N Y* 77:141 F 2 '18

Magic of lime-sulphur. H. R. Bowles. il *Country Life* 32:116 My '17

Recent tests of material for controlling San Jose scale. J. S. Houser. il *Ohio Ag Exp B* v 1:21-7 Ja '16

San Jose scale. H. S. Copeland. il *Purdue Ag* 13:128 D '18

San Jose scale. C. N. Crottsenburg. il *Fruit-Grower* 27:44 Ja 15 '16

San Jose scale. R. E. Horton. il *Purdue Ag* 11:46-7 F '17

San Jose scale. F. B. Paddock. il *Tex Ag Exp C* 18:1-11 '16

San Jose scale. H. R. Painter. il *Oklahoma Ag Exp C* 41:1-7 '16

San José scale. L. M. Peairs and J. H. Merrill. il *Kan Ag Exp B* 214:1-28 '16

San Jose scale; what it is and how to control it. S. B. Fracker. il *Wis Ag Dept C* 10 4p '18

Spray your orchard. J. S. Knox. *Prog F* 32: 1360 D 29 '17

Sprays for the control of San Jose scale. W. C. Edmundson. il *Idaho Ag Exp B* 108: 1-15 '18

See also Scale insects

**Sanninoidea exitiosa.** See Peach tree borers

**San Xavier mission, Arizona**

Rural mission of three centuries. J: F. Myers. il *Rural Manhood* 8:53-5 F '17

**Sap**

Cohesion of water and the rise of sap. W: Crocker. *Bot Gaz* 62:325-8 O '16

Cryoscopic determination on tissue fluids of plants of Jamaican coastal deserts. J. A. Harris and J: V. Lawrence. *Bot Gaz* 64: 285-305 O '17

Extension to 5.99° of tables to determine the osmotic pressure of expressed vegetable saps from the depression of the freezing point. J. A. Harris. *Am J Bot* 2:418-19 O '15

Notes on the calculation of the osmotic pressure of expressed vegetable saps from the depression of the freezing point, with a table for the values of P for  $\Delta=0.001^\circ$  to  $\Delta=2.999^\circ$ . J. A. Harris and R. A. Gortner. *Am J Bot* 1:75-8 F '14

On the osmotic concentration of the tissue fluids of phanerogamic epiphytes. J. A. Harris. *bibliog Am J Bot* 5:490-506 N '18

On the osmotic pressure of the tissue fluids of Jamaican Iorantheaceae parasitic on various hosts. J. A. Harris and J: V. Lawrence. *bibliog Am J Bot* 2:438-55 O '16

Preservation of plant juices for analysis of sugar content. D. O. Spriestersbach. *Am Chem Soc J* (Box 505, Washington, D.C. \$6 per yr.) 40:431-6 F '18

Relation of the density of cell sap to winter hardiness in small grains. S. C. Salmon and F. L. Fleming. il *J Ag Research* 13:497-506 Je 3 '18

Structure of the bordered pits of conifers and its bearing upon the tension hypothesis of the ascent of sap in plants. I. W. Bailey. il *Bot Gaz* 62:133-42 Ag '16

Transpiration and the ascent of sap in plants. *For Quar* 14:476-83 S '16

Variations in mineral composition of sap, leaves, and stems of the wild-grape vine and sugar-maple tree. O. M. Shedd. *bibliog J Ag Research* 5:529-42 D 20 '15

**Saperda tridentata.** See Elm borers

**Sapindus.** See Soapberry trees

**Sapote, White**

Mexican apple (*casimiroa edulis*) in the botanic gardens. E. N. Ward. *il Ag Gaz of New South Wales* 29:134-6 F '18

**Saprolegniaceae**

Relation between vegetative vigor and reproduction in some saprolegniaceae. A. J. Pieters. *bibliog Am J Bot* 25:229-76 D '15

**Sarcoma**

Round-celled sarcoma in the heart of a dog. W. R. Blair. *Am Vet M Assn J* 49:520-2 J1 '16

**Sarcophaga**

Sarcophagidae of New England: genus *sarcophaga*. R. H. Parker. *J Econ Entom* 9: 438-41 Ag '16

**Sarcosporidiosis.** See **Sheep—Diseases and pests****Sargent, Ethel, 1863-1918**

Life and work; with bibliography of works. *Ann Bot* 32:i-v Ap '18

**Sargent, Charles Sprague**

Man with the thousand-year tree garden. F. A. Arnold. *por Am For* 24:297-8 My '18

**Saskatchewan**

See also subhead Canada under special subjects

**Agriculture, Department of**

Activities of the Department of agriculture. *il Ag Gaz of Canada* 4:794-801 S '17

**Saskatchewan cooperative elevator company**

How 18,000 Canadian farmers marketed 44,000,000 bushels of grain in 1915. *il Am Coop J* 12:105-7 O '16

**Saskatchewan dairymen's association**

1st annual convention, Saskatoon, Jan. 5-6. K. G. MacKay. *Hoard's D* 51:54 F 4 '16

2d annual convention, Saskatoon, Jan. 10-11, 1917. H. W. MacKay. *Hoard's D* 53:212 F 23 '17

**Sassafras**

Sassafras for tea. C. A. LeClair. *il Country Gent* 81:541 Mr 4 '16

**Sauces**

Sauce is the spice of the roast. A. Remsen. *Country Life* 29:156 Mr '16

**Sauerkraut**

Better sauerkraut. *Weekly N L* 4:7 Je 27 '17

Make kraut for home use. E. L. Kirkpatrick. *il Country Gent* 82:1899 D 1 '17

Making sauer kraut. *Market Growers J* 19: 68 Ag 1 '16

Marketing cabbage through sauerkraut. E. C. Rogers. *Mass Ag Ext C* 52 3p '18

Sauer kraut at home. J. R. Bechtel. *Nat Stock & F* 41:634 S 29 '17

To make good sauerkraut. C. B. Williams. *Ohio F* 140:275 S 29 '17

**Statistics**

Kraut report. *Monthly Crop Rep* 3:18 F '17

**Sausage**

Using the last of the hog. M. E. Kramer. *Country Gent* 81:1854 O 14 '16

**Savage, Marion Willis, 1859-1916**

Sketch. *por Breeder's Gaz* 70:97 J1 20 '16

**Saving and savings**

Italian national savings at 30th June 1915—financial exposition. *Int R Ag Econ* 66:76-8 Je '16

**Savings banks**

First thrift conference and the savings banks of Chile. *Int R Ag Econ* 76:37-49 Ap '17

**Saw palmetto**

Palm fruit used for flavouring brandy. C. Griebel and E. Barnes. *Int R Sci & Prac Ag* 7,no 8:1182-4 Ag '16

**Sawbills.** See **Mergansers****Sawdust**

Making sanitary containers for milk from waste sawdust. *Am Gas Eng J* (42 Pine st, N.Y. 10c) 108:150 F 16 '18

**Sawflies**

Contribution to the life history and anatomy of *lyda hypotrophica*. F. Scheidter. *Int R Sci & Prac Ag* 7,no 8:1217-19 Ag '16

*Lyda hypotrophica*, a hymenopterous pest of epicea in the forests of Roggenburg, Germany. *Int R Sci & Prac Ag* 7,no 7:1064-6 J1 '16

See also Larch sawflies; Pine sawflies; Sawfly leaf miners; Western wheat stem sawflies

**Sawfly leaf miners**

Cherry and hawthorn sawfly leaf-miners (B.411). P. J. Parrott and B. B. Fulton. *il N Y State Ag Exp Rep* 1915:403-32 '16; Same cond. *J Ag Research* 5:519-28 D 20 '15

**Sawing**

Sawing wood. J. C. Hazzard. *il Country Life* 30:82 S '16

**Sawmills**

Answering saw mill queries. F. M. White. *O Judd Farmer* 64:579 Je 1 '18

Creamery supersedes sawmill. C. J. Emery. *Hoard's D* 54:492 N 2 '17

Farm saw mill and wood working plant. A. S. Hill. *il Power F* 25:7-8 N '16

Second-growth pine mill in California. S. Berry. *J For* 15:463 Ap '17

Some useful hints on operating a saw mill. E. H. Detweiler. *Power F* 25:12 D '16

**Saws**

Convenient saw outfit. C. V. Hull. *il Power F* 27:37 D '18

Disston lumberman handbook containing a treatise on the construction of saws and how to keep them in order, together with other information of kindred character. 209p *il '18 Henry Disston & sons, Philadelphia*

Handsaw dentistry. R. H. Smith. *Country Gent* 33:22 Ap 20 '18

Hints on dressing a saw. J. J. Ricketts. *il J Dept Ag Victoria* 15:631-4 O '17

Sawing wood. F. L. Harris. *il Rural N Y* 77:412 Mr 16 '18

See also Drag saws

**Saxifrage**

Early saxifrage, bloodroot, and jack-in-the-pulpit. R. W. Shufeldt. *il Am For* 23:83-7 F '17

Mossy saxifrages. *il Gard Chron (Lond)* 61: 205 My 19 '17

Sayings and doings of Donald Ban. P. McArthur. *Wallaces' F* 43:686, 752, 1412 Ap 19, My 3, O 4 '18

**Scabies.** See **Sheep scab****Scaffolding**

Portable scaffold. J. L. Ahart. *Country Gent* 81:571 Mr 11 '16

**Scale insects**

Citrus fruit insects in Mediterranean countries; scale insects. H. J. Quayle. *il map U S Ag B* 134:12-22 '14

Coccidae of the Philippine Islands. E. Robinson. *Int R Sci & Prac Ag* 8,no 12:1295-8 D '17

Control of scale insects. *Ag Digest* 1:78 Je '16

Control of scale-insects, or coccidae, in Florida. E. W. Berger. *Fla State Plant Bd Quar B v* 2:66-81 O '17

Descriptive catalogue of the scale insects (coccidae) of Australia. W. W. Froggatt. *il Ag Gaz of New South Wales* 27:425-30, 568-78, 809-16, 883-8; 28:134-40, 505-14 Je, Ag, N-D '16, F, J1 '17

Dispersion of scale insects by the wind. H. J. Quayle. *J Econ Entom* 9:486-92 O '16

*Icerya purchasi* in Ceylon: a warning to India. T. Bainbridge Fletcher. *bibliog il Ag J of India* 12:525-31 O '17

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *N Y State Coll For B v* 16,no 26:93-112 '16

List of the coccidae of Porto Rico. T. H. Jones. *bibliog J Bd Ag Porto Rico* 1:1-16 Ja '17; Same cond. *Int R Sci & Prac Ag* 8,no 6:948-52 Je '17



**Scale insects—Continued**

- List of Uganda coccidae, their food-plants and natural enemies. C. C. Gowdey. *Int R Sci & Prac Ag* 9,no 2:262-3 F '18
- Natural enemies of chrysomphalus dictyospermi, a coccid injurious to citrus. E. Malenotti. *Int R Sci & Prac Ag* 9,no 1:125-7 Ja '18
- Observations on British coccidae. E. E. Green. *Int R Sci & Prac Ag* 9,no 4:520-1 Ap '18
- Observations on British coccidae, by E. E. Green; Coccidae observed in the Royal botanic gardens, Kew, England, by E. E. Green. *Int R Sci & Prac Ag* 8,no 10:1437-8, 1438-9 O '17
- Observations on the coccidae of Asia, Africa and America, by R. Newstead; Coccidae of British Guiana, by G. E. Bodkin. *Int R Sci & Prac Ag* 8,no 11:1169-70, 1171-2 N '17
- Observations on the coccidae of Europe, Africa and America. R. Newstead. *Int R Sci & Prac Ag* 8,no 10:1439-41 O '17
- Prospaltella berlesii against diaspis pentagona; observations in Piedmont during 1916. P. Voglino. *Int R Sci & Prac Ag* 8,no 7: 1066-7 J1 '17
- Reports on scale insects. J. H. Comstock. *il Cornell Ag Exp B* 372:425-603 '16; Same. *Cornell Ag Exp Rep* 1916:425-603 '17
- Scale insects. A. T. Gillanders. *Gard Chron (Lond)* 59:243 My 6 '16
- Scale insects. T. J. Mellinger. *il Purdue Ag* 12:298-9 F '18
- Scale insects as vine pests and their relationships with other cultivated plants. J. Jablonowski. *Int R Sci & Prac Ag* 8,no 2:316-17 F '17
- Scale insects (coccidae) from Asia, Africa, America and Oceania. R. Newstead. *Int R Sci & Prac Ag* 9,no 2:258-62 F '18
- Solubility of the scale of the mussel scale-insect (Iepidosaphes ulmi, Linn). S. Maulik. *Int R Sci & Prac Ag* 8,no 4:665-6 Ap '17
- Some Florida scale-insects. C. E. Wilson. *bibliog il Fla State Plant Bd Quar B v* 2:2-65 O '17
- Spraying necessary for the elimination of San Jose and oyster shell scale. L. M. Frederick. *il Farm Eng* 3:157 F '16
- Status of introduced coccids in South Africa in 1917. C. K. Brain and A. E. Kelley. *Int R Sci & Prac Ag* 9,no 2:264-7 F '18
- Three common scale insects. H. T. Fernald. *il Mass Ag Bd B* 2 (5th ed):129-35 '16
- Two new monophlebina coccidae from the Philippine islands. T. D. A. Cockerell. *J Econ Entom* 9:235-6 F '16
- Two newly-established scale insects. E. O. Essig. *il Cal State Comm Hort B v* 5:192-7 My '16
- See also Citricola scales; Cottony cushion scales; Cottony maple scale; Elm bark lice; Lac insects; Mealy bugs; Mediterranean fig scale; Oyster shell scale; Pine leaf scale; Rose scale; San Jose scale; Scurfy scale; Terrapin scale
- Scalemen's association, National. See National scalemen's association
- Scales (weighing instruments)
- Adequate facilities for weighing. C. A. Briggs. *Coop Manager & F* 8:64 O '18
- Cream testing balances. O. F. Hunziker and others. *il Ind Ag Exp B* 189:1-19 '16; Same cond. *N Y Prod R* 42:930+ O 4 '16
- Grain weights verified by new semi-automatic scales. *plan Coop Manager & F* 7:48-9 D '17
- Importance of the automatic weighing scale for country elevators. *Coop Manager & F* 7:30-2 My '18
- Improved apparatus for determining the test weight of grain, with a standard method of making the test. E. G. Boerner. *il U S Ag B* 472:1-15 '16; Same abr. *Int R Sci & Prac Ag* 8,no 3:425-30 Mr '17
- Removable scale sides. J. L. Justice. *Country Gent* 83:24 S 21 '18
- Richardson automatic scale school. *Coop Manager & F* 7:47 D '17
- Scallops
- Soaking scallops. *Weekly N L* 5:3 O 31 '17

Scarlet tanagers. See Tanagers

Scatophagidae. See Dung flies

**Scenery, Natural**

Save the beauty spots. N. B. McClintock. *Wallaces' F* 41:214 F 11 '16

**Scent-producing organs**

Scent-producing organ of the honey-bee. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:22 Ja 12 '18

**Schizomycetes**

Studies in the nomenclature and classification of the bacteria. R. E. Buchanan. *bibliog J Bact* 2:155-64 Mr '17

Schizoneura. See Woolly aphid

**Schley, Grant Barney**

Sketch. F: C. Minkler. *por Field II* 28:21 Ja '18

School architecture. See Schoolhouses

**School attendance**

Effect of agricultural employment upon school attendance. R. McIntire. *Elementary School J* (Univ. of Chicago Press 20c) 18:533-42 Mr '18

Rural child labor problem; with discussion. A. C. Monahan. *Child Labor B* (105 E. 22d st., N. Y. 50c) 6:50-6 My '17

\* Rural school attendance in Alabama. E. F. Joffe. *map Child Labor B* (105 E. 22d st., N.Y. 50c) 7:100-25 Ag '18

Schools and food production. *School and Soc* (Science Press, Garrison, N.Y. 10c) 6:289-90 S 8 '17

School books. See Text-books

School centralization. See Rural schools—Consolidation

**School children**

Brains and social status. *il J Heredity* 8:261-7 Je '17

Discarding school books for farming. *Survey* (112 E. 19th st, N.Y. 10c) 38:68-9 Ap 21 '17

Mental status of rural school children; report of preliminary sanitary survey made in New Castle county, Delaware, with a description of the tests employed. E. H. Mullan. *Pub Health Repts* (U. S. Public Health Service, Washington, D. C.; 5c Supt. of doc.) 31: 3174-87 N 17 '16

National welfare and rural schools. T: D. Wood; W. Rose. *Journal of the National Educ Assn* (5758 Ellis av., Chicago) 1:232-40 N '16

Physical care of rural school children. T. Clark. *Pub Health Repts* (U. S. Public Health Service, Washington, D. C.; 5c Supt. of doc.) 31:2759-64 O 6 '16

Physical care of the child in rural schools: discussion. W: A. Ocker. *Nat Conf Charities and Correction, Pro* (Wm. T. Cross, 315 Plymouth Court, Chicago \$2) 1916:605-8

School pupils for farm work. *Ag Gaz of Canada* 5:371-5 Ap '18

**Health**

Health essentials for rural school children; proposed by the joint committee on health problems in education of the National education association. T: D. Wood. 23p *bibliog n.d.* Dr T: D. Wood, chm., 525 W. 120th st, N.Y.

Minimum health requirements for rural schools; proposed by the joint committee on health problems in education of the National education association. T: D. Wood. 8p *n.d.* Dr T: D. Wood, chm., 525 W. 120th st, N.Y.

**Transportation**

Consolidation of schools and transportation of pupils. (B. 56) 80p *il n.d.* Dept. of educ., Montgomery, Ala.

Consolidation of schools and transportation of pupils. J. T. Calhoun. (B. 10) 54p *il* '17 *Miss. Dept. of pub. educ., Jackson*

School consolidation. See Rural schools—Consolidation

**School credits**

Junior home project work. F. L. Griffin. *il Cornell Countryman* 14:283-6 Ja '17

**School credits —Continued**

- \* Policies of state superintendents toward students entering agricultural employment during the war. T: J. Smart. School and Soc (Science Press, Garrison, N.Y. 10c) 8:481-7 O 26 '18

See Also Home project work

**School fairs**

- Agricultural exhibits and contests. H. P. Barrows. (Doc. 42) 8p '17 U.S. States relations service, Washington, D.C.
- High school fair. il Hoard's D 52:524 N 3 '16
- High school fair. C. R. Wiseman. Hoard's D 54:214 S 14 '17
- Receptacles for school fair exhibits. il Ag Gaz of Canada 5:599-607 Je '18
- Starting the school fair. il Hoard's D 54:46+ Ag 3 '17

**Canada**

- Co-operative school fairs. il J Ag (Quebec) 21:102 Ja '18
- Examination at school fairs. E. K. Hampson. Ag Gaz of Canada 4:976-7 N '17
- Lennoxville school fair. W. G. MacDougall. J Ag (Quebec) 20:100 N '16
- Rural school fairs. C. F. Bailey. il Ag Gaz of Canada 3:629-33 Jl '16
- Rural school fairs. W. J. Reid. Ag Gaz of Canada 5:52-73 Ja '18
- Rural school fairs and other junior work of the Ontario department of agriculture. W. B. Roadhouse. 8p '16 Ontario Dept. of ag., Toronto, Ontario, Canada
- Rural school fairs in Ontario. Ag Gaz of Canada 3:1014-15 N '16
- Rural school fairs—1918. J. E. McOuat. il J Ag (Quebec) 22:75-6 N '18
- School fair movement and its relation to poultry keeping. M. A. Jull. J Ag (Quebec) 20:194 Mr '17
- School fair movement in Quebec. J. E. McOuat. il J Ag (Quebec) 21:67-9 N '17
- School fairs. (In Report, Minister of agriculture, 1916, p. 48-53) '17 Ontario ag. dept., Toronto, Canada
- School fairs. J. E. McOuat. J Ag (Quebec) 20:99 N '16
- School fairs for 1916. L. A. Dewolfe. Ag Gaz of Canada 3:454-9 My '16
- School fairs in the provinces. il Ag Gaz of Canada 3:77-88 Ja '16
- School fairs in the provinces. il Ag Gaz of Canada 4:48-73 Ja '17

**Minnesota**

- Encouraging agriculture through school fairs. R. C. Pollock. il Hoard's D 53:971 Jl 13 '17

**School farms**

- Why not have a school farm this year? Z. Judd. Prog F 31:344 Mr 4 '16

**School garden association of America**

- School garden association of America. C. B. Hamilton. (In Ontario horticultural societies, 11th annual report, 1916, p. 82-3) '17 Ontario ag. dept., Toronto, Canada

**School gardens**

- Educational and economic value of school-directed gardening. (In B. 1917, no. 46, p. 570-620) '17 U.S. Bur. of educ., Washington, D.C.
- Educational use of the school garden. J. E. Feasey. Contemporary Review (249 W. 13th st, N.Y. 50c) 111:514-20 Ap '17; Same. Living Age (6 Beacon st, Boston 15c) 294:106-11 Jl 14 '17
- Educative and economic possibilities of school-directed home gardening in Richmond, Indiana. J. L. Randall. (B. 6) 25p il map '17 U.S. Bur. of educ., Washington, D.C.
- Enlistment for the farm. J. Dewey. (Columbia war papers, ser. 1, no. 1) Division of intelligence & publicity, Columbia univ., N.Y.
- Gardening in elementary city schools. C. D. Jarvis. (B 40) 74p il '16 U. S. Bureau of education, Washington, D. C.
- Gardening in the elementary city schools. C. D. Jarvis. Gard M 23:256 My '16
- Gardening with children. A. G. McCloskey. il Cornell Rural School Leaflet v 11, no 1:283-92 '17

- Grand Rapids home garden plan for school children. il Social Service R (Woodward bldg., Washington, D. C. 10c) 4:15-17 D '16
- Home and school gardening. S. E. Lang. Ag Gaz of Canada 4:316-17 Ap '17
- Home and school gardening in Canada. Ag Gaz of Canada 4:220-31 Mr '17
- Home-school garden. C. W. Pugsley. il Neb Ag Ext B 43:1-12 '17
- Home school gardens. il Ag Gaz of Canada 3:638-47 Jl '16
- \* How school gardens tend to direct a natural course in botany. G. Monsch. School Sci and Math (2059 E. 72d place, Chicago 30c) 18:36-42, 124-9 Ja-F '18
- Influence of school gardens on community. J. A. Taylor. (In Report, Horticultural societies of Ontario, 1917, p. 48-53) il '18 Ontario ag. dept., Toronto
- Making school gardens in winter. H. P. Chandler. il Sunset (San Francisco 15c) 38:32-3 Mr '17
- \* Nature study and the school garden. K. L. Koehler. Nature Study R (Ithaca, N.Y. 15c) 14:101-4 Mr '18
- Possibilities for school-directed home gardening in Atlanta, Georgia. (School home garden C. 17) '17 U.S. Bur. of educ., Washington, D.C.
- Report of the director of school gardens. (In Report, 1917, p. 137-40) '17 Quebec ag. dept., Quebec
- Rural science, including school-gardening. R. N. Sheridan. Ag J of India 13:158-61 Ja '18
- Rural science, including school gardening. R. N. Sheridan. J Dept Ag Ireland 17, no 2: 260-3 '17
- School and home gardening. J: L. Randall. (Reprint from report of comr. of educ. 1916) p 259-70 '16 U.S. Bur. of educ., Washington, D.C.
- \* School children and food production. Ping Ling. Pedagogical Seminary (Worcester, Mass. \$1.50) 25:163-90 Je '18
- \* School garden army and the state councils of defense. School and Soc (Science Press, Garrison, N.Y. 10c) 8:464-5 O 19 '18
- School garden as regarded and carried on in the different provinces. 64p il '16 Canada Ag School garden organization in Saskatchewan. F. W. Bates. il Ag Gaz of Canada 3:459-62 My '16
- School garden plans for 1916 in the provinces. Ag Gaz of Canada 3:355-61 Ap '16
- \* School gardening—a force in civic training. F. G. Billig. il Nature Study R (Ithaca, N.Y. 15c) 14:89-92 Mr '18
- School gardening in 1917. A. W. Cocks. il Ag Gaz of Canada 4:985-6 N '17
- \* School gardens. R. T. Hance. School and Soc (Science Press, Garrison, N.Y. 10c) 8:497-9 O 26 '18
- School gardens. Mrs A. M. Herr. Am Flor 46:118-19 F 5 '16
- School gardens and greater production. Ag Gaz of Canada 4:1073-9 D '17
- School gardens at home. A. R. Kling. il Country Gent 81:730 Ap 1 '16
- School gardens in British Columbia. Am Flor 46:1088 Je 10 '16
- School gardens in the provinces. il Ag Gaz of Canada 3:158-76 F '16
- Teaching gardening in elementary schools. il Pan Am Union B (17th and B sts., N.W., Washington, D.C. 25c) 45:215-23 Ag '17
- United States school garden army. P. P. Claxton. Review of Reviews (30 Irving place, N.Y. 25c) 57:393-4 Ap '18
- \* United States school garden army in 1919. L. S. Ivins. Industrial Arts M (129 Michigan st, Milwaukee, Wis. 25c) 7:476 D '18
- Vocational education; its relation to school gardening. C. W. Pugsley. il Neb Ag Ext B 42:1-11 '17
- \* War and the school garden. S. S. Alburts. Nature Study R (Ithaca, N.Y. 15c) 14:124-5 Mr '18

School houses. See Schoolhouses

School law. See Educational law



**School libraries**

- Graded list of library books for supplementary reading in elementary schools. (*In* Million dollar appropriation country schools. W. F. Doughty.) (B 54) p 46-65 '16 Texas Dept. of educ., Austin
- \* Organization and management of elementary school libraries in Wisconsin. O. S. Rice and B. Bergold. 58p il '18 Wis. Dept. of pub. instruction, Madison
- Rural school library. O. M. Peters. (*In* Pro., Nat. educ. assn., 1916, p. 676-80) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Simple method of cataloguing agricultural literature suitable for the school library. il Ag Gaz of Canada 3:466-8 My '16
- See also* High school libraries

**School lunches**

- Children's lunches. E. B. Hughes. O Judd Farmer 60:42 F 5 '16
- Cooking in rural schools. T. E. Kauffman. il Ohio F 140:150 Ag 25 '17
- Hot-lunch coöperation. F. Niederhauser. Country Gent 81:243 Ja 29 '16
- Hot lunches at school. Country Gent 82:173 Ja 27 '17
- Hot school lunch for rural schools. L. W. Hunt. Wash Ag Ext Ser 1, no 16 4p '16
- Luncheon as a project in elementary and secondary education. J. H. Snow. J Home Econ 9:361-4 Ag '17
- Luncheons for school children. E. Russell. Delineator (Spring and MacDougal sts., N.Y. 15c) 90:47 F '17
- Lunches for the rural school. bibliog Green's Fruit Grower 36:14 N '16
- Rural hot lunch. M. C. McDonald and J. O. Newton. N D Ag Ext B 4:1-12 '16
- Rural school lunch. N. W. Farnsworth. 42p il 25c '16 Webb publishing co., St Paul, Minn.
- Rural school lunch. F. Harrison and O. B. Percival. il Ill Ag Ext C 4:1-23 '16
- Rural school lunch. V. M. Kellar. il Md Ag Ext B 12:1-15 '18
- Rural school luncheon. (Household science C. 1) 39p bibliog il '16 Dept. of educ., Regina, Saskatchewan
- Rural-school lunches. I. A. Tourtellot. Hampton Leaflets 7, no 9:1-14 '16
- Rural school lunches. F. A. Twiss. il Ag Gaz of Canada 4:611-13 Jl '17
- School lunch. J. Babb. J Ag (Quebec) 21:15 Jl '17
- School lunch as a project in teaching cookery in the elementary schools. E. M. Heyle. J Home Econ 9:205-10 My '17
- School lunch basket and its preparation. D. H. Stockman. Am Assn Farmers' Inst Workers Pro 1916:108-19 '17
- School luncheon. A. B. Milam and others. il Ore Ag Ext B 222(Ser 3, no 9):3-24 '16
- School lunches. C. L. Hunt and M. Ward. Farmers' B 712:1-26 '16
- School lunches in rural districts. J. Babb. Ag Gaz of Canada 4:978-81 N '17
- Simple course in home economics for rural schools with suggestions for school noon lunch. M. E. Gearing and others. Texas Univ (Austin) B 49:1-162 S 1 '17
- What the rural school can do. Mrs M. M. Holmes. (*In* Report, United farmers of Alberta, 1917, p. 303-4) '18; Excerpt. Ag Gaz of Canada 5:816-17 Ag '18

**Bibliography**

- Bibliography of school lunches. L. Condell, comp. 25p '17 U.S. Bur. of educ., Washington, D.C.

**School manse.** *See* Teachers' homes

**School superintendents and principals**

**Salaries**

- Comparison of the salaries of rural and urban superintendents of schools. A. C. Monahan and C. H. Dye. (B. 1917, 33) 68p '17 U.S. Bur. of educ., Washington, D.C.

**School supervision and supervisors**

- Rural school supervision. K. M. Cook and A. C. Monahan. (B. 48) 63p '17 U.S. Bur. of educ., Washington, D.C.

- Rural school supervision in New England. L. A. Averill. Education (120 Boylston st, Boston 35c) 38:361-73 Ja '18
- Rural supervision in the mountains of the South. J. Burkes. (*In* Pro., Nat. educ. assn., 1916, p. 1023-31) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Status and need of rural supervision. A. C. Monahan. (*In* Pro., Nat. educ. assn., 1916, p. 1031-6) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.

**School surveys**

- Rural school survey. School and Society (Science Press, Garrison, N.Y. 10c) 5:203-4 F 17 '17
- Study of rural schools in Travis county, Texas. E. E. Davis. il Texas Univ (Austin) B 67:1-53 D 1 '16

**School trustees**

- Handbook for rural school trustees. J. C. Werner. Idaho State Bd Educ (Boise) B v 3:1-44 Je '17

**Schoolhouses**

- Concrete rural school at low cost. il plans Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:196-7 Je '18
- How to make school grounds attractive. R. W. Curtis. il Cornell Rural School Leaflet v 11, no 1:294-300 '17
- Model country school building. il plan Country Gent 81:1931 N 4 '16
- Modern structures to displace little old red schoolhouse. il plans Weekly N L 6:4-5 N 27 '18
- One room and consolidated country schools of Illinois, 1916. 5th ed (C. 100) 80p il map plans '16 Ill. Supt. of public instruction, Springfield
- School grounds, school buildings and their equipment. W. F. Doughty. (B. 65) 64p il plans '17 Tex. Dept. of educ., Austin
- Schoolhouse for the rural districts. L. S. Keir. il plan Building Age (243 W. 39th st, N.Y. 20c) 39:293-8 Je '17
- Sewage disposal for school buildings in Ohio. R. S. Durrell and D. E. Adams. plans Ohio Pub Health J (Ohio State bd. of health, Columbus) 7:326-38 Ag '16
- Small country school house. C. Baker. plan Architectural Record (115 W. 40th st, N.Y. 35c) 43:176-9 F '18
- Teacherage. J. S. Pardee. il plan Country Life 29:24 Mr '16

**Designs and plans**

- Plans for one-room school building. (C. 104) 8p plans '16 Ill. Supt. of public instruction, Springfield
- Rural school architecture. S. Laird. il plan J Ag (Quebec) 22:87 D '18
- Rural schoolhouses; building plans, requirements, suggestions. (B. 54) 76p il plans n. d. Mich. dept. of public instruction, Lansing
- School architecture, n.p. il n.d. Southern pine association, New Orleans, La.
- School architecture, Georgia. 46p il plans '16 Ga. Dept. of educ., Atlanta
- Schoolhouse for the rural districts. plans Building Age (243 W. 39th st, N.Y. 20c) 39:426-9 Ag '17

**Heating and ventilation**

- Furnace heating in rural schoolhouse. L. S. Keir. il plans Metal Worker (243 W. 39th st, N.Y. 10c) 88:76-8 Jl 20 '17
- Natural gas furnace heats rural school. plan Metal Worker (243 W. 39th st, N.Y. \$3 per yr.) 89:132-3 Ja 25 '18

**Schoolhouses as social centers**

- Community center; what it is and how to organize it. H: E. Jackson. (B. 1918, no. 11) 52p il '18 U. S. Bur. of educ., Washington, D. C.
- Community live wire; a pioneer rural social center. M. P. Rich. il Am City-Town and county ed (Tribune bldg., N.Y. 35c) 16:242-5 Mr '17
- Consolidated school as a community center. J: H. Cook. (*In* Am. sociological soc., Pub. v. 11, p. 97-105)
- How we made better use of our schoolhouse. il Prog F 31:804 Je 24 '16

**Schoolhouses as social centers—Continued**

- How we made our little schoolhouse and school the pride of the district. M. F. Cox. Prog F 31:303 F 26 '16
- Rallying round a school. A. M. Kimball. il Country Gent 83:17+ Ja 19; 58-9 Ja 26 '18
- Rural school—a center of community service. G. F. Comings. Hoard's D 56:694 D 13 '18
- Rural school as a social center. J. R. White. Mo Ag Bd B v 14:32-6 Ap '16
- School as a factor in community life. Am City—Town and county ed (Tribune bldg., N.Y. 35c) 17:515-16 D '17
- School is community center in Stockland, Ill. il O Judd Farmer 60:5 My 13 '16
- School that educates both old and young. R. Thomas. il Prog F 32:733 Je 30 '17
- Successful social club. T. Ufford. Wallaces' F 42:878 Je 1 '17

**Schools.** See Agricultural schools; High schools; Normal schools; Public schools; Rural schools

**Schumann rays**

- Action of Schumann rays on living organisms. W. T. Bovie. bibliog Bot Gaz 61:1-29 Ja '16

**Schweinitz, Lewis David von, 1780-1834**

- Studies of the Schweinitz collections of fungi; sketch of his mycological work. G. L. Shear and N. E. Stevens. bibliog il Mycol 9:191-204, 333-44 Jl, N '17

**Sciara flies**

- Sciara maggots injurious to potted plants. H. B. Hungerford. bibliog il J Econ Entom 9:538-49 D '16

**Science**

- How should science be taught. Ag Gaz of Canada 3:184 F '16
- Science and the nation. Gard Chron (Lond) 61:239 Je 16 '17
- Science of bacteriology and its relation to other sciences. L. F. Rettger. bibliog J Bact 3:103-13 Mr '18
- Teaching of science; symposium. Ag Gaz of Canada 3:468-70 My '16
- See also Botany; Ethnology; Evolution; Nature study; Scientific research

**Scientific management**

- Scientific management as applied to the farm, home and manufacturing plants. C. R. Jones. Assn Am Ag Coll & Exp Pro 1916: 108-15 '17

**Scientific research**

- Botany and better agriculture. E. J. Petry. il Purdue Ag 11:21-2 Je '17
- National statutory board of science and industry. Ag J of India 12:122-5 Ja '17
- On the supposed origin of life in solutions of colloidal silica. S. G. Paine. il Ann Bot 30: 383-8 Jl '16
- Presidential address at Indian science congress. A. G. Bourne. Ag J of India Sci Congress No 1917:1-16
- Scientific and industrial research. G. Fletcher. J Dept Ag Ireland 17,no 4:606-10 '17
- See also Agricultural research; Forestry research; Medical research; also Council for scientific and industrial research; Council of science and industry

**Sclerostomes.** See Strongylidosis

**Sclerotinia**

- Disease of coldframe parsley. J. A. McClintock. il Va Truck Exp B 18:379-84 Ja '16
- Pathogenicity and identity of sclerotinia libertiana and sclerotinia smilacina on ginseng. J. Rosenbaum. bibliog il J Ag Research 5:291-8 N 15 '15
- Sclerotinia blight; a serious disease of snap beans. J. A. McClintock. il Va Truck Exp B 20:419-28 Jl '16
- Sclerotinia diseases. il J Bd Ag 23:1095-8 F '17
- Sclerotinia libertiana on snap beans. J. A. McClintock. il Phyt 6:436-41 D '16

- Sclerotinia trifoliorum, the cause of stem rot of clovers and alfalfa. A. H. Gilbert and C. W. Bennett. bibliog il Phyt 7:432-42 D '17

**Sclerotium**

- Peanut-wilt caused by sclerotium rolfsii. J. A. McClintock. il J Ag Research 8:441-8 Mr 19 '17
- Sclerotium bataticola; the cause of a fruit-rot of peppers. W. H. Martin. il Phyt 7:308-12 Ag '17
- Sclerotium rolfsii on wheat. G. H. Godfrey. il Phyt 8:64-6 F '18
- Serious disease of cultivated perennials caused by sclerotium rolfsii. G. L. Peltier. il Ill Ag Exp C 187:1-4 '16

**Sconce, Harvey J.**

- Best farmer in Illinois. J. R. McMahon. por il Country Gent 83:1+ Ag 31 '18

**Scorpions**

- Centipedes and whip-tailed scorpions. R. W. Shufeldt. il Am For 24:607-9 O '18

**Scotch terriers.** See Terriers

**Scotland****Agriculture**

See Agriculture—Great Britain

**Industries and resources**

- Sheep of the Scottish highlands. A. S. Alexander. il Breeder's Gaz 69:609-10 Mr 16 '16

**Land tenure**

See Land tenure—Scotland

**Scottish deerhounds.** See Deerhounds

**Scrap metal.** See Metal, Scrap

**Screw drivers**

- Use of hand tools on the farm. J. R. Stone. Power F 26:44 Ap '17

**Screw threads**

- Standard screw threads. W. B. Jones. Power F 27:42 My '18

**Screwworm flies**

- Screwworm flies and other flies. C. M. O'Donel. Breeder's Gaz 70:147 Jl 27 '16
- Screw-worms and other maggots affecting animals. F. C. Bishopp and others. il Farmers' B 857:1-20 '17

**Scrutoires.** See Desks

**Sculpture**

- Gothic sculpture from France. J. M. Breese. il Country Life 34:66 O '18
- Some garden sculpture of Paul Manship. il Country Life 33:53-5 N '17

**Scurfy scale**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16,no 26:100-1 '16
- Oyster-shell scale and the scurfy scale. A. L. Quaintance and E. R. Sasscer. il Farmers' B 723:1-16 '16
- Two destructive scale insects. Better Fruit 11:19 D '16

**Scurvy**

- Infantile scurvy. A. F. Hess. (In Pan American scientific congress Pro., 1915, v. 10, p. 48-51) '17

**Sea-cows.** See Manatees

**Sea island cotton.** See Cotton—Varieties

**Sea kale.** See Kale

**Sea lavender.** See Statice

**Sea mosses.** See Algae

**Seaweed.** See Algae; Feeding and feeding stuffs —Seaweed

**Secondary schools.** See High schools

**Secretariat of Swiss peasants**

- Swiss peasants' union and the Swiss peasants' secretariate during 1915. Int R Ag Econ 66:40-50 Je '16
- Switzerland; Peasants' union and Peasants' secretariat in 1916. Int R Ag Econ 78:13-20 Je '17

**Secretions (botany)**

- Chemistry and histology of the glands of the cotton plant, with notes on the occurrence of similar glands in related plants. E. R. Stanford and A. Viehoever. bibliog il J Ag Research 13:419-36 My 20 '18



**Secretions (botany).—Continued**

- Influence of the leaf upon root formation and geotropic curvature in the stem of bryophyllum calycinum and the possibility of a hormone theory of these processes. J. Loeb. *il Bot Gaz* 63:25-50 Ja '17  
 Secretory canals of rhus diversiloba. J. B. McNair. *bibliog Bot Gaz* 65:268-73 Mr '18  
*See also* Nectar secretion

**Securities.** See Bonds; Investments; Mortgages; Railroads—Securities; Stocks

**Sedges**

- Grasses, sedges and some September flowers. R. W. Shufeldt. *il Am For* 24:551-5 S '18  
*See also* Nut grass; Tule

**Diseases and pests**

- North American species of puccinia on carex. F. D. Kern. *Mycol* 9:205-38 Jl '17

**Sedum**

- Preliminary list of the species of sedum in cultivation. R. L. Praeger. *Gard Chron (Lond)* 60:92 Ag 19 '16

**Seed adulteration and inspection**

- Chloral hydrate test for brassica arvensis. L. M. Allen. *Assn Offic Seed Analysts Pro* 1916-1917:28-30 '17  
 Identification of the country of origin of commercial oats. R. G. Stapledon. *J Bd Ag* 23:105-16 My '16  
 Official seed inspection in Wisconsin. A. L. Stone. *il Wis Ag Dept B* 12:1-22 '18  
 Paper packet seed investigation, 1916. E. D. Eddy. *il Ag Gaz of Canada* 4:179-85 Mr '17  
 Results of seed inspection, 1917. J. P. Helyar. *N J Ag Exp B* 322:1-36 '18  
 Seed impurities. A. H. Cockayne. *J Ag New Zealand* 13:208-12 S '16  
 Seed inspection and weed control. P. B. Kennedy. *il Cal State Comm Hort B v* 7:160-7 Mr '18  
 Seed testing 1915-16; work of Seed branch. J. R. Dymond. *Ag Gaz of Canada* 3:403-5 My '16  
 State action for the eradication of weeds and the provision of pure seeds. *J Bd Ag* 24:705-12 O '17  
 Testing of seeds order, 1918. *J Bd Ag* 25:477-82 Jl '18  
 Weeds and seeds. *J Dept Ag S Australia* 21:646-7 Mr '18  
*See also* Seeds—Analysis

**Seed and plant catalogs.** See Catalogs, Seed and plant

**Seed conservation**

- Conserving seed by more careful planting. J. R. Hepler. *Market Growers J* 22:125-6 F '15 '18

**Seed corn houses.** See Corn houses

**Seed corn maggots**

- Cabbage root maggot and its control in Canada, with notes on the seed-corn maggot. A. Gibson and R. C. Treherne. p 32-5 *il '16 Canada Ag*  
 Economic status of the seed-corn maggot. W. J. Schoene. *J Econ Entom* 9:131-3 F '16  
 Seed corn maggot and snails destroying beans. C. R. Crosby. *Rural N Y* 76:960 Ag 11 '17

**Seed disinfection**

- Calcium hypochlorite as a seed sterilizer. J. K. Wilson. *bibliog Am J Bot* 2:420-7 O '15  
 Care of seed maize. H. Wenholtz. *il Ag Gaz of New South Wales* 28:229-43 Ap '17  
 Cereal smuts and the disinfection of seed grain. H. B. Humphrey and A. A. Potter. *il Farmers' B* 939:1-23 '18  
 Cleaned, treated and tested seed for Colorado. W. W. Robbins. *il Colo Ag Exp B* 238:20-32 '18  
 Copper sulfate as a disinfectant for potatoes. G. R. Bisby and A. G. Tolaas. *Phyt* 8:240-1 My '18  
 Ergot in rye. Hoard's D 54:526 N 2 '17  
 Formalin for smut in oats. J. A. Kroll. *Breeder's Gaz* 69:724 Mr 30 '16  
 Fumigation treatment to save corn and peas. *Ala Ag Exp Press B* 94 2p n.d.

- Heating seed rooms to destroy insects. E. G. Montgomery. *Am Soc Agron J* 9:105-8 Mr '17  
 How the quarantine division protects the cotton producer. F. Maskew. *il Cal State Comm Hort B v* 5:311-20 S '16  
 How to prevent smut in oats. F. D. Fromme. *il Va Ag Ext B* 26 4p '18  
 How to treat seed potatoes. C. W. Waid. *Market Growers J* 18:207 Mr 15 '16  
 Important points in treating potatoes for scab. A. T. Erwin. *Wallaces' F* 41:608 Ap 14 '16  
 Jens Ludwig Jensen and his work. F. K. Ravn. *Phyt* 7:1-4 F '17  
 Method of fumigating seed. E. R. Sasseer and L. A. Hawkins. *il U S Ag B* 186:1-6 '15  
 Note on a machine to kill gelechia larvæ by hot air, and the effects of heat on gelechia larvæ and cotton seed. L. Gough. *Egypt Ag Tech & Sci B* 6:1-15 '16 (10c)  
 Oat smut. *il Purdue Ag* 12:371 Mr '18  
 Protect seeds with carbon disulphid. E. A. Back. *U S Seed Rep* 2:6 Jl '18  
 Seed and soil treatments for plant diseases. J. G. Humbert. *Ohio Ag Exp B v* 1:43-6 F '16  
 Seed potato treatment. *Green's Fruit Grower* 37:4 My '17  
 Seed treatment control and overwintering of cucumber angular leaf-spot. W. W. Gilbert and M. W. Gardner. *Phyt* 8:229-33 My '18  
 Seed treatment of potatoes. *Rural N Y* 76:651 My 5 '17  
 Seed treatment to increase yield of wheat and oats. J. B. Berry. *Ga Ag Coll (Ext) C* 72 4p '18 (rev.)  
 Seed tuber treatments for potatoes. G. H. Coons. *bibliog il Phyt* 8:457-68 S '18  
 Selection and treatment of seed potatoes to avoid diseases. (C., T., & F. C. D. C. 3) 8p *il '18 U.S. Bur. of plant industry, Washington, D.C.*  
 Simon's hot-air machine for the treatment of cotton seed against pink boll worm. G. Storey. *Egypt Ag Tech & Sci B* 11:1-7 '16 (5c)  
 Smut of oats. Hoard's D 53:578 Ap 20 '17  
 Smuts of grain and forage crops in Kansas. L. E. Melchers. *il Kan Ag Exp B* 210:26-38 '16  
 Spray method of applying concentrated formaldehyde solution in the control of oat smut. R. J. Haskell. *Phyt* 7:381-3 O '17  
 Treat grain seed. *Weekly N L* 4:5 Ap 18 '17  
 Treat oats for smut. R. A. Hayne. *Nat Stock & F* 40:1344 Mr 10 '17  
 Treat seed for smut. *Coop Manager & F* 7:23 O '17  
 Treat seed potatoes. *Weekly N L* 4:3 Ap 4 '17  
 Treating seed wheat to prevent smut, scab, etc. *Ohio Ag Exp B v* 3:284-5 S '18  
 Treating seed with formalin. *Wallaces' F* 41:319 F 25 '16  
 Treatment for grain smuts. Hoard's D 51:267 Mr 3 '16  
 Treatment for smut disease. *il Rural N Y* 75:915 Fe 24 '16  
 Treatment of seed potatoes to prevent diseases. G. H. Coons. *il Mich Ag Ext B* 15 4p '18  
 Uspulun a new preparation for the treatment of cereal grains against fungoid diseases. *Int R Sci & Prac Ag* 8,no 1:163-5 Ja '17  
 Wolfryn electro-chemical process for the treatment of seed grain. F. T. Shutt. *Ag Gaz of Canada* 5:762-4 Ag '18  
 You should, but you won't. S. Jordan. *il Country Gent* 83:8+ O 5 '18  
*See also* Seed disinfection machinery

**Seed disinfection machinery**

- Machines for the treatment of cotton seed against pink boll worm. G. Storey. *Egypt Ag Tech & Sci B* 14:1-29 '17 (10c)

**Seed fairs**

- Important factor in crop production in Canada. *il Ag Gaz of Canada* 3:714-28 Ag '16  
 Judging at seed fairs. C. A. Zavitz. *il Ag Gaz of Canada* 5:167-71 F '18  
 Seed grain fairs. S. T. Newton. *Ag Gaz of Canada* 3:825 S '16  
 Seed selection and seed fairs. J. B. Daggett. *Ag Gaz of Canada* 3:821-2 S '16

- Seed growers' cooperative agricultural society,** Quebec. See Quebec seed-growers' cooperative agricultural society
- Seed harvesting machinery**  
Clover seed stripper. Weekly N L 4:4 My 16 '17  
Clover seed stripper that is cheap and effective. C. R. Hudson. Prog F 31:562 Ap 22 '16  
Make your clover stripper now. Prog F 31:282 F 26 '16  
Rotary seed harvester for crimson clover. A. J. Pieters. (F. C. I.—47) 8p il '18 U S Ag
- Seed inspection.** See Seed adulteration and inspection
- Seed introduction**  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from January 1 to March 31, 1914. il U S Ag B P I Inventory 38:1-105 '17  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from April 1 to June 30, 1914. il U S Ag B P I Inventory 39:1-187 '17  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from July 1 to Sept. 30, 1914. il U S Ag B P I Inventory 40:1-110 '17  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from Oct. 1 to Dec. 31, 1914. il U S Ag B P I Inventory 41:1-64 '17  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from January 1 to March 31, 1915. il U S Ag B P I Inventory 42:1-123 '18  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from April 1 to June 30, 1915. il U S Ag B P I Inventory 43:1-97 '18  
Inventory of seeds and plants imported by the Office of foreign seed and plant introduction during the period from July 1 to September 30, 1915. il U S Ag B P I Inventory 44:1-71 '18  
Seeds and plants introduced into the United States by the Bureau of plant industry of the Department of agriculture during the second half of 1913. Int R Sci & Prac Ag 8,no 1:34-42 Ja '17  
Some of the broader phytopathological problems in their relation to foreign seed and plant introduction. B. T. Galloway. Phyt 8:87-97 Mr '18
- Seed laboratories**  
Seed laboratories help farmers. J Ag (Quebec) 21:133 Mr '18  
Work of the seed laboratory. C. Jacobs. il Purdue Ag Ext Leaflet 66:1-6 Ja '16  
See also Montana state grain laboratory; North Dakota seed laboratory
- Seed laws.** See Seed trade—Laws and regulation
- Seed production**  
American seed trade association convention. Am Flor 46:1208+ Je 24 '16  
California seed crop; report on conditions May 6, 1916. Am Flor 46:969 My 20 '16  
Call for better seed. W. W. Tracy. Am Flor 46:1064 Je 3 '16  
Commercial seed growing. V. M. Buck. il Cornell Countryman 15:269-70 F '18  
Community seed improvement. L. W. Shook. Prog F 33:98 Ja 26 '18  
Conditions detrimental to seed production. J. B. S. Norton and C. E. Leathers. Md Ag Exp B 216:175-216 '18  
Co-operative seed organization. Rural N Y 76:5 Ja 6 '17  
Eighteenth-century London seedsman. W. Roberts. Gard Chron (Lond) 63:223 Je 1 '18  
Experiments in growing vegetable seeds in 1915. W. T. Macoun. il Ag Gaz of Canada 3:11-18 Ja '16  
Experiments on the supposed deterioration of varieties of vegetables in Porto Rico, with suggestions for seed preservation. C. F. Kinman and T. B. McClelland. il Porto Rico Ag Exp B 20:1-30 '16  
Farmer who grows good seeds. il O Judd Farmer 65:397 N 2 '18  
Field root and vegetable seed. G. H. Clark. Ag Gaz of Canada 3:30-1 Ja '16  
Field root and vegetable seed growing in the maritime provinces. S. J. Moore. Ag Gaz of Canada 4:122-3 F '17  
Field root seed production. Ag Gaz of Canada 3:807-9 S '16  
Gardener's experience in seed growing. F. Windmiller. Market Growers J 21:73-4 Ag 15 '17  
Gardeners urged to save seed for next season's plantings. Weekly N L 6:14 S 4 '18  
Growing crimson clover seed. Prac F 113:32 Ja 15 '17  
Growing of mustard seed. J Bd Ag 22:1134-6 F '16  
Growing of roots and vegetables for seed in the province of Quebec. J. A. Simard. il Ag Gaz of Canada 4:559-61 Jl '17  
Growing seeds for the home garden. C. P. Close. (Doc.—87) 8p il '18 U.S. States relations service, Washington, D. C.  
Growing seeds for the world. A. Kruhm. il Gard M 24:164-7 D '16  
Growing your own vegetable seed. V. A. Martin. il Penn State F 9:412 Je '16  
Hand selection and harvesting of the seed plot. A. R. Judson. il Manitoba Ag Dept Farmers' Lib (Ext) B 5:1-12 Ag '16  
Home gardener and the seed situation. G. M. Smith. il Purdue Ag 12:539-41 Je '18  
Home grown vegetable seed; with discussion. A. McMeans. il (In Report, Ontario vegetable growers' assn., 1916, p. 22-9) '17 Ontario ag. dept., Toronto, Canada  
Home production of onion seed and sets. W. R. Beattie. il Farmers' B 434:1-21 '18 (rev.)  
Home saving of vegetable-seeds. W. H. Taylor. J Ag New Zealand 17:221-4 O '18  
How commercial seeds are grown. C. E. Beckwith. il O Judd Farmer 64:7 Mr 2 '18  
How I doubled the returns from my corn crop. F. J. Rist. il System on the Farm 1:146-8 Je '17  
How to cut sweet clover for seed. Jersey B 36:1299 Ag 8 '17  
Is wheat wheat? J. C. Beavers. il Country Gent 83:7 S 21 '18  
Methods of producing pure seed. W. C. Barrie. (In Report, Live stock branch, 1916, p. 20-2) '17 Ontario ag. dept., Toronto, Canada  
Methods of turnip-seed production in Europe. A. H. Cockayne. J Ag New Zealand 17:168-9 S '18  
Opportunity for wide-awake Arkansas farmers. C. O. Carpenter. Prog F 32:459 Ap 7 '17  
Percentage of home-grown seeds planted in truck crops. U S Seed Rep 2:6 Ag '18  
Principles of seed selection. C. E. Durst. Market Growers J 23:49 Ag 1 '18  
Production of alfalfa seed in southern Idaho. L. C. Aicher. il Idaho Ag Exp B 101:1-20 '17  
Production of clover seed under irrigation in southern Idaho. L. C. Aicher. il Idaho Ag Exp B 100:1-19 '17  
Production of seed of sugar beet in Russia. Int R Sci & Prac Ag 8,no 3:370-3 Mr '17  
Production of vegetable seeds in Canada. il Ag Gaz of Canada 3:126-30 F '16  
Progress of pure seed production in Canada. L. H. Newman. Ag Gaz of Canada 4:232-3 Mr '17  
Quick returns from the use of lime. G. P. Williams. il Ohio F 141:341 Mr 9 '18  
Raise your own seeds. Purdue Ag 11:41-2 Je '17  
Red-clover seed production: pollination studies. J. M. Westgate and others. bibliog il U S Ag B 289:1-31 '15; Summary. Int R Sci & Prac Ag 7,no 1:67-8 Ja '16  
Root seed production a war measure. M. O. Malte. il Ag Gaz of Canada 5:228-30 Mr '18  
Root seed production at Macdonald college. P. A. Boving. il Ag Gaz of Canada 3:894-8 O '16



**Seed production—Continued**

- Saving vegetable seeds. M. G. Dunn. Hoard's D 55:1054 JI 19 '18  
 Saving vegetable seeds. N. C. Helms. Country Gent 82:1343 S 1 '17  
 Seed field. H. L. Bolley. N D Ag Exp C 12: 1-4 '16  
 Seed for 1918 crops. N. C. Helms. Country Gent 82:1250 Ag 11 '17  
 Seed growing in the West. Market Growers J 23:203 D 1 '18  
 Seed problem confronting the country. L. A. Markham. Prog F 32:104 Je 16 '17  
 Seed production in Canada. J Bd Ag 24:726-9 O '17  
 Seed production in 1918. H. F. Thompson. Mass Ag Ext B 20:1-18 '18  
 Seed production of western white pine. R. Zon. U S Ag B 210:1-15 '15  
 Seed raising in the Empire. Gard Chron (Lond) 61:164 Ap 21 '17  
 Seed selection. P. E. Clement. il Minn Hort 45:312-15 Ag '17  
 Seed selection and improvement. A. T. Erwin. Am Flor 47:545 S 30 '16  
 35th annual convention of the American seed trade association. Am Flor 48:1234-4 Je 23 '17  
 Turnip- and rape-seed production. A. H. Cockayne. J Ag New Zealand 16:311-23 Je '18  
 Vegetable seed production. Ag Gaz of Canada 4:397-8 My '17  
 Vegetable seed production in California. R. G. Risser. Market Growers J 23:90 S 1 '18  
 War conditions cause development of seed-growing industry in this country. Weekly N L 6:4 O 30 '18  
 Wholesale seed farm. il Wallaces' F 41:943 JI 7 '16

**Bibliography**

- Conditions detrimental to seed production; bibliography. J. B. S. Norton and C. E. Leathers. Md Ag Exp B 216:216-26 '18  
**Seed purchasing commission**  
 Seed purchasing commission. G: H. Clark. Ag Gaz of Canada 4:953-4 N '17  
**Seed reporting service**  
 Seed reporting as a public service. W. A. Wheeler. U S Seed Rep 2:2 JI '18; Same. Coop Manager & F 7:73-6 Ag '18  
**Seed sampling**  
 Device for sampling grain, seeds, and other material. E. G. Boerner. il U S Ag B 287: 1-4 '15  
 Variations in seed tests resulting from errors in sampling. O. A. Stevens. Am Soc Agron J 10:1-19 Ja '18  
**Seed sterilization. See Seed disinfection**  
**Seed surveys**  
 Announcement of seed survey for January 1, 1919. U S Seed Rep 2:2 D '18  
 Announcement of war emergency seed surveys for July 1, 1918. U S Seed Rep 1:2 Je '18  
 Scope of seed survey of January 31, 1918. U S Seed Rep 1:1 F '18  
 Seed surveys of July 1, 1918. U S Seed Rep 2:1 S '18  
**Seed testing**  
 Acidity as a factor in determining the degree of soundness of corn. H. J. Besley and G. H. Baston. il U S Ag B 102:1-45 '14  
 Agricultural seed: concerning the germination of seed. G. P. Burns and others. il Vt Ag Exp B 205:1-48 '17  
 Agricultural seeds, germination and hard seeds. Va Ag Dept B 111:32 Ap '16  
 Backing the seed corn drive: how county bankers got behind the farm bureau. A. T. Kearney. il Banker-F 5:11 O '18  
 Bank seed corn work. O. H. Anderson. il Banker-F 5:7 Je '18  
 Buying and testing farm seeds. G: Gardiner. il Field 11 26:117 F '16  
 Campaigning for corn and wheat in Indiana. R. S. Bundy. il Purdue Ag 12:94-5 N '17  
 Choosing the best tree seeds: the influence of parental character and environment upon the progeny of Douglas fir. C: J. Kraebel. il J Heredity 8:483-92 N '17

- Cleaned, treated and tested seed for Colorado. W. W. Robbins and others. il Colo Ag Exp B 238:13-20 '18  
 Corn-crop insurance. C. R. Weidle. il Country Gent 81:762 Ap 1 '16  
 Ear-to-row test of corn. J. C. Pridmore. Prog F 31:345 Mr 4 '16  
 Forest seed control. For Quar 14:333-5 Je '16  
 Germination test of seed corn. N. Schmitz. il Pa Ag Ext C 71:1-7 '18  
 Germination testing. H. B. Sifton. il Ag Gaz of Canada 4:454-9 Je '17  
 Getting ready for spring. C. G. Williams. Ohio F 137:290 F 26 '16  
 Home-grown versus commercial seed of field roots. J Ag (Quebec) 21:88 D '17  
 How seed testing helps the farmer. E. Brown. bibliog il U S Ag Yearbook 1915:311-16  
 How testing seeds helps me in forestalling failures. F. Mark. System on the Farm 2: 54-5 F '18  
 How to test seed. Coop Manager & F 7:75 Ja '18  
 How to test seed corn. J. C. Hackleman. il Mo Ag Ext C 48:1-16 '18  
 How to test seeds. H. D. Hemenway. Mass Ag Bd B 5:68-70 '18 (3d ed. rev.)  
 How to use low-germinating seed corn. T. A. Kisselbach. il Breeder's Gaz 73:705 Ap 4 '18  
 Instructions in testing seeds. G: A. Smith. Tex Ag Ext B C-4 4p '18  
 Iowa seed corn week. Wallaces' F 41:264 F 18 '16  
 Jimmie's seed corn venture. il Hoard's D 53: 296 Mr 9 '17  
 Making seeds come true to name. J. W. Swaren. il Country Gent 81:826-7 Ap 15 '16  
 Making sure of a crop. F. A. Koenig. il Kimball's D F 14:231 Ap 1 '16  
 Mechanical device for placing samples of seed into germination tests. H. D. Hughes. Assn Offic Seed Analysts Pro 1916-1917:42-9 '17  
 Methods of testing seed corn. E. R. Hodgson. Va Ag Ext B 27 1p '18  
 Methods of testing seed corn. F. H. Tobias. O Judd Farmer 60:4 Mr 25 '16  
 Need of seed-testing. E. B. Levy. il J Ag New Zealand 14:390-3 My '17  
 New seed testing station and the testing of seeds order. il J Bd Ag 24:937-42 D '17  
 Official seed testing station at the food production department of the board; first annual report. J Bd Ag 25:641-68 S '18  
 Ohio corn census. Ohio F 141:422 Mr 23 '18  
 Order garden seed early. Wallaces' F 41:142 Ja 28 '16; Same. Kimball's D F 14:68 F 1 '16  
 Other seed tests. Hoard's D 51:210 F 25 '16  
 Parallel tests of seeds by germination and by electrical response. M. T. Fraser. Ann Bot 30:181-9 Ja '16  
 Poor quality of seed corn. G. W. Koerner. Va Ag Dept B 127:3-5 Ap '18  
 Practical 150-car rag-doll tester. Wallaces' F 41:575 Ap 7 '16  
 Primitive methods of maize seed preparation. H. H. Biggar. Am Soc Agron J 10:183-5 Ap '18  
 Quality of agricultural seeds. J Bd Ag 24: 1202-13 F '18  
 Rag-doll corn tester. W. E. Bowers. il Country Gent 81:740 Ap 1 '16  
 Rag doll method for testing seed corn. O. F. Jensen. Rural N Y 75:405 Mr 4 '16  
 Rag-doll seed tester; its use in determining what ears of corn are fit for seed. G: J. Burt and others. il Farmers' B 948:1-7 '18  
 Rag-doll tester for corn. W. L. Burlison and G: H. Dungan. il Ill Ag Ext C 19:1-8 '18  
 Relation of germination in the greenhouse and nursery. S. B. Show. J For 16:319-28 Mr '18  
 Report on seeds purchased in central and south Wales: seasons 1915-16. R. G. Stapledon. J Bd Ag 23:832-50 D '16  
 Results of seed tests for 1916. F. W. Taylor and F. S. Prince. N H Ag Exp B 180:1-17 '16  
 Scarcity of seed corn threatens 1918 crop. R. H. Moulton. il Hoard's D 55:136-7 F 15 '18  
 Science and seed testing. J. R. Dymond. Ag Gaz of Canada 5:18-20 Ja '18  
 Second annual seed laboratory report, 1914-1915. W. L. Oswald. il Minn Ag Exp B 159: 1-16 '16

## Seed testing—Continued

- Seed corn; do you know that it will grow? P. G. Holden and J. E. Waggoner. 27p il '17 International harvester co., Agricultural extension dept., Chicago
- Seed corn experience. C. E. Prescott. Hoard's D 55:554 Ap 19 '18
- Seed corn for Iowa. il Kimball's D F 14:198 Mr 15 '16
- Seed corn for the 1916 crop. H. D. Hughes and W. W. Stanfield. il Ia Ag Exp C 28:1-16 '16
- Seed corn situation. A. E. Grantham. Prac F 114:123 Mr 15 '18
- Seed-corn situation for 1918. W. L. Burlison and G. H. Dungan. il Ill Ag Exp C 211:1-8 '18
- Seed corn testers and their work. C. H. Knopf. il Hoard's D 51:327 Mr 17 '16
- Seed corn testing experience. D. E. Fish. Wallaces' F 43:297 F 15 '18
- Seed situation in Utah. G. Stewart. il Utah Ag Exp C 23:1-31 '16
- Seed test in time will save the crop; pictures. Country Gent 83:22-3 Mr 2 '18
- Seed testing. il Cornell Ag Exp Rep 1916, v 2: 891-900 '17
- Seed testing, and the need for destroying weeds. J Bd Ag 22:1055-62 F '16
- Seed testing at the Calgary laboratory. J. F. Fryer. il Ag Gaz of Canada 5:1052-5 N '18
- Seed testing in North Wales. J Bd Ag 23:160-2 My '16
- Seed testing incubator. il O Judd Farmer 64:3 F 23 '18
- Seed-testing key; progressive average germination. A. H. Cockayne. J Ag New Zealand 13:129-31 Ag '16
- Seed testing 1915-16; work of Seed branch. J. R. Dymond. Ag Gaz of Canada 3:403-5 My '16
- Seed-testing notes. E. B. Levy. il J Ag New Zealand 16:369-70 Je '18
- Seed testing with the Jacobsen germinating apparatus at the Danish seed control station. J. A. Larsen. bibliog For Quar 14:273-6 Je '16
- Seed tests made at the station during 1915. M. T. Munn. N Y State Ag Exp B 416:55-74 '16
- Selecting and curing seed corn. A. Atkinson and M. L. Wilson. il Mont Ag Exp C 54:165-84 '16
- Selecting and testing seed corn. C. W. Goodman. il Tex Ag Dept B 53:1-23 Ja '17
- Selecting, curing, and testing seed corn. R. A. Moore and J. J. Garland. il Wis Ag Ext C 58:1-20 '16
- Selecting sugar cane before planting: some demonstrative experiments. A. H. Rosenfeld. Ag J of India 13:695-700 O '18
- Some problems of efficiency in seed testing. O. A. Stevens. Assn Offic Seed Analysts Pro 1916-1917:16-18 '17
- Test seed corn before busy season. Ohio F 139:254 F 17 '17
- Test the planting seed. A. F. Kidder. Prog F 32:82 Ja 20 '17
- Test the seed corn. R. A. Hayne. il Nat Stock & F 40:1424 Mr 24 '17
- Test your seed corn. Weekly N L 4:5 Ap 18 '17
- Test your seed corn. F. D. Gardner. il Nat Stock & F 41:1239 Mr 2 '18
- Testing agricultural seeds by the rag doll method. G. P. Burns. il Vt Ag Ext C 10:1-4 '18
- Testing and preparing seed corn. A. T. Wiancko and J. A. McCarty. il Purdue Ag Ext Leaflet 90:1-4 '18
- Testing of farm seeds. J Dept Ag Ireland 18,no 2:210-13 '18
- Testing of seeds. J Bd Ag 24:1035-9 D '17
- Testing of seeds for farmers at the official seed testing station. J Bd Ag 24:1070-6 Ja '18
- Testing of seeds order, 1917. J Bd Ag 24:1031-5 D '17
- Testing of seeds order, 1918. Gard Chron (Lond) 64:19 Jl 13 '18
- Testing seed before planting. Market Growers J 18:10 Ja 1 '16
- Testing seed corn. il Hoard's D 51:164 F 18 '16
- Testing seed corn. il Hoard's D 55:202 F 22 '18
- Testing seed corn. il Ia Ag Ext B 50:1-4 '17
- Testing seed corn. Prac F 113:76 F 15 '17
- Testing seed corn. R. M. Ainsworth. O Judd Farmer 61:1 S '16; 4 S 23 '16
- Testing seed corn. H. P. Cooper. Penn State F 11:83+ Mr '18
- Testing seed corn. C. G. Williams. Ohio Ag Exp B v 1:96 Mr '16
- Testing seed corn at home. Ohio F 139:462 Mr 24 '17
- Testing seeds in incubator. H. Smith. il Country Gent 81:841 Ap 15 '16
- Testing small grain. R. H. Moulton. il Kimball's D F 15:101 F 15 '17
- Testing the seed corn. Wallaces' F 43:230, 293 F 8-15 '18
- This year's seed scarcity. J. E. Pickett. il Country Gent 83:5+ F 23 '18
- Treating seed grains. Hoard's D 55:334 Mr 15 '18
- Value of selected seed. T. W. Harvey. Country Gent 81:208 Ja 29 '16
- Variations in seed tests resulting from errors in sampling. O. A. Stevens. Am Soc Agron J 10:1-19 Ja '18
- Work of the seed laboratory. C. Jacobs. il Purdue Ag Ext Leaflet 66:1-6 Ja '16
- See also Montana state grain laboratory; North Dakota seed laboratory

## Seed trade

- Asks \$6,000,000 to buy seed for farmers. Weekly N L 5:2 Ja 9 '18
- Classification of those engaged in the seed business. U S Seed Rep 1:1 Je '18
- Congressional distribution of seeds. Congressional Record (Washington, D.C.) 56:1471-5 Ja 29 '18
- Denmark establishes seed prices. U S Seed Rep 2:1 D '18
- Forward step in seed selling. Market Growers J 18:128 F 15 '16
- Profiteering in seeds. Weekly N L 5:1 Mr 20 '18; Same. Am Flor 50:455 Mr 16 '18
- Purchase and sale of seed to farmers. Hoard's D 55:32 Ja 25 '18
- Royal visit to Messrs Sutton and Sons' seed establishment at Reading. il Gard Chron (Lond) 63:140 Mr 30 '18
- Sale of seed grain to farmers. Congressional Record (Washington, D.C.) 56:4476-504, 4554-88, 4611-12 Mr 27-28 '18
- Seed dealers found selling agricultural seed in violation of the agricultural seed law, chapter 506, acts 1916. Va Ag Dept B 128:28-32 My '18
- Seed grain and feed for farmers and stockmen; hearings before the House committee on agriculture on H. R. 7795 and H. R. 9966. (pts 1 & 2) 1-57; 58-86p '18 Apply to congressmen
- Seed grain loans planned in drought regions to help next spring planting. Coop Manager & F 8:49 D '18
- Seed market notes. U S Seed Rep 1:7-8 Je '18
- Seed reporter, published monthly by the U.S. Bureau of markets was first issued in November, 1917. It is an effort to disseminate such information concerning seeds as may seem necessary or desirable for the guidance of governmental agencies and the public in making plans for increasing production, for promoting efficient distribution, and for directing conservation and utilization. Leading articles will be indexed
- Seed reporting as a public service. W. A. Wheeler. U S Seed Rep 2:2-4 Jl '18; Same. Coop Manager & F 7:73-6 Ag '18
- Seedman's side of the disclaimer. H. L. Musser. Market Growers J 19:279 D 15 '16
- Seedmen's view of price fixing. Am Flor 50:128 F 2 '18
- Seedsmen's risks. Market Growers J 19:157 O 1 '16
- Some immediate responsibilities of the seed trade. R. A. Oakley. Coop Manager & F 7:72-3 Ag '18
- Tense situation in seed trade; shortages. A. W. Fulton. O Judd Farmer 60:6 Ja 29 '16
- Testing of seeds order, 1917. J Bd Ag 24:1031-5 D '17



**Seed trade—Continued**

- Text of resolutions adopted by the Advisory committee of agricultural and live stock producers. U S Seed Rep 1:1 My '18
- \* United States buys large Canary Island onion-seed crop. G: K. Stiles. (Commerce Reports no. 265) p 561-2 (N 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- War emergency purchase and the sale of seed to farmers by the United States Department of agriculture. U S Seed Rep 1:7-8 Mr '18
- Weights and measures bill. Am Flor 46:96 Ja 29 '16
- Winning our seed independence. J.R. McMahon. il Country Gent 83:3-4 N 23 '18
- Work of the U.S. committee on seed stocks. R. A. Oakley. U S Seed Rep 1:2 N '17
- See also American seed trade association; Northrup, King and co.

**Directories**

- \* Seed list: dealers in Kansas. (C. 11) 74p '18
- Kansas State council of defense, State House, Topeka

**Laws and regulation**

- Agricultural seed law, effective July 4, 1915. 8p '17 Iowa dairy and food comm., Des Moines
- Cleaned, treated and tested seed for Colorado. W. W. Robbins. il Colo Ag Exp B 238:32-40 '18
- Colorado seed act. W. W. Robbins and G: E. Egginton. Colo Ag Exp Seed Laboratory B v 1, no 1:1-15 S '17
- Commerce de semences en Allemagne et en Autriche. Int Yearbook Ag Leg 1916:218-23 '17
- Epitome of regulations respecting the importation of seed into Canada. U S Seed Rep 2:5-6 D '18
- Importation regulations. Ag Gaz of Canada 5:1139-40 D '18
- Law relating to the manufacture and sale of food products; agricultural seeds. p 49-76 '17 Ore. State printing dept., Salem
- New Jersey seed law. Market Growers J 19:9 Jl 1 '16
- New Jersey seed law. J: P. Helyar. N J Ag Exp C 59:1-12 n.d.
- Pro and con on Illinois seed law. O Judd Farmer 62:3 Mr 17 '17
- Pure seed law, chap. 110, S. L. 1913, and regulations thereunder. 13p n.d. Wyo. Dairy, food and oil dept., Cheyenne
- Pure seed legislation. G: P. Weldon. Cal State Comm Hort B v 5:393-5 N '16
- Regulations and instructions relating to the labelling, inspection and analysis of seeds in New Jersey. J: P. Helyar. N J Ag Exp C 66:1-10 '17
- Revised agricultural seed law. C. P. Smith. Md Ag Exp B 219:1-9 '18
- Seed and feed law passed by special session of the North Dakota legislature; furnishing seeds and feeds to farmers at cost. Coop Manager & F 7:27 Mr '18
- Seed laws of adjoining states. O Judd Farmer 62:3 Mr 24 '17
- Seed legislation. E. M. Freeman. Assn Offic Seed Analysts Pro 1916-1917:12-15 '17
- United States Food administration license requirements affecting seedsmen. U S Seed Rep 2:1 Ag '18
- Virginia agricultural seed law, 1916. Va Ag Dept B 113:3-4 Jl '16
- West Virginia seed law. C. W. Wood. W Va Ag Dept B 34:1-7 '17

**Statistics**

- Imports of field, vegetable, and flower seeds into the United States as compiled from data, published by the Department of commerce. U S Seed Rep 1:4 Je '18
- Imports of forage plant seeds permitted entry into the United States. U S Seed Rep 2:8 D '18
- Report of commercial field seed stocks, sales and seed requirements for the United States. U S Seed Rep 2:3-5 O '18
- Report of field seed stocks for Canada. U S Seed Rep 1:7 Ap '18

- Report of field seed stocks for the United States by divisions; war emergency seed survey, Jan. 31, 1918. U S Seed Rep 1:4-5 Ap '18
- Seed survey of July 1, 1918, conducted and reported by the seed branch, department of agriculture, Ottawa, Canada. U S Seed Rep 2:6 O '18
- Sorgo or cane seed outlook. U S Seed Rep 2: 6-7 D '18
- Sudan grass seed outlook. U S Seed Rep 2:8 D '18
- Vegetable seeds; commercial acreage, average yield per acre, commercial production, and estimated commercial consumption, for the United States. U S Seed Rep 2:4 D '18
- Vegetable seeds; commercial stocks, receipts, imports, exports, and estimated sales for 1917 and 1918. U S Seed Rep 2:3 D '18

**Seeding machinery**

- Drill for seeding nursery rows. C. E. Hill. Am Soc Agron J 10:165-6 Ap '18
- Seeding machinery and fertilizer sowers. G. H. Alford. Prog F 33:68 Ja 19 '18

**Seedlings**

See also Transplanting

**Seeds**

- Agricultural seed; concerning weeds and weed seeds. G. P. Burns and A. K. Peitersen. il Vt Ag Exp B 200:1-79 '16
- Assistance given by the Experimental farms branch to farmers in securing good seed. J. H. Grisdale. il Ag Gaz of Canada 5:225-6 Mr '18
- Better seed campaign of Blair county. Penn State F 9:366-+ Ap '16
- Buying and testing farm seeds. G: Gardiner. il Field 11 26:117 F '16
- Canadian seed growers' association; catalogue of registered and improved seed produced in 1916 and offered for sale. 8p L. H. Newman, sec., Canadian bldg., Ottawa
- Catalase and oxidase content of seeds in relation to their dormancy, age, vitality, and respiration. W: Crocker and G: T. Harrington. bibliog J Ag Research 15:137-74 O 21 '18
- Cleaned, treated and tested seed for Colorado. W. W. Robbins and others. il Colo Ag Exp B 238:1-40 '18
- Clover, timothy and alfalfa seed. il Wallaces' F 42:300 F 16 '17
- Critical shortage in seed supply. A. W. Fulton. O Judd Farmer 64:4 Ja 19 '18
- Economy in the use of seeds. J Bd Ag 24:87-8 Ap '17
- Effect of heating seeds upon the development of the plant; experiments made in Russia with wheat. S. J. Worobiew. Int R Sci & Prac Ag 7:no 4:527-9 Ap '16
- Electrification of agricultural seed. Gard Chron (Lond) 62:223 D 1 '17
- European seed crops. Am Flor 46:450 Mr 18 '16
- Experiments in fall seed sowing. H. O. Werner. Market Growers J 18:208 Mr 15 '16
- Facilitating imports of seeds. U S Seed Rep 2:1 Jl '18
- Factors affecting the depth of sowing various crops. F. S. Harris and H. J. Maughan. bibliog Utah Ag Exp B 164:1-18 '18
- Free seeds not true to names. Am Flor 47: 1072 D 2 '16
- From farm to farmer. 64p il Hyde seed farms, Pattonsburg, Mo.
- Germinating test applied to the seed trade. F. Butner. Market Growers J 20:95 F 1 '17
- Good seeds versus poor seeds. G: W. Hood. il (In Nebraska Horticulture v. 6, no. 12, p. 140-4) (F) '17 Neb. state hort. soc., Lincoln
- Grain farming in the corn belt. C. Vrooman. Farmers' B 704:26-31 '16
- Great importance to the farmer is good seed. G. T. French. Va Ag Dept B 126:35-40 '18
- Grower's side of the seed question. R. J. Dallinga. Market Growers J 19:279 D 15 '16
- Home gardener and the seed situation. G. M. Smith. il Purdue Ag 12:539-41 Je '18
- How about next year's seed? F. F. Rockwell. il Gard M 28:84-5 O '18

## Seeds—Continued

- How much seed to sow. *Ariz Ag Exp* Timely Hints 130:1-4 '17
- Illinois seed situation. *Wallaces' F* 42:1084 Ag 3 '17
- Improvement of the seed supply in the Central Provinces. *G. Evans. Ag J of India* 12: 58-64 Ja '17
- Meaning of pedigreed seed. *L. H. Newman. Ag Gaz of Canada* 5:184-5 F '18
- Mechanics of dormancy in seeds. *W. Crocker. Am J Bot* 3:99-120 Mr '16
- Method of prophesying the life duration of seeds. *W. Crocker and J. F. Grovers. Int R Sci & Prac Ag* 7,no 3:347 Mr '16
- Northern grown seeds and trees. *W. J. Green. Ohio F* 140:454 N 17 '17
- Northern seeds and plants. *W. F. Massey. Ohio F* 140:506 D 1 '17
- Novel seed sowing. *il Scientific Am* (233 Broadway, N.Y. 10c) 116:474 My 12 '17
- Observations on the development and germination of the seed in certain polygonaceae. *E. F. Woodcock. bibliog il Am J Bot* 1:454-76 N '14
- On the correlation between somatic characters and fertility; illustrations from *Phaseolus vulgaris*. *J. A. Harris. bibliog Am J Bot* 1:398-411 O '14
- Pedigreed seeds. *R. A. Moore. Am Coop J* 12: 768 Ag '17
- Plant breeding and seed selection. *W. F. Therkildson. il Field* 11 26:219-20 Mr '16
- Plant good seed or pay the penalty. *il Ag Digest* 2:656 O '17
- Plant good seeds. *Kimball's D F* 14:15 Ja 15 '16
- Protection of gorteria and neurada seedlings. *J. Hutchinson. il Gard Chron (Lond)* 63:133-4 Mr 30 '18
- Pure seed and pure bred stock. *J. R. Shinn. Coop Manager & F* 6:108 Mr '17
- Quality in seeds. *Am Flor* 46:1160 Je 17 '16
- Quality of agricultural seeds. *Gard Chron (Lond)* 63:158 Ap 13 '18
- Quantity of seed necessary to acre. *Coop Manager & F* 6:95 F '17
- Quantity of seed required per acre. *Prog F* 33:200 F 16 '18
- Quantity of seed to the acre. *H. E. Cox. Rural N Y* 76:788 Je 16 '17
- Remarkable seed situation for 1917. *O Judd Farmer* 62:1 Ja 27 '17
- Resistance of seed coats of abutilon theophrasti to intake of water. *W. E. Davis. Bot Gaz* 64:166-7 Ag '17
- Resistance of seeds to desiccation. *G. T. Harrington and W. Crocker. J Ag Research* 14:525-32 S 16 '18
- Saving seed for home use. *E. J. Canning. Country Life* 29:124 Ap '16
- Saving seeds from the home garden. *D. F. Jones. il Gard M* 27:260-1 Jl '18
- Seed germination. *Am Flor* 47:322 Ag 26 '16
- Seed-growing for New Zealand. *A. H. Cockayne. J Ag New Zealand* 16:11-15 Ja '18
- Seed growing in New Jersey. *R. R. Jamison. Purdue Ag* 11:37 O '16
- Seed improvement. *H. G. Bell and C. A. Waugh. (Soil improvement com. B. 11) 16p il '16 Nat. fertilizer assn., Chicago*
- Seed selection and seed improvement. *A. T. Erwin. Market Growers J* 19:231 N 15 '16
- Seed selection for crop improvement. *G. E. Thompson. il Kan Ag Ext B* 15:1-16 '17
- Seed situation. *J. P. Helyar. N J Ag Exp C* 72:1-7 '17
- Seed situation in Utah. *G. Stewart. il Utah Ag Exp C* 23:1-31 '16
- Seed sowing suggestions. *W. N. Craig. Mass Hort Soc Trans* 1917,pt 1:15-27 '17; Same. *Gard Chron Am* 21:299-301, 335-6 Ag-S '17
- Seed supplies and distribution. *Ag Gaz of Canada* 5:221-3 Mr '18
- Seed supplies and the war. *A. W. Sutton. Gard Chron (Lond)* 61:41 Ja 27 '17
- Seed supply for the current year in the provinces. *Ag Gaz of Canada* 5:245-53 Mr '18
- Seed supply of the nation. *R. A. Oakley. il maps U S Ag Yearbook* 1917:497-536; Same. Separate 757

- Seed survey for spring of 1917. *Coop Manager & F* 6:45-6 Ja '17
- Seed-testing notes. *E. B. Levy. il J Ag New Zealand* 16:369-70, 17:95-7, 165-8 Je, Ag-S '18
- Seeds. *Wallaces' F* 42:208 F 2 '17
- Seeds and plants imported into United States, 1913. *Int R Sci & Prac Ag* 7,no 4:523-5 Ap '16
- Seeds and their identification. *E. B. Levy. il J Ag New Zealand* 12:295-302 Ap '16
- Selecting seeds for planting. *B. L. Moss. Prog F* 31:1049 S 2 '16
- Soaking seeds before planting. *A. E. Wilkinson. Market Growers J* 22:170 Mr 1 '18
- Some effects of salt-treated soils on absorption by seeds. *W. F. Gericke. bibliog Soil Sci* 3:271-8 Mr '17
- Studying plants in winter. *R. W. Shufeldt. il Am For* 22:731-6 D '16
- Temperature and life duration of seeds. *J. F. Groves. bibliog Bot Gaz* 63:169-89 Mr '17
- This year's seed scarcity. *J. E. Pickett. il Country Gent* 83:5-+ F 23 '18
- Value of pedigreed seed. *il Ag Gaz of Canada* 5:162-6 F '18
- Vitality of seeds passed by cattle. *Int R Sci & Prac Ag* 7,no 2:206 F '16
- When are seeds too old? *Fruit-Grower* 27:144 F 15 '16
- Where good seed of recommended varieties may be obtained in North Carolina. *R. W. Freeman. N C Ag Ext C* 63 6p '18

See also Cotton seed; Germination; Seed adulteration and inspection; Seed disinfection; Seed introduction; Seed laboratories; Seed production; Seed sampling; Seed testing; Seed trade; Seeding machinery; also subhead Seeds under names of plants, e.g., Apples—Seed, Beets—Seed, Celery—Seed, Clover—Seed, Clover, Sweet—Seed, Clover, White—Seed, Corn—Seed, Flax—Seed, Forage plants—Seeds, Grain—Seed, Grasses—Seed, Potatoes—Seed, Radishes—Seed, Root crops—Seed, Vegetables—Seed; also Montana state grain laboratory; North Dakota seed laboratory

## Analysis

- Agricultural or field seeds. *G. T. French. Va Ag Dept B* 120:7-10 Ag '17
- Agricultural seed. *G. P. Burns. Vt Ag Exp B* 192:1-40 '16; Same. (*In Vt Ag Exp Report*, 1915-1916) '16
- Agricultural seed; Concerning the germination of seed. *G. P. Burns and others. il Vt Ag Exp B* 205:1-48 '17
- Agricultural seed inspected in 1915. *C. P. Smith. Md Ag Exp B* 203:179-230 '17; Same. *Md Ag Exp Rep* 1916-1917 '17
- Agricultural seed inspected in 1916. *C. P. Smith. Md Ag Exp B* 210:19-50 '18
- Agricultural seeds; discussion of rules and methods of testing. *G. T. French. Va Ag Dept B* 116:3-6 Ap '17
- Analyses of agricultural seeds. *Va Ag Dept B* 116:47-63; 117:28-30; 118:24-32; 119:25-32; 122:31; 123:27-32; 124:24-31; 125:24-9; 127:24-9; 128:25-7; 129:20-5; 130:21-7; 131:31; 132:30-2; 133:27-32; 134:25-32 Ap-Jl, O-D '17-Ja, Ap-N '18
- Analyses of agricultural seed for 1915; tabulation. *Va Ag Dept B* 108:29-32; 111:29-31 Ja, Ap '16
- Analysis of agricultural seed for 1916. *Va Ag Dept B* 113:36-46 Jl '16
- Annual reports of the board for 1915-16. *Del Ag Bd B* v 6 no 2 32p '16
- Clover and grass seed inspected in 1914. *C. P. Smith. Md Ag Exp B* 197:1-53 '16; Same. *Md Ag Exp Rep* 1916-1917 '17
- Commercial agricultural seeds, 1916. *C. D. Woods. Maine Ag Exp Offic Inspec* 81:1-28 '17; Same. *Maine Ag Exp Rep* 1917:1-28
- Commercial agricultural seeds, 1917; insecticides and fungicides, 1916 and 1917. *C. D. Woods. Maine Ag Exp Offic Inspec* 86:1-32 '18
- Composition of grain sorghum kernels. *J. A. Le Clerc and L. H. Bailey. bibliog Am Soc Agron J* 9:1-16 Ja '17; Summary. *Int R Sci & Prac Ag* 9,no 2:156-8 F '18
- Importance of seed analysis. *J Ag (Quebec)* 22:xxv O '18



**Seeds—Analysis—Continued**

- Inspection of agricultural seeds; with article 15 of the agricultural law. M. T. Munn. N Y State Ag Exp B 416:56-72 '16
- Official seed testing station at the food production department of the board; first annual report. J Bd Ag 25:641-68 S '18
- Paper packet seed investigation. E. D. Eddy. Ag Gaz of Canada 3:604-6 J1 '16
- Paper packet seeds. J: R. Dymond. Assn Office Seed Analysts Pro 1916-1917:30-5 '17
- President's address before 10th annual meeting. A. L. Stone. Assn Office Seed Analysts Pro 1916-1917:58-63 '17
- Report of the department of seed analysis. J: P. Helyar. N J Ag Exp Rep 1916:237-48 '17
- Report on an inquiry into the quality of farm seeds—1912-1914. R. H. Biffen. J Bd Ag 22: 1041-54 F '16
- Report on seeds purchased in central and south Wales; seasons 1915-16. R. G. Stapledon. J Bd Ag 23:832-50 D '16
- Results of seed inspection 1915-1916. J: P. Helyar. N J Ag Exp B 302:1-23 '16
- Results of seed inspection, 1917. J: P. Helyar. N J Ag Exp B 322:1-36 '18
- Results of seed tests for 1916. F. W. Taylor and F. S. Prince. N H Ag Exp B 180:1-17 '16; Same. N H Ag Dept Report v 34 '16
- Results of seed tests for 1917. F. W. Taylor and F. S. Prince. bibliog N H Ag Exp B 186:1-19 '17
- Seed report. J. W. Kellogg. Pa Ag Dept B 293:1-25 '17
- Seed testing, and the need for destroying weeds. J Bd Ag 22:1055-62 F '16
- Seed-testing notes. E. B. Levy. il J Ag New Zealand 17:42-4 J1 '18
- Seed tests made at the station during 1914 (B. 394). M. T. Munn. N Y State Ag Exp Rep 1915:699-725 '16
- Seed tests made at the station during 1916-1917. M. T. Munn. N Y State Ag Exp B 446:1-53 '18
- Sowing weeds with impure seeds. F. J. Pipal. il Purdue Ag 11:30-1 F '17
- Studies in tolerance for purity variations. C. P. Smith. Assn Office Seed Analysts Pro 1916-1917:18-21 '17
- 3d annual report of the State grain laboratory of Montana. il Mont Ag Exp B 113:79-100 '16
- 3d annual seed laboratory test, 1915-1916. W. L. Oswald. il Minn Ag Exp B 165:1-12 '17
- Weed seeds and impurities in imported seed. E. Breakwell. Ag Gaz of New South Wales 28:405-8 Je '17
- Weed seeds and impurities in imported seeds. E. Breakwell. Ag Gaz of New South Wales 29:633-8 S '18

**Distribution**

- Distribution of seed to settlers in the western provinces. Ag Gaz of Canada 5:1037-8 N '18
- Registered seed distribution. Ag Gaz of Canada 3:58-9 Ja '16

**Judging**

- Judging at seed fairs. C. A. Zavitz. il Ag Gaz of Canada 5:167-71 F '18

**Oil content**

- Oil content of seeds as affected by the nutrition of the plant. W. W. Garner and others. bibliog J Ag Research 3:227-49 D '14

**Prices**

- Average difference between the price at which stocks were sold for seed and the price at which they were sold for food, feed, or manufacturing purposes, as reported in the seed survey of July 1, 1918. U S Seed Rep 2:8 O '18
- Clover seed prices; monthly average for a five year period, 1913-17. U S Seed Rep 2:6-7 S '18
- Retail prices on vegetable seeds. U S Seed Rep 1:4 F '18
- Seed prices. C: B. Wing. Nat Stock & F 40: 958 D 23 '16
- Timothy, clover and alfalfa seed prices. U S Seed Rep 2:7 O '18

- Wholesale and retail selling prices of field seeds. U S Seed Rep 1:8 Ap '18

**Sampling**

See Seed sampling

**Standards**

- Effort at seed standardization and seed certification. H. L. Bolley. Assn Office Seed Analysts Pro 1916-1917:37-42 '17

**Testing**

See Seed testing

**Transportation**

- Transportation of seed. U S Seed Rep 2:8 N '18; Same. Coop Manager & F 8:69 D '18

**Seeds, Hard**

- Agricultural value of hard seeds. Va Ag Dept B 121:17-18 S '17
- Agricultural value of impermeable seeds. G. T. Harrington. bibliog il J Ag Research 6:761-96 Ag 14 '16; Abstract. Int R Sci & Prac Ag 7,no 11:1605-8 N '16
- Ames scarifier. W. E. Bowers. Country Gent 81:841 Ap 15 '16
- Germinating refractory seeds. Country Gent 81:936 Ap 29 '16
- Germination of hard seeds. Va Ag Dept B 113:46-7 J1 '16
- Germination of hard seeds. H. H. Love and C. E. Leighty. Am Flor 46:644 Ap 8 '16; Same. Am Flor 49:1294 D 29 '17
- Hard seed. Gard Chron (Lond) 60:244 N 18 '16
- Hastening the germination of Bermuda grass seed by the sulfuric acid treatment. W. E. Bryan. il Am Soc Agron J 10:279-81 O '18
- How to boil bur clover seed to hasten germination. A. D. McNair. Prog F 32:821 J1 28 '17
- How to hull and scarify clover, alfalfa and other legume seeds. Coop Manager & F 7: 91 J1 '18
- Practical treatment for hard seed. W. E. Bowers. il Hoard's D 53:516 Ap 13 '17

**Selaginella**

- \* Allies of selaginella rupestris in the southeastern United States. G. P. Van Eseltine. (U.S. Nat. herbarium, Contributions. v. 20, pt. 5) 159-72p il '18 Smithsonian inst., Washington, D.C.

- Selecting a neighbor. R. D. Whitefield. Country Life 31:60-3 Ap '17

**Selection, Natural.** See Natural selection

**Selective draft law**

- Deferred classification for chemists. Am Fert 48:34-5 Mr 2 '18
- Department of agriculture names agriculture advisers for district draft boards. Weekly N L 6:1-4 O 9 '18
- Draft bill. Wallaces' F 43:1160 Ag 16 '18
- Draft working hardship on farmers. E. Davenport. O Judd Farmer 64:3 Ap 20 '18
- Enlarge the draft. Wallaces' F 43:873 My 31 '18
- Farm labor and the draft. Breeder's Gaz 72: 604 O 11 '17
- Farmers and the draft. Swine World 6:36 O '18
- More agricultural advisors named to tell draft boards of farming needs. Weekly N L 6:6 O 16 '18
- Secretary Houston defends deferred classification of Department employees. Weekly N L 5:1-4 Je 19 '18
- Skilled farm labor to be in deferred draft classes. Weekly N L 6:1 S 18 '18; Excerpts. O Judd Farmer 65:229 S 21 '18; Excerpts. Prog F 33:1031 S 21 '18

**Registration**

- Drafting our national army. maps Rural Manhood 9:90-2 Mr '18

**Self-feeders**

- Automatic feeder. R. T. Archer. plans J Dept Ag Victoria 15:763-4 D '17
- Feeding economies; pictures. System on the Farm 2:129 Ap '18
- See also Poultry self-feeders; Swine self-feeders

- Selfishness** of Emily Doyle; story. H. Richmond. Nat Stock & F 40:975 D 23 '16
- Selkirk, Alexander**, 1676-1821
- Crusoe's island: Juan Fernandez. J. Hutchinson. il map Gard Chron (Lond) 61:199-200, 209 My 19-26 '17
- Selkirk mountains**
- Vegetation of the Selkirks. C. H. Shaw. map Bot Gaz 61:477-94 Je '16
- Separators, Cream.** See Cream separators
- Sepsidae**
- Dipterous families sepsidae and piophilidae. A. L. Melander and A. Spuler. il Wash Ag Exp B 143:1-97 '17
- Septic tanks**
- Farm sewage disposal. Wallaces' F 41:1069 Ag 11 '16
- Farm sewage disposal. M. P. Shierling. Purdue Ag 12:355 Mr '18
- Health insurance against house sewage. H. C. Campbell. il Hoard's D 51:279 Mr 10 '16
- Home-made septic tank. B. W. Yale. Prog F 32:1064 O 13 '17
- Sanitary engineering. H. C. Campbell. il Farm Eng 3:204 Mr '16
- Septic and Imhoff tanks. M. C. Welborn. Texas Univ (Austin) B 1733:32-8 Je 10 '17
- Septic sewage disposal systems for summer cottages. H. P. Boynton. Domestic Eng (407 S. Dearborn st, Chicago 10c) 83:415-17 Je 15 '18
- Septic tank. Farm Eng 5:18 Mr '17
- Septic tank. L. C. Hart and G. C. Jones. il Ga Ag Coll (EXT) C 41 7p '17
- Septic tank. J. A. Starrak. J Ag (Quebec) 21:103 Ja '18
- Septic tank for the country home. S. K. Eastwood. Gard M 25:36 F '17
- Septic tank means better health. Power F 25:15 S '16
- Septic tank method. Prac F 113:337 O 1 '17
- Septic tanks and sewage tile systems. R. F. MacDowell. Ohio F 138:166+ Ag 26 '16
- Septic tanks in relation to farm sewage disposal. R. W. Trullinger. Am Soc Ag Eng Trans 11:67-78 '18
- Septic tanks of sewer pipe. H. P. Boynton. Ohio F 142:82 Jl 27 '18
- Sewage disposal for village and rural homes. C. S. Nichols. il Ia Ag Coll B v 15:1-29 Ag 10 '16
- Sewage disposal on the farm. G. M. Warren. U S Ag Yearbook 1916:363-70; Same. Separate 712:17-24
- Siphon for septic tanks. B. Jelinek. Country Gent 82:783 Ap 21 '17
- Water supplies and sewage disposal for suburban and farm premises. P. H. Bryce. Ag Gaz of Canada 3:651-3 Jl '16
- Septic tanks, Concrete**
- Concrete septic tanks. 8p il '16 Portland cement assn., Chicago
- Making concrete septic tanks. plans Prog F 31:1146+ S 30 '16
- Septicemia, Hemorrhagic.** See Hemorrhagic septicemia
- Septoria**
- Dissemination of septoria lycopersici Speg. by insects and pickers. W. H. Martin. bibliog Phyt 8:365-72 Jl '18
- Leaf spot of celery. il J Bd Ag 24:68-70 Ap '17
- New leaf-spot disease of polygonum persicaria. P. J. O'Gara. il Mycol 9:248 Jl '17
- Septoria injurious to celery in the neighbourhood of Petrograd. G. Dorogin. Int R Sci & Prac Ag 7:no 7:1041-2 Jl '16
- Septoria leaf spot disease of celery. G. H. Coons and E. Levin. il Mich Ag Exp Spec B 77:1-8 '16; Same. Mich Ag Bd Rep 1916:372-8; Same cond. Am Flor 46:1218 Je 24 '16; Same cond. Market Growers J 19:207 N 1 '16
- Some septorias of wheat. W. B. Grove. Gard Chron (Lond) 60:194, 210 O 21-28 '16
- Studies in the life histories of some species of septoria occurring on ribes. R. E. Stone. il Phyt 6:419-27 D '16
- Sequoia**
- First record of a sequoia. D. Bruce. Am For 22:489 Ag '16
- Fossil wood of sequoia from the tertiary of Japan. Kono Yasui. il Ann Bot 31:101-6 Ja '17
- See also Redwood
- Sequoia national park**
- Famous Moro rock. M. Daniels. il Am For 23:29 Ja '17
- \* General information regarding Sequoia and General Grant national parks. 45p bibliog maps '18 U.S. Nat. park service, Washington, D.C.
- Perhaps our greatest national park. R. S. Yard. il Am For 24:145-50 Mr '18
- Sequoia national park. M. Daniels. il Am For 22:12-21 Ja '16
- Sequoia pitch moths**
- Sequoia pitch moth, a menace to pine in western Montana. J. Brunner. il U S Ag B 111:1-11 '14
- Serenoa serrulata.** See Saw palmetto
- Sericultural trade associations, Central Institute of**
- New central organisation of the sericultural trade association of Japan. T. Ono. Int R Ag Econ 70:9-16 O '16
- Serpentine leaf miners**
- Serpentine leaf-miner. F. M. Webster and T. H. Parks. bibliog il maps J Ag Research 1:59-88 O '13
- Serpents**
- Our snakes a national asset. G. T. K. Norton. il Am For 23:555-8 S '17
- See also Venom, Physiological effects of
- Serum therapy**
- Development of ideas regarding the preparation and use of anti-rinderpest serum. A. R. Ward. bibliog il Am Vet M Assn J 49:456-70 Jl '16
- Serum treatment of canine distemper. A. Slawson. Am Vet M Assn J 53:455-65 Jl '18
- See also Anthrax—Preventive inoculation; Anthrax, Symptomatic—Preventive inoculation; Diphtheria antitoxin; Hog cholera—Preventive inoculation; Tetanus antitoxin; Vaccination; Veterinary biologic products
- Serums**
- Effects of snake venom on domestic animals and the preparation of anti-venomous serum. D. T. Mitchell. Int R Sci & Prac Ag 7, no 10:1463-5 O '16
- Note on the preparation and use of agglutinine from beans. M. Dorset and R. R. Henley. Am Vet M Assn J 50:699-702 F '17
- Polyvalent serum. Am Vet M Assn J 51:599-601 Ag '17
- Transformation of pseudoglobulin into euglobulin. W. N. Berg. J Ag Research 8:449-56 Mr 19 '17
- See also Anti-glanders serum
- Servants**
- For better domestic service. J Home Econ 10:424-6 S '18
- Helping the hired girl. N. K. Jones. Country Gent 81:1987 N 11 '16
- Town help for farm wives. Ohio F 141:474 Mr 30 '18
- Servia.** See subhead Servia under Agricultural cooperative credit associations, Agricultural credit, Forests and forestry, Land tenure
- Service flag;** story. A. Blake. See weekly numbers of Ohio farmer beginning Nov. 9, 1918.
- Setaria**
- Taxonomic study of setaria italica and its immediate allies. F. T. Hubbard. Am J Bot 2:169-98 Ap '15
- Setters**
- Setters—English, Irish, and Scotch. W. A. Dyer. il Country Life 32:41-4 Je; 43-5 Jl '17
- Seventeen-year locusts.** See Cicadas
- Sevier national forest**
- Scenic marvels of Sevier forest. il Am For 23:11-13 Ja '17
- Sewage as fertilizer**
- Fertilizing value of activated sludge. G. G. Nasmith and G. P. McKay. il J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:339-44 My '18



**Sewage as fertilizer —Continued**

- Manurial value of sewage sludges. G. Mumford. J Bd Ag 23:129-35 My '16
- Question of fertilizer; use of sewage. F. McFadden. Scientific Am (233 Broadway, N.Y. 10c) 116:575 Je 9 '17
- Recovery of grease and fertilizers from sewage; Massachusetts joint investigating board reports against applying Miles acid process at Boston. Eng News-Record (10th av at 36th st, N.Y. 15c) 80:319-22 F 14 '18
- Saving fertility; manure and sewage preservation in the different parts of the world. L. Dykstra. Farm Eng 6:5 Ja '18
- Utilisation of sewage-water in Italy. A. Aita. Int R Sci & Prac Ag 8,no 1:30-2 Ja '17
- Sewage disposal**
- Disposal of sewage in rural school districts. C. G. Gillespie and M. S. McNaught. il plans Cal State Bd of Educ (Sacramento) B 17 16p '16
- Experiments in sewage disposal. L. J. Smith. plan Am Soc Ag Eng Trans 11:171-4 '18
- Farm sanitation. C. L. McArthur. il Ark Ag Exp B 127:1-24 '16
- Farm water supply and sewage disposal. W. H. Day and others. il plans Ontario Ag Dept B 267:1-80 '18
- Getting sewage out of house. C. E. Williams. O Judd Farmer 61:12 S 2 '16
- Household sewage disposal; our experience pool. Prac F 113:337 O 1 '17
- Hygienic, scientific and economic disposal of human excreta. F. Garrigou. Int R Sci & Prac Ag 7,no 7:947-8 Jl '16
- Irrigating with sewage at Tucson, Arizona. W. C. Lefebvre. Municipal J (243 W. 39th st, N.Y. 10c) 44:395 My 11 '18
- Miles process for sewage disposal. Am Fert 48:36-7 Je 8 '18
- Pasadena city sewage disposal farm. W. R. Marshall. il Domestic Eng (407 S. Dearborn st, Chicago 10c) 83:495-7 Je 29 '18
- Refuse disposal in small towns. G. W. Simons, Jr. Am J Public Health (126 Massachusetts av., Boston 30c) 7:299-301 Mr '17
- Safe disposal of human excreta at unsewered homes. L. L. Lumsden and others. (B. 68) 28p il '17 U.S. Public health service, Washington, D.C.
- Septic sewage disposal systems for summer cottages. H. P. Boynton. Domestic Eng (407 S. Dearborn st, Chicago 10c) 83:415-17 Je 15 '18
- Septic tanks and sewage tile systems. R. F. MacDowell. Ohio F 138:166+ Ag 26 '16
- Septic tanks in relation to farm sewage disposal. R. W. Trullinger. Am Soc Ag Eng Trans 11:67-78 '18
- Sewage disposal for country homes. F. F. Frazier. plans Kan Ag Ext B 6:1-30 '16
- Sewage disposal for country homes. O. L. Waller and M. K. Snyder. Wash Ag Ext Pub Ser 1, no 5:1-16 '16 (rev. ed.)
- Sewage disposal for country homes. F. M. White and E. G. Hastings. il plan Wis Ag Ext C 60:1-15 '16
- Sewage disposal for school buildings in Ohio. R. S. Durrell and D. E. Adams. plans Ohio Pub Health Journal (Ohio State Bd of Health, Columbus) 7:326-38 Ag '16
- Sewage disposal for the farm home. plan Hoard's D 52:425 O 20 '16
- Sewage disposal for village and rural homes. C. S. Nichols. il Ia Ag Coll B v 15:1-29 Ag 10 '16
- Sewage disposal in rural districts. Ag Gaz of Canada 3:840-1 S '16
- Sewage disposal in unsewered districts. 15p '16 Minn. State bd. of health, St Paul
- Sewage disposal on dairy farms. Hoard's D 55:1019 Jl 12 '18; Same. Kimball's D F 16: 601 Ag 1 '18
- Sewage disposal on the farm. Power F 25: 30 N; 33 D '16
- Sewage disposal on the farm. G: M. Warren. U S Ag Yearbook 1916:347-73; Same. Separate 712
- Sewage treatment and disposal. B. J. Ashley. Am Soc Ag Eng Trans 9:30-3 '16
- Trapping grease. H. A. Roberts. Country Gent 82:1800 N 17 '17

- Typhoid fever; its causation and prevention. L. L. Lumsden. (B. 69) 22p il '17 U.S. Public health service, Washington, D.C.
- Water supply and sewage disposal for country houses. G: L. Robinson. Am Architect (243 W. 39th st., N.Y. 25c) 111:267-70 Ap 25 '17
- Water supply, plumbing, and sewage disposal for country homes. R. W. Trullinger. U S Ag B 57:1-46 '14
- Water-supply, sewerage and heating for Florida home. W. G. Kirchoffer. plan Eng News-Record (10th av at 36th st, N.Y. 15c) 81:443-4 S 5 '18

See also Cesspools; Septic tanks

**Sewing**

- Cut, pin and baste your pattern with care. Mrs W. N. Hutt. Prog F 31:1370 N 25 '16
- Demonstration in practical sewing. R. Buckman. Ky Ag Ext C 42:1-16 '16
- Directions for fundamental stitches in hand sewing. R. Buckman. 8p n.d. Dept. of home economics, Ky. state univ., Lexington
- For the home seamstress. Ohio F 139:204 F 10 '17
- Girl who must earn her own living: sewing. Prog F 31:787 Je 17 '16
- Hand sewing. J. Gleason. Cornell Rural School Leaflet v 11,no 1:215-52 '17
- Handbook in sewing for girls. A. A. Hunt. il Ariz Ag Ext C 18:1-22 '17
- Principles of sewing. M. E. Robinson. il plans Mo Ag Ext C 41:1-28 '17
- Sewing for girls. E. B. Kelley and others. il Wis Ag Ext C 65:1-36 '16
- Spring sewing servants. A. G. Vestal. Power F 26:32 My '17
- Stitches, seams, and sewing processes. H. Cowgill. il Ore Ag Ext B 197:1-16 '17
- See also Buttonholes; Dressmaking; Embroidery; Knitting; Mending; Needlework
- Study and teaching**
- Courses in sewing for elementary and high school and their correlation with drawing. M. H. French. J Home Econ 9:61-4 F '17
- New departure in the teaching of sewing. E. I. Avery. J Home Econ 8:75-7 F '16
- Red cross and the high school sewing course. G. Gray. J Home Econ 10:414-16 S '18
- Sewing for rural schools. C. D. Pratt. Hampton Leaflets 7,no 7:1-15 '16
- Sewing project. Minn Ag Ext Spec B 18:1-8 '18
- Sewing clubs**
- Girls' sewing club. C. E. Carpenter and M. E. Sheridan. il Colo Ag Ext B 132:1-32 '18
- Nebraska girls' sewing club; course 1, Lessons 1-12. M. E. Brown. Neb Ag Ext '16
- Subjects follow: Some of the fundamental stitches; Sewing apron; Hemstitched towel; Corset cover; Repairing; Petticoat; Spoon case (Christmas problem); French hem on napkin
- Second year sewing bulletin: Idaho sewing clubs. diags Idaho Ag Ext B 17:1-16 '16
- Sewing bulletin for club members. M. R. McPheeters and D. Sexauer. il Okla Ag Ext C 69:1-7 '18
- Sewing clubs; instructions for members and leaders. diags Kansas Ag Ext B 8:1-34 '16
- Sewing for girls' club work. (Doc. 83) 16p il '18 U.S. States relations service, Washington, D.C.
- Sewing machines**
- Clean your machine yourself and make it work for you. Prog F 33:798 Jl 13 '18
- Sex**
- Change in sex-ratio. H: Pittier. J Heredity 7:406-11 S '16
- Cause and determination**
- Can sex be controlled? J Ag (Quebec) 21: xiii; 22:102 Je, S '18
- Control of sex. A. Morosini. Int R Sci & Prac Ag 7,no 3:398 Mr '16
- Heredity and sex. J Heredity 7:9-11 Ja '16
- Sex control. H. E. Sharp. Kimball's D F 14: 224 Ap 1 '16
- Sex control in poultry breeding. H. E. Sharp. Am P J 47:612-14, 758-60, 848-50, 915-17, 987-90, 1190-1+ Ap-Ag, N '16

**Sex**—Cause and determination—*Continued*

- Sex in livestock breeding. E. N. Wentworth. bibliog J Heredity 7:29-31 Ja '16  
 Success in controlling sex. J Heredity 7:158-64 Ap '16

**Sex in plants.** See Plants, Sex in

**Sex instruction**

- Relation of home economics education to social hygiene. J. H. Foster. J Home Econ 9: 405-11 S '17  
 Sex education in village and country. R. P. Anderson. Rural Manhood 9:96-8 Mr '18

**Sexual ethics**

- Eugenic aspect of sexual immorality. R. H. Johnson. J Heredity 8:121-2 Mr '17

**Shade trees.** See Trees

**Shakespeare, William, 1564-1616**

- Your Shakspeare celebration. K. Lord. il Country Gent 81:951 Ap 29 '16

**Shakespeare gardens**

- Shakespeare garden plan. J. Jensen. il Gard M 23:163 Ap '16  
 Shakespearean garden. il Gard Chron Am 20: 130-1 Mr '16

**Shale**

- Drainage of irrigated shale land. D. G. Miller and L. T. Jessup. il U S Ag B 502:1-40 '17; Summary. Irr Age 32:119 Je '17

**Shallu.** See Sorghum

**Shamrock**

- Shamrock versus white clover. Am Bee J 58:13 Ja '18

**Sharks**

- Sharks as food; with thirty recipes. L. Radcliffe. (Econ. C. 35) 8p '18 U.S. Bur. of fisheries. Washington, D. C.

**Sharp-headed grain jassid.** See Leaf hoppers

- Sheboygan county cheese producers' federation**  
 When cheese acted queer. J. H. Collins. il Country Gent 81:1609 S 2 '16

**Sheep**

- Acute scarcity of ewes. Breeder's Gaz 70:198 Ag 10 '16  
 Address before Idaho wool growers' association. H. Sproat. Nat Wool Grower 7:13-14 Ag '17  
 Avoid winter sheep troubles. J. A. Raiser. il Ohio F 139:40 Ja 13 '17  
 Beginning with sheep. Rural N Y 75:694 Ap 29 '16  
 Best sheep. W. W. Reynolds. Nat Stock & F 41:541 S 1 '17  
 Boosting the sheep business. C. H. Shurte. Nat Wool Grower 7:23-4 S '17  
 Breeding and feeding sheep. H. N. Gibson. Breeder's Gaz 72:1144 D 20 '17  
 Brief talks about sheep. W. W. Reynolds. Rural N Y 76:1229 O 27 '17  
 \* Bunch of sheep on every farm. 92p bibliog il 15c '18 Int. harvester co., Harvester bldg., Chicago  
 Care and management of the flock. (In Appendix to report, Live stock branch, 1917, p. 27-30) '17 Ontario ag. dept., Toronto  
 Care of sheep on the farm. M. Wagers. Am Sheep B & W 38:379 Je '18  
 Care of the flock. L. Ogilvy. Breeder's Gaz 73:16 Ja 3 '18  
 Castration and docking. (In Appendix to report, Live stock branch, 1917, p.30-3) '17 Ontario ag. dept., Toronto  
 Catch the leakage for profits. H. Hackedorn. il Am Sheep B & W 38:233-5 Ap '18  
 Cattleman raising sheep. Nat Wool Grower 7: 51 O '17  
 Christmas suggestion for sheepmen—some thick woolen socks! C; E. Snyder. Nat Stock & F 42:858 D 21 '18  
 Combining dairy and sheep farming. R. H. Harding. J Ag (Quebec) 20:vi Ja '17  
 Conditions right for return of sheep. W. H. Jenkins. Prac F 114:81 F 15 '18  
 Conference on increasing domestic wool supply. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:22-4 D 2 '16  
 Co-operation in farm sheep husbandry. G; H. Dacy. il Nat Wool Grower 7:13-14 N '17  
 Culling the flock. E. P. Snyder. Ohio F 141: 770 Je 15 '18

- Cut sheep 200,000 in forest reserves. W; C. Barnes. Am Sheep B & W 37:178 Mr '17  
 Details of the "keep sheep" movement. A. C. Bigelow. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:623-4 Ja 13 '17  
 Developing the farm flock. J. F. Walker. il Am Sheep B & W 38:313-14 My '18  
 Directions for caring for sheep in order to produce a good quality and condition of wool. (In Appendix to report, Live stock branch, 1917, p.40-2) '17 Ontario ag. dept., Toronto  
 Dock the lambs. Prac F 112:255 Je 15 '16  
 Don't sell your breeding stock. F. R. Marshall. il Am Sheep B & W 37:329-30 Je '17  
 Drawbacks with sheep. W. W. Reynolds. il Rural N Y 75:1138 Ag 26 '16  
 Early fall is a good time to start a flock of sheep. Weekly N L 6:1 S 25 '18; Same. Coop Manager & F 8:74 N '18  
 Eat more lamb and fix wool prices. F. J. Hagenbarth. Am Sheep B & W 38:79-80 F '18  
 Efficiency in sheep husbandry. D. A. Spencer. il Wallaces' F 43:435 Mr 8 '18; Same. Am Sheep B & W 38:318 My '18  
 Equipment for farm sheep raising. V. O. McWhorter. il plans Farmers' B 810:1-27 '17  
 Establishing and maintaining a farm flock of sheep. R. M. Wood. il Breeder's Gaz 70: 307-8 Ag 31 '16  
 Experience with sheep. S. Baxter. il Wallaces' F 42:339 F 23 '17  
 Experience with sheep. W. H. Crozier. Breeder's Gaz 69:962 My 4 '16  
 Experience with sheep. S; Heymann. Rural N Y 75:214 F 5 '16  
 Factors in successful sheep production. E. B. Wilson. Wallaces' F 43:1783 D 6 '18  
 Fall work with sheep. W. C. McKillican. J Ag (Quebec) 22:43 S '18  
 Farm equipment that helps in increasing sheep profits. S. Peck. il System on the Farm 1:293-4 O '17  
 Farm flock. il Purdue Ag 12:282-3 F '18  
 Farm flock. F. Crissey. il Country Gent 83:12-13-4 Mr 16 '18  
 Farm flock management. W. C. Coffey. il Nat Wool Grower 7:15-16 D '17  
 Farm sheep raising for beginners. F. R. Marshall and R. B. Millin. il Farmers' B 840:1-24 '17  
 Farmers should raise more sheep. W. A. Graham. Prac F 112:304 Ag 1 '16  
 Farmers will make money with sheep permanent on farm program. W. C. Coffey. il Banker-F 4:5 My '17  
 Favors use of lamb. F. M. Rothrock. Nat Wool Grower 7:24 Ag '17  
 Feeding and care of sheep. D. E. Willard. 33p il n.d. Northern Pacific ry., St Paul, Minn.  
 Feeding sheep at a profit. il Wallaces' F 42: 747 My 4 '17  
 Fencing and pasture for sheep. E; Van Alstyne. il N Y Ag Dept B 96:25-31 Je '17  
 First problems of beginners with sheep. W. C. Coffey. Am Sheep B & W 38:493-4 Ag '18  
 Flock at lambing time. C; F. Crothers. il Ohio F 137:379 Mr 11 '16  
 Flock of sheep on every farm. C; W. Turner. il Hoard's D 55:704 My 10 '18  
 Flock of sheep on the farm. R. F. Miller. Cal Ag Exp C 184:1-7 '17  
 Flocks at the University of Illinois and Purdue university. il Am Sheep B & W 37:358 Je '17  
 Founding a flock. H. A. McColm. il Purdue Ag 11:25-6 Ap '17  
 Future for the sheep herds. C. Harper. il Farm Eng 5:5 O '17  
 Future of wool raising. F. S. King. Am Sheep B & W 37:543 S '17  
 Get every farmer interested. B. F. Harris. Am Sheep B & W 37:753-4 D '17  
 Getting a start in sheep. J. H. McKenney. il Prac F 113:397 N 15 '17  
 Golden fleece. A. H. Harris. il Sunset (San Francisco 15c) 39:33-5 N '17  
 Good ram three-fourths the flock. A. L. French. Prog F 32:1206 N 17 '17  
 Government should give more aid to lamb clubs. Am Sheep B & W 36:93 F '16  
 Grass as food and clothing. C. H. Shattuck. Nat Wool Grower 7:49 My '17



Sheep—Continued

- Grower's views on the wool situation. W. W. Reynolds. *Breeder's Gaz* 74:188 Ag 8 '18
- Growing sheep on our farm. H. H. Shepard. *il Country Gent* 83:22 D 14 '18
- Handling sheep under new methods. *Am Sheep B & W* 36:199 Ap '16
- Have you any wool? F. Crissey. *il Country Gent* 83:3-4 Mr 2 '18
- Hints on sheep raising. H. L. Wardwell. *il Field II* 27:957 D '17
- His first sheep. E. P. Snyder. *Nat Stock & F* 42:859 D 21 '18
- Hold tight to the sheep and hold tight together. W. W. Reynolds. *Rural N Y* 77:882 JI 13 '18
- Horse and sheep experience letters. *Prog F* 32:1203 N 17 '17
- How sheep eradicate Rocky Mountain fever. L. Paine. *Am Sheep B & W* 36:672 N '16
- How the sheep campaign was handled. W. R. Reek. *Ag Gaz of Canada* 5:42-3 Ja '18
- How to care for sheep. W. W. Reynolds. *Rural N Y* 76:1027 S 1 '17
- How to get the sheep habit. W. W. Reynolds. *il Rural N Y* 77:183 F 9 '18
- How to produce more and better wool. A. A. MacMillan. *il Am Sheep B & W* 38:11 Ja '18; Same. *J Ag (Quebec)* 21:106 Ja '18
- How to produce sheep successfully. R. M. Murphy. *il Tenn Ag Ext Pub* 69:1-7 '18
- Income from 1000 sheep. *Nat Wool Grower* 8:41 Mr '18
- Increase of sheep. F. R. Marshall. *Nat Stock & F* 41:610 S 22 '17
- Joint sheep sale at Columbus. C. A. Tyler. *Am Sheep B & W* 37:391 JI '17
- Keep good ewes and ewe lambs on the farm. G. I. Christie. *Jersey B* 36:1276 Ag 15 '17
- Keep sheep, bankers, sound this slogan—this tells why. *il Banker-F* 3:4 JI '16
- Keeping sheep for profit. H. A. Hopper. *il Cornell Reading Course* 115:1-24 Ag '16
- Lake that is a sheep trail. W. C. Barnes. *il Breeder's Gaz* 73:157 Ja 24 '18
- Lamb was sure to go. W. W. Reynolds. *Breeder's Gaz* 71:389 F 22 '17
- Little visit with a bighorn. R. B. Jerrard. *Country Life* 29:37 F '16
- Maintaining high vitality in the flock. L. C. Reynolds. *Am Sheep B & W* 37:204 Ap '17
- Management of sheep on the farm. *U S Ag B* 20:1-50 '15
- Management of the farm flock. W. H. Tomhave. *Prac F* 112:349 S 15 '16
- Marketing lambs, grading wool, purchasing supplies, and dipping via co-operative route. *Am Sheep B & W* 36:162-3 Mr '16
- Meat product of sheep as affecting producer and consumer. W. H. Tomhave. *Prac F* 112:469 D 15 '16
- Money returns from sheep. W. W. Reynolds. *Rural N Y* 75:997 JI 22 '16
- More about advanced registry for fine wool sheep. R. Miller. *Nat Wool Grower* 8:32 Ap '18
- More about the granddaddies of your flock. R. F. Miller. *il Am Sheep B & W* 38:247 Ap '18
- More sheep! *Am Sheep B & W* 36:322 Je '16
- More sheep for the hills. E. R. Eastman. *Nat Stock & F* 41:141 Ap 28 '17
- More sheep mathematics. *Nat Stock & F* 41:1175 F 16 '18
- More sheep, more wool, more meat. C. S. Kates. *Banker-F* 4:14 Ja '17
- More sheep propaganda. J. E. Poole. *Nat Wool Grower* 7:44 N '17
- Mutton as it affects producer and consumer. W. H. Tomhave. *Am Sheep B & W* 36:732+ D '16
- Necessity for more sheep. W. W. Reynolds. *Ohio F* 138:570 D 9 '16
- Neglected sheep industry. W. W. Reynolds. *Rural N Y* 77:1129 O 5 '18
- New flock's foundation. B. O. Severson. *Nat Stock & F* 40:1028 Ja 6 '17
- New system of sheep farming. C. J. Wilkon. *il Field II* 27:269-70+ Ap '17
- N. America raises only one ounce of wool per acre. S. F. Snow. *Am Sheep B & W* 37:77 F '17
- Notable importation of stud sheep. W. W. Chapman. *il Am Sheep B & W* 38:271 Ap '18
- Object lesson in sheep husbandry. W. W. Hunter. *Nat Stock & F* 42:678 O 26 '18
- Old woman's profits from sheep. J. A. MacDonald. *Rural N Y* 75:1220 S 16 '16
- Pastures and corrals in range lambing. L. H. Douglas. *Nat Wool Grower* 7:26-7 Je '17
- Permanent farm flocks. H. Hackedorf. *Breeder's Gaz* 72:8 JI 5 '17
- Philadelphia wool and textile association makes plea for more sheep. *Am Sheep B & W* 36:165 Mr '16
- Plain talks about sheep. W. W. Reynolds. *Rural N Y* 76:765 Je 9 '17
- Points in sheep raising. G. W. Gause. *Wallaces' F* 41:464 Mr 17 '16
- Practical sheep points. E. L. Vincent. *Prac F* 114:238 JI 1 '18
- Prefers the mutton type. E. D. Burras. *Nat Stock & F* 41:487 Ag 18 '17
- Present and future wool supply. A. W. Elliott. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:132-3 D 9 '16
- Production of feeding lambs. T. W. McAllister. *Ohio F* 138:172 Ag 26 '16
- Profit in sheep. E. P. Snyder. *Ohio F* 138:518 N 25 '16
- Profit in spring lambs. F. D. Fuller. *Prog F* 32:884 Ag 18 '17
- Profit of the farm flock. F. R. Marshall. *Field II* 27:631 Ag '17
- Profitable ways to handle sheep. T. M. Beverly. *Am Sheep B & W* 38:20 Ja '18
- Profits in sheep. W. W. Reynolds. *Nat Stock & F* 42:430 Ag 3 '18
- Progress in sheep raising. *Am Fert* 48:36 Je 22 '18
- Pure bred sheep prosperity. F. W. Harding. *Nat Wool Grower* 8:17-18 Ap '18
- Putting the sheep back. J. C. Andrews. *il Nat Wool Grower* 7:17-18 F '17; Same cond. *Ag Digest* 1:385 Ap '17
- Raise sheep. *Fruit-Grower* 28:332 Ag 1 '17
- Raise some sheep. *Prog F* 33:72 Ja 19 '18
- Raising sheep with profit. E. L. Quaife. *il Ia Ag Ext B* 64:1-7 '18
- Rotate your pasture and avoid disaster. H. B. Arbuckle. *Am Sheep B & W* 36:402 JI '16
- Save every ewe and ewe lamb. *Am Sheep B & W* 37:327 Je '17
- Saving our sheep and wool. J. W. Hammond. *Ag Digest* 1:297 F '17
- Scotchman with sheep. *il Wallaces' F* 41:599 Ap 14 '16
- Selecting and breeding sheep. W. J. Darth. *Wallaces' F* 42:160 Ja 26 '17
- Shall we raise more sheep? S. W. McClure. *il Country Gent* 81:1016-17 My 13 '16
- Sheep. J. W. Wilson and B. L. Thompson. *il S D Ag Exp B* 177:766-78 '18
- Sheep and clover. J. A. Raiser. *Ohio F* 141:618 My 4 '18
- Sheep and goats. (*In Geography of the world's agriculture*, p. 135-41) maps '17 *U S Ag*
- Sheep and hen farm. E. I. Farrington. *il Country Gent* 83:35 My 4 '18
- Sheep and intensive farming. F. R. Marshall. *il U S Ag Yearbook* 1917:311-20
- Sheep and wool situation. H. B. Pier. *Neb Ag Bd B* 245:349-53 '18
- Sheep as effective land reclaimers. H. A. Crafts. *Prac F* 112:350 S 15 '16
- Sheep at farmers' institutes. W. W. Reynolds. *Ohio F* 142:428 N 2 '18
- Sheep at the opening of spring. E. L. Vincent. *Prac F* 114:167 Ap 15 '18
- Sheep benefit land and purse. E. W. Gage. *Prac F* 112:219 My 15 '16
- Sheep comes back. *il J Heredity* 8:387-93 S '17
- Sheep criticisms. W. S. Stevenson. *Nat Stock & F* 40:1274 F 24 '17
- Sheep farming: West and East. D. C. Smith. *Rural N Y* 77:1100 S 21 '18
- Sheep for cut over lands. F. R. Marshall. *Am Sheep B & W* 37:298 My '17
- Sheep for every farmer. B. F. Harris. *Banker-F* 5:4 D '17
- Sheep grower's experience. W. W. Reynolds. *Ohio F* 137:791 Je 10 '16
- Sheep hints for early summer. E. L. Vincent. *Prac F* 114:215 Je 1 '18

**Sheep—Continued**

Sheep history and prophecy. G. M. Wilbur. Nat Stock & F 40:966 D 23 '16

Sheep in the North country. J. E. Poole. il Nat Wool Grower 7:23-4 D '17

Sheep management. H. P. Miller. Ohio F 142: 458 N 9 '18

Sheep needed to win the war. Prac F 114:38 Ja 15 '18

Sheep notes for practical farmers. E. L. Vincent. Prac F 114:313 S 15 '18

Sheep notes; shearing troubles. W. W. Reynolds. Rural N Y 76:712 My 19 '17

Sheep on cut-over lands. T. Shaw. Breeder's Gaz 73:1199 Je 6 '18

Sheep on eastern farms. S. F. Snow. N Y Ag Dept B 94:10-14 Ap '17

Sheep on every farm. Mrs W. B. Doak. Breeder's Gaz 69:306 F 10 '16

Sheep on the farm. D. G. Whitaker. Country Gent 81:589 Mr 11 '16

Sheep on the farm; our experience pool. Prac F 114:31 Ja 15 '18

Sheep on the general farm. H. J. Stevens. Country Gent 81:509 Mr 4 '16

Sheep ornamental and useful. il Am For 24: 621-2 O '18

Sheep our food and clothing producers. Prac F 113:309 S 1 '17

Sheep raising in the East. Rural N Y 75:148 Ja 29 '16

Sheep raising steadily advancing with mutton kinds in lead. Weekly N L 5:9 Je 5 '18

Sheep, the money makers. C. LeBus. Am Sheep B & W 37:399 Jl '17

Sheep—their importance in the war. F. Kleinheinz. Am Sheep B & W 37:328 Je '17

Sheep vs. dairies. W. W. Reynolds. Rural N Y 75:868 Je 10 '16

Sheep vs. dairying. C. H. Sapp. Nat Stock & F 41:750 N 3 '17

Sheepmen who make money. W. L. Nelson. il Country Gent 82:421 Mr 3 '17

Sheepraising profitable. F. Kleinheinz. il Breeder's Gaz 69:869 Ap 20 '16

Sheep-yard equipment; shearing shed, drafting yards, and dip combined. J. W. Matthews. plans Ag Gaz of New South Wales 29:773-9 N '18

Shepherd's calendar. Am Sheep B & W 37: 469 Ag '17

Side line of lambs. J. K. Parr. Country Gent 81:633 Mr 18 '16

Small flock that pays. O Judd Farmer 61:24 Jl 29 '16

Small flock to stay. E. S. Bayard. Penn State F 10:201+ D '17

Some flock management hints. H. E. Allen. Purdue Ag 10:24-5+ F '16

Sorrow or joy via sheep. W. W. Reynolds. Nat Stock & F 40:1119 Ja 27 '17

Start with western ewes. E. Weld. O Judd Farmer 64:3 Ap 13 '18

Starting in sheep. C. E. Benson. Wallaces' F 42:997 Jl 6 '17

Story of a load of Shropshire wethers. T. Bradburne. Breeder's Gaz 69:178 Ja 27 '16

Successful lamb production. F. W. Harding. Nat Wool Grower 7:19-20 Jl '17

Successful sheep and lamb raising. R. S. Curtis and G. Evans. N C Ag Ext C 64 4p '18

Suggestions to beginners. R. L. Munce. Nat Stock & F 41:652 O 6 '17

Suggestions to beginners with sheep. W. C. Coffey. Breeder's Gaz 69:614 Mr 16 '16

Summer care of the flock. Am Sheep B & W 37:354 Je '17

Summer management of the farm flock. C. W. McDonald. il Penn State F 11:127-8 Ap '18

Summer precautions for flock comfort. E. J. Wilford. il Purdue Ag 12:560-1 Je '18

Ten fundamental lessons in successful sheep raising. W. C. Coffey and C. Harper. ill Ag Ext C 17:1-4 '18

Thirty-five years of coöperation. E. E. Miller. Country Gent 81:2043 N 25 '16

Timely sheep notes from the farm. E. L. Vincent. Prac F 114:283 Ag 15 '18

Value of cut-over lands for sheep. Am Sheep B & W 36:485-7 Ag '16

War meat and wool production. H. E. Allen. Purdue Ag 12:131 D '17

We have victory to win. F. Kleinheinz. Am Sheep B & W 38:175 Mr '18

What sheep raisers think. R. A. Hayne. Nat Stock & F 41:509 Ag 25 '17

Whatever you want to know; miniature sheep management. F. Kleinheinz. Am Sheep B & W 37:74-6 F '17

Where to get the sheep; redistribute ewes and lambs; have dog laws. C. A. Mann. il Banker-F 4:7 Jl '17

Why he is not a flockmaster. C. N. Tuttle. Breeder's Gaz 73:813 Ap 18 '18

Why keep sheep? W. W. Reynolds. Breeder's Gaz 73:655 Mr 28 '18

Why keep sheep on the farm? Am Sheep B & W 37:655; 38:22-3 N '17, Ja '18

Why of the more sheep movement. L. L. Heller. il Field il 27:181, 281+ Mr-Apr '17

Why sheep decreased. W. S. Stevenson. Nat Stock & F 40:1054 Ja 13 '17

Why sheep raising will be profitable for the general farmer. F. R. Marshall. Banker-F 4:4 O '17

Why the lamb can't grow up. G. F. Stratton. il Country Gent 82:1511-12 O 6 '17

Winter care of the sheep. Ohio F 141:42-3 Ja 12 '18

Winter lambs direct. R. Schaff. il Country Gent 81:1332 Jl 8 '16

Wintering sheep. H. J. Sellen. Am Sheep B & W 36:43 Ja '16

Winter's day with the sheep. W. W. Reynolds. Rural N Y 76:269 F 24 '17

With profitable markets for mutton and wool, farmers should keep sheep. A. C. Bigelow. il Banker-F 4:6 Mr '17

Wool and mutton from by-products. J. Deare. Nat Wool Grower 7:15 Jl '17

Wool and mutton necessary in profitable sheep raising. Prac F 112:303 Ag 1 '16

World famine in mutton and wool. F. H. Higgins. Ag Digest 2:584 Ag '17

Would not slaughter ewe lambs. R. Wood. Nat Wool Grower 7:20-1 Je '17; Same. Am Sheep B & W 37:409 Jl '17

Year with sixty ewes. il Wallaces' F 42:1583 N 23 '17

You need livestock on your farm. A. R. Gould. Am Sheep B & W 37:418-19 Jl '17

See also Lambs; Live stock; Milk, Ewes; Wool; also Karakul sheep; National sheep and wool bureau; also headings beginning Sheep

**Bibliography**

Reading list on sheep husbandry. G. A. Devenau. 2p mim '18 U.S. Food administration for Illinois, Urbana

**Branding**

English shepherd's guide. Breeder's Gaz 72: 983 N 29 '17

**Breeds**

Adaptability of breeds. E. N. Wentworth. Field il 26:544 Je '16

Adapting the breeds to individual requirements. F. S. King. Am Sheep B & W 36: 131-2 Mr '16

Analysis of carcass competitions at Smithfield show. Am Sheep B & W 36:80-1 F '16

At home with the Dorset horn. C. S. Plumb. il Am Sheep B & W 38:301-3 My '18

Best breed of sheep. E. P. Snyder. Ohio F 142:243 S 14 '18

Best breed of sheep for the district. E. F. Crouch. J Dept Ag S Australia 20:933-6 Je '17

Breeding problems of the merino. J. F. Walker. Am Sheep B & W 37:589-90 O '17

Breeds of sheep. (In Appendix to report, Live stock branch, 1917, p. 3-14) il '17 Ontario ag. dept., Toronto

Breeds of sheep. Prac F 113:109, 120, 152 Mr 1-Apr 1 '17

Breeds of sheep for the farm. F. R. Marshall. il Farmers' B 576:1-18 '17 (reprint)

Brief history of the Leicester. A. J. Temple. il Am Sheep B & W 37:285-6 My '17

Comparison of Shropshire and delaine-merino ewes. Wallaces' F 43:606 Ap 5 '18



**Sheep—Breeds—Continued**

- Corriedales on the range. S. S. Parsons. *il* Field II 28:720 O '18
- Domestic breeds of sheep in America. E. L. Shaw and L. L. Heller. *il* map U S Ag B 94:1-59 '14
- Dorset and hothouse lambs. C. Harper. *il* Am Sheep B & W 38:304-5 My '18
- Dorset horn for fat lamb raising. J. W. Mathews. *Ag Gaz* of New South Wales 27: 15-16 Ja '16
- Dorset horn sheep. M. A. Cooper. *Prac F* 113:221 Je 1 '17
- Dorset horn sheep. F. Kleinheinz. *Am Sheep B & W* 38:309 My '18
- Dorset ram as a sire of market lambs. H. E. Allen. *Am Sheep B & W* 38:310 My '18
- Dorsets at the Pennsylvania state college. C. W. McDonald. *Am Sheep B & W* 38:309 My '18
- Dorsets at the University of Missouri. H. Hackedorn. *il* Am Sheep B & W 38:308 My '18
- Dorsets still hold first place in my affections. H. B. Arbuckle. *Am Sheep B & W* 38:311 My '18
- Evaluation of rams used in T. S. Minton's flock of Shropshires, Shropshire, England. W. C. Coffey and B. O. Severson. *Am Sheep B & W* 38:236-40 Ap '18
- Evolution of Altamont Shropshires. G. H. Davison. *il* Field II 27:934 D '17
- Facts and problems in merino breeding. S. M. Cleaver. *Am Sheep B & W* 36:278 My '16
- Fairlawne flock, Southdowns. W. W. Chapman. *Am Sheep B & W* 36:196 Ap '16
- Fitting Dorset sheep for exhibition. A. Danks. *il* Field II 26:223+ Mr '16
- Founding a Shropshire flock. T. Bradburne. *il* Breeder's *Gaz* 73:1331-2 Je 27 '18
- Hampshire a mutton sheep. F. J. Hagenbarth. *il* Field II 26:314 Ap '16
- Hampshire sheep. W. C. Coffey. *il* Nat Wool Grower 7:19 Mr; 17 Ap '17
- History of the Corriedale. F. R. Marshall. *il* Am Sheep B & W 37:395-8 Jl '17
- Inheritance of rams used by T. S. Minton, England. W. C. Coffey and B. O. Severson. *Am Sheep B & W* 38:430-4 Jl '18
- Little known breeds of sheep. G. H. Dacy. *il* Nat Wool Grower 7:11-12 Je '17
- Maplewood, the home of Gold Coin. *il* Am Sheep B & W 37:164 Mr '17
- Merino comes back. R. A. Hayne. *Breeder's Gaz* 72:44 Jl 12 '17
- Merino has place in small farm flocks. B. O. Severson. *Am Sheep B & W* 37:14 Ja '17
- Merino questions answered by prominent breeders. *Am Sheep B & W* 36:350 Je '16
- Merino sheep. W. W. Reynolds. *Nat Stock & F* 40:1237 F 17 '17
- Merino sheep the best. E. P. Snyder. *Nat Stock & F* 40:797 N 4 '16
- More sheep—mostly Dorsets. F. Huyler. *Am Sheep B & W* 38:312 My '18
- New type of Delaine merinos. *Am Sheep B & W* 37:337 Je '17
- Publicity problem of the merino. J. F. Walker. *Am Sheep B & W* 38:19-20 Ja '18
- Rambouillet type. *il* Nat Wool Grower 7:15 F '17
- Rambouillets in Germany. W. C. Coffey. *il* Nat Wool Grower 7:9-10 My '17
- Range breeders would junk B type. F. S. King. *Am Sheep B & W* 37:12 Ja '17
- Selecting the merino sire. J. F. Walker. *Am Sheep B & W* 38:178-9 Mr '18
- Sheep-breeding experiments; sales of cross-bred lambs. *Ag Gaz* of New South Wales 29:212-13 Mr '18
- Sheep improvement in South Africa. *Am Sheep B & W* 38:17-18 Ja '18
- Sheep industry in New York. N Y Ag Dept B 96:149-230 '17
- Bulletin includes articles on the breeds as follows: Merino, by S. M. Cleaver; Rambouillet, by C. S. Plumb; Southdown, by F. S. Springer; Shropshire, by J. C. Duncan; Hampshire, by C. A. Tyler; Oxford Down, by W. A. Shafer; Suffolk Down, by C. S. Plumb; Cheviot, by F. E. Dawley; Dorset, by A. Danks; Cotswold, by F. W. Harding; Lincoln, by B. Smith; Leicester, by A. J. Temple; Tunis, by J. N. MacPherson; Black-faced Highland, by F. E. Dawley; Karakul, by W. M. Rider
- Sheep of the Cheviot hills. F. E. Dawley. *il* Field II 27:765 O '17
- Sheep on rough land; arguments for the Cheviot breed. B. L. Hathaway. *il* Rural N Y 77:732 My 25 '18
- Short history of the merino sheep. J. W. Thompson. *Breeder's Gaz* 73:484 Mr 7 '18
- Shropshires at Pinehurst. H. L. Wardwell. *il* Field II 28:521 Jl '18
- Some sidelights on the merino. J. F. Walker. *Am Sheep B & W* 38:707-8 N '18
- Status of British breeds of sheep, with table. B. O. Severson. *Nat Stock & F* 42:271 Je 8 '18; Same (table). *Nat Wool Grower* 8:50 Je '18
- Status of the merino. J. F. Walker. *Am Sheep B & W* 37:90 F '17
- Study in heredity of the Mansell flocks, Shropshire, England. W. C. Coffey and B. O. Severson. *Am Sheep B & W* 38:639-42 O '18
- Success with Shropshires. M. A. Haynes. *Prac F* 112:sup4 Mr 1 '16
- Turning to the sheep industry. W. G. Weigle. *Purdue Ag* 10:29+ Je '16
- University of Idaho receives splendid gift of Suffolk Down sheep from England. *Am Sheep B & W* 38:592 S '18
- Value of merino blood. E. P. Snyder. *Nat Stock & F* 42:234 My 25 '18
- Wensleydales popular. H. Robinson. *Am Sheep B & W* 36:234 Ap '16
- Will the merino go? J. F. Walker. *Nat Stock & F* 40:356 Jl 1 '16
- World's varieties of sheep—ancient and modern. W. T. Ritch. *Am Sheep B & W* 36:676-7 N '16

**Care of ewes**

- Ante-partum paralysis of ewes. C. J. Reakes. *J Ag New Zealand* 13:365-6 N '16
- Care of sheep at lambing time. W. H. Tomhave. *Prac F* 114:104 Mr 1 '18
- Care of the ewe. T. C. Stone. *il* Wallaces' *F* 43:1707 N 22 '18
- Ewe and the lamb. *Am Sheep B & W* 38:216 Mr '18
- From fall to lambing time. *Ohio F* 141:258 F 23 '18
- Handling the flock during the lambing period. W. C. Coffey. *il* Ag Ext C 18:1-4 '18
- Lamb weaning season. A. S. Alexander. *Am Sheep B & W* 38:523 Ag '18
- Maintenance of breeding ewes of mutton and wool sheep. B. O. Severson. *il* Pa Ag Exp B 144:1-20 '16; Same cond. *Am Soc Animal Production Pro* 1915-1916:210-22 '17; Summary. *Wallaces' F* 43:1019 Jl 5 '18; Excerpts. *Am Sheep B & W* 36:593 O '16; Excerpts. *Nat Stock & F* 40:821 N 11 '16
- Maintenance of ewes. *Ohio F* 138:542 D 2 '16
- Mountain ewe and her improvement. M. J. Smith. *Am Sheep B & W* 37:106 F '17
- Needs of the ewe. M. J. Smith. *Country Gent* 81:325 F 12 '16
- Rations for breeding ewes. *Wallaces' F* 43: 295 F 15 '18; Same. *Am Sheep B & W* 38: 179 Mr '18
- Success in lambing. W. C. Coffey. *Am Sheep B & W* 38:15-16 Ja '18
- Suggestions for lambing time. W. C. Coffey. *O Judd Farmer* 62:12 Mr 31 '17
- Winter care of pregnant ewes. *Ohio F* 140:580 D 22 '17
- Winter feed for breeding ewes. *Prac F* 114:58 F 1 '18
- Wintering breeding ewes. W. E. Joseph. *Nat Wool Grower* 7:17-18 O '17

**Costs**

- Cost of rams. C. X. Jenes. *Nat Wool Grower* 7:11 N '17
- Cost of running sheep. *Nat Wool Grower* 8: 36 S '18
- Maintenance of breeding ewes of mutton and wool sheep. B. O. Severson. *il* Pa Ag Exp B 144:1-20 '16; Same cond. *Am Soc Animal Production Pro* 1915-1916:210-22 '17; Summary. *Wallaces' F* 43:1019 Jl 5 '18; Excerpts. *Am Sheep B & W* 36:593 O '16; Excerpts. *Nat Stock & F* 40:821 N 11 '16

**Sheep—Costs—Continued**

Meat situation in the United States. pt 2.  
Live stock production in the eleven far  
western range states. W. C. Barnes and  
J. T. Jardine. il maps U S Ag Rep 110:44-8  
'16  
Sheep or cattle. Country Gent 81:1159 Je 3 '16

**Diseases and pests**

Anaphylaxis in cattle and sheep, produced by  
the larvae of hypoderma bovis, h. lineatum  
and oestrus ovis; with discussion. S. Hadwen  
and E. A. Bruce. il Am Vet M Assn J 51:  
15-44 Ap '17  
Blow fly pest in Australia. R. H. Harrowell.  
Nat Wool Grower 7:15-16 Je '17  
Cause of the spewing sickness of sheep. C. D.  
Marsh. (Bureau of animal industry, A9) 4p  
il '16 U S Ag  
Common diseases of sheep and their treat-  
ment. R. A. Craig. N Y Ag Dept B 96:69-74  
Je '17  
Cysticercus ovis, the cause of tapeworm cysts  
in mutton. B. H. Ransom. bibliog il J Ag  
Research 1:15-58 O '13  
Dips and dressings used for protecting sheep  
from blow-flies. J. L. Froggatt. Ag Gaz of  
New South Wales 27:17-28 Ja '16  
Diseased tongue. Am Sheep B & W 36:31 Ja  
'16  
Diseases of ewes and lambs. M. J. Smith.  
Ohio F 137:334 Mr 4 '16  
Diseases of sheep. R. W. Hoggan. (B. 1) 34p  
il '17 Utah state live stock bd., Salt Lake  
City  
Diseases of sheep. W. A. N. Robertson. J  
Dept Ag Victoria 16:410-15 Jl '18  
Diseases of sheep. J. G. Rutherford. (In Ap-  
pendix to report, Live stock branch, 1917,  
p. 35-9) '17 Ontario ag. dept., Toronto  
Diseases of sheep; internal parasites, footrot  
and other ailments. (In Report, 1916, p. 90-  
111) '17 Oregon state live stock sanitary  
board, Salem  
Dozen common ailments of sheep. E. T.  
Baker. Nat Wool Grower 8:45-6 Ap '18  
Drenching sheep. W. A. N. Robertson. il J  
Dept Ag Victoria 16:633-4 O '18  
Eradicating sheep scabies: external and in-  
ternal parasites. J. R. Mohler. Am Sheep  
B & W 38:86-7 F '18; Same. Nat Wool  
Grower 8:27-8 F '18  
Experiments in the use of sheep in the  
eradication of the Rocky Mountain spotted  
fever tick. H. P. Wood. U S Ag B 45:1-11  
'13  
External parasites of sheep. A. Matthews. J  
Ag New Zealand 15:73-8 Ag '17  
Facial eczema in sheep. J Ag New Zealand  
12:386-7 My '16  
Fighting the stomach worm. A. S. Alexan-  
der. Am Sheep B & W 38:415 Je '18  
Fluke in sheep. J Dept Ag Victoria 15:705-10  
D '17  
Foot-rot of sheep. E. P. Snyder. Ohio F 137:  
738 My 27 '16  
Goitre, or enlargement of the thyroid gland.  
A. S. Alexander. Am Sheep B & W 38:466 Jl  
'18  
Hemorrhagic septicemia a fatal sheep dis-  
ease. W. H. Lytle. Am Sheep B & W 36:  
604 O '16  
Insect parasites of the sheep. il Purdue Ag  
12:224-5 Ja '18  
Keeping the flock in health. I. D. Wilson. il  
Am Sheep B & W 38:376-8 Je '18  
Lice and tick on sheep. T. H. Williams. il  
plan J Dept Ag S Australia 22:224-32 O '18  
Lip and leg disease. J. Etien. Am Sheep B  
& W 36:365 Je '16  
Lung worms and verminous bronchitis. A. S.  
Alexander. Am Sheep B & W 38:210 Mr '18  
Malignant catarrh. Am Sheep B & W 36:296  
My '16  
More about the blue vitriol treatment. Am  
Sheep B & W 38:525 Ag '18  
New parasite on sheep maggot flies; notes  
and description of a chalcid parasite. W. W.  
Froggatt. il Ag Gaz of New South Wales  
27:505-6 Jl '16  
Nodular disease. A. S. Alexander. il Am  
Sheep B & W 38:40 Ja '18

Nodular disease in sheep. R. Graham. il  
Breeder's Gaz 72:352 S 6 '17  
Notes for sheep-farmers. C. J. Reakes. J Ag  
New Zealand 13:173-8 S '16  
Ovine pathology. W. W. Reynolds. Am Sheep  
B & W 38:109 F '18  
Parasite and paradox. W. W. Reynolds.  
Breeder's Gaz 73:157 Ja 24 '18  
Parasites in sheep. A. M. Paterson. J Ag  
New Zealand 13:226-8 S '16  
Parasites of sheep; with discussion. A. D.  
Knowles. Am Vet M Assn J 53:334-54 Je  
'18  
Preventing and treating footsores sheep. R. A.  
Hayne. Breeder's Gaz 73:62 Ja 10 '18  
Preventing constipation and liver disease.  
A. S. Alexander. Am Sheep B & W 38:146  
F '18  
Prevention of disease among sheep. A. S.  
Alexander. Am Sheep B & W 38:676-7 O '18  
Protecting sheep from internal parasites. H.  
Hackedorf. il Breeder's Gaz 73:1251 Je 13  
'18  
Renguera in Peru; a paralytic sheep disease.  
Am Vet M Assn J 53:9-11 Ap '18  
Sarcosporidiosis; prevalent sheep pest. J Dept  
Ag S Australia 21:56-7 Ag '17  
Sheep diseases. W. W. Reynolds. Nat Stock  
& F 42:858 D 21 '18  
Sheep nasal fly. F. E. Place. J Dept Ag S  
Australia 21:443-4 D '17  
Sheep parasites again. Nat Stock & F 42:579  
S 21 '18  
Sheep pests, parasitic and predacious. B. M.  
Underhill. Am Vet M Assn J 53:192-201 My  
'18  
Sheep poisoned by western goldenrod. S.  
Lockett. Am Vet M Assn J 51:214-21 My '17  
Sheep sickness reported. R. Graham. O Judd  
Farmer 64:9 Ap 13 '18  
Sheep tick and its eradication by dipping. M.  
Imes. il plans Farmers' B 798:1-31 '17  
Sheep-tick control. Weekly N L 4:4 Jl 4 '17  
Sheep-tick question. L. D. Swingle. Nat Wool  
Grower 7:13-14 Ja '17  
Some sheep worms. F. E. Place. J Dept Ag S  
Australia 21:692-7 Ap '18  
Some summer ailments of sheep and lambs.  
A. S. Alexander. Am Sheep B & W 38:350  
My '18  
Stomach worms. il Va Ag Dept B 111:12-15  
Ap '16  
Stomach worms and tapeworms of sheep.  
D. C. Mote. il Ohio Ag Exp B v 3:173-5  
Je '18  
Stomach worms in sheep. Prog F 33:611 My 18  
'18  
Stomach worms—use tobacco. Am Sheep B &  
W 36:279 My '16  
Studies in black disease; a braxy-like disease  
of sheep. S. Dodd. Ag Gaz of New South  
Wales 29:657-62, 799-804 S, N '18 (to be  
cont)  
Study of hemorrhagic septicemia, observa-  
tions in sheep and in mouflon-sheep hybrids.  
N. Mori. Int R Sci & Prac Ag 8,no 7:1010-12  
Jl '17  
Three important internal parasites of sheep.  
D. C. Mote. il Ohio Ag Exp B v 1:259-64 S  
'16  
Ticks—the sheep's closest companion. Am  
Sheep B & W 37:347 Je '17  
Treatment of foot-rot in sheep. A. R. Young.  
J Ag New Zealand 16:99-100 F '18  
Trouble with ticks. R. A. Hayne. Nat Stock  
& F 40:47 Ap 3 '16  
Utah flock masters support radical measures  
to eradicate the tick. C. Hayne. il Am Sheep  
B & W 38:438-9 Jl '18  
What to do to the stomach worm. Am Sheep  
B & W 37:481 Ag '17  
Whip worms—tape worms—larkspur poison-  
ing. A. S. Alexander. Am Sheep B & W 38:  
749-50 N '18  
Worm infestation in sheep; treatment. S. T.  
D. Symons. Ag Gaz of New South Wales  
29:696 O '18  
Wormy sheep. Nat Wool Grower 8:20 Je '18  
*See also Sheep dip; Sheep scab*

**Feeding**

Beet for sheep; feeding value of silver beet.  
J Dept Ag Victoria 16:53-4 Ja '18



**Sheep—Feeding—Continued**

Can sheep be grown with cattle? J. Weil. Am Sheep B & W 37:459 Ag '17  
 Differs on spring pasture. W. B. Doak. Am Sheep B & W 36:219 Ap '16  
 Digestion experiments with sheep. J. B. Lindsey and others. Mass Ag Exp B 181:241-335 '17  
 Ensilage—its production and value as a feed for sheep. A. G. Butterfield. il Nat Wool Grower 8:17 Ja '18; Same. Am Sheep B & W 38:84 F '18  
 Eradicating noxious weeds by grazing. M. E. Woods. Nat Wool Grower 8:13-15 Jl '18  
 Factors in the maintenance of a flock. B. O. Severson. il Breeder's Gaz 72:423 S 20 '17  
 Feed for sheep in summer. R. B. Rushing. Rural N Y 76:823 Je 23 '17  
 Feeding peanuts in Texas. Nat Wool Grower 7:25 My '17  
 Feeding sheep on beet pulp. R. Wood. il Nat Wool Grower 7:11-14 Mr '17  
 Forage crops for sheep. M. J. Smith. il Country Gent 82:798 Ap 28 '17  
 Handling feeding sheep in Missouri. W. M. Sawyer. Breeder's Gaz 71:331 F 15 '17  
 Hogs and sheep in the orchard. G. G. Brown. Better Fruit 11:12-+ Ag '16  
 How can I keep sheep on my farm? A. R. Gould. Am Sheep B & W 37:455-6 Ag '17  
 Lamb and sheep feeding experiments. E. J. Iddings. il Idaho Ag Exp B 89:1-14 '16  
 Maintenance of breeding ewes of mutton and wool type. B. O. Severson. Am Sheep B & W 36:193-5 Ap '16  
 Maintenance rations for breeding flocks of mutton and wool types of sheep. B. O. Severson. il Pa Ag Exp Separate 17:1-109 '17  
 Reprint from the Annual report, 1915-1916  
 Making mutton and minimizing labor. J. Deare. Nat Wool Grower 7:15-16 Ag '17  
 Notes on feeding. (In Appendix to report, Live stock branch, 1917, p. 14-27) '17 Ontario ag. dept., Toronto  
 Plan for fall sheep feeding. O Judd Farmer 64: 552 My 25 '18  
 Plants poisonous to sheep. C. D. Marsh. Am Sheep B & W 38:176-7 Mr '18  
 Pregnant ewe ration. Wallaces' F 41:282 F 18 '16  
 Pumpkin-growing for sheep. A. J. Faulkner. il J Ag New Zealand 13:266-8 O '16  
 Questions about sheep feeding. il Rural N Y 75:227 F 12 '16  
 Ration to produce milk. B. O. Severson. Nat Stock & F 40:1314 Mr 3 '17  
 Rations for breeding ewes. Wallaces' F 43: 295 F 15 '18; Same. Am Sheep B & W 38:179 Mr '18  
 Relative value of feeds for wintering range sheep under conditions in the Pacific Northwest. W. Hislop. Am Sheep B & W 37:102 F '17; Same. Nat Wool Grower 7:24 F '17  
 Reliable sheep licks. W. T. Ritch. Am Sheep B & W 37:740 D '17  
 Report of feeding test fattening old ewes. R. F. Miller. Nat Wool Grower 7:54 F '17  
 Saving a poor grain crop by buying sheep to clean the stubble. J. H. Shepperd. il System on the Farm 1:66 Ap '17  
 Sheep as crop harvesters. D. George. il Nat Wool Grower 7:15-16 O '17  
 Sheep breeding and feeding. J. M. Jones. il Tex Ag Exp B 205:1-24 '17  
 Sheep feeders' day. il Wallaces' F 41:1468 N 10 '16  
 Sheep feeding; fattening western lambs. J. H. Skinner and F. G. King. il Ind Ag Exp B 202:1-20 '17; Summarized. B 202 Popular ed 7p  
 Sheep feeding trials at Williston substation. W. H. Peters and C. H. Ruzicka. il N D Ag Exp B 115:301-16 '16  
 Sheep for cut-over land. F. Kleinheinz. Breeder's Gaz 69:130 Ja 20 '16  
 Sheep harvest his crops. C. Harper. Country Gent 82:617 Mr 24 '17  
 Sheep licks. W. T. Ritch. Am Sheep B & W 38:46 Ja '18  
 Sheep losses due to poisonous plants. C. D. Marsh. Am Sheep B & W 36:136 Mr '16  
 Sheep on cattle range. Nat Wool Grower 8: 51 My '18

Sheep with little or no permanent pasture. W. C. Coffey. Breeder's Gaz 60:1206 Je 8 '16  
 Sheep without permanent pasture. W. C. Coffey. Breeder's Gaz 69:1018 My 11 '16  
 Sheeping-down corn. W. C. Coffey. il Ill Ag Ext C 21:1-8 '18; Excerpt. Wallaces' F 43: 716 Ap 26 '18  
 Sheeping down corn. Wallaces' F 43:716 Ap 26 '18  
 Sheeping off corn. G. H. Dacy. il Prac F 112: 285 Jl 15 '16  
 Silage main feed for sheep. H. H. Busch and S. W. Busch. O Judd Farmer 63:8 Ag 4 '17  
 Supplying winter succulence for sheep. G. H. Dacy. Nat Wool Grower 7:19-20 Ag '17  
 Take care of the grass. R. A. Hayne. Nat Stock & F 40:140 Ap 29 '16  
 Taking the gamble out of sheep feeding. M. J. Smith. il Country Gent 82:1447 S 22 '17  
 Those 17c spring lambs. Am Sheep B & W 36:293 My '16  
 Turning poison into mutton. S. Riley. il Nat Wool Grower 7:19-21 Ap '17  
 University of Wisconsin feeding test. Am Sheep B & W 36:713 D '16  
 Winter feed for breeding ewes. Prac F 114: 58 F 1 '18  
 Winter feeds for sheep. D. Prowant; J. B. Huyett. il Ohio F 137:66 Ja 15 '16  
 See also Grazing; Lambs—Feeding; Ranges

**Grading**

Market classes and grades of sheep. W. C. Coffey. Am Sheep B & W 38:96-7 F '18; Same. Nat Wool Grower 8:11-14 F '18

**Judging**

Aftermath of exposition judging. Am Sheep B & W 36:167 Mr '16  
 Fundamentals in sheep judging. il Breeder's Gaz 74:111, 113 Jl 25 '18  
 Lesson in judging. J. McCraig. Breeder's Gaz 73:975 My 9 '18  
 Practical points in sheep judging. J. W. Schwab. il Ohio F 138:297 S 30 '16  
 What's under the fleece? photographs. Country Gent 82:1826 N 24 '17  
 Winning essay on sheep judging. F. B. Race. Am Sheep B & W 36:210 Ap '16

**Marketing**

Co-operative marketing of sheep and lambs. C. Harper. il Ohio F 139:142 Mr 24 '17  
 Denver inaugurates ram sale. il Am Sheep B & W 38:344 My '18  
 Marketing of sheep at stock yards. E. G. Gordon. (In Appendix to report, Live stock branch, 1917, p.39-40) '17 Ontario ag. dept., Toronto  
 Wanted, more stock yards. Nat Wool Grower 7:40 Ag '17

**Price lists**

Ashford show of Ronneys. W. W. Chapman. Am Sheep B & W 38:49-50 Ja '18  
 Don't read history, make it and this they did at Salt Lake. il Am Sheep B & W 37:521-6+ S '17  
 Report of Salt Lake ram sale. il Nat Wool Grower 7:9-20 S '17  
 Sidney, Australia, ram sales. R. H. Harrowell. Nat Wool Grower 8:11-12 O '18  
 Sydney ram sale. R. H. Harrowell. Nat Wool Grower 7:21-2 S '17

**Prices**

Cheap mutton a future impossibility. C. H. Shurte. Am Sheep B & W 36:532-3 S '16  
 Chicago sheep market. J. E. Poole. Nat Wool Grower 8:37 Je '18  
 Costly rams for Western ranges. G. F. Stratton. il Country Gent 83:5 N 9 '18  
 Course of live mutton trade. Nat Wool Grower 8:51 Ap '18  
 Future live mutton markets. R. S. Matheson. il Nat Wool Grower 7:17-18 My '17  
 Joint sheep sale at Columbus. Am Sheep B & W 37:464 Ag '17  
 July sheep market. J. E. Poole. Nat Wool Grower 7:38 Ag '17  
 Kansas City lamb market. J. A. Rickart. Nat Wool Grower 8:35 O '18

**Sheep—Prices—Continued**

Mutton records shattered. C. H. Shurte. *il Am Sheep B & W* 36:290-1 My '16  
 National wool growers third annual ram sale, Salt Lake City. *il Am Sheep B & W* 38:555-69 S '18; *Nat Wool Grower* 8:11-15, 35 S '18  
 New series of prices for 1917. *Am Sheep B & W* 38:30-2 Ja '18  
 New set of values at Salt Lake auction; with price lists. *il Am Sheep B & W* 36:513-17 S '16  
 Prices of sheep and wool. *Nat Wool Grower* 8:40 N '18  
 Record sheep prices and why. O Judd Farmer 61:12 D 2 '16  
 Senator Drake as a prophet. W. A. Drake. *il Nat Wool Grower* 7:13 Je '17  
 Sheep and lamb prices. *Country Gent* 82:248 F 10 '17  
 Survey of the mutton market. *Am Sheep B & W* 38:261-2, 333-4, 397, 440-1, 504-5, 582-3 Ap-S '18  
 Topics of the sheep trade. J. E. Poole. *Nat Wool Grower* 7:28-9 Ag '17  
 Trend of the markets. J. E. Poole. *Nat Wool Grower* 8:31-2 Ag '18  
 Up and then down covers the market. *Am Sheep B & W* 37:348-4 Je '17  
 Wool-growing in Australia; prices of rams. R. H. Harrowell. *il Nat Wool Grower* 8:11-12 Je '18  
 Yearly market reviews show record prices; record of 15 years. *Am Sheep B & W* 36:48 Ja '16

**Protection**

Another view of the dog. J. L. Moore. *Nat Stock & F* 40:1397 Mr 17 '17  
 Banking and sheep growing. R. S. Curtis. *il Banker-F* 5:12 Ag '18  
 Case against the dog. R. A. Hayne. *Breeder's Gaz* 72:140 Ag 2 '17  
 Control the dogs. *Weekly N L* 5:8 D 26 '17  
 Dog and the sheep. L. F. Allen. *Rural N Y* 75:1480 N 25 '16  
 Dog as a menace to sheep. *Literary Digest* (354 4th av., N.Y. 10c) 54:63 Ja 13 '17  
 Dog law needed. W. W. Reynolds. *Ohio F* 139:142 F 3 '17  
 Dog law with teeth. *Country Gent* 83:28 F 9 '18  
 Dog laws. B. L. Crouch. *Am Sheep B & W* 36:278 My '16  
 Dog raid. E. L. Freeland. *il Nat Stock & F* 40:1314 Mr 3 '17  
 Dogs and sheep killing. *Rural N Y* 76:1272 N 3 '17  
 Dogs and the sheep industry. G: D. Black. *Ohio F* 138:278 S 23 '16  
 Dogs are needed. R. E. Bateman. *Nat Wool Grower* 7:50 S '17  
 Dogs versus sheep. J. O. Cooper. *Rural N Y* 77:292 F 23 '18  
 Enforce the dog law. W. W. Reynolds. *Ohio F* 140:479 N 24 '17  
 Federal dog tax. W. W. Reynolds. *Am Sheep B & W* 38:193 Mr '18  
 Fight against the cur dog. *Field* 11 27:631 Ag '17  
 Fighting the thieving coyote. *il Am Sheep B & W* 37:530 S '17  
 How Maine handles the pestiferous s. k. *Am Sheep B & W* 37:222 Ap '17  
 Just dogs. W. W. Reynolds. *Nat Stock & F* 40:1274 F 24 '17  
 Model dog law. *Country Gent* 82:836 My 5 '17  
 More about the sheep killing dog. F: J. Has-kin. *Irr Age* 33:153 J1 '18  
 New dog law. G: D. Black. *Ohio F* 141:159 F 2 '18  
 New York has fine new dog law. C. W. Larm-on. *Am Sheep B & W* 36:235 Ap '16  
 Pennsylvania dog law. *Nat Stock & F* 41:448+ Ag 4 '17; Same cond. *Prac F* 113:436 D 15 '17  
 Pennsylvania's new dog law. J. M. McKee. *Ohio F* 138:466 N 11 '16  
 Philadelphia campaign for more sheep and better dog laws gathers momentum. *Am Sheep B & W* 36:359 Je '16  
 Pity of it. *il Nat Stock & F* 41:366 J1 7 '17  
 Proposed New York dog law. *Nat Stock & F* 40:1201 F 10 '17

Protection of sheep. *Ag Gaz of Canada* 4:150-2 F '17  
 Pulling together helps the game in Mary-land. *Am Sheep B & W* 37:461 Ag '17  
 Read this if you are pestered with dogs; sum-mary of the dog laws of the different states. *Am Sheep B & W* 37:472-3 Ag '17  
 Reparation for injury by dogs to sheep in Quebec. *Int R Ag Econ* 66:73-4 Je '16; Same (in French). *Int Yearbook Ag Leg* 1916:1248-50 '17; Same abr. *Ag Gaz of Cana-da* 3:425-6 My '16  
 Revolving lamp protects sheep. *il Farm Eng* 5:22 Ap '17  
 Sentiment or sheep? C: E. Gapen. *il Country Gent* 83:5-6 Je 15 '18  
 Sheep and dog law. *J Ag (Quebec)* 19:144 Ja '16  
 Sheep and dog question. K. S. Kimmel. *Nat Stock & F* 41:1040 Ja 19 '18  
 Sheep and dogs again. R. E. Culver. *Breed-er's Gaz* 71:320 My 3 '17  
 Sheep for New York state; controlling the dog. *Field* 11 26:248 Mr '16  
 Sheep game in New England. *Am Sheep B & W* 37:480 Ag '17  
 Sheep industry, damage by dogs, and the remedy. D. P. Witter. *il N Y Ag Dept B* 96:32-53 Je '17  
 Sheep killing dog. C. S. Plumb. *Ohio F* 139:538 Ap 7 '17  
 Sheep-killing dog. J. F. Wilson. *il Farmers' B* 935:1-32 '18; Abstract. *Am Sheep B & W* 38:244 Ap '18  
 Shepherding the sheep. W. A. Dyer. *il Coun-try Life* 34:42-5 Ag '18  
 Uniform dog laws. *J Ag (Quebec)* 21:xv My '18  
 Washington county plan of dealing with a dog nuisance. W. W. Hunter. *Nat Stock & F* 40:471 Ag 5 '16  
 What will Nebraska legislature do about this? S. W. Hervey. *Am Sheep B & W* 37:463 Ag '17  
 Why not restrain the dogs? R. M. Carrons. *Nat Stock & F* 40:630 S 16 '16  
 Wool shortage. W. W. Reynolds. *Nat Stock & F* 41:305 Je 16 '17

**Renting**

Joint application and contract for breeding ewes on shares. *Am Sheep B & W* 38:594 S '18  
 Letting sheep on shares. E. P. Snyder. *Ohio F* 142:194 Ag 31 '18  
 Share schemes of sheep-keeping. W. C. Coffey. *Breeder's Gaz* 71:826 Ap 19 '17  
 Sheep on shares. E. P. Snyder. *Nat Stock & F* 40:495 Ag 12 '16

**Study and teaching**

Instruction in sheep and goat husbandry; sug-gestions for teachers in secondary schools. H. P. Barrows. (Doc. 76) 12p '18 U.S. States relations service, Washington, D.C.  
 Judging sheep as a subject of instruction in secondary schools. H. P. Barrows. *il U S Ag B* 593:1-30 '17

**Transportation**

Ship your sheep with care. J. V. Delaney. *Am Sheep B & W* 37:593-4 O '17

**Alabama**

Pastoral industry prosperous in Alabama. A. D. Summers. *Am Sheep B & W* 36:158 Mr '16

**Argentina**

Argentine notes. D. Jameson. *Am Sheep B & W* 38:654 O '18  
 In the far south of Argentine. C: T. Smith. *il Am Sheep B & W* 37:392-4 J1 '17

**Arizona**

Conditions in Arizona. L. E. Verkamp. *Nat Wool Grower* 7:27 Ja '17  
 Great Arizona ranch. *Am Sheep B & W* 36:96 F '16  
 Sheep investigations. *Ariz Ag Exp Rep* 1916:281-6 '16

**Australia**

Australian conditions sound. R. H. Harrowell. *Am Sheep B & W* 37:374 Je '17



**Sheep—Australia—Continued**

- Australian wool letter. A. H. Pearse. il Am Sheep B & W 38:740-1 N '18  
 Black merinos in Australia. R. H. Harrowell. il Nat Wool Grower 7:13-14 F '17  
 Drought cripples Australian industry. Am Sheep B & W 36:24 Ja '16  
 Establishment of the government merino stud flock. J. W. Mathews. il Ag Gaz of New South Wales 27:837-43 D '16  
 Impressions gained from working fringe country of South-East. S. Ockley. J Dept Ag S Australia 20:807-13 My '17  
 Interesting award affecting labour in sheep-farming. Int R Ag Econ 9,no 3:234-40 Mr '18  
 Marvelous recovery of pastoral industry in Australia. Am Sheep B & W 36:276-7 My '16  
 Mr Coffin in Australia. Nat Wool Grower 7:56 Ap '17  
 More livestock on the land. A. J. Perkins. J Dept Ag S Australia 20:711-15 Ap '17  
 New Zealand sheep returns in 1917 and the progress of crossbreeding in New South Wales. Int R Sci & Prac Ag 9,no 2:218-19 F '18  
 Pastoral conditions in Australia. Am Sheep B & W 36:652-3 N '16  
 Sale of Merino rams; Nyngan demonstration farm. il Ag Gaz of New South Wales 29:425-8 Je '18  
 Sheep. R. Wiese. J Dept Ag S Australia 22:180-3 S '18  
 Sheep and wool for farmers; cross-breeding experiments. J. W. Mathews. il Ag Gaz of New South Wales 27:325-34 My '16  
 Sheep management in the South-east. T. Williams. J Dept Ag S Australia 21:806-8 My '18  
 Show season commences in Australia. Am Sheep B & W 36:211-12, Ap '16  
 Wool growing in Australia. R. H. Harrowell. Nat Wool Grower 7:11-12 O '17  
 Wool growing in Australia. R. H. Harrowell. Nat Wool Grower 8:13-14 Ap '18  
 Wool-growing in Australia; prices of rams. R. H. Harrowell. il Nat Wool Grower 8:11-12 Je '18

**Brazil**

- Brazil to encourage sheep and goat raising. R. P. Momsen. Am Sheep B & W 38:320 My '18

**California**

- Disappearing flock. Nat Wool Grower 8:46 Mr '18  
 Intensive sheep farming; conclusive evidence that the small farm flock has a place in southern California. J. C. Knollin. Am Sheep B & W 38:435-7 Jl '18  
 Sheep and goat industry in California. T. H. Ramsay. Cal Ag Bd Rep 1917:xxiv-xxvii '18  
 Sheep in California. Nat Wool Grower 8:46 O '18

See also California sheep and wool growers' association

**Canada**

- Alberta making sheep history. J. McCaig. il Am Sheep B & W 36:344 Je '16  
 Budget of news from Canada. N. Stansfield. Am Sheep B & W 38:394 Je '18  
 Canadian bank's sheep plan. W. T. White. Banker-F 5:12 Ag '18  
 Canadian news letter. N. Stansfield. Am Sheep B & W 38:450 Jl '18  
 Demonstration sheep flock in Canada. Am Sheep B & W 38:119 F '18  
 Demonstration sheep flocks. il Ag Gaz of Canada 4:582-5 Jl '17  
 Dominion government feeding experiments. E. S. Archibald. Am Sheep B & W 36:460-1 Ag '16  
 Forty reasons why sheep should be kept in Quebec. A. A. MacMillan. J Ag (Quebec) 21:121 F '18  
 Present state of sheep breeding in Canada. J. R. Arkell. Int R Sci & Prac Ag 8,no 10:1333-8 O '17  
 Profitable sheep raising in Canada. Am Sheep B & W 37:749 D '17

- Prospects for sheep breeding. R. Miller. (In Report, Live stock branch, 1916, p. 48-52) '17 Ontario ag. dept., Toronto, Canada  
 Report of division of animal husbandry; sheep. (In Experimental farms, 1916. v. 1, p. 532-59) il 45c '17 Canada Ag  
 Sheep more profitable than swine in semi-arid belts. W. F. Stevens. Am Sheep B & W 36:148 Mr '16

See also Canadian cooperative wool growers

**Corn belt**

- Much demand for sheep. O Judd Farmer 63:8 N 10 '17  
 Sheep for the corn belt farmer. C. Harper. il Purdue Ag 12:475-7 My '18  
 Sheep management on the corn belt farm. T. W. Harvey. Ohio F 140:426 N 10 '17  
 Urging sheep for corn belt. O Judd Farmer 63:14 O 6 '17

**Eastern states**

- East's Shropshire champion. il Am Sheep B & W 37:666-7 N '17  
 More sheep in the East. Weekly N L 5:7 N 28 '17  
 Old ewe for the East. Nat Wool Grower 7:22 N '17  
 Sheep in the eastern states. W. W. Reynolds. Rural N Y 75:1303 O 14 '16  
 Sheep on eastern farms. W. H. Tomhave. il Prac F 112:227+ Je 1 '16

**Egypt**

- Egyptian sheep. Int R Sci & Prac Ag 8,no 2:276-7 F '17

**Florida**

- Sheep growing on the farm and range in Florida. H. S. Elliott. Fla Ag Dept Quar B v 27:5-21 Ap '17

**France**

- Apprenticeship of shepherds. Int R Ag Econ 66:123-4 Je '16

**Great Britain**

- Among the English flocks. W. W. Chapman. Am Sheep B & W 37:757-8 D '17  
 Lincoln reverie. W. W. Chapman. il Am Sheep B & W 38:521 Ag '18  
 News notes from English flocks. Am Sheep B & W 37:498 Ag '17  
 Pastoral England. Nat Wool Grower 8:42 N '18  
 Sheep-farming in the Yorkshire wolds. F. J. Petch. J Dept Ag S Australia 22:165-7 S '18  
 Sheep industry in Great Britain. K. C. Ikeler. il Nat Wool Grower 8:35 Mr '18; Same. Breeder's Gaz 73:862 Ap 25 '18  
 Sheep of the Scottish highlands. A. S. Alexander. il Breeder's Gaz 69:609-10 Mr 16 '16  
 West highland sheep-farming. A. Fletcher. Contemporary Review (249 W. 13th st., N.Y. 50c) 111:190-6 F '17  
 Where the Cheviot stands in Scotland. A. MacNeilage. il Am Sheep B & W 36:474 Ag '16

**Hungary**

- Tests on milking ewes in Hungary for yield of milk and wool. J. Kovács. Int R Sci & Prac Ag 7,no 5:711-12 My '16

**Idaho**

- Management of farm flocks in Idaho. E. J. Iddings. il Idaho Ag Exp B 96:1-20 '17  
 More sheep in Idaho. J. C. Knollin. Breeder's Gaz 72:142 Ag 2 '17  
 Priority right law a misnomer. A. G. Butterfield. Am Sheep B & W 36:480 Ag '16  
 Sheep industry on the Minidoka reclamation project. E. F. Rinehart. il U S Ag B 573:1-23 '17  
 Situation in Idaho. H. Sproat. Nat Wool Grower 7:24 My '17

See also Idaho wool growers' association

**Illinois**

- Illinois should raise more sheep. il O Judd Farmer 65:49 Jl 20 '18  
 More sheep for Illinois. il O Judd Farmer 62:1 Mr 24 '17  
 Sheep for Illinois in war time. W. C. Coffey. O Judd Farmer 64:3 Mr 9 '18

## Sheep—Continued

## Indiana

Sheep demonstration flocks in Indiana; co-operative livestock feeding demonstrations. P. S. Richey. *il Purdue Ag Ext B* 67:1-8 '18  
*See also* Indiana sheep breeders' association

## Iowa

Sheep in Iowa. Wallaces' *F* 41:697 My 5 '16

## Japan

Wool growing in the Orient. I. Tanimura. *Am Sheep B & W* 38:98-101 F '18

## Kentucky

Care and feeding of sheep in the state of Kentucky. R. S. Blastock. *Ky Ag Dept Rep* 1916-1917:359-63 '18  
 Care and management of sheep in Kentucky. E. S. Good and L. B. Mann. *il Ky Ag Exp B* 215:1-63 '18  
 Hints to the beginner in sheep raising. L. J. Horlacher. *Ky Ag Ext C* 64:1-13 '18  
 Kentucky buys breeding ewes. *Nat Wool Grower* 8:52 J1 '18  
 Kentucky hears wool and mutton facts. R. S. Blastock. *Am Sheep B & W* 36:105 F '16  
 Kentucky's opportunities as a sheep state. L. B. Mann. *Ky Ag Exp C* 18:108-16 '17  
 Number and value of sheep killed and injured by dogs. *Ky Ag Dept Rep* 1916-1917:295-7 '18  
 Sheep raising on blue grass farms. R. H. Stevenson. *Am Sheep B & W* 36:157 Mr '16

## Louisiana

Louisiana sheep proposition. *il Am Sheep B & W* 36:47 Ja '16

## Maine

Are sheep profitable in Maine? *Maine Ag Exp B* 246:30-6 Ja '16  
 Are sheep profitable in Maine? *Maine Ag Exp B* 269:3-8 '18  
 How Maine handles the pestiferous s. k. *Am Sheep B & W* 37:222 Ap '17  
 Maine will raise more sheep. *Am Sheep B & W* 38:720 N '18  
 Why not sheep in Maine for a business? W. B. Kendall. *Maine Ag Dept B v* 13:25-42 Je '18

## Maryland

Pulling together helps the game in Maryland. *Am Sheep B & W* 37:461 Ag '17

## Michigan

As a western man sees cut-over lands of the North. J. A. Jeffery. *il Am Sheep B & W* 37:272 My '17  
 Cloverland for the western flocks. G. W. Rowell, jr. *il Am Sheep B & W* 38:180-2 Mr '18  
 Great Lakes range; Cloverland, Mich. L. C. Harmon. *Am Sheep B & W* 38:135-6 F '18  
 Michigan's dreamland—Cloverland. G. M. Mashek. *Am Sheep B & W* 38:37 Ja '18  
 Moving sheep to Michigan. *Nat Wool Grower* 8:31 J1 '18  
 Sheep for land clearing. *Am Sheep B & W* 38:326 My '18  
 Sheep for Michigan's cut-overs. O. Judd Farmer 63:4 D 29 '17  
 Sheep on cut over land. G. F. Stratton. *il Country Gent* 83:10-11 Ag 13 '18

## Missouri

Future of the sheep business. A. J. Knollin. *il Mo Ag Bd Yearbook* 1916:136-40  
 Modern lamb production—Missouri experiments. H. Hackedorn. *Am Sheep B & W* 36:94 F '16  
 Sheep day at Missouri during farmers' week. H. Hackedorn. *Am Sheep B & W* 36:44 Ja '16

## Montana

As seen in Montana. C. H. Williams. *Nat Wool Grower* 7:25 D '17  
 Sheep and wool day at Montana state college. C. H. Arnett. *Am Sheep B & W* 36:203 Ap '16

Sheep situation in Montana. J. V. Merriion. *Nat Wool Grower* 8:27 My '18  
 Situation in Montana. F. W. Tubbs. *Nat Wool Grower* 7:31 N '17  
*See also* Montana—Sheep commissioners, Board of

## Nebraska

Nebraska sheepman's experience. A. A. Luttin. *Breeder's Gaz* 73:974 My 9 '18  
 Official report of the Sheep, wool and calf conservation committee of the State council of defense. *Am Sheep B & W* 38:197 Mr '18  
 What will Nebraska legislature do about this? S. W. Hervey. *Am Sheep B & W* 37:463 Ag '17

## New England

New farming for old New England; mutton and milk offer splendid opportunities. F. A. Waugh. *il Country Gent* 83:1+ S 7 '18  
 Place of sheep on New England farms. F. H. Branch. *il map Farmers' B* 929:1-29 '18  
 Sheep game in New England. *Am Sheep B & W* 37:480 Ag '17  
 Sheep in New England. *Field* 11 26:949 N '16  
 What's the matter with New England? J. C. Orcutt. *Am Sheep B & W* 36:356 Je '16

## New Hampshire

Sheep. *N H Ag Dept Rep v* 34:103-10 '16

## New York

Beef cattle versus sheep in New York. *Rural N Y* 76:124 Ja 27 '17  
 Breeding in New York. W. Randall. *Am Sheep B & W* 38:42 Ja '18  
 New York sheep growers meet. *Ohio F* 142:550 D 7 '18  
 New York sheep rally. *Am Sheep B & W* 37:657-9 N '17  
 New York state sheep growers meeting. E. E. Reynolds. *Ohio F* 140:450 N 17 '17  
 Patriotic sheep meeting at Utica. *Rural N Y* 76:1360, 1384 N 24-D 1 '17  
 Proposed New York dog law. *Nat Stock & F* 40:1201 F 10 '17  
 Sheep at meeting at Albany. *il Rural N Y* 77:1388 D 14 '18  
 Sheep for New York. H. A. Hopper. *Am Sheep B & W* 37:652-4 N '17  
 Sheep for New York state. H. H. Lyon. *Hoard's D* 54:920 Ja 18 '18  
 Sheep industry in New York state. *N Y Ag Dept B* 96:1-237 Je '17  
 Sheep interests of New York state. H. L. Wardwell. *N Y Ag Dept B* 80:1587-92 F '16;  
 Same. *N Y Ag Dept Rep* 1916:pt 3:1587-92 '17

## New Zealand

Annual sheep returns, 1918 (30th April). *J Ag New Zealand* 17:254-5 O '18  
 Health management of young sheep; pasture renovation and liming at Motuihi. *il J Ag New Zealand* 17:1-5 J1 '18  
 Mr Coffin in New Zealand. H. S. Coffin. *Nat Wool Grower* 7:16 Ap '17  
 Mr Coffin's report on New Zealand. H. S. Coffin. *il Nat Wool Grower* 7:13-14 My '17  
 New Zealand sheep at San Francisco. *il J Ag New Zealand* 12:134-7 F '16  
 New Zealand sheep returns in 1917 and the progress of crossbreeding in New South Wales. *Int R Sci & Prac Ag* 9,no 2:216-19 F '18  
 Sheep in New Zealand. E. Clifton. *J Ag New Zealand* 12:288-91 Ap '16  
 Tillage measures for increasing the carrying-capacity of farms. J. Brown. *J Ag New Zealand* 17:193-5 O '18

## North Carolina

More sheep—a war measure. F. H. Jeter. *il Am Sheep B & W* 38:491-2 Ag '18

## Ohio

Business boom that lies dormant. W. W. Reynolds. *il Ohio F* 142:266 S 21 '18  
 Just why have Ohio's flocks declined? T. C. Conklin. *maps Ohio F* 140:37 J1 21 '17  
 Merino situation in Ohio today. S. M. Cleaver. *Ohio Ag Dept B v* 9:12-15 My '18



**Sheep—Ohio—Continued**

Ohio shepherd's round-up. Nat Stock & F 41: 115 Ap 21 '17  
 Sheep in Ohio. J. F. Walker. Am Sheep B & W 38:437-8 Jl '18  
 Sheep in southwestern Ohio. H. R. O'Brien. Ohio F 140:242 S 22 '17  
 Sheep situation in Ohio. D. Prowant. Nat Stock & F 41:1040 Ja 19 '18

**Oklahoma**

Forty-six-pound fleece; Laramie. A. D. Spencer. il Country Gent 81:1264 Je 24 '16  
 Oklahoma college; Laramie sired by Laramie Boy shears 46¼ pounds. J. N. King. il Am Sheep B & W 36:292 My '16  
 Sheep husbandry in Oklahoma. W. L. Carlyle and D. A. Spencer. il Okla Ag Exp B 111:1-47 '16

**Oregon**

Oregon wool growers ask government aid. Nat Wool Grower 8:60 Ag '18

**Pacific island**

Sheep husbandry great business on Pacific island. L. Penwell. Am Sheep B & W 36: 299 My '16

**Pennsylvania**

Pennsylvania dog law. Nat Stock & F 41:448+ Ag 4 '17; Same cond. Prac F 113:436 D 15 '17  
 Report of the committee on wool and textile fibres, 1915; with discussion. S. C. George. Pa Ag Dept B 278:63-70 '16  
 Sheep-raising in Pennsylvania. H. W. Kingsbury. Penn State F 9:434+ O '16  
 Sheep raising in western Pennsylvania. B. O. Severson. Nat Stock & F 42:859 D 21 '18

**South Africa**

Rains save South African range situation. Am Sheep B & W 36:34 Ja '16

**South America**

Sheep in South America. Nat Wool Grower 7:47 My '17

**Southern states**

Regarding southern sheep lands. Nat Wool Grower 8:56+ F '18  
 Sheep for southern cut-over lands. J. E. Pickett. il Country Gent 83:9 N 23 '18  
 Sheep for the South. H. B. Arbuckle. Am Sheep B & W 38:150, 214, 278 F-Ap '18  
 Sheep industry in the South. C. C. Prescott. il Nat Wool Grower 8:43-4 Ap '18  
 Sheep industry of the South, by F. R. Marshall: Shortage of raw material—the demand increasing, by A. C. Bigelow. (*In* Cut-over land conf. of the South, 1917, p. 196-201, 210-16) \$2.50 '17 Southern pine assn., New Orleans, La.  
 Sheepraising in the South. W. T. Magee. Breeder's Gaz 70:13 Jl 6 '16  
 South should raise more sheep. T. Butler. Prog F 32:1347 D 29 '17  
 Starting a flock in the South. W. R. Radford. il Am Sheep B & W 37:331-2 Je '17  
 West and the South. A. K. Sessoms. Am Sheep B & W 38:141-4 F '18

**Spain**

Sheep in Spain in the middle ages. J. W. Thompson. Breeder's Gaz 70:90 Jl 20 '16  
 Sheep-raising in La Mancha, Spain: systems of stock-breeding combined with cultivation. J. U. Soroa. Int R Sci & Prac Ag 7, no 10:1489-90 O '16

**Tennessee**

Inquisitive shepherdess; visit to the spring lamb district of central Tennessee. Am Sheep B & W 37:360 Je '17

**Texas**

Sheep in Texas. B. L. Crouch. il Nat Wool Grower 7:23-4 Je '17  
 Texas drought. B. L. Crouch. Nat Wool Grower 8:20 Jl '18  
 Texas reader answers Senor Jameson. G. W. Colles. Am Sheep B & W 38:721 N '18

**United States**

Address of President F. J. Hagenbarth to 54th National wool growers' convention. Nat Wool Grower 8:9-15 Ja '18  
 Agricultural situation for 1918: wool; war makes more sheep and wool necessary. U S Ag C 93:1-14 '18  
 Annual address to National wool growers convention. F. J. Hagenbarth. Nat Wool Grower 7:9-12 Ja '17  
 Bankers and sheepmen. C. Adams. Nat Wool Grower 8:16 Je '18  
 Between the devil and the deep sea. J. W. Walker. il Am Sheep B & W 37:263-4 My '17  
 Bureau of animal industry range sheep experiment. F. R. Marshall. Nat Wool Grower 7: 35-6 Ja '17  
 Can match the President in raising flock of sheep. Weekly N L 5:1 Je 5 '18  
 Cold facts about the wool and mutton supply—why we need more sheep. W. W. Burch. Am Sheep B & W 37:71-2 F '17  
 Experimental sheep husbandry in the states and the Bureau of animal industry. F. R. Marshall. Am Soc Animal Production Pro 1915-1916:165-8 '17  
 Farm flock; a few good sheep pay well on many middle western farms. F. Crissey. il Country Gent 83:20 Ap 20 '18  
 Government flock moved. Nat Wool Grower 7:22 D '17  
 Read this if you are pestered with dogs; summary of the dog laws of the different states. Am Sheep B & W 37:472-3 Ag '17  
 Resolutions of United States livestock committee. Nat Wool Grower 7:56 O '17  
 Sheep among the Appalachian hills. E. W. Sheets. Am Sheep B & W 38:235 Ap '18  
 Sheep and wool conference. Wallaces' F 41: 1601 D 8 '16  
 Sheep industry in the United States. A. J. Knollin. Am Sheep B & W 36:82 F '16  
 Sheep industry of the United States. A. C. Bigelow. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:191-7 N '17  
 Shepherd, strafe der Kaiser. J. A. Delfelder. Am Sheep B & W 38:391 Je '18  
 Some causes and cures for American sheep decline. H. B. Arbuckle. Am Sheep B & W 36:455 Ag '16  
 Some phases of American sheep husbandry. M. J. Smith. Am Sheep B & W 36:592 O '16  
 Suggestions to the National sheep and wool bureau. M. F. Horine. Am Sheep B & W 37:479 Ag '17  
 Where shall we get wool? S. W. McClure. il Country Gent 82:1024 Je 26 '17  
 Work of the Bureau of animal industry in improving the sheep industry. J. R. Mohler. Am Sheep B & W 38:85-7 F '18; Same. Nat Wool Grower 8:26-8+ F '18

**Utah**

Longest sheep ranges in the world. G: F: Stratton. il Wallaces' F 42:3 Ja 5 '17  
 On the backbone of the Wasatch. C. Hayne. il Am Sheep B & W 38:495-7 Ag '18  
 Sheep-killing weather on the winter range. J. C. Alter. Nat Wool Grower 8:25-6 Mr '18  
 See also Utah woolgrowers' association

**Virginia**

Shall we raise more sheep?—Virginia answers yes. Mrs W. B. Doak. Am Sheep B & W 36:453-4 Ag '16  
 Sheep-raising in Virginia. Va Ag Dept B 126: 31-3 '18

**Washington**

Range sheep in Washington. C. E. Howell and W: Hislop. Breeders' Gaz 70:1104 D 14 '16  
 Range sheep increase in Washington. Ag Digest 1:304 F '17  
 Sheep husbandry in the Pacific Northwest. W: Hislop and C. E. Howell. il Wash Ag Exp B 134:1-24 '17; Same abridged. Am Sheep B & W 37:267-8 My '17

## Sheep—Continued

## West Virginia

Development of the sheep industry in West Virginia. T. C. Atkeson. W Va Ag Dept B 30:28-32 '17  
 Sheep among the Appalachian hills. E. W. Sheets. W Va Ag Dept B 30:35-7 '17  
 Sheep in West Virginia. G. B. Thompson. il Country Gent 81:862 Ap 15 '16

## Western states

Annual sheep drive in Rocky mountains. G. F. Stratton. il Ohio F 138:170 Ag 26 '16  
 Can the range sheep industry come back? il Am Sheep B & W 36:643-5 N '16  
 Golden hoof in silver clouds. W. F. Wilcox. il Breeder's Gaz 72:1130-1 D 20 '17  
 Important statement regarding the matter of fixing prices on sheep and wool. Nat Wool Grower 7:28 Je '17  
 On the trail of little Bo-Peep's flock. C. White. il Am Sheep B & W 37:265-6 My '17  
 Phases of sheep management in the West. J. R. Fox. il Breeder's Gaz 70:87 Jl 20 '16  
 Putting the lid on the sheep gamble. G. F. Stratton. il Country Gent 83:12+ N 30 '18  
 Sheep on western ranges. R. M. Wood. Breeder's Gaz 73:599 Mr 21 '18  
 Sheep raising on the western range. J. C. McGill. Purdue Ag 10:28-9 Ap '16  
 Status of the western sheep industry. Breeder's Gaz 70:272 Ag 24 '16  
 Subsistence of western flocks. A. J. Knollin. il Nat Wool Grower 7:13-14 Ap '17  
 Western sheep affairs. S. W. McClure. Country Gent 82:1003 Je 9 '17  
 Western wool growers' problem. F. J. Hagenbarth. Am Sheep B & W 37:544-5 S '17

## Wisconsin

Best country on earth; speech at Menominee meeting; excerpts. F. J. Hagenbarth. il Am Sheep B & W 37:673-4 N '17; Nat Wool Grower 7:15-17 N '17  
 Cut-over land possibilities. Am Sheep B & W 37:224 Ap '17  
 Resources of Wisconsin. W. G. Bissel. Am Sheep B & W 38:139 F '18  
 Sheep and wool manufacturing possibilities in Wisconsin. M. C. Churchill. Am Sheep B & W 38:136 F '18  
 Sheep raising in Wisconsin. F. Kleinheinz. il Wis Ag Exp B 263:1-19 '16  
 Wisconsin an ideal state for sheep. F. Kleinheinz. Am Sheep B & W 36:540 S '16

## Wyoming

Closing out in Wyoming. E. P. Spaeth. Nat Wool Grower 7:20 D '17  
 Sheep in western Wyoming. J. D. Noblitts. Nat Wool Grower 8:54 Ja '18  
 Summary of Wyoming affairs. R. Wood. Nat Wool Grower 7:23 N '17  
 Wyoming in general. R. Wood. Nat Wool Grower 8:21 Je; 44-5 Jl '18

See also Wyoming—Sheep commissioners, Board of

Sheep and wool bureau, National. See National sheep and wool bureau

Sheep barns. See Barns and stables—Sheep barns

## Sheep breeders' societies

Annual meetings of the local wool growers' and sheep breeders' associations. J Ag (Quebec) 19:196 Mr '16  
 Co-operation in farm sheep husbandry. G. H. Dacy. il Nat Wool Grower 7:13-14 N '17  
 Co-operative sheep associations. B. O. Severson. Am Sheep B & W 37:458 Ag '17  
 Delaware co. (N.Y.) sheep growers, meeting, June 20. Rural N Y 77:966 Ag 10 '18  
 Successful co-operation by sheep breeders in Quebec. J Ag (Quebec) 20:33 Ag '16  
 Why a fleece wool association. J. F. Walker. Am Sheep B & W 38:501-2 Ag '18

See also American and delaine merino record association; California sheep & wool growers' association; Canadian cooperative wool growers; Canadian sheep breeders' association; Idaho wool growers' association; Indiana sheep breeders' association; Jeffer-

son county wool growers' association; Missouri sheep breeders' and feeders' association; National sheep and wool bureau; National wool growers' association; Otsego county sheep breeders' association; Texas sheep and goat raisers' association; Tri-state sheep breeders' and wool growers' association; Utah wool growers' association; Wyoming wool growers' association

## Sheep breeding

Auction prices of various crosses of lambs for export. Ag Gaz of New South Wales 27:851-2 D '16  
 Balancing types in the range flock. R. Wood. il Breeder's Gaz 69:1111 My 25 '16  
 Breeding ewe lambs. R. Blastock. il Nat Wool Grower 7:9-10 Je '17  
 Bright future for the merino. S. M. Cleaver. Am Sheep B & W 36:108 F '16  
 Changes in range ram management. J. C. Knollin. Breeder's Gaz 72:842 N 8 '17  
 Cheap and quick means of getting into the mutton business. C. J. Schroeder. il Country Gent 81:656 Mr 18 '16  
 Choosing the ram. R. A. Hayne. Breeder's Gaz 72:550 O 4 '17  
 Community breeding. C. S. Plumb. Am Sheep B & W 37:583-4 O '17  
 Conservation of breeding stock. Am Sheep B & W 37:406-10 Jl '17  
 Corriedale sheep. F. R. Marshall. il J Heredity 7:88-95 F '16  
 Corriedales and halfbreds. Am Sheep B & W 36:212 Ap '16  
 Crossbreeding. F. S. King. Nat Wool Grower 7:25-6 Ja '17  
 Cross breeding for lambs. A. H. Williams. Am Sheep B & W 36:72 F '16  
 Cross breeding for mutton. M. Ryder. Field il 28:642 S '18  
 Cross-breeding in New Zealand. il Am Sheep B & W 36:328-9 Je '16  
 Crossbreeding in New Zealand. R. H. Harrowell. Nat Wool Grower 8:19-20 My '18  
 Cross breeding in South Africa. Am Sheep B & W 38:208 Mr '18  
 Cross-breeding in the Southwest. R. H. Williams. Am Sheep B & W 36:601 O '16  
 Crossbreeding—winter feeding. B. O. Severson. Am Sheep B & W 37:592-3 O '17  
 Crossbreds increase; marked decrease in fine wool breeds within ten years. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:5130 My 4 '18  
 Degree of resemblance of parents and offspring with respect to birth as twins for registered Shropshire sheep. H. L. Rietz and E. Roberts. J Ag Research 4:479-510 S '15  
 Drouth cripples Australian industry. Am Sheep B & W 36:24 Ja '16  
 Early sheep breeding in Britain. Breeder's Gaz 70:294 Ag 24 '16  
 Evaluation of rams used in T. S. Minton's flock of Shropshires, Shropshire, England. W. C. Coffey and B. O. Severson. il Am Sheep B & W 38:236-40 Ap '18  
 Family performance as a basis for selection in sheep. E. G. Ritzman and C. B. Davenport. J Ag Research 10:93-7 Jl 9 '17  
 Faults of native lambs. T. J. Delohery. il Country Gent 81:993 My 6 '16  
 \$50 for the greatest breeding ram represented at the 1918 International. Am Sheep B & W 38:593 S '18  
 Flockowners for years to come will be men higher up. M. G. Smith. Am Sheep B & W 36:168 Mr '16  
 For what shall Australia breed? Am Sheep B & W 37:436 Jl '17  
 Improvement in range sheep. T. S. Parsons. Breeder's Gaz 69:1328 Je 29 '16  
 Influence of a good sire in mutton production. J. K. Wright. il Mo Ag Bd B v 14:71-8 S '16  
 Inheritance in sheep breeding. B. O. Severson. il Nat Wool Grower 8:13-14 Ag '18  
 Inheritance of rams used by T. S. Minton, England. W. C. Coffey and B. O. Severson. Am Sheep B & W 38:430-4 Jl '18  
 Keeping the ram fit. R. A. Hayne. Breeder's Gaz 72:1076 D 13 '17



**Sheep breeding—Continued**

- Lamb-breeding tests. H. C. Wilson and A. J. Whelan. *il J Dept Ag Victoria* 14:129-37 Mr '16; Same cond. *Am Sheep B & W* 36:465 Ag '16
- Lesson for the farm flock. *Am Sheep B & W* 37:723 D '17
- Maintenance of breeding flocks of mutton and wool sheep. *il Pa Ag Exp B* 147:7-9 '17
- Mendelism of short ears in sheep. E. G. Ritzman. *J Ag Research* 6:797-8 Ag 14 '16
- New Zealand sheep returns in 1917 and the progress of crossbreeding in New South Wales. *Int R Sci & Prac Ag* 9,no 2:218-19 F '18
- Note on lambs for export. A. J. Black. *J Dept Ag Victoria* 14:238-40 Ap '16
- Present state of sheep breeding in Canada. J. R. Arkell. *Int R Sci & Prac Ag* 8,no 10:1333-8 O '17
- Results of cross breeding. B. O. Severson. *Nat Stock & F* 41:588 S 15 '17
- Selecting the merino sire. J. F. Walker. *Am Sheep B & W* 38:178-9 Mr '18
- Selection and care of the breeding flock. E. Van Alstyne. *plans N Y Ag Dept B* 96:75-87 Je '17
- Sheep and pig breeding in the Argentine Republic at the present day. G. Martinoli. *Int R Sci & Prac Ag* 8,no 9:1205-13 S '17
- Sheep and wool for farmers; cross-breeding experiments. J. W. Mathews. *il Ag Gaz of New South Wales* 27:325-34, 397-407; 29:480-90 My-Je '16; J1 '18 (to be cont)
- Sheep breeding and feeding. J. M. Jones. *il Tex Ag Exp B* 205:1-24 '17
- Sheep that are different. C. A. Goss. *Breeders' Gaz* 69:238 F 3 '16
- Some experiences in breeding range sheep. F. R. Marshall. *Nat Wool Grower* 8:35-6 Ja '18; Same. *Am Sheep B & W* 38:92-3 F '18
- Some important breeding issues. S. M. Cleaver. *Am Sheep B & W* 36:674 N '16
- Study in heredity of the Mansell flocks, Shropshire, England. W. C. Coffey and B. O. Severson. *Am Sheep B & W* 38:639-42 O '18
- Success with a breeding flock. *il Wallaces' F* 43:743 My 3 '18
- Success with breeding ewes. R. A. Joseph. *Country Gent* 81:807 Ap 8 '16
- Systematic crossbreeding of sheep. W. T. Ritch. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2966+ Ja 12 '18
- Use a pure bred ram on the farm. H. Hackedorf. *Am Sheep B & W* 37:527 S '17
- Use only purebred rams. *il Ohio F* 142:243 S 14 '18
- Value of Corriedale sheep. *il Field II* 26:328 Ap '16
- What shall we breed? J. F. Walker. *Am Sheep B & W* 38:608 S '18

*See also* Sheep—Care of ewes

**Record books**

- Advanced registry for fine woolled sheep. R. F. Miller. *Nat Wool Grower* 8:38 Ja '18; Same. *Am Sheep B & W* 38:111 F '18
- Why have records? W. C. Coffey and B. O. Severson. *Am Sheep B & W* 38:369-70 Je '18

**Sheep clubs**

- Banks: start sheep clubs—the nation needs more mutton, more wool. *Banker-F* 4:11 Je '17
- Boys' and girls' club work. *Am Sheep B & W* 37:603-4 O '17
- Boys' and girls' clubs. *il Purdue Ag* 13:65 N '18
- Council of defense sheep club. J. C. Andrew. *il Breeder's Gaz* 72:1261 D 27 '17
- Have you faith in a boy's future? *Am Sheep B & W* 37:333-4 Je '17
- Hoosier boys' sheep club. O. Crane. *il Banker-F* 5:13 Ja '18; Same. *Am Sheep B & W* 38:194 Mr '18
- How finance the sheep clubs? *Banker-F* 5:4 D '17
- Letter to you about boys. *Am Sheep B & W* 37:269 My '17
- Missouri bank's sheep club. D. H. Doane. *il Banker-F* 6:9 D '18
- Plan for sheep clubs by the U.S. Department of agriculture. *Banker-F* 4:6-7 O '17

**Sheep dip**

- Dipping in Utah. T: Redmond. *Am Sheep B & W* 37:465 Ag '17
- Dipping the flock. (*In* Appendix to report, Live stock branch, 1917, p. 33-5) '17 Ontario ag. dept., Toronto
- Dipping the live issue in Wyoming. H. R. Millard. *Am Sheep B & W* 36:321 Je '16
- New Wyoming dip law; text. *Am Sheep B & W* 37:88 F '17
- Placing the responsibility for dipping. C. E. Timson. *Am Sheep B & W* 36:387 J1 '16
- Profit that arises from dipping sheep. *J Dept Ag Victoria* 14:94-6 F '16
- Results of dipping. *Am Sheep B & W* 36:84 F '16
- Sheep dip. A. W. Curlewis. *plans J Dept Ag Victoria* 14:694-8 N '16
- Sheep dips. A. W. Curlewis. *il plans J Dept Ag Victoria* 14:423-32 J1 '16
- Sheep scab. M. Imes. *il Farmers' B* 713:1-36 '16
- Sheep tick and its eradication by dipping. M. Imes. *il plans Farmers' B* 798:1-31 '17
- Sheep-tick question. L. D. Swingle. *Nat Wool Grower* 7:13-14 Ja '17
- Shower spray dipping system. *Am Sheep B & W* 37:746-7 D '17
- Standard sheep dips. *Country Gent* 81:1579 Ag 26 '16
- Trouble with ticks. R. A. Hayne. *Nat Stock & F* 40:47 Ap 8 '16
- Utah dipping order. *Am Sheep B & W* 36:393 J1 '16
- Why dip sheep? H. E. Haslett. *Rural N Y* 77:946 Ag 3 '18
- Wyoming dipping order. H. R. Millard. *Am Sheep B & W* 36:321 Je '16

*See also* Arsenical dip; Lime-sulfur dip

**Sheep dogs**

- Hexham sheep dog trials. *Am Sheep B & W* 36:101 F '16
- Old English sheepdog. W. A. Dyer. *il Country Life* 33:64-7 D '17

**Sheep farms**

- English sheep farm in America; Walnut Hall stock farm. M. Smith. *il Country Gent* 81:1355-6 J1 15 '16
- Fillmore farms at Bennington, Vt. *il Am Sheep B & W* 36:218 Ap '16
- Making mutton and minimizing labor. J. Deare. *Nat Wool Grower* 7:15-16 Ag '17
- Small sheep drafting, dipping, and shearing plant. *plan J Ag New Zealand* 13:228-9 S '16

**Sheep herding**

- Blizzard and its habits. J. C. Alter. *il Nat Wool Grower* 8:22-5 F '18
- One-night camps vs. established bed-grounds on Nevada sheep ranges. C. E. Fleming. *il Nev Ag Exp B* 94:1-21 '18
- Saving the sheep. J. C. Knollin. *Breeder's Gaz* 72:603 O 11 '17
- Sheepman's remembrance. L. C. Jewet. *il Nat Wool Grower* 7:17-19 D '17
- Shepherd and his dog. T. S. Parsons. *Field* 11 28:417 Je '18

**Sheep houses. See Barns and stables—Sheep barns**

**Sheep industry and trade**

- Annual review of the big mutton markets. *Am Sheep B & W* 37:39+ Ja '17
- Chicago sheep market. J. E. Poole. *Nat Wool Grower* 8:37 Je '18
- Collapsible lamb market. J. E. Poole. *Nat Wool Grower* 8:9-10 N '18
- Condition of the sheep industry. W. W. Hunter. *il Nat Stock & F* 40:772 O 28 '16
- Conservation of sheep and wool industry. J. W. Hammond. *il Ohio F* 139:65 Ja 20 '17
- Course of live mutton trade. *Nat Wool Grower* 8:51 Ap '18
- Course of the market. J. E. Poole. *Nat Wool Grower* 8:41 My '18
- Features of the sheep industries of the United States, New Zealand, and Australia compared. F. R. Marshall. *il plan U S Ag B* 313:1-35 '15; Abstract. *Int R Sci & Prac Ag* 7,no 2:252-5 F '16
- Feeding lamb prospect. *Nat Wool Grower* 8:29-30 Ag '18

**Sheep industry and trade—Continued**

- Future of wool growing in Australia. R. H. Harrowell. *il Nat Wool Grower* 7:21-2 Mr '17
- Hurting the sheep business. J. E. Poole. *Nat Wool Grower* 7:17 Ag '17
- June lamb market. J. E. Poole. *Nat Wool Grower* 8:40-1 Jl '18
- Lamb boycott. *Nat Wool Grower* 7:35 Ag '17
- Live mutton prospect. J. E. Poole. *Nat Wool Grower* 8:52-3 Ag '18
- Market classes and grades of sheep. W. C. Coffey. *Am Sheep B & W* 28:96-7 F '18; Same. *Nat Wool Grower* 8:11-14 F '18
- Market nervous but strong; the eat-less lamb movement checks possible advances. E. R. Johns. *Am Sheep B & W* 38:113 F '18
- Market prospects for 1918. C. H. Shurte. *Nat Wool Grower* 7:26-7 D '17
- 1918 lamb trade prospects. C. A. Mallory. *il Nat Wool Grower* 8:15-16 Ap '18
- Outlook for the sheep industry in Quebec. A. A. Macmillan. *J Ag (Quebec)* 20:147 Ja '17
- Packer shows advantages of sheep raising. E. Morris. *Am Sheep B & W* 37:214 Ap '17
- Packers' view of the mutton situation. *Am Sheep B & W* 37:201 Ap '17
- Promoting the sheep industry. *il Field* 11 27:32 Ja '17
- Purebred sheep sales in Quebec. J. Ag (Quebec) 21:89 D '17; Same abr. *Am Sheep B & W* 38:34 Ja '18
- Relation between wool and mutton production in North and South American sheep industries. F. R. Marshall. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 319-25) '17
- Review of Sioux City sheep market for 1917. *Am Sheep B & W* 38:32 Ja '18
- Revolution in the sheep business. C. T. Conklin. *il Field* 11 26:512+ Je '16
- Sheep and wool situation. J. Van Dusen. *Nat Wool Grower* 8:23-4 S '18
- Sheep industry. H. P. Miller. *Ohio F* 138:47 Jl 15 '16
- Sheep industry in New York state. *N Y Ag Dept B* 96:1-237 Je '17
- Sheep market. *Nat Wool Grower* 8:51+ F '18
- Sheep situation; decrease in production since 1914, but increase in consumption. C. Du Bose. *Penn State F* 11:267+ F '18; Same abr. *Power F* 27:36 F '18
- Sheep trade outlook. W. A. Miner. *Nat Wool Grower* 7:15-16 Mr '17
- Shoddy and the future of the sheep industry; we must fight for pure wool. W. W. Reynolds. *il Rural N Y* 77:639 My 4 '18
- Signposts of the trade. C. A. Kleman. *Nat Wool Grower* 7:37 D '17
- Survey of the mutton market. *Am Sheep B & W* 38:261-2, 333-4, 397, 440-1, 504-5, 582-3, 648-9, 712-13 Ap-N '18
- Trade conditions and prospects. J. E. Poole. *Nat Wool Grower* 7:17-18 Mr '17
- Trend of the markets. J. E. Poole. *Nat Wool Grower* 8:31-2 Ag '18
- Troubles of the mutton market. *Nat Wool Grower* 8:48 N '18
- Truth about the sheep and wool situation. A. C. Bigelow. *il Prac F* 113:195 My 15 '17
- We do not advocate boycotting lamb. *Am Sheep B & W* 37:470-1 Ag '17
- What's the matter with the sheep industry? R. Miller. *il Breeder's Gaz* 70:1204-5 D 21 '16
- Statistics**
- Annual sheep returns, 1918 (30th April). *J Ag New Zealand* 17:254-5 O '18
- Breeds of sheep. *Monthly Crop Rep* 4:40 Ap '18
- Estimated number and value on farms, January 1, 1914-1917, by states. *Monthly Crop Rep* 3:6 Ja '17
- Farm animals and their products, including imports and exports. See United States Department of agriculture Yearbooks
- Number and value of sheep killed and injured by dogs. *Ky Ag Dept Rep* 1916-1917:295-7 '18
- Sheep and wool industry. Queensland, Australia. L. N. Sullivan. (*Commerce Reports no. 188*) p 568-75 (Ag 12) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Sheep; estimated number and value on farms January 1, 1915-1918, by states. *Monthly Crop Rep* 4:14 F '18; Same. *Am Sheep B & W* 38:192 Mr '18
- Sheep statistics. *Am Sheep B & W* 37:116 F '17
- World's sheep and their wool with special reference to the production in Australasia. *Int R Sci & Prac Ag* 7, no 11:1691-8 N '16
- Sheep knoweth the shepherd's voice; story. J. Bower. *Am Sheep B & W* 38:206-7 Mr '18
- Sheep manure**
- Sheep as manure spreaders. W. W. Reynolds. *Rural N Y* 75:953 Jl 8 '16
- Sheep manure and its handling. W. W. Reynolds. *Rural N Y* 76:1050 S 3 '17
- Value of sheep manure. *Hoard's D* 51:11 Ja 28 '16
- Sheep measles.** See Sheep—Diseases and pests
- Sheep products**
- By-products of the sheep. *Nat Wool Grower* 8:21 Ag '18
- Sheep-boiling plants. C. T. Conklin. *Breeder's Gaz* 71:116 Ja 18 '17
- Sheep scab**
- Sheep scab. M. Imes. *il Farmers' B* 713:1-36 '16
- Sheep scab. A. E. Moore. *Ag Gaz of Canada* 4:263-5 Ap '17
- Sheep scab, its history and cause. A. E. Moore. *Ag Gaz of Canada* 5:21-3 Ja '18
- Sheep scab—what it is and methods of curing it. *il Am Sheep B & W* 37:280 My '17
- Sheep shearers' union**
- 2d biennial convention, Butte, Montana. E. S. Bartlett. *Am Sheep B & W* 38:590 S '18
- Sheep shearing**
- Annual shearing contest at Ohio state university. *Nat Stock & F* 40:114 Ap 22 '16
- Australian system at King Bros. J. A. Hill. *il Am Sheep B & W* 37:411-13 Jl '17
- Care in shearing. R. A. Hayne. *Breeder's Gaz* 73:1089 My 23 '18
- Day in a western shearing shed. A. N. Broadfield. *Am Sheep B & W* 36:392-3 Jl '16
- Experience with the shearing machine. W. L. McCleary. *Nat Stock & F* 41:245 My 26 '17
- Growing and marketing wool. T. C. Stone. *Breeder's Gaz* 69:556-7 Mr 9 '16
- Harvesting the wool crop. *il O Judd Farmer* 60:11 Ap 15 '16
- Machine sheep-shearing and national efficiency. J. L. Bruce. *J Ag New Zealand* 15:134-5 S '17
- Machine vs. hand shearing. J. W. Hammond. *Nat Stock & F* 41:223 My 19 '17
- New way with wool; Australian system. G. F. Stratton. *Country Gent* 81:992 My 6 '16
- 1915 shearing season epoch making. E. S. Bartlett. *Am Sheep B & W* 36:85 F '16
- Ohio state university; eighth annual shearing contest. C. S. Plumb. *il Am Sheep B & W* 36:229 Ap '16
- Pointers on shearing. F. S. King. *il Am Sheep B & W* 36:68-9 F '16
- Pointers on sheep shearing. W. H. Tomhave. *il Prac F* 114:149 Ap 1 '18
- Points on shearing. C. T. Brettell. *il Field* 11 26:429 My '16
- Shearing machine. E. D. Burras. *il Nat Stock & F* 41:1006 Ja 12 '18
- Shearing situation. *Am Sheep B & W* 38:386 Je '18
- Shearing troubles. *Nat Wool Grower* 8:34 Je '18
- Sheep shearing problems for 1918. E. S. Bartlett. *Am Sheep B & W* 38:9-10 Ja '18
- Sheep shearing situation for 1919. W. McLennan. *Am Sheep B & W* 38:711 N '18
- Western sheep shearing time. R. M. Wood. *Breeder's Gaz* 73:915 My 2 '18
- What the people think of the Australian system. *Am Sheep B & W* 37:162 Mr '17



**Sheep shearing—Continued**

Wool studies; washing before shearing; time of shearing. J. W. Hammond. *il* Ohio Ag Exp B 294:309-22 '16; Same cond. Ohio Ag Exp B v 1:131-5 My '16

**Sheep shearing machines**

Shearing machines in the East. C. S. Plumb. *il* Nat Stock & F 41:1304 Mr 9 '18

**Sheep shearing sheds**

Aftermath of the shearing season. Am Sheep B & W 36:449-50 Ag '16

Australian shearing shed at the King ranch. Am Sheep B & W 36:422 Jl '16

Construction of model shearing sheds. J. C. Findlay. *il* plans Am Sheep B & W 36:598-600 O '16

Designer of new model Australian shearing sheds. J. C. Findley. Am Sheep B & W 36:42-3 Ja '16

Modern shearing sheds. Am Sheep B & W 36:183 Mr '16

Modernizing the woolly West. P. A. Ingvason. *il* Breeder's Gaz 70:275 Ag 24 '16

Observations at the new sheds. *il* Am Sheep B & W 36:324-5 Je '16

Plans for shearing shed endorsed by U. S. Department of agriculture. Nat Wool Grower 7:23 My '17

**Sheep shows**

Analysis of carcass competitions at Smithfield show. Am Sheep B & W 36:80-1 F '16

Argentine wool growers awake. Am Sheep B & W 37:731 D '17

At the Springfield and Sedalia shows. L. A. Webster. *il* Am Sheep B & W 36:594+ O '16

Australian wool letter. A. H. Pearce. *il* Am Sheep B & W 38:740-1 N '18

Canadian news letter; Sherbrooke, Toronto and Vancouver shows. N. Stansfield. Am Sheep B & W 38:655-6 O '18

Centenary show at Buenos Aires. *il* Am Sheep B & W 36:658 N '16

Chichester Southdown show. Am Sheep B & W 37:624 O '17

Don't read history, make it and this they did at Salt Lake. *il* Am Sheep B & W 37:521-6+ S '17

English royal show at Manchester. W. W. Chapman. Am Sheep B & W 36:388-91 Jl '16

Findings in the flocks at International. Breeder's Gaz 72:1092-3 D 13 '17

1st National western ram sale a trail blazer. *il* Am Sheep B & W 38:570-3 S '18

Fourteenth International; a resplendent array and a joyous reunion. *il* Am Sheep B & W 36:705-16 D '16

Great Smithfield show. W. W. Chapman. Am Sheep B & W 36:9-10 Ja '16

Greater Iowa goes for more sheep. *il* Am Sheep B & W 37:550-1 S '17

Half a century in the showing. G. McKerrrow. *il* Field 11 28:646 S '18

Hoosier sheep show. Am Sheep B & W 37:548-9 S '17

How to win the \$50 prize. A. R. Gould. Am Sheep B & W 38:701-2 N '18

Illinois' centennial state fair, 1918. Breeder's Gaz 74:309 Ag 29 '18

Illinois sheep show bigger than ever. *il* Am Sheep B & W 38:601-2 S '18

Indiana state fair sheep show. *il* Am Sheep B & W 38:657-8 O '18

International sheep program. *il* Am Sheep B & W 38:709-10 N '18

Iowa state fair, 1918. Wallaces' F 43:1261 S 6 '18

Knollin wins Shropshire prizes at the 1917 International live stock exposition. Nat Wool Grower 8:48 F '18

List of the principal sheep shows. Am Sheep B & W 37:336 Je '17

Live stock awards at 1916 Iowa state fair. Ia Ag Bd Yearbook 1916:215-24

Midwest sheep champions; Illinois and Iowa state fairs. *il* Field 11 28:721 O '18

Minnesota had a practical fair. Am Sheep B & W 37:608 O '17

Mutton makers at the International. Breeder's Gaz 70:1119 D 14 '16

National wool growers third annual ram sale. Salt Lake City. *il* Am Sheep B & W 38:555-69 S '18; Nat Wool Grower 8:11-15, 35 S '18

New York state fair. L. A. Webster. Am Sheep B & W 37:607 O '17

New York state sheep show. *il* Am Sheep B & W 38:659 O '18

Ohio sheep show at state fair. L. A. Webster. Am Sheep B & W 36:520-2 S '16

Ohio state fair, 1918. C. S. Plumb. *il* Am Sheep B & W 38:595-600 S '18

117th Smithfield show at Islington. W. W. Chapman. Am Sheep B & W 37:9-10 Ja '17

Sheep at the Blue Grass state fair. F. Kleinhertz. Am Sheep B & W 36:526 S '16

Sheep at the Hoosier state fair. Am Sheep B & W 36:522-3 S '16

Sheep at the Michigan state fair. *il* Am Sheep B & W 38:660-1 O '18

Sheep at the Missouri state fair. Am Sheep B & W 38:603 S '18

Sheep at the National feeders' and breeders' show. J. M. Jones. *il* Am Sheep B & W 36:200-1 Ap '16

Sheep at the New York state fair. F. D. Ward. N Y Ag Dept B 96:107-14 Je '17

Sheep at the Ohio state fair. L. A. Webster. *il* Am Sheep B & W 37:546-7 S '17

Sheep at Wisconsin state fair. J. L. Tormey. Am Sheep B & W 37:613 O '17

Sheep exhibit at the Southwest show. J. M. Jones. *il* Am Sheep B & W 37:203 Ap '17

Sheep overtop any form of livestock at the Washington state fair. Am Sheep B & W 38:661-2 O '18

Sheep show at Iowa. *il* Am Sheep B & W 38:604-6 S '18

Sheep show at Iowa state fair. Breeder's Gaz 72:329 S 6 '17

Sheep show at Sacramento. R. Millar. Am Sheep B & W 36:526 S '16

Sheep show at Syracuse. Am Sheep B & W 36:525 S '16

Sheep show at Wisconsin state fair. *il* Am Sheep B & W 38:662-4 O '18

Sheep show up in the Badger state. Am Sheep B & W 36:527 S '16

Sheep shows and their value. Am Sheep B & W 37:335 Je '17

Something about the sheep show at Detroit. Am Sheep B & W 36:523 S '16

Two big fairs in the Lone Star state. L. A. Webster. Am Sheep B & W 36:654-5 N '16

With the woolly coats at the International. Breeder's Gaz 70:1113-14 D 14 '16

See also names of state fairs

**Sheep skins**

Preparation of sheep pelts. L. F. Swift. Am Sheep B & W 38:83-4 F '18; Same. Nat Wool Grower 8:19-20 F '18

**Sheep sorrel**

Growth of sheep sorrel in calcareous and dolomitic media. W. H. MacIntire. *il* Am Soc Agron J 10:29-31 Ja '18

**Sheep ticks.** See Sheep—Diseases and pests

**Sheeps' milk.** See Milk, Ewes'

**Shellac**

Present condition of lac cultivation in the plains of India. C. S. Misra. *il* map Ag J of India 13:405-15 Jl '18

**Sheldrakes.** See Mergansers

**Shelter belts.** See Windbreaks

**Shepherds**

Apprenticeship of shepherds. Int R Ag Econ 66:123-4 Je '16

Would rate sheep herders. E. T. Benson. Nat Wool Grower 7:37 Mr '17

**Sheppard, H. Cecil**

Portrait. Am P J 48:501 Ap '17

**Sherbrooke fair**

Annual fair, Sept. 2-9. A. E. MacLaurin. J Ag (Quebec) 20:78 O '16

34th annual exhibition. Sherbrooke, August 24-31. *il* J Ag (Quebec) 22:58-9 O '18

**Sherman, John B.**

Packers are people; brief biographical sketch. L. L. Heller. *il* por Field 11 28:596 Ag '18

**Shingles**

- Production of lumber, lath, and shingles in 1915 and lumber in 1914. J. C. Nellis. il map U S Ag B 506:1-45 '17  
 Proper shingling of the roof. G: E. Walsh. il Country Life 33:90 Mr '18  
 Uses of wood; the place of the wooden roof in civilization. H. Maxwell. il Am For 24: 473-82 Ag '18

**Shipbuilding**

- War, lumber and ships. Am For 23:261-2 My '17

**Shipment of goods**

- Co-operative carlot shipment of live stock and farm crops. Va Ag Dept B 120:11-13 Ag '17  
 Losses in shipping. Country Gent 81:809 Ap 8 '16

See also Freight inspection; Packing for shipment

**Shipping**

- Food problem of Great Britain; shipping problem of the world. A: Pollen. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:91-4 N '17  
 New export rules. N Y Prod R 41:630-1 F 9 '16  
 \* Ships and the food supply. (In Official statement no. 5, p. 6) '18 U.S. Food administration, Washington, D.C.

**Shipping fever.** See Horses—Diseases and pests**Ships, Concrete**

- Re-inforced concrete ships. N Y Prod R 44: 734 S 5 '17  
 Ships of concrete. Rural N Y 76:872 Jl 14 '17

**Shires (horses)**

- Belgian, Clyde and shire. Wallaces' F 42: 1623 N 30 '17  
 Case of the shire. C: Marshall. Breeder's Gaz 71:875 Ap 26 '17  
 Clydesdale and shires. R. A. Hayne. il Nat Stock & F 41:426 Jl 28 '17  
 English cart horse at home and abroad. J: G. Truman. il Breeder's Gaz 70:1196 D 21 '16  
 Shire and the Percheron. G: E. Brown. Breeder's Gaz 73:19 Ja 3 '18  
 Shire horse's ancestral foundation. il Breeder's Gaz 72:1136 D 20 '17  
 Shires at the International. Breeder's Gaz 70: 1128 D 14 '16  
 Why he selected shires. G: E. Brown. Breeder's Gaz 72:375 S 13 '17  
 Why I like shire horses. G: A. Hogg. Nat Stock & F 40:1195 F 10 '17

**Shocking of grain**

- Grain shocking machine. il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26: 359-60 N '16  
 Prevent waste in shocking. P. C. Hartl. Kimball's D F 16:661 S 1 '18  
 Save the crop by good shocking. P. G. Holden. il Wallaces' F 41:924 Je 30 '16  
 Shock that will stand. R. A. Hayne. il Nat Stock & F 41:381 Jl 14 '17  
 Shocking sheaf grain. W. A. Jones. il Ohio F 138:3 Jl 1 '16

**Shoddy**

- Government controls woolen rag market. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 54:346-7 Jl 20 '18

**Shoes.** See Boots and shoes**Shooting.** See Hunting**Short ballot**

- Farmers and the politicians. H. Quick. Country Gent 81:1263+ Je 24 '16

**Short courses.** See Agricultural colleges—Short courses**Shortage of cars.** See Freight car service**Shorthorns**

- Another pair of noted shorthorn bulls. H. W. Mumford. Breeder's Gaz 73:1086 My 23 '18  
 Basic facts in shorthorn pedigrees. W. A. Dryden. il Breeder's Gaz 73:153 Ja 24 '18  
 Bates shorthorns as dual purpose cattle. il Field II 26:227-8 Mr '16  
 Beginning a milking shorthorn herd. R. M. Dodington. Breeder's Gaz 73:1196 Je 6 '18  
 Beginnings of the dual-purpose shorthorn type. W: Graham. il Breeder's Gaz 71:1235-6 Je 21 '17

- Breeder's recollections and views. M. E. Jones. Breeder's Gaz 73:858 Ap 25 '18  
 Breeding and feeding shorthorns for beef. R. A. Norrish. il Breeder's Gaz 71:1013-14 My 17 '17  
 Brief history of an old shorthorn herd. C. D. Bellows. il Breeder's Gaz 72:1146 D 20 '17  
 Color in shorthorns. T: Shaw. Breeder's Gaz 72:314 S 6 '17  
 Derby, Red cross shorthorn bull sale. Prog F 33:802 Jl 13 '18  
 Developing shorthorns for the showyard. P. G. Ross. il Breeder's Gaz 70:1202-3 D 21 '16  
 Discrimination in shorthorn pedigrees. R. C. Forbes. Breeder's Gaz 69:957 My 4 '16  
 Distribution of shorthorns. W. C. McGavock. Breeder's Gaz 71:968 My 10 '17  
 Duchess that sold for \$35,000 in 1873. il Breeder's Gaz 71:569 Mr 15 '17  
 Early-day Canadian shorthorn breeders. S. F. Lockridge. Breeder's Gaz 72:782 N 1 '17  
 Early shorthorn breeders and beginnings. B. F. Vannmeter. Breeder's Gaz 72:276 Ag 30 '17  
 Early shorthorn days in Kentucky. S. F. Lockridge. Breeder's Gaz 72:602 O 11 '17  
 Early shorthorn days in Kentucky. B. F. Van Meter. Breeder's Gaz 72:206 Ag 16 '17  
 England's so-called non-pedigree shorthorns. Breeder's Gaz 73:202 Ja 31 '18  
 Fitting and showing milking shorthorns. L. D. May. il Field II 26:1029 D '16  
 Flintstone farm and its milking shorthorns. E. L. D. Seymour. il Country Life 30:44-5 Ag '16  
 Founding a herd of dairy shorthorns in Canada. D. Marshall. il Breeder's Gaz 70:123 Jl 27 '16  
 Future of shorthorns. B. O. Cowan. Breeder's Gaz 74:262 Ag 22 '18  
 Going in debt for shorthorns. G: E. Martin. Breeder's Gaz 74:76 Jl 18 '18  
 Greatest shorthorn exhibition. O Judd Farmer 61:3 D 23 '16  
 Hereford-shorthorn range controversy. J. E. Painter. Breeder's Gaz 70:468 S 21 '16  
 Historic shorthorn meeting. S. F. Lockridge. Breeder's Gaz 72:932 N 22 '17  
 History made at first American milking shorthorn convention and sale. il Field II 26:324-5+ Ap '16  
 How I saved fifteen years in starting a herd. W. W. Washburn. System on the Farm 1:73 Ap '17  
 Improvement might have been greater. B. O. Cowan. Breeder's Gaz 73:482 Mr 7 '18  
 Influence of a great shorthorn sire. C. W. McCampbell. Breeder's Gaz 73:1332 Je 27 '18  
 Is there a milking shorthorn? Ohio F 139:714 My 26 '17  
 Kentucky shorthorns in the seventies. S. F. Lockridge. Breeder's Gaz 72:548 O 4 '17  
 Laying shorthorn foundations in Central West. S. F. Lockridge. Breeder's Gaz 72: 491 S 27 '17  
 Management with shorthorn herd. O Judd Farmer 61:5 N 18 '16  
 Merry Monarch a great steer. H. E. McCartney. il Field III 28:19 Ja '18  
 Milking shorthorn. A. H. Prince. il Rural N Y 76:970 Ag 11 '17  
 Milking shorthorn achievements. F. J. Curtin. Breeder's Gaz 74:184 Ag 8 '18  
 Milking shorthorn cattle. il Rural N Y 77: 1209 O 26 '18  
 Milking shorthorn records. W. A. Simpson. Breeder's Gaz 73:106 Ja 17 '18  
 Milking shorthorns and milk records. T: Shaw. Breeder's Gaz 73:860 Ap 25 '18  
 Milking shorthorns coming West. W: Shaw. Nat Stock & F 40:1051 Ja 13 '17  
 Milking shorthorns in New England. W. A. Simpson. Field II 26:422 My '16  
 Milking shorthorns' rehabilitation. P. Weis. Breeder's Gaz 72:424 S 20 '17  
 More about shorthorns. B. O. Cowan. Breeder's Gaz 73:424 F 28 '18  
 More shorthorn recollections. S. F. Lockridge. Breeder's Gaz 72:353 N 8 '17  
 More stories of the early-day shorthorns. M. E. Jones. Breeder's Gaz 73:809 Ap 18 '18  
 New records for Scottish shorthorns. Breeder's Gaz 73:552c Mr 14 '18



**Shorthorns —Continued**

Obstacles in the way of milking shorthorns. T: Shaw. Breeder's Gaz 70:590 O 5 '16  
 Off-colors in shorthorns. R. C. Forbes. Breeder's Gaz 71:918 My 3 '17  
 On the way to stock improvement. F. D. Tomson. Breeder's Gaz 74:44 Jl 11 '18  
 Outlook for the shorthorn breed. G. M. Pettit. J Ag (Quebec) 20:139 Ja '17  
 Pioneer shorthorn breeders. S. F. Lockridge. Breeder's Gaz 72:666 O 18 '17  
 Place of the milking shorthorn. T: Shaw. il Field II 28:82 F '18  
 Price of foundation shorthorns. R. C. Forbes. Breeder's Gaz 69:822 Ap 13 '16  
 Promoting the interests of milking shorthorns. T: Shaw. Breeder's Gaz 73:971 My 9 '18  
 Purdue shorthorns at the 1917 International. C. F. Gobbie. il Purdue Ag 12:199-200 Ja '18  
 Pure-breds built a bank. T: J. Murphy. il Country Gent 83:12 F 9 '18  
 Raising shorthorn calves. J: Garden. Breeder's Gaz 74:45 Jl 11 '18  
 Reception of new shorthorn breeders. B. O. Cowan. Breeder's Gaz 72:1074 D 13 '17  
 Recollections of pioneer shorthorn breeders. B. F. Van Meter. Breeder's Gaz 72:240 Ag 23 '17  
 Recollections of the shorthorn cattle trade. W: D. Flatt. il Breeder's Gaz 69:235-6, 302+, 364 F 3-17 '16  
 Record shorthorn importation. G. E. Martin. Breeder's Gaz 71:955 My 10 '17  
 Red, white and roan. P. G. Ross. il Country Gent 81:2070 D 2 '16  
 Reds, whites and roans; the origin and development of the American shorthorns. J. Lawrence. il Ohio F 141:765+ Je 15 '18  
 Return of milking shorthorns. L. J. Meredith. il Breeder's Gaz 73:253 F 7 '18  
 Revolution of the eighties. Breeder's Gaz 73:651-2 Mr 28 '18  
 Rising shorthorn tide. Ag Digest 2:746 D '17  
 Saddle and sirloin club and gallery; famous shorthorn breeders. L. L. Heller. il Field II 27:923-6 D '17  
 Scotch and Scotch-topped shorthorns. C. Todd. Breeder's Gaz 73:754 Ap 11 '18  
 Selecting and getting away with a shorthorn importation. K. C. Ikeler. il Breeder's Gaz 72:1129 D 20 '17  
 Shorthorn ancestors and individual merit. W: Graham. Breeder's Gaz 70:930 N 16 '16  
 Shorthorn beginnings in Kentucky. B. F. Van Meter. Breeder's Gaz 72:172 Ag 9 '17  
 Shorthorn breeder's story. W. C. Rosenberger. Breeder's Gaz 74:222 Ag 15 '18  
 Shorthorn champion of historic descent. Breeder's Gaz 70:470 S 21 '16  
 Shorthorn herd management in Ohio and Indiana. W. S. Robbins. il Breeder's Gaz 69:423-4 F 24 '16  
 Shorthorn herds in Ireland, 1917. il map J Dept Ag Ireland 17,no 3:383-427 '17  
 Shorthorn in literature. Breeder's Gaz 74:8 Jl 4 '18  
 Shorthorn in Ohio. W: A. Martin. il Ohio F 139:38 Ja 13 '17  
 Shorthorn men in Indianapolis in 1872. S. F. Lockridge. il Breeder's Gaz 72:886+ N 15 '17  
 Shorthorn prosperity in 1915. il Field II 26:14-15 Ja '16  
 Shorthorn sages. L. L. Heller. Field II 28:73-5+ F '18  
 Shorthorn trade. F. D. Tomson. Breeder's Gaz 71:871 Ap 26 '17  
 Shorthorn trade of the future. B. O. Cowan. Breeder's Gaz 72:980 N 29 '17  
 Shorthorns and Angus in Scotland. A. Mowat. Breeder's Gaz 74:222 Ag 15 '18  
 Shorthorns as baby beeves. W. J. Sayre. Breeder's Gaz 74:294 Ag 29 '18  
 Shorthorns at Berry experiment farm. J. G. McMillan. il Ag Gaz of New South Wales 28:121-30 F '17  
 Shorthorns at the Old Lafayette, Indiana, fair. S. F. Lockridge. Breeder's Gaz 72:1260 D 27 '17  
 Shorthorns in a Holstein district. il O Judd Farmer 60:3 My 20 '16  
 Shorthorns in Colorado. F. D. Tomson. Breeder's Gaz 74:150 Ag 1 '18  
 Shorthorns on the range. R. C. Forbes. Breeder's Gaz 70:308 Ag 31 '16

Sni-a-bar's grades; old red cows and a good bull make profitable beef. J: E. Pickett. il Country Gent 83:6-7 D 21 '18  
 Some American shorthorn worthies. S. F. Lockridge. Breeder's Gaz 73:373 F 21 '18  
 Something new in New England. B. W. Currie. Country Gent 81:1868 O 21 '16  
 Status of the shorthorn trade. E. D. Tomson. Breeder's Gaz 73:1030 My 16 '18  
 Story of Fair Acres Sultan. J. A. Kilgour. Breeder's Gaz 73:912 My 2 '18  
 Story of Trout Creek farm. W: D. Flatt. Breeder's Gaz 69:71-2 Ja 13 '16  
 Studies in shorthorn ancestry. B. O. Cowan. il Breeder's Gaz 70:347 S 7 '16  
 Study of shorthorn color. B. O. Cowan. Breeder's Gaz 71:62 Ja 11 '17  
 Successful breeder of dairy shorthorns. J. R. Wiley. il Ohio F 137:93+ Ja 22 '16  
 Three famous shorthorn sires. H. W. Mumford. Breeder's Gaz 73:700 Ap 4 '18  
 To solve a shorthorn paradox. J Heredity 8:163 Ap '17  
 Two noted recent shorthorn bulls. H. W. Mumford. Breeder's Gaz 73:970 My 9 '18  
 Type and performance in milking shorthorns. W. A. Simpson. Breeder's Gaz 69:1291 Je 22 '16  
 Value of good sires among the shorthorns. J. K. Wright. il Mo Ag Bd B v 14:42-9 S '16  
 Value of milking shorthorns. il Rural N Y 77:1298 N 16 '18  
 When the pedigree craze was in flower. S. F. Lockridge. Breeder's Gaz 72:1033 D 6 '17  
 Where milking shorthorns are winning their way. L. J. McMartin. il Breeder's Gaz 72:1159 D 20 '17  
 Year 1873 in the shorthorn trade. S. F. Lockridge. Breeder's Gaz 72:730 O 25 '17  
 See also Polled Durhams; also American milking shorthorn breeders' association; American milking shorthorn cattle club; American shorthorn breeders' association; Iowa shorthorn breeders' association; National shorthorn congress show and sale

**Price lists**

Barber shorthorns sell well. Breeder's Gaz 71:1250 Je 21 '17  
 Bellows Bros.' 51 shorthorns for \$57,850. Breeder's Gaz 71:1249 Je 21 '17  
 Bellows Bros. sell 40 shorthorns for \$44,430. Breeder's Gaz 69:1301 Je 22 '16  
 Bellows' shorthorn calves average \$603. Breeder's Gaz 70:1031 N 30 '16  
 Canadian shorthorns average \$400 at Elora, Ontario. Breeder's Gaz 69:1260 Je 15 '16  
 Carpenter and Ross average \$1,185. il Breeder's Gaz 72:850 N 8 '17  
 Carpenter & Ross have \$145,950 shorthorn sale—average \$1,364. Wallaces' F 42:935 Je 15 '17  
 Central shorthorn breeders' sale, 1916. Breeder's Gaz 69:833 Ap 13 '16  
 Central shorthorn breeders' sale, 1917. Breeder's Gaz 71:782 Ap 12 '17  
 Central shorthorn breeders' vendue. Breeder's Gaz 73:762d Ap 11 '18  
 Chicago shorthorn week—288 head; \$371,987; average \$1,290. Breeder's Gaz 73:1345-6 Je 27 '18  
 Cumberland shorthorns average \$1,068. Breeder's Gaz 69:1218 Je 8 '16  
 Daniels-Owens shorthorns average \$540. Breeder's Gaz 71:638 Mr 22 '17  
 Denver shorthorn bull sale. Breeder's Gaz 69:191 Ja 27 '16  
 55 Maxwellton shorthorns for \$55,700. il Breeder's Gaz 69:1259 Je 15 '16  
 43 shorthorn calves sell for \$43,575. Breeder's Gaz 70:894 N 9 '16  
 45 shorthorn calves for \$69,980. il Breeder's Gaz 72:1046 D 6 '17  
 Glenside milking shorthorns make \$1,008. Breeder's Gaz 71:1166 Je 7 '17  
 Glenside sale average \$1,008. il Field II 27:558 Jl '17  
 Glenside shorthorns in demand. il Field II 28:518 Jl '18  
 Hallwood shorthorn auction. Breeder's Gaz 70:22 Jl 6 '16  
 Illinois (Galesburg) shorthorn sale. Breeder's Gaz 73:381 F 21 '18

**Shorthorns—Price lists—Continued**

- Imported shorthorns average \$751. *il* Field II 27:35 Ja '17
- Imported shorthorns average \$906. Breeder's Gaz 70:894 N 9 '16
- Imported shorthorns in keen demand. Breeder's Gaz 71:1203 Je 14 '17
- Iowa shorthorn breeders' sale. Des Moines. Breeder's Gaz 69:562-3 Mr 9 '16
- Jos. Miller & Sons' shorthorns make \$655. Breeder's Gaz 71:1167 Je 7 '17
- Lackawana shorthorns average \$1,052. Breeder's Gaz 73:1099 My 23 '18
- Leslie Smith's greatest shorthorn sale. Breeder's Gaz 74:17 J1 4 '18
- Lespedeza shorthorns make \$288. Breeder's Gaz 69:499 Mr 2 '16; Prog F 31:346 Mr 4 '16
- Lookabaugh's shorthorns realize \$600. Breeder's Gaz 70:1032 N 30 '16
- Maasdam & Wheeler dispersion. Breeder's Gaz 73:714 Ap 4 '18
- McClellan shorthorns make \$983. Breeder's Gaz 73:664 Mr 28 '18
- McDermott's shorthorns in keen demand. Breeder's Gaz 71:1168 Je 7 '17
- McMaster-Prather shorthorns. Breeder's Gaz 71:1166 Je 7 '17
- March sales. Breeder's Gaz 69:618-19 Mr 16 '16
- Missouri shorthorn sales of sensational character. Breeder's Gaz 73:1306 Je 20 '18
- Mitchell Bros. disperse shorthorns at \$872. Breeder's Gaz 72:19 J1 5 '17
- National shorthorn congress show and sale, Chicago, Feb. 19-22. *il* Breeder's Gaz 73:430-2 F 28 '18; Wallaces' F 43:421 Mr 1 '18
- Ogden & Son's shorthorns average \$828. Breeder's Gaz 71:1250 Je 21 '17
- Pritchard-Jackson shorthorn auction. Breeder's Gaz 69:683 Mr 23 '16
- Purdy Bros.' shorthorns average \$551. Breeder's Gaz 71:1167 Je 7 '17
- Recent shorthorn sales. *il* Field II 27:952-3 D '17
- Recent shorthorn sales. H. T. Morgan. *il* Field II 26:1041 D '16
- Sale held by Milking shorthorn cattle club of America at Painesville, O. Breeder's Gaz 69:562 Mr 9 '16
- Shorthorn auction at Freeport, Ill. Breeder's Gaz 69:247 F 3 '16
- Shorthorn show and sale at Columbus, O. Breeder's Gaz 69:139 Ja 20 '16
- Shorthorns at South Omaha. Breeder's Gaz 69:1301 Je 22 '16
- Shorthorns average \$958.66. Field II 27:39 Ja '17
- Shorthorns sold in Kansas City. Breeder's Gaz 71:1167 Je 7 '17
- Shorthorns sold in Toronto. Breeder's Gaz 73:494 Mr 7 '18
- Smith & Son's average \$1,090. Breeder's Gaz 72:850 N 8 '17
- Stanton shorthorns make \$775. Breeder's Gaz 71:173 Ja 25 '17
- Two notable shorthorn sales in Oklahoma. Breeder's Gaz 71:1082 My 24 '17
- Uppermill shorthorns make \$763. Breeder's Gaz 69:780-1 Ap 6 '16
- Watt Gardhouse shorthorns at \$810. Breeder's Gaz 73:1149 My 30 '18
- Watt-Gardhouse shorthorns average \$772. Breeder's Gaz 72:19 J1 5 '17
- Shortleaf pine.** See Pine
- Shot-hole borers.** See Barkbeetles
- Show windows**
- Background colors for window displays. Am Flor 49:97-8 Ag 4 '17
- Summer store and window. Am Flor 47:102 Ag 5 '16
- Summer window. Am Flor 49:51 J1 28 '17
- Shrimp**
- Shrimp: handling, transportation, and uses. E. D. Clark and L. MacNaughton. *il* U S Ag B 538:1-8 '17
- Shrubs**
- Australian fodder shrub; the salt bush. J. W. Audas. *il* J Dept Ag Victoria 15:499-504 Ag '17
- Beautifying the farm home. R. B. Cruickshank. *il* Ohio Ag Ext B v 12, no 7 26p '16-'17
- Chinese viburnums and cotoneasters. Gard Chron (Lond) 60:254 N 25 '16
- Cultural notes on hardy shrubs. A. E. Thatcher. Gard Chron Am 20:309 J1 '16
- Distinctive American plants. E. H. Costich. *il* Gard Chron Am 21:141-2 Ap '17
- Early-flowering shrubs in an Irish garden. T. E. Tomalin. *il* Gard Chron (Lond) 63:165 Ap 20 '18
- Early spring-flowering trees and shrubs. E. H. Wilson. *il* Gard M 23:19-23 F '16
- Flowering shrubs. J. Luck. Am Flor 48:848 My 5 '17
- Flowering shrubs as hedge plants. G. H. Sinclair. *il* Gard M 25:24-5 F '17
- Flowering shrubs for the middle South. J. M. Patterson. *il* Gard M 24:137-8 N '16
- Flowering shrubs in Wiltshire. R. H. Legg. Gard Chron (Lond) 62:242 D 15 '17
- Flowering shrubs of late summer. W. E. Bontrager. Ohio F 138:207 S 2 '16
- Foundation planting. W. Miller. *il* Gard M 24:86-8 O '16
- Fruits, trees and shrubs recommended for northern Minnesota. T. M. McCall. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1 88-91) '17
- Good plants for northern regions. S. Fraser. Gard M 25:150 Ap '17
- Hardy ornamental fruiting trees and shrubs. J. Dunbar. Gard Chron Am 21:341-2 S '17
- Hardy shrubs. Gard M 25:94-5 Mr '17
- Hardy shrubs and herbaceous perennials. F. W. Brodrick. Minn Hort 46:446-8 D '18
- Landscape improvement of rural school grounds; with supplementary lists of ornamental plants. J. W. Gregg and others. (B. 20) 52p *il* plans '17 Cal. State bd. of educ., Sacramento
- List of shrubs all of which have been tested and found unsatisfactory in Wisconsin. Wis Hort Soc Rep 1917:15
- Native shrubs. F. A. Waugh. *il* Country Gent 81:1766 S 30 '16
- New Chinese trees and shrubs for the Pacific slope and other favored regions. E. H. Wilson. *il* Gard M 22:197-200 Ja '16
- North Dakota farmstead; list and description of shrubs. H. O. Werner. *il* N C Ag Exp C 10:21-7 '16
- \* Now is the time to plant shrubs. W. C. McCollom. *il* Independent (119 W. 40th st, N.Y. 10c) 96:169 N 9 '18
- Ornamental shrubs. W. N. Hutt. Prog F 32:1133 O 27 '17
- Ornamental shrubs adapted to general planting in Oklahoma. C. Jensen. *il* Okla Ag Ext C 42:1-4 '16
- Our garden in winter. R. Dean. *il* Country Life 33:69-71 Ja '18
- Plans for some permanent plantings of shrubs. *il* Country Gent 81:2238 D 30 '16
- Propagating shrubs. A. D. Turner. Gard Chron (Lond) 61:3 Ja 6 '17
- Propagation of shrubs. E. O. Orpet. Am Flor 47:276 Ag 19 '16
- Pruning flowering shrubs. Gard Chron Am 22:221 Ag '18
- Random remarks about various shrubs. Country Life 31:82 Mr '17
- Selected shrubs for our climate. A. Millard. *il* Gard Chron Am 21:52-4 F '17
- Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. *il* Maine Ag Dept B v 15:3-10 S '16
- Shrub combinations that go well. E. O. Blair. Gard M 23:124 Mr '16
- Shrubs for the home place. *il* Country Gent 81:749 Ap 1 '16
- Shrubs for use and ornament. E. P. Powell. *il* Gard M 25:179-80 Ap '17
- Shrubs from the wildwood. C. H. Chesley. Country Gent 81:1555 Ag 19 '16
- Shrubs in the garden picture. H. J. Koehler. *il* Country Life 31:36-40 Mr '17
- Shrubs that keep their foliage late. W. H. Judd. *il* Gard M 27:139-40 Ap '18
- Some native shrubs and their uses. E. Meyer. *il* Minn Hort 45:156-61 Ap '17
- Spring pruning of shrubbery. C. H. Chesley. Ohio F 139:484 Mr 31 '17



**Shrubs—Continued**

- Three new shrubs of exceptional merit. J. H. McFarland. *il Gard M* 24:98-9 O '16  
 Trees and shrubs in modern gardening. *Am Flor* 47:390 S 9 '16  
 Trees and shrubs recommended. *Wis Hort Soc Rep* 48:10-14 '18 (rev.)  
 Trees, shrubs and plants for farm and home planting. C. P. Halligan. *il Mich Ag Exp B* 28:1-52 '18  
 Using shrubs wisely. F. W. Sweet. *il Green's Fruit Grower* 36:4 Ja '16  
 What can grow close to the house? S. E. Hamblin. *il Gard M* 25:30-1 F '17  
 What to plant and how to care for hardy plants, shrubs and trees. C. A. Green. *il Green's Fruit Grower* 37:1 Ja '17

*See also* Hedges; Landscape gardening; Trees; also Althæa; Barberries; Box-barberry; Boxwood; Buddleias; Ceanothus; Chinese pearl bush; Citrus trifoliata; Colletias; Crabapples; Cyrtandra; Daphnes; Deutzias; Dogwood; Eupatoriums; Hydrangeas; Indigoferas; Juniperus; Ligustrum lucidum; Lilacs; Mangroves; Piptanthus; Pittosporum; Pyracanthas; Rhododendrons; Salvias; Spice bush; Staphyleas; Tamarisk; Viburnums; also Arbutum arboretum

**Seeds**

- Tree and shrub seeds. *Gard Chron Am* 20:315 JI '16

- Siamese twins on record, Latest. *pors J Hered-ity* 7:239 My '16

**Siberia**

*See also* Agriculture, Cooperative—Siberia; Cooperation—Siberia; Plants—Siberia

**Description and travel**

- Farming in eastern Asia; Russian Siberia. J. T. Nichols. *Wallaces' F* 42:998 JI 6 '17

- Sicilian buttercups (poultry). *See* Buttercups (poultry)

- Sicily. *See* Cotton—Sicily

**Sick, The**

- Care of the sick in the home. Mrs J. Y. Shamel. *il Ill Farmers Inst Household Sci* 1917:16-24 '18

- Diet for the sick. *Prog F* 31:233 F 12 '16  
 Farm woman as nurse. *Prog F* 32:408 Mr 31 '17

**Sideboards**

- In and out my sideboard. F. A. Harris. *il Country Gent* 81:952 Ap 29 '16

**Sidewalks, Concrete**

- Cement walks. E. V. Laughlin. *Farm Eng* 4: 77 N '16  
 How to make a concrete walk on the farm. *Power F* 26:34 D '17  
 Sidewalks on the farm. *Wallaces' F* 41:1089 Ag 18 '16  
 Simple sidewalk construction for the farm. *il Irr Age* 32:202 N '16

**Sierra Nevada**

- Across the high Sierras. M. Daniels. *Am For* 22:684 N '16

**Sigillaria**

- Mazocarpon or the structural sigillariostrobus. M. J. Benson. *il Ann Bot* 32:569-89 O '18

- Sign posts. *See* Guide posts

**Silage**

- Balanced ration from alfalfa and silage; alfalfa substituted for grain. *Rural N Y* 75: 1536 D 16 '16  
 Beef from silage. *Country Gent* 82:1256 Ag 11 '17  
 Beets and mangels compared with silage for milk production. C. C. Hayden. *Ohio Ag Exp B v* 1:49-53 F '16  
 Build a silo and save the silage. *Tex Ag Ext B* C-6 8p '18  
 Cane or sorghum for silage. *Wallaces' F* 41: 841 Je 9 '16  
 Cattle feeding; oat and pea silage for beef cows; oat and pea silage for growing cattle. A. D. Faville. *Wyo Ag Exp B* 117:55-64 '17  
 Clover or alfalfa in the silo. F. C. Minkler. *Rural N Y* 75:1027 JI 29 '16

- Comparative feeding value of sorghum silage. T. Butler. *Prog F* 33:1327 D 7 '18  
 Conservation calls for silos. *il Kimball's D F* 16:442-4 Je 1 '18  
 Conserving fodder in Kansas. F. B. Nichols. *Hoards' D* 55:876 Je 14 '18  
 Construction of the silo. W. J. Fraser. *Jersey B* 36:685 My 2 '17  
 Contribution to the bacteriology of silage. J. M. Sherman. *bibliog J Bact* 1:445-52 JI '16  
 Converting dry fodder into succulent ensilage. R. Maxwell. *Country Life* 31:128 Ap '17  
 Cooking silage in the silo. C. A. Ludwig. *Rural N Y* 75:535 Mr 25 '16  
 Co-operate to fill their silos. J. L. Ahart. *O Judd Farmer* 61:5 Ag 12 '16  
 Corn and beans for the silo. J. C. Beavers. *il Country Gent* 82:1110 JI 7 '17  
 Corn and sorghum silage compared. *Prog F* 33:747 Je 29 '18  
 Corn and soybean silage. H. G. Van Pelt. *il Kimball's D F* 14:185, 272 Mr 15, Ap 15 '16  
 Cost of silage—profit in cows. *Hoards' D* 51: 293 Mr 10 '16  
 Cotton stalks in the silo. *Rural N Y* 76:811 Je 23 '17  
 Cottonseed meal and silage. *Hoards' D* 54:38 Ag 3 '17  
 Crops for the silo in northern Michigan. B. W. Housholder. *il Hoards' D* 55:371 Mr 22 '18  
 Do you need a silo? W. F. Turner. *Mass Ag Ext C* 44:1-2 '17  
 Does it pay to feed silage. *Ohio F* 140:44, 64 JI 21-28 '17  
 Economize through building silo. C. B. May. *il O Judd Farmer* 62:3 My 5 '17  
 Economy of the silo. H. T. Trainer. *Prac F* 112:123 Mr 15 '16  
 Effect of silage on Swiss cheese. C. F. Doane. *Hoards' D* 51:203 F 25 '16  
 Ensilage. *J Ed Ag* 24:996-8, 1114-17 D '17-Ja '18  
 Ensilage. W. Dibble. *il J Ag New Zealand* 17:147-53, 201-4 S-O '18  
 Ensilage from goat's-rue. W. Dibble. *il J Ag New Zealand* 13:230-1 S '16  
 Ensilage; its manufacture and use. W. J. Spafford. *J Dept Ag S Australia* 21:391-404 D '17  
 Ensilage—its production and value as a feed for sheep. A. G. Butterfield. *il Nat Wool Grower* 8:17 Ja '18; Same. *Am Sheep B & W* 38:84 F '18  
 Ensilage—its value and cost of production. R. R. Kerr. *J Dept Ag Victoria* 14:97-9 F '16  
 Ensilage notes. W. Dibble. *J Ag New Zealand* 13:397-8 N '16  
 Ensilage notes. W. Dibble. *il J Ag New Zealand* 14:447-8 Je '17  
 Ensilage-pressing device. *il J Ag New Zealand* 13:287-8 O '16  
 Experiences with feeding silage. *Ohio F* 138: 46 JI 15 '16  
 Feeding of silage to lambs. F. McRoberts. *Mo Ag Ed Yearbook* 1916:151-2  
 Feeding silage. *Ohio F* 138:203 S 2 '16  
 Feeding value of silage. *Prog F* 31:508 Ap 8 '16  
 Getting better value from silage. O Judd *Farmer* 60:4 Ap 15 '16  
 Good silage is largely made by good filling. K. Perkins. *Prog F* 32:1068 O 13 '17  
 Great utility of the summer silo. W. A. Martin. *il Ohio F* 141:641 My 11 '18  
 Handling silage. L. W. Chase. *il Neb Ag Ext B* 45:1-16 '17  
 Handling silage crops. O. E. Reed. *il Kimball's D F* 16:589 Ag 1 '18  
 Harvesting the silage crop and filling the silo. T. E. Woodward. *il Hoards' D* 53:325 Mr 16 '17  
 How silage affects color of butter. *Wallaces' F* 41:279 F 18 '16  
 How to feed the dairy cow; silage. H. G. Van Pelt. *il Kimball's D F* 13:816-17; 14:12-13 Ja 1-15 '16  
 Improvised methods of making silage. *J Bd Ag* 24:1345-56 Mr '18  
 Italian silage investigations. *il Hoards' D* 52: 96 Ag 18 '16

**Silage—Continued**

- Japanese millet for silage. B: G. Southwick. Rural N Y 77:611 Ap 27 '18
- Late silage investigations. O. E. Reed. il Hoard's D 53:322 Mr 16 '17
- Legume crops ensiled with corn taint milk? J. L. Justice. Ohio F 137:817 Je 17 '16
- Machine-made silage. il Country Gent 83:36 S 7 '18
- Making and feeding silage. E. W. Sheets. il W Va Ag Ext C 154:1-16 '17
- ✓ Making silage. H. L. Blanchard. Western Wash Ag Exp B v 5:78-80 S '17
- ✓ Making silage. F. W. Woll. Hoard's D 53:224 Mr 16 '17
- ✓ Making silage. F. W. Woll. il Hoard's D 56:108 Ag 16 '18
- Making silage for dairy feed. E. W. Gage. il Kimball's D F 16:620-1 Ag 15 '18
- Management of dairy herds; silos and silage. E. V. Ellington. Idaho Ag Exp B 102:26-31 '17
- Millet for silage. B. G. Southwick. Hoard's D 55:604 Ap 26 '18
- More from silage—Wisconsin and Indiana plans. M. P. Brummit and W. C. Hugunin. il System on the Farm 1:261-2 S '17
- More on O. P. V. silage mixtures. Hoard's D 56:109 Ag 16 '18
- New forage plant. F. B. Linfield. il J Heredity 9:135-8 Mr '18; Same cond. Rural N Y 77:667 My 11 '18
- Nineteen years with silage. W: A. Martin. Ohio F 139:227 F 17 '17
- Oats, peas and vetch in Canada. J: M. Truro. Country Gent 81:840 Ap 15 '16
- Observations on silage, with a short description of various types of silos recently erected in East Anglia. A. W. Oldershaw. il J Bd Ag 23:1063-72 F '17
- Pack silage thoroughly. O Judd Farmer 63:8 Ag 4 '17
- Planning for a silage crop. Rural N Y 75:100 Ja 15 '16
- Potato cull silage. Weekly N L 5:6 D 12 '17
- Profitable silage feeding in Iowa. Breeder's Gaz 69:1290 Je 22 '16
- Profitable succotash; soy beans with corn. E. R. Eastman. Hoard's D 53:359 Mr 16 '17
- Rape as material for silage. A. R. Lamb and J. M. Evvard. J Ag Research 6:527-33 Jl 3 '16
- Reasons for using silage. G. E. Morris. Ohio F 137:650 My 6 '16
- Refilling the silo. C. H. Long. Wallaces' F 43:462 Mr 8 '18
- Results of steer feeding with silage. W. H. Tomhave. Prac F 114:182 My 1 '18
- Revival of the ensilage question. R. Burri. Int R Sci & Prac Ag 8,no 11:1151-2 N '17
- Russian sunflowers for silage. il Hoard's D 55:511 Ap 12 '18
- Save time and feed by building a silo. R. S. Stephenson. il Ohio F 140:73 Ag 4 '17
- Selling value of silage. Wallaces' F 41:8 Ja 7 '16
- Silage and alfalfa for cows. Hoard's D 53:971 Jl 13 '17
- Silage and alfalfa in Idaho. Hoard's D 51:547 Ap 21 '16
- Silage and farm fertility. Rural N Y 76:667-8 My 12 '17
- Silage and labor. B: G. Southwick. Rural N Y 77:498 Mr 30 '18
- Silage and silage fermentation. A. R. Lamb. Ia Ag Exp B 168:1-11 '16; Same. Ia Ag Bd Yearbook 1916:465-72
- Silage and Swiss cheese. H. E. Paulson. N Y Prod R 41:1043 Ap 12 '16
- Silage and Swiss cheese. J. L. Sammis. Hoard's D 53:529 Ap 13 '17
- Silage as a factor in beef production. W. H. Tomhave. Am Soc Animal Production Pro 1915-1916:158-64 '17; Same cond. Prac F 113:61 F 1 '17
- Silage as food for stock. G. Jaques. J Bd Ag 22:1249-52 Mr '16
- Silage at lower cost. C. C. Gray. il Ohio F 137:31 Ja 8 '16
- Silage crops a necessity. E. V. Ellington. Jersey B 36:1049 Jl 4 '17
- Silage crops for Nevada. C. S. Knight. il Nev Ag Exp B 91:1-16 '18
- Silage crops for southern farmers. J. F. Duggar. Prog F 31:505 Ap 8 '16
- Silage crops for western Washington. E. B. Stookey. Western Wash Ag Exp B v 5:148-52 Ja '18
- Silage cuts feed bill. O Judd Farmer 64:13 F 9 '18
- Silage feeding plan. C: E. Wheatley. il Wallaces' F 41:271 F 18 '16
- Silage for beef-makers. C. G. Starr. Breeder's Gaz 72:374 S 13 '17
- Silage for dairy cattle. S. P. Wild. Breeder's Gaz 71:1158 Je 7 '17
- Silage for draft horses. H. Birkett. Breeder's Gaz 69:27 Ja 6 '16
- Silage for farm animals. E. S. Gilton and R. F. O'Donnell. Ia Ag Ext B 41:1-7 '16
- Silage for fattening cattle. B. E. Carmichael. Ohio Ag Exp B v 2:225-6 Jl '17
- Silage for horses, swine, sheep and poultry. il Prac F 113:45 F 1 '17
- Silage for poultry. Country Gent 82:1743 N 10 '17
- Silage for swine. J: M. Evvard. Country Gent 81:1240 Je 17 '16
- Silage from clover and timothy. E. Norman. Hoard's D 55:272 Mr 8 '18
- Silage from stover. Weekly N L 4:1 Jl 18 '17
- Silage in California. Hoard's D 52:100 Ag 18 '16
- Silage inquiries. Prog F 31:999 Ag 19 '16
- Silage investigations. C. H. Eckles and others. Mo Ag Exp Research B 22:1-32 '16
- Silage juice as liquor. Rural N Y 75:900 Je 17 '16
- Silage made from oats and tares as a food for milking-cows. A. W. Oldershaw. J Bd Ag 23:224-9 Je '16
- Silage main feed for sheep. H. H. Busch and S. W. Busch. O Judd Farmer 63:8 Ag 4 '17
- Silage suggestions. Jersey B 37:1844 O 30 '18
- Silage vs. sugar beets. Wallaces' F 41:744 My 12 '16
- Silages for fattening steers. H. K. Gayle and E. R. Lloyd. Miss Ag Exp B 182:1-15 '17
- Silo and dairy production. C. R. George. il Purdue Ag Ext Leaflet 81:1-6 '17
- Silo and silage. C: S. Plumb. (In De Laval dairy hand book, p 28-32) '16 De Laval separator co., New York
- Silo and the beef cattle breeder. Purdue Ag Ext Leaflet 78:1-4 '17
- Silo and the cattle feeder. Purdue Ag Ext Leaflet 79:1-4 '17
- Silo and the profit of the general farm. Purdue Ag Ext Leaflet 82:1-6 '17
- Silo and the sheepman. Purdue Ag Ext Leaflet 77:1-4 '17
- Silo experiences at Sunny Home. A. L. French. Prog F 31:502 Ap 8 '16
- Silo important for fruit grower-stock raiser. G: North. Better Fruit 10:24 My '16
- Silo in California agriculture. F. W. Woll. il Hoard's D 53:321 Mr 16 '17
- Silo—is it succeeding in the South? L. A. Markham. Prog F 31:497 Ap 8 '16
- Silo the stock farmer's gold mine. A. L. Haecker. il Prog F 31:499 Ap 8 '16
- Silos and ensilage. E. J. F. Crawford. J Dept Ag S Australia 20:696-700 Ap '17
- Silos and shorthorns. F. I. Coykendall. Breeder's Gaz 73:1333 Je 27 '18
- Silos and silage. Nat Stock & F 40:599 S 9 '16
- Silos and silage. H. L. Blanchard. il Western Wash Age Exp B v 4:2-10 Jl '16
- Silos and silage. W. J. Dougan. Wis Dairy-men's Assn Rep 1913-1916:89-94 '17
- Silos and silage. A. L. French. Prog F 33:639 My 25 '18
- Silos and silage. L. Ross. il Purdue Ag 10:33+ Mr '16
- Silos and silage. E. W. Sheets and G. L. Oliver. il W Va Ag Exp B 157:1-23 '16
- Silos and silage. S. T. Simpson. il Mo Ag Ext C 32:1-8 '17
- Silos and silage crops for Arizona. W. A. Barr. il Ariz Ag Ext C 17:1-17 '17
- Silos and silage in New York. H. H. Lyon. Hoard's D 53:318 Mr 16 '17
- Silos, and the production and feeding of silage. H. A. Hopper. il Cornell Reading Course 114:215-35 Jl '16



**Silage—Continued**

- Silos on eastern farms. W. H. Tomhave. *Prac F* 112:317, 333 Ag 15-S 1 '16
- Silos on the plains. Z. E. Black. *il Country Gent* 81:1579 Ag 26 '16
- Six years with silage. H. B. Osborn. *Ohio F* 138:354 O 14 '16
- Some problems in the growth of silage crops. A. Amos. *J Bd Ag* 21:162-70 My '17
- Some reasons why every farmer should have a silo. F. A. Read. *J Ag (Quebec)* 20:46 Ag '16
- Some silo-filling suggestions. T. Butler. *Prog F* 32:839 Ag 4 '17
- Sorghum as a silage crop. T. Butler. *Prog F* 33:683 Je 8 '18
- Sorghum bagasse silage. Hoard's D 56:195 S 6 '18
- Sorghum crops for silage. J. B. Fitch. *Kimball's D F* 15:233 Ap 1 '17
- Stockyards sales prove silage best. *Prac F* 113:187 My 1 '17
- Studies in forage poisoning (Extracts from Ky Ag Exp B 207 & 208); with discussion. R. Graham and others. *il Am Vet M Assn J* 53:161-92 My '18
- Studies in forage poisoning: an aerobic organism isolated from ensilage of etiologic significance. R. Graham and others. *il Ky Ag Exp B* 208:117-23 '17
- Substitute silage crops for Washington. R. M. Phillips. Hoard's D 52:352 O 6 '16
- Sudan grass silage. C. K. Francis and W. G. Friedemann. *Okla Ag Exp B* 115:1-8 '17; Abstract. *Rural N Y* 76:926 Jl 28 '17; Abstract. Wallaces' F 42:1111 Ag 10 '17
- Suggestions for better silage. F. S. Prince. *Ohio F* 138:252 S 16 '16
- Sunflower silage for dairy cows: a preliminary report. C. N. Arnett and O. Tretsven. *Mont Ag Exp B* 118:75-80 '17
- Sunflowers as a silage crop. G. Lagrange. *Jersey B* 36:1749 N 7 '17
- Supplying winter succulence for sheep. G. H. Dacy. *Nat Wool Grower* 7:19-20 Ag '17
- Sweet clover silage. *Nat Stock & F* 40:939 D 16 '16
- Sweet clover: utilization; as a silage crop. H. S. Coe. *Farmers' B* 820:20-2 '17; Same. Wallaces' F 42:1093 Ag 3 '17
- Sweet potatoes in the silo. *Rural N Y* 76:893 Jl 21 '17
- Sweet stack silage. T. Wibberley. *J Bd Ag* 23:581-3 S '16
- Thorough packing needed if silage is to keep well. *Weekly N L* 6:5 Ag 14 '18
- Transfer of silage. F. W. Woll. *il Country Gent* 81:789 Ap 8 '16
- Trials with California silage crops for dairy cows. F. W. Woll and E. C. Voorhies. *Cal Ag Exp B* 282:19-40 '17
- Valuable silage experience. Wallaces' F 41:1121 Ag 25 '16
- Value of silage. Wallaces' F 43:1293 S 13 '18
- Value of silage for cattle. R. L. Case. *il Purdue Ag* 10:23-4 F '16
- Value of silage for dairy cows: results at Glen Innes experiment farm. R. H. Gennys. *Ag Gaz of New South Wales* 29:809-11 N '18
- Well packed silage does not spoil. *Prog F* 31:928 Jl 29 '16
- What a silo can do. Hoard's D 54:18 Jl 27 '17
- What is silage worth. J. E. Dorman. *il Hoard's D* 52:800 D 29 '16; Same. *Int R Sci & Prac Ag* 8,no 4:615-16 Ap '17
- What makes silage. A. R. Lamb. *Country Gent* 82:190 F 3 '17
- Will silage freeze? J. Bower. Hoard's D 54:578 N 16 '17
- Year-round silos; with corn, alfalfa or clover to supplement the summer pasture. W. J. Fraser. *il Country Gent* 83:7 Je 22 '18

See also Alfalfa as feed—Silage; Corn (feed)—Silage; Silos

**Composition**

- Occurrence and significance of mannitol in silage. A. W. Dox and G. P. Plaisance. *la Ag Exp Research B* 42:353-64 '17
- Occurrence of l-leucine in sweet clover silage. G. P. Plaisance. *Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.)* 39:2087-8 S '17

- Occurrence of mannite in silage and its possible utilization in the manufacture of explosives. A. W. Dox and G. P. Plaisance. *Science (Science Press, Garrison, N.Y. 15c)* n s 46:192-3 Ag 24 '17

**Costs**

- Cost of silage. Wallaces' F 43:1693 N 15 '18
- Preliminary enquiry into the cost of production of silage in East Anglia. A. Amos and A. W. Oldershaw. *J Bd Ag* 23:333-42 Jl '16

**Weights and measures**

- Estimating silage. F. M. White. Hoard's D 55:514 Ap 12 '18
- Measuring silage and capacity of silos. L. W. Chase. *Neb Ag Exp C* 1:1-14 '17

**Silage fermentation**

- Acidity of silage made from various crops. R. E. Neidig. *bibliog J Ag Research* 14:395-409 S 2 '18
- Chemical studies in making alfalfa silage. C. O. Swanson and E. L. Tague. *J Ag Research* 10:275-92 Ag 6 '17
- Chemistry of sweet-clover silage in comparison with alfalfa silage. C. O. Swanson and E. L. Tague. *J Ag Research* 15:113-32 O 14 '18
- Colon-aerogenes group from silage. O. W. Hunter. *bibliog J Bact* 2:635-9 N '17
- Lactic acid bacteria in silage making. F. B. Morrison. Hoard's D 52:116 Ag 18 '16
- Microorganisms and heat production in silage fermentation. O. W. Hunter. *bibliog J Ag Research* 10:75-83 Jl 9 '17
- Relative influence of microorganisms and plant enzymes on the fermentation of corn silage. A. R. Lamb. *bibliog J Ag Research* 8:361-80 Mr 6 '17; Same. *la Ag Exp Research B* 40:313-32 '17
- Silage and silage fermentation. A. R. Lamb. *la Ag Exp B* 168:1-11 '16; Same. *la Ag Bd Yearbook* 1916:465-72
- Silage fermentation. A. R. Lamb. *Country Gent* 82:907 My 19 '17
- Some important fermentations in silage. O. W. Hunter and L. D. Bushnell. *bibliog Kan Ag Exp Tech B* 2:1-32 '16

**Silk**

- Silk. *il Country Gent* 82:297 F 10 '17

**Statistics**

- Production of raw silk in different countries. See United States Department of agriculture Yearbooks

**Silk, Artificial**

- Manufactured silk. I. Bjorklund. *J Home Econ* 9:377-82 Ag '17

**Silkworms**

- Appearance of accidental bivoltins in univoltine breeds of the silkworm. A. Lecaillon. *Int R Sci & Prac Ag* 9,no 1:88-90 Ja '18
- Best silkworm hybrids of the first generation. *Int R Sci & Prac Ag* 8,no 10:1392-3 O '17
- Black worm silkworm of Cambodge. *Int R Sci & Prac Ag* 8,no 12:1256-7 D '17
- Comparative research on the value of the electrical and chemical treatments of silkworm eggs; Selection by phototaxy of newly-hatched silkworm larvae with regard to their strength; Studies on the process of digestion in silkworm larvae. C. Acqua. *Int R Sci & Prac Ag* 9,no 2:220-3 F '18
- Development of sericulture in Japan. *Int R Sci & Prac Ag* 8,no 5:775-7 My '17
- Development of the silk glands in the chief races of silkworms. *Int R Sci & Prac Ag* 7,no 2:261-4 F '16
- Experimental rearing of the silkworm in Tilimbars, in southern Italy. P. Bucci. *Int R Sci & Prac Ag* 7,no 6:860 Je '16
- New silkworm rearing methods; the Acqua small trestle system and the Campbell shelf system. *il Int R Sci & Prac Ag* 9,no 3:364-7 Mr '18
- Ordonnance royale portant des instructions pour l'enregistrement des graines des vers à soie en Espagne. *Int Yearbook Ag Leg* 1916:762-3 '17
- Orientation of the mature silkworm in the act of spinning its cocoon. G. Ravenna. *Int R Sci & Prac Ag* 7,no 3:408 Mr '16

**Silkworms—Continued**

- Our giant silkworm. Ohio F 140:409 N 3 '17  
 Pebrine disease of silkworms in India. C. M. Hutchinson. Int R Sci & Prac Ag 8,no 8: 1156-7 Ag '17  
 Results of summer rearing of silkworms obtained in Piedmont in 1916. P. Favero. Int R Sci & Prac Ag 8,no 1:123-5 Ja '17  
 Second report on the experiments carried out at Pusa to improve the mulberry silk industry. Int R Sci & Prac Ag 9,no 4:482-3 Ap '18  
 Sericulture in Egypt. Int R. Sci & Prac Ag 7,no 2:265 F '16  
 Silk culture in India. Ag J of India 13:553-4 JI '18  
 Studies made by the Imperial sericultural station of Japan. Int R Sci & Prac Ag 8, no 3:419-21 Mr '17  
 Transmission of richness in silk and hardness in crossing silkworms. E. Grangeon. Int R Sci & Prac Ag 9,no 1:87-8 Ja '18  
 Use of phototaxy in selecting, from the moment of their birth, those larvae of bombyx mori most resistant to the disease flacherie. C. Acqua. Int R Sci & Prac Ag 8,no 6:910-12 Je '17  
 Use of viper's grass in feeding the mulberry silkworm. F. Lambert. Int R Sci & Prac Ag 8,no 12:1257-8 D '17  
 Value of lime in relation to silkworm nutrition. I. Hatano. Int R Sci & Prac Ag 7,no 8:1147-8 Ag '16  
 Work of the experiment station for silk worms at Murcia, Spain, 1910 to 1914. A. Virgili. Int R Sci & Prac Ag 7,no 11: 1645-7 N '16  
 Work of the institute for research on silkworms at Portici (Italy). C. Acqua. Int R Sci & Prac Ag 7,no 11:1643-4 N '16  
 See also Sericultural trade association, Central institute of

**Silo filling**

- Filling the silo. J. H. Frandsen. il Kimball's D F 14:516 Ag 15 '16; Same. Hoard's D 52: 103 Ag 18 '16  
 Filling the silo. L. A. Higgins. Prog F 33:643 My 25 '18  
 Filling the silo. W. F. McSparran. Jersey B 36:1394 S 12 '17  
 Filling the silo; symposium. Prac F 113:259 JI 15 '17  
 Filling the silo with the least trouble. J. Day. il Prac F 114:285 S 1 '18  
 Five days saved in filling a silo. T. Clark. il System on the Farm 1:259 S '17  
 Get ready for silo filling. il Wallaces' F 43: 1183 Ag 23 '18  
 How bunch labor fills silos. J. Underwood. Prac F 113:286 Ag 15 '17  
 Low wagon for silo filling. Hoard's D 53:60 Ag 10 '17  
 Pointers for silo filling time. Power F 25:56 Ag '16  
 Proper methods in filling the silo. F. R. Cammack. Jersey B 37:1582 O 2 '18  
 Silo filling club. C. H. Sapp. il Ohio F 139: 767 Je 9 '17  
 Silo filling short cuts. Kimball's D F 16:661 S 1 '18  
 Silo filling time. il Wallaces' F 43:1215+ Ag 30 '18  
 Silo filling time is coming. F. M. White. il O Judd Farmer 65:153 Ag 31 '18  
 Silos should be filled to capacity—save labor with modern methods. Weekly N L 6:5 S 25 '18  
 Suggestions for silo filling. Prac F 114:315 S 15 '18  
 What is a fair price to charge for silo-filling? T. Butler. Prog F 33:947 Ag 31 '18

**Silo-filling machinery**

- Cooperation in the purchase and use of silo-filling machinery. T. Butler. Prog F 33: 683 Je 8 '18  
 Improved silo filling. Ohio F 137:415 Mr 18 '16  
 New device for silo filling. Rural N Y 75:612 Ap 15 '16  
 Reducing the outlay for a silo-filling outfit. J. F. Duggar. Prog F 33:822 JI 20 '18  
 Silage packing machine. M. G. Keppel. il Farm Eng 4:64 O '16

**Silos**

- Approximate capacity of silos in various sizes, in tons. Prog F 31:519 Ap 8 '16  
 Build a silo. L. M. Schindler. Hoard's D 55: 948 Je 28 '18  
 Build your own silo. il Am Coop J 12:738 JI '17  
 Building a square silo. Rural N Y 76:292 F 24 '17  
 Building the home-made silo. G. L. Oliver. il W Va Ag Ext C 94:1-12 '16  
 Combination silo. H. Marks. Hoard's D 52:97 Ag 18 '16  
 Conservation calls for silos. il Kimball's D F 16:442+ Je 1 '18  
 Consider the silo. D. G. Carter. il Kimball's D F 15:451 JI 1 '17  
 Construction of the silo. W. J. Fraser. Jersey B 36:685 My 2 '17  
 Construction of the wood-hoop silo. J. B. Davidson and J. E. Stiles. il Cal Ag Exp C 173:1-15 '17  
 Coons cypress silo co. builds silos of the wood eternal. il Am Lumberman (431 S. Dearborn st. Chicago 15c) 2246:40 Je 1 '18  
 Cost of filling silos. Hoard's D 51:219 F 25 '16  
 Defend dairy profits—build a silo. Jersey B 36:1251 Ag 15 '17  
 Double silo service. il Hoard's D 54:829 Ja 4 '18  
 Eight silos a day in Kansas. F. B. Nichols. Country Gent 81:108 Ja 15 '16  
 Ensilage. W. Dibble. il J Ag New Zealand 17: 201-4 O '18  
 Ensilage; its manufacture and use. W. J. Spafford. J Dept Ag S Australia 21:391-404 D '17  
 Erecting the stave silo. A. L. Haecker. il Hoard's D 52:94 Ag 18 '16  
 Every-man's silo. M. P. Jarnagin. il Ga Ag Coll (Ext) B 141:1-15 '18  
 Few practical types of silos; photographs. Hoard's D 53:319 Mr 16 '17  
 Fight with forage forts. F. H. Higgins. il Farm Eng 5:4 O '17  
 Fitting the silo to the farm. Prac F 114:275 Ag 15 '18  
 Gurler silo. Hoard's D 52:101 Ag 18 '16  
 Have you ordered your silo? il Kimball's D F 16:564 JI 15 '18  
 High grade silo of low grade material. F. W. Ives. il Ohio F 142:45 JI 20 '18  
 History of the silo. Wallaces' F 41:875 Je 16 '16  
 History of the silo and ensilage. J Ag (Quebec) 19:230 Ap '16  
 Homemade silos. R. Rabild and K. E. Parks. il plans Farmers' B 855:1-55 '17  
 Home made stave silo. L. S. Corbett and E. W. Morton. plan Maine Ag Ext B 118:1-13 '18  
 Home made stave silo. J. N. Price. il Wash Ag Ext Pub Ser 1, no 24:1-16 '16  
 Hoosiers launch silo campaign. C. R. George. Hoard's D 55:721 My 17 '18  
 How a dairy barn and silo were planned for convenience. il plans Building Age (243 W. 39th st. N.Y. 20c) 40:67-72 F '18  
 How big a silo do I need? Prog F 31:221 F 12 '16  
 How to build the wooden-hoop silo. R. U. Blasingame. il Ala Ag Ext C 9:6-12 '17  
 How to choose and how to use a silo. 39p il n.d. Southern pine assn., New Orleans, La.  
 Increasing silo capacity by fine cutting. J. E. Fischer. Hoard's D 51:735 My 26 '16  
 Indiana committee on food production and conservation. R. E. Caldwell. Purdue Ag 12:488-9+ My '18  
 Indiana's silo drive. G. I. Christie. Banker-F 5:7 Ag '18  
 Indiana's sky cannon. J. R. McMahon. il Country Gent 83:1+ Ag 3 '18  
 Kind of silo to build. O Judd Farmer 60:3 Mr 25 '16  
 Lansing silo. il Int R Sci & Prac Ag 7,no 3: 420-1 Mr '16  
 Little economies at siloing. J. L. Justice. il Hoard's D 56:160 Ag 30 '18  
 Log-house silo. Rural N Y 76:950 Ag 4 '17  
 Make your own silo. Weekly N L 5:3 O 3 '17; Same. Jersey B 36:1847 N 21 '17



**Silos —Continued**

Making wooden silos last longer. J. Day. *Prac F* 114:281 Ag 15 '18  
 Masonry silos are the most durable. *Power F* 20:16 Ag '17  
 Materials to use and the cost of construction. M. E. Conard. *il Country Gent* 81:290 F 5 '16  
 Metal silo satisfactory. J. N. Shrock. *O Judd Farmer* 61:32 JI 29 '16  
 Mistakes made in building a silo. G. B. Clark. *Ohio F* 137:341 Mr 4 '16  
 Monuments that pay dividends: photographs. *Country Gent* 82:sup4 Ag 11 '17  
 More silos needed for Iowa. *il Wallaces' F* 43:951 Je 21 '18  
 Moving a silo. C. H. Sapp. *il Nat Stock & F* 41:440 Ag 4 '17  
 Moving a stave silo. C. H. Sapp. *il Ohio F* 141:673 My 18 '18  
 Number of silos in the United States. Hoard's *D* 52:695 D 8 '16; Abstract (Increasing use of forage silos on farms in the United States). *Int R Sci & Prac Ag* 8,no 3:461-3 Mr '17  
 Observations on silage, with a short description of various types of silos recently erected in East Anglia. A. W. Oldershaw. *il J Bd Ag* 23:1063-72 F '17  
 One-cow and other small silos. G. W. Rogers. *Rural N Y* 77:1122 S 28 '18  
 Page of silo experience letters. *Prog F* 33:638 My 25 '18  
 Page of silos; photographs. *Field* 11 27:697 S '17  
 Preventing corn losses with a silo. *il Ohio F* 141:820 Je 29 '18  
 Progress of Missouri silo campaign. F. G. Kraege. *Hoard's D* 56:680 D 6 '18  
 Resolve to build a silo. *il Hoard's D* 56:95 Ag 16 '18  
 Roof of the silo. W. H. McCrary. *Farm Eng* 3:190 Mr '16  
 Shoulder a gun or build a silo; Indiana silo drive. Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:193 Je '18  
 Silage investigations. C. H. Eckles and others. *Mo Ag Exp Research B* 22:1-32 '16  
 Silo: a necessity in the dairy and beef industry. H. F. Judkins. *Rural N Y* 77:933 Ag 3 '18  
 Silo and dairy production. C. R. George. *il Purdue Ag Ext Leaflet* 81:1-6 '17  
 Silo and its filling. *il Rural N Y* 76:1103 S 22 '17  
 Silo and mill tower. *il Kimball's D F* 14:446 JI 1 '16  
 Silo building. W. D. Nicholls. *Ky Ag Ext C* 48:1-7 '17  
 Silo construction. F. M. White. *Wis Dairy-men's Assn Rep* 1913-1916:109-17 '17; Same. *Hoard's D* 52:91+ Ag 18 '16  
 Silo experience. I. G. Shellabarger. *Nat Stock & F* 40:1153 F 3 '17  
 Silo experiences. C. G. Smith. *Prog F* 31:732 Je 3 '16  
 Silo for every cattle feeder. E. W. Lehmann. *il Am Coop J* 12:685-6 Je '17  
 Silo for every farm. E. L. Westover and L. E. Robinson. *il plans Ore Ag Ext B* 297:1-15 '18  
 Silo for northern conditions. B. R. Mullen. *il Farm Eng* 5:10 S '17  
 Silo important for fruit grower-stock raiser. G. North. *Better Fruit* 10:24 My '16  
 Silo in Arizona. M. E. Bemis. *il Hoard's D* 53:853 Je 15 '17  
 Silo in California agriculture. F. W. Woll. *il Hoard's D* 53:321 Mr 16 '17  
 Silo—is it succeeding in the South? L. A. Markham. *Prog F* 31:497 Ap 8 '16  
 Silo knockers. H. W. Lawrence. *Nat Stock & F* 41:139 Ap 28 '17  
 Silo on every farm. W. R. Baughman and C. M. Carroll, comps. and eds. 50p *il* 25c '16  
 Int. harvester co., Chicago  
 Silo on the small farm. J. W. Schwab. *Field* 11 28:244+ Ap '18  
 Silo, or the farmer's friend. C. E. Davidson. *Building Age* (243 W. 39th st., N.Y. 20c) 39:518-19 S '17

Silo survey in Missouri. *Jersey B* 35:315 Mr 1 '16  
 Silo war-time equipment. G. I. Christie. *Jersey B* 37:115 Ja 23 '18  
 Silos and Jerseys in Imperial valley. C. Van Vuren. *il Hoard's D* 53:821 Je 8 '17  
 Silos and lightning. K. J. T. Ekblaw. *Country Gent* 82:1082 Je 30 '17  
 Silos and silage. *Nat Stock & F* 40:599 S 9 '16  
 Silos and silage. H. L. Blanchard. *il Western Wash Ag Exp B v* 4:2-10 JI '16  
 Silos and silage. W. J. Dougan. *Wis Dairy-men's Assn Rep* 1913-1916:89-94 '17  
 Silos and silage. A. L. French. *Prog F* 33:639 My 25 '18  
 Silos and silage. E. W. Sheets and G. L. Oliver. *il W Va Ag Exp B* 157:1-23 '16  
 Silos and silage. S. T. Simpson. *Mo Ag Ext C* 32:1-8 '17  
 Silos and silage crops for Arizona. W. A. Barr. *il Ariz Ag Ext C* 17:1-17 '17  
 Silos, and the production and feeding of silage. H. A. Hopper. *il Cornell Reading Course* 114:215-35 JI '16  
 Silos by the thousand. J. Mappelbeck. *il Country Gent* 81:1759 S 30 '16  
 Silos for southern farmers. *Prog F* 32:534 Ap 28 '17  
 Silos on eastern farms. W. H. Tomhave. *Prac F* 112:285, 306, 317 JI 15-Ag 15 '16  
 Silos; questions and answers. F. M. White. *il Wis Ag Ext C* 87:1-24 '17; Excerpt (Creosoting silo staves). *Hoard's D* 54:579 N 16 '17  
 Silos—their use, cost and kind. *il Kimball's D F* 15:96+ F 15 '17  
 Small herd and the silo. L. W. Servey. *Rural N Y* 75:3 Ja 1 '16  
 Some details in the construction of wooden hoop silos. I. D. Charlton. *il plans Western Wash Ag Exp B v* 5:20-3 My '17  
 Some things every farmer ought to know about silos. *Prog F* 3:643 My 25 '18  
 Square wooden silo. *Rural N Y* 76:657 My 5 '17  
 Supply of silos by the food production department. *J Bd Ag* 25:149-52 My '18  
 Tables and information for the silo builder. *Hoard's D* 52:93 Ag 18 '16  
 10,000 more silos for Indiana. T. W. Harvey. *Purdue Ag* 12:529-30 Je '18  
 \* 10,000 silos for Indiana in 1918. 8p '18 Indiana committee on food production and conservation. Silo division, Indianapolis  
 To build or not to build a silo. *il Hoard's D* 53:323 Mr 16 '17  
 Treated wooden silos. *Jersey B* 35:1646 O 18 '16  
 Unorthodox thoughts about the silo. H. Sage. *il Country Life* 81:79 Ap '17  
 Water tank on silo. *Wallaces' F* 43:1011 JI 5 '18  
 What kind of a silo shall he build? H. P. Miller. *Ohio F* 137:492 Ap 1 '16  
 When thinking of a silo. L. W. Lighty. *Nat Stock & F* 40:1152 F 3 '17  
 Where there's a barn a silo is needed. F. H. Higgins. *il Farm Eng* 3:189-90 Mr '16  
 Which is the best silo? J. Bower. *il Hoard's D* 56:97 Ag 16 '18  
 Why take chances? build a silo. F. M. White. *il O Judd Farmer* 64:547 My 25 '18  
 Wood stave silos vs. the substitute kind. H. M. Koebel. *il Am Lumberman* (431 S. Dearborn st., Chicago 15c) 2265:57 O 12 '18  
 Wooden hoop silo. *il Ohio F* 139:391 My 19 '17  
 Wooden silos used in Nebraska. L. W. Chase and I. D. Wood. *il plans Neb Ag Ext B* 40:1-16 '17  
 Year-round silos; with corn, alfalfa or clover to supplement the summer pasture. W. J. Fraser. *il Country Gent* 83:7 Je 22 '18  
 See also Farm buildings; Silage

**Designs and plans**

Build a home-made silo. plans Ga Ag Coll (Ext) Poster 16

**Measurement**

Measuring silage and capacity of silos. L. W. Chase. *Neb Ag Exp C* 1:1-14 '17

## Silos —Continued

## Statistics

- Silos by counties in Kentucky, 1917. Ky Ag Dept Rep 1916-1917:301-5 '18
- Table showing number of cattle and silos in Iowa. Greater Iowa (Ag. dept., Des Moines) 10:5 Je '18
- Silos, Concrete**
- Building concrete silo in 3 days. Eng & Contracting (608 S. Dearborn st, Chicago, \$3 per yr.) 49:509 My 22 '18
- Building silos on the jump. il Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:197-8 Je '18
- Cement stave silos. 11p il '17 Portland cement assn., Chicago
- Concrete block barn and silo. il plan Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:67 F '18
- Concrete for silos. H. C. Campbell. il Kimball's D F 16:450 Je 1 '18
- Concrete silo construction. H. C. Campbell. il Hoard's D 52:92 Ag 18 '16
- Concrete silo for twenty head of cattle. F. T. Fellner. il plans Bldg Age (243 W. 39th st, N.Y. 25c) 40:344-5 Jl '18
- Home made silo equipment of ingenious design. il Concrete (Telegraph bldg., Detroit, Mich. 20c) 10:199 My '17
- How to build a monolithic concrete silo. J. L. Justice. il Ohio F 140:318 O 13 '17
- Large fireproof barn and silos built of concrete. il plans Concrete (Telegraph bldg., Detroit, Mich. 20c) 10:175-7 My '17
- Materials for concrete silo. H. C. Campbell. Hoard's D 50:796 Ja 7 '16
- Monolithic concrete silos for your farm. 23p il '18 Portland cement assn., 111 W. Washington st, Chicago
- Reinforcing circular structures. Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:166 My '18
- Saving reinforcement and cement in building concrete silos. H. J. Brown. Ohio F 140:266 S 29 '17
- Silo foundation of concrete. F. W. Ives. il Ohio F 141:493 Ap 6 '18
- Sorghum silage—a new problem. il Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:123-4 Ap '18
- Using the mails to sell concrete silos. Concrete (Telegraph bldg., Detroit, Mich. 20c) 10:82-3 F '17

## Costs

- Cost of concrete silo. Hoard's D 56:157 Ag 30 '18
- Silos, Pit**
- Pit, semi-pit, and bank silos. L. W. Chase. il Neb Ag Ext B 39:1-16 '17
- Pit silo. J. G. Haney. 25p il 16 Int. harvester co., Chicago
- Pit silos. T. P. Metcalfe and G. A. Scott. il Farmers' B 825:1-14 '17; Same. Hoard's D 54:148+ Ag 31 '17
- Pit silos and how to make them. A. L. Paschall. il Ariz Ag Ext C 8:1-26 '16
- Pit silos for New Mexico. J. E. Watt. il N M Ag Ext C 30:1-16 Je '18

## Silver bell trees

- New American flowering tree. J: Dunbar. il Gard M 24:16 Ag '16

## Silver foxes

- Breeding of silver black fox on Prince Edward Island. Scientific Am (233 Broadway, N.Y. 10c) 115:543+ D 16 '16
- Domesticated silver fox. N. Dearborn. il map Farmers' B 795:1-32 '17
- Silver fox farming. Ohio F 141:317 Mr 2 '18
- Silver fox farming in eastern North America. N. Dearborn. il plan map U S Ag B 301:1-35 '15

## Silver leaf disease

- Silver leaf disease. Gard Chron (Lond) 59: 316 Je 10 '16
- Widely-spread silver-leaf disease of plums, cherries and kindred fruits. P. S. Hayward. Gard Chron (Lond) 64:148 O 12 '18
- Silver wyandotte.** See Wyandottes (poultry)

## Silverfish (insect)

- Silverfish, or slider; an injurious household insect. E. A. Back. il Farmers' B 902:1-4 '17

## Silverware

- Care of silverware. Ohio F 141:475 Mr 30 '18
- Lustre and silverware treasures; photographs. Country Life 29:32-3 F '16
- Silver and glass for the tables. il Country Life 34:34 O '18
- Study of the electrolytic method of silver cleaning. H. L. Lang and C. F. Walton, jr. U S Ag B 449:1-12 '16; Abstract. J Home Econ 8:418-21 Ag '16

## Silviculture. See Trees

## Simpson, John C.

- Portrait. Breeder's Gaz 71:111 Ja 18 '17

## Singing schools

- Singing schools in New York. M. Birdseye. il Country Gent 81:2101 D 2 '16

## Single tax

- Back to the land. T: Nulty. 62p n.d. Joseph Fels fund of America, Cincinnati, Ohio
- Breakdown of the single tax theory in the municipalities of western Canada. Economic World (128 Water st, N.Y. 25c) n s 13:486 Ap 7 '17
- Debate for single tax on land. J. R. Brown. 8p n.d. James R. Brown, Manhattan single tax club, 47 W. 42d st., N.Y.
- Reprinted from proceedings of the 75th annual meeting of New York state agricultural society
- Failure of single tax. Canadian Municipal J (Coristine bldg., Montreal \$1.25 a year) 13: 104 Mr '17
- Farmer and the single tax. H: George. 16p n.d. Joseph Fels fund, Blymer bldg., Cincinnati, O.
- Possibilities and limitations of special taxation of land. A. N. Young. (Reprint 101 Pro 1917) 8p 8c '17 Nat. conf. of social work, 315 Plymouth court, Chicago
- Single tax; a debate. E. D. Shurter, ed. bibliog Texas Univ (Austin) B 47:1-87 Ag 20 '16
- Single tax and its Cleveland champions. 32p 10c '16 Catholic Bulletin, 5500 Lorain av., Cleveland, Ohio
- Single tax league of San Antonio, Tex. distributes the following pamphlets on single tax: Smaller profits, reduced salaries and lower wages, by G: L. Rusby. 5c; Single tax: what it is and what it will accomplish, by Judson Grenell. 5c; Two papers on public sanitation and the single tax, by W: M. Gorgas and L. J. Johnson; Confessions of a parasite, by David Gibson. 5c; Labor question: being an abridgment of the condition of labor, by Henry George. 10c
- \* Single tax; what it is and what it will accomplish. J. Grenell. 21p n.d. Henry George lecture assn., 538 S. Dearborn st, Chicago
- Some of Tom Harder's remarks. G: V. Wells. Am Coop J 12:719, 765; 13:12, 59 Jl-O '17
- Wane of the single tax idea in western Canada. Economic World (128 Water st., N.Y. 25c) n s 13:270 F 24 '17

See also Land—Taxation; Land tenure

## Bibliography

- Torrens system; single tax. 3p '17 Public library, Detroit, Mich.
- Sinuate pear borers**
- Sinuate pear borers and leopard moth (C. 44). P. J. Parrott and H. Glasgow. il N Y State Ag Exp Rep 1915:484-6 '16
- Sioux City board of trade**
- Sioux City board of trade elect officers. Coop Manager & F 7:59 F '18
- Siphons**
- Siphon for water supply. Wallaces' F 43:1113 Ag 2 '18
- Sirups**
- Juices and sirups. Weekly N L 5:6 Ag 15 '17
- Sources and composition of some commercial invert sugar syrups with notes on sorghum syrup. S. Jordan and A. L. Chesley. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:756-8 Ag '17
- Syrup gauge for syrup makers. J. F. Duggar. Prog F 32:1122 O 27 '17



**Syrups —Continued**

Syrups for canning and preserving. J. B. McNair. *J Industrial and Eng Chemistry (Am. Chemical Soc., Easton, Pa. \$6 per yr)* 9:151-3 F '17

See also Beet sirup; Grape sirup; Maple sirup; Sorghum sirup

**Standards**

\* Proposed standards for mixed syrups. (In Official statement no. 5, p. 14-15) '18 U. S. Food administration, Washington, D. C.

**Statistics**

Commercial stocks of cane sirup, Jan. 1. U S

Food Surveys 1:5-8 Je 14 '18

Commercial stocks of sirup, July 1. U S Food Surveys 2:4-6 S 18 '18

**Sisal hemp**

Binder twine situation. Wallaces' F 41:293 F 18 '16

Binder twine situation. C. W. Smith. Farm Eng 5:16 F '17

Binder twine to cost more. O Judd Farmer 60:14 Ja 22 '16

Costa Rica sisal. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:1968 Mr 31 '17

Cultivation of agave sisalina. E. H. Heron. Ag Gaz of New South Wales 28:498-504 J1 '17

Green gold of Yucatan. G. Mason. Outlook (381 4th av., N.Y. 10c) 114:822-8 D 13 '16

Henequen industry in Yucatan and its sale regulation. L. E. Elliott. il Pan Am Magazine (70 5th av, N.Y. 25c) 24:172-82 F '17

Little band that binds. F. S. Betz. il Am Coop J 13:461+ Ag '18

Mexican sisal price controversy. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:1488+ F 24 '17

Monopoly in Mexican sisal denied. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:1968 Mr 31 '17

Our grain crops threatened by demoralization in Yucatan. E. I. Bell. Rural N Y 76:1467 D 29 '17

Production of sisal in East Africa. H: P. Starrett. (Commerce Reports 133) p 917-25 (Je 8) '17 U. S. Bureau of foreign and domestic commerce, Washington, D. C.

Scrub palm and the binder twine problem. R. S. Walker. il Country Life 31:66 Ja '17

Sisal. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:379 D 15 '17

Sisal from New Orleans, La. (Investigation and suspension docket no. 1128; Opinion 5188) 13-18p '18 U. S. Interstate commerce commission, Washington., D. C.

See also Agaves

Sitotroga. See Angoumois grain moth

**Skates (fish)**

Skates and rays. (Econ. C. 34) 7p il '18 U. S. Bur. of fisheries, Washington, D. C.

Skim milk. See Milk, Skimmed

**Skinner, John Harrison**

Sketch. M. L. Fisher. por Purdue Ag 10:13 Ap '16

**Skunk cabbage**

Lysichiton camtschaticense (L.) Schott, and its behavior in sphagnum bogs. G. Turesson. bibliog il Am J Bot 3:189-209 Ap '16

Much-despised skunk cabbage—earliest of spring flowers. R. W. Shufeldt. il Am For 24:225-31 Ap '18

**Skunks**

Ferrets and skunks for sale. A. S. Gregg. il Independent (119 W. 40th st., N.Y. 10c) 89:108 Ja 15 '17

Fur money in your back yard. J. D. Judd. O Judd Farmer 65:380 O 26 '18

Habits of the skunk. F. C. Pellett. il Gleanings 44:17-18 Ja 1 '16

Illinois skunk farm. O. Crooker. O Judd Farmer 61:2 N 11 '16

Skunk and civet trapping. G: J. Thiessen. Farm Eng 5:12 N '17

Skunk breeding. il J Heredity 8:452-4 O '17

Skunk farmer. W: P. Doyle. Ohio F 140:227 S 15 '17

Skunk farming on the side. F. E. Brimmer.

Rural N Y 77:1401 D 21 '18

Skunks to a great extent insectivorous. J. L.

Byer. Am Bee J 56:333 O '16

Talks to young trappers. G: J. Thiessen. il

Country Gent 82:1844 N 24 '17

Trapping skunk. G: J. Thiessen. Ohio F 142:

442 N 2 '18

Trapping skunk and raccoon. C: H. Chesley.

O Judd Farmer 61:25 N 25 '16

**Skylarks. See Larks**

**Slag as fertilizer**

Basic slag as a fertiliser. Engineer (33 Norfolk st., Strand, London, W. C.) 123:162 F 10 '17

Basic slag for renewing pastures. J. F. Warren. Breeder's Gaz 71:518 Mr 8 '17

Blast-furnace slag as a source of bases for acid soils. J. W. Ames. Ohio Ag Exp B v 1:359-62 D '16

Composition of basic slags, sold as manure in the winter of 1915-16. J Bd Ag 23:233-6 Je '16

Pot experiments to determine primarily the availability of phosphoric acid in Thomas slag phosphates in comparison with other phosphates. W. B. Ellett and A. A. Ingham. il Va Ag Exp Tech B 16:118-36 '17; Same. Va

Ag Exp Rep 1915-1916:118-36 '17

Report of the committee on availability of phosphoric acid in basic slag. Assn Offic Ag Chem J 3:104-5 My '17

Trials on grass land with open-hearth basic slag and rock phosphates. G. S. Robertson. J Bd Ag 24:1077-86 Ja '18

Value of Thomas slag phosphate for neutralizing soil as well as for supplying phosphorus. B. L. Hartwell and others. il R I Ag Exp B 171:1-34 '17

Yields of grass from various basic slags. A. W. Oldershaw. J Bd Ag 24:819-26 N '17

**Slang**

Slang—and its remedy. Country Gent 81:1851 O 14 '16

**Slaughter-houses**

Abattoir and delicatessen. M. J. Kellam. Ag Gaz of Canada 5:136-8 F '18

Some problems in insect control about abattoirs and packing houses. F. C. Bishopp. il J Econ Entom 10:269-77 Ap '17

**By-products**

See also Meat waste

**Laws and regulations**

Arrêté n. 5297 concernant l'utilisation des cadavres d'animaux et des déchets de boucherie en Allemagne. Int Yearbook Ag Leg 1916:251-2 '17

Sanitary inspection of slaughter-houses. J. O. LaBach and W. H. Simmons. Ky Ag Exp B 209:137-67 '17

Slaughter-houses, Cooperative

Cooperative abattoirs in Denmark. Int R Ag Econ 65:1-15; 66:1-18 My-Je '16

**Slaughter-houses, Municipal**

Municipal abattoir. E. H. McCuistion. il plan Tex Ag Dept B 51:1-14 '16

Municipal abattoirs or slaughter houses. Prog F 31:1359 N 25 '16

Place of the municipal abattoir. W. H. Dalrymple. il plan Breeder's Gaz 70:831 N 2 '16

**Slaughtering**

Bacon industry. E. Belanger. il Ag Gaz of Canada 3:887-9 O '16

Be careful in butchering. il Va Ag Dept B 126:22-5 '18

Best of hams and bacon; how to dress and cure them on the farm. T. G. Paterson. il Country Gent 82:1816-17+ N 24 '17

Butchering. Va Ag Dept B 134:8-11 N '18

Butchering day rules and recipes. O Judd Farmer 62:28 Ja 6 '17

Conservation slaughter; with discussion. W. W. Dimock. Am Vet M Assn J 53:221-30 My '18

Curing meat on the farm. D. T. Gray. Prog F 32:1234 N 24 '17

Direct selling of farm-grown meats. W: H. Dean. il Country Gent 81:1645 S 9 '16

**Slaughtering—Continued**

- Dressing and curing pork on the farm. *il* Ia Ag Ext B 44:1-15 '16
- Dressing and curing pork on the farm. E. S. Gorton. *il* Wallaces' F 41:1596-7 D 8 '16
- Economic treatment of farm slaughtered animals. J. C. Marshall. *J* Dept Ag Victoria 15: 367-72 Je '17
- Farmers' beef club. P. F. Trowbridge. *il* Mo Ag Exp C 85:1-32 '18
- Farmers' experience meeting; good ideas for hog-killing season. Prog F 33:1282 N 23 '18
- Hog butchering and pork curing. P. F. Trowbridge. *il* Mo Ag Ext C 42:1-16 '17
- Hog-scalding box. N. J. Barnes. Prog F 31:39 Ja 8 '16
- Home butchering. Hoard's D 52:811 D 29 '16
- Home curing of pork. J. A. Simms. *il* Conn Ag Coll Ext B 11:1-14 '17
- How to kill and dress hogs. L. D. Humes. Prog F 31:1361 N 25 '16
- Killing and dressing hogs. W. H. Tomhave. *il* Prac F 112:449-50 D 1 '16
- Killing and dressing the beef. C. O. Ormsbee. Rural N Y 77:1193 O 19 '18
- Killing hogs and curing meat. *il* Swine World 5:8-10 D '17
- Killing hogs and curing pork. F. G. Ashbrook and G. A. Anthony. *il* Farmers' B 913:1-39 '18 (rev.)
- Making meat on the farm. G. V. Gray. *il* Country Gent 83:34- N 2 '18
- Products of the farm slaughter house, sausage kitchen and smoke house. A. Haring and W. Hislop. Wash Ag Ext Pub Ser 1, no 10:1-23 '16
- Scalding a hog. Wallaces' F 41:46 Ja 14 '16
- Slaughtering and curing pork on the farm. W. M. Burson. *il* Ga Ag Coll (Ext) C 33 8p '16
- Slaughtering and marketing mutton and lamb. K. J. Seulke. *il* N Y Ag Dept B 96: 115-28 Je '17

**Study and teaching**

- What is really underneath a hide; how the Iowa state college is meeting the demand for information upon that point. *il* Breeder's Gaz 73:753 Ap 11 '18

**Sleep**

- Sleep; indoors and out. C. H. Lerrigo. *il* Country Gent 82:667 Mr 31 '17

**Sleeping porches**

- Sleeping porch. *il* Country Life 30:88 Jl '16
- Sleeping-porch bed. J. R. McMahon. *il* Country Gent 81:2062 N 25 '16

**Slicker. See Silverfish (insect)****Slime molds. See Myxomycetes****Slovaks in the United States**

- New Bohemia, Virginia; colony of alien farmers. R. G. Carroll. *il* map Country Gent 81: 1290-1 Jl 1 '16

**Slugs**

- Molluscan garden pest. F. C. Baker. Science (Science Press, Garrison, N. Y. 15c) n s 47: 391-2 Ap 19 '18
- Seed corn maggot and snails destroying beans. C. R. Crosby. Rural N Y 76:960 Ag 11 '17
- Spotted garden slug. W. H. White. *il* Farmers' B 959:1-8 '18

**Small fruit. See Berries****Small holdings. See Land tenure—Small holdings****Smartweed. See Lady's thumb (herb)****Smelter wastes**

- Experiments on the effects of constituents of solid smelter wastes on barley growth in pot cultures. C. B. Lipman and W. F. Gericke. Cal Univ Pub Ag Sci v 1, no 13 495-587p '17 (95c)

**Smith, G. Worthington, 1835-1917**

- Sketch. por Gard Chron (Lond) 62:180 N 3 '17

**Smith-Hughes bill**

- Smith-Hughes bill. M. S. Woolman. *J* Home Econ 8:241-6 My '16

**Smithfield show**

- London Smithfield show. Breeder's Gaz 70: 1297 D 23 '16

**Smoke, Tobacco. See Fungi, Effect of tobacco smoke on****Smoked out; story. G: E. Walsh. Nat Stock & F 40:656 S 23 '16****Smokehouses**

- Barrel smokehouse. Rural N Y 77:347 Mr 2 '18
- Practical small smokehouse for fish: how to construct and operate it. (Econ. C. 27) 8p *il* plans '17 U. S. Bur. of fisheries, Washington, D.C.
- Preservation of food products by drying. G. C. Shadwell. *il* Am Soc Heating & Ventilating Eng (29 W. 39th st, N.Y.) 23:537-44 '17
- Small smokehouse. G. Shockey. Nat Stock & F 41:842 D 1 '17
- Smokehouse for meat. *il* Wallaces' F 41:212 F 11 '16
- Smoke house for \$25. W. E. Frudden. *il* Hoard's D 51:140 F 18 '16
- Smoke houses and smoking meat. J. W. Ing-ham. *il* Hoard's D 51:140 F 18 '16

**Smokehouses, Concrete**

- Concrete for the farm smokehouse. H. C. Campbell. *il* Hoard's D 54:252 S 21 '17
- Permanent smoke-houses. H. C. Campbell. *il* plan Ohio F 139:139 F 3 '17
- Use of a concrete smokehouse. Rural N Y 76: 914 Jl 28 '17

**Smuts**

- Cereal smuts and the disinfection of seed grain. H. B. Humphrey and A. A. Potter. *il* Farmers' B 939:1-28 '18
- Control of grain smuts. G: A. McMurdo. Okla Ag Ext C 66 4p '17
- Fight grain smuts and blights. R. E. Vaughan and A. G. Johnson. *il* Wis Ag Ext C 57:1-4 '16
- Fungi of New Mexico. P. C. Standley. Mycol 8:169-72 My '16
- Grain smut causes \$4,000,000 loss in Minnesota yearly. Coop Manager & F 7:23 F '18
- Grain smuts. D. B. Swingle. Mont Ag Exp C 70 4p '17
- How did it turn out? *il* Am Coop J 11:1246 Ag '16
- Influence on germination of the hot water treatment of cereal seeds for smut. G. Lakon. Int R Sci & Prac Ag 8, no 6:852-3 Je '17
- Manual for the detection and treatment of the smuts. J. M. McArthur. *il* N M Ag Ext C 28:1-30 D '17
- Prevent smut. F. A. Wolf. *il* N C Ag Ext C 73:1-7 '18
- Prevention of smut in grain by seed treatment. H. E. Vasey. Colo Ag Ext B 134:1-4 '18
- Prevention of smuts. E. C. Stakman. *il* Minn Ag Ext Spec B 16:1-16 '17
- Rusts and smuts. T. Butler. Prog F 31:1385 D 2 '16
- Rusts and smuts collected in New Mexico in 1916. P. C. Standley. Mycol 10:34-42 Ja '18
- Smut treatment question. *il* Wallaces' F 41: 460 Mr 17 '16
- Smuts in oats and barley. *J* Bd Ag 24:1417-19 Mr '18
- Smuts of grain and forage crops in Kansas. L. E. Melchers. *il* Kan Ag Exp B 210:1-38 '16
- Smuts of small grains. W. L. Burlison and G. H. Dungan. *il* Ill Ag Exp C 228:1-7 '18
- Treating for smut. Kimball's D F 14:112 F 15 '16
- Treatment for grain smuts. Hoard's D 51:267 Mr 3 '16
- Treatment for smut disease. *il* Rural N Y 75: 915 Je 24 '16
- Treatment of grain smut. Coop Manager & F 7:52 D '17
- See also* Bamboo smut; Barley smut; Corn smut; Millet smut; Oat smut; Rye smut; Sorghum smut; Sugar-cane smut; Timothy smut; Wheat smut

**Snails. See Slugs****Snakes. See Serpents****Snap beans. See Kidney beans****Snapdragons**

- Snapdragon. Gard Chron Am 20:362 Ag '16



**Snapdragons —Continued**

- Snapdragon. A. Wynne. *il Gard Chron Am* 21:371 O '17  
 Snapdragons for all purposes. G. W. Kerr. *il Country Gent* 83:60 Mr 9 '18  
 Sweet peas and snapdragons. G. W. Kerr. *il Gard M* 27:25-7 F '18  
 What's worth while in snapdragons. E. I. Farrington. *il Gard M* 25:285-6 Je '17

**Snow**

- Department of meteorology; snow studies and snow surveying. *Nev Ag Exp Rep* 1917:62-6 '18  
 Forest cover and snow retention on the east slope of the front range in Colorado. N. deW. Betts. *il Soc Am For Pro* 11:27-32 Ja '16  
 \* Rain and snow in Canada. (*In Report, Bur. of Industries, 1917, p. 23-5*) '18 Ontario ag. dept., Toronto  
 Snow and its value to the farmer. A. H. Palmer. *il Scientific Monthly* (Science Press, Garrison, N.Y., 30c) 6:128-41 F '18; Same cond. *Literary Digest* (354 4th av, N.Y. 10c) 56:27 Mr 9 '18  
 Snow and the country road. R. H. Smith. *il Rural N Y* 75:321 F 26 '16  
 Snow and wheat. C. A. Ludwig. *Rural N Y* 75:614 Ap 15 '16  
 Snow-blinded on the summit. E. A. Mills. *il Country Life* 33:41-4 F '18  
 Snow survey to tell what water is available. O. J. Grimes. *il Country Gent* 81:482 F 26 '16  
 Snow surveying; its problems and their present phases with reference to Mount Rose, Nevada, and vicinity, by J. E. Church, jr. *Review, J For* 16:585-7 My '18  
 Snow flies. See White flies

**Snow removal**

- Handling the beautiful snow. E. W. Gage. *il Rural N Y* 77:1399 D 21 '18

**Snow-shoeing**

- Web-foot wanderings. W. D. White. *il Country Life* 31:60-1 D '16

**Snowballs. See Viburnums**

**Snowdrop tree. See Silver bell trees**

**Soap**

- Ins and outs of soap. M. L. Magruder. *Country Gent* 82:2039 D 22 '17  
 Making hard soap. *il Wallaces' F* 41:928 Je 30 '16  
 Soap-making at home. Mrs G. C. Bain. *Prog F* 33:355 Mr 16 '18  
 Soap making at home. L. Brownlow. *Kimball's D F* 16:22 Ja 1 '18  
 Soaps and miscible oils. E. R. De Ong. *Cal State Comm Hort B v* 5:172-6 My '16  
 Some good soaps. C. Hamilton. *Nat Stock & F* 41:1045 Ja 19 '18

**Soap plants**

- Vegetable soap. *Literary Digest* (354 4th av, N.Y. 10c) 55:23 Jl 14 '17

**Soapberry trees**

- Notes on the sapindus or soap tree. *J Dept Ag Victoria* 16:502-3 Ag '18  
 Soap-nut tree. *Scientific Am* (233 Broadway, N.Y. 10c) 118:209 Mr 9 '18  
 Tree that produces soap. *il Am For* 23:686 N '17

**Social centers**

- Call of the hour to the farmer. Mrs C. G. Lewis. *Mo Ag Bd B v* 14:15-21 Ap '16  
 Community building finds many uses. R. W. Holcombe. *Prac F* 114:73 F 15 '18  
 Country church as a social center. plan Miss Ag Coll B v 1, no 3 6p '18  
 Home economics and the community center. J. Collier. *J Home Econ* 9:319-21 Jl '17  
 Kansas community house. C. M. Harger. *il Country Gent* 81:436 F 26 '16  
 Real community house. plan *Country Gent* 83:40 O 12 '18

- \* Rural centers of community activity. W. H. Wilson. (Pamph. 159) 8p 5c '18 Nat. conference of social work, Kansas City, Mo.

- Social center idea. S. S. Cromer. *il Purdue Ag* 10:14-15 F '16

See also Schoolhouses as social centers; Young women's Christian association

**Social problems**

- Development of rural leadership; with discussion. G. W. Fiske. (*In Am. sociological soc., Pub. v. 11, p. 54-81*)  
 Educational agriculture—a community enterprise. E. R. Powers. *Social Service R* (Woodward bldg., Washington, D. C. 10c) 4:7-9 D '16  
 Folk depletion as a cause of rural decline. E. A. Ross. (*In Am. sociological soc., Pub. v. 11, p. 21-30*)  
 Mind of the farmer. E. R. Groves. (*In Am. sociological soc., Pub. v. 11, p. 47-53*)  
 Mitigating rural isolation. J. M. Gillette. *Quarterly Journal* (University, N. D.) 7: 107-20 Ja '17  
 Our southland's decade of opportunity. *Rural Manhood* 9:247-55 Je '18  
 Rural and community sociologist. E. R. Groves. *Rural Manhood* 8:405-7 N '17  
 Social relations of town and country people. *Prog F* 31:1344 N 18 '16  
 Teacher and community well-being. G. H. Von Tungeln. *J Home Econ* 8:279-87 Je '16  
 See also Community institutes; Defectives; Housing problem; Labor, Compulsory; Public health

**Social surveys**

- Brief economic and social survey of Putnam county, Ga. (Farm life conditions in the South) 5p n.d. Georgia State normal school, Athens  
 \* Brief social and economic survey of Floyd county. E. Hughes. (B. v. 4, no. 4) 15p '17 Georgia State normal school, Athens  
 Brief social and economic survey of Muscogee county. E. Jones. (B. v. 4, no 3) 12p '17 Ga. State normal school, Athens  
 Economic and social survey of Clarke county, Georgia. (Farm life conditions in the South, ch. 9) 4p n.d. Georgia State normal school, Athens  
 Is your county like this? *Nat Stock & F* 40: 238 My 27 '16  
 Results of some rural social surveys in Iowa. G. H. Von Tungeln. (*In Am. sociological soc., Pub. v. 11, p. 134-62*)  
 Rural social and business survey in Peel county. J. Miller. *Ag Gaz of Canada* 4:964-7 N '17  
 Rural survey of Alice, Cass county, North Dakota. C. J. Bornman. (Pamph 16) 8p 5c n. d. Moravian country church commission, E. de S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
 Rural survey of Lane county, Oregon. F. C. Ayer and H. N. Morse. *il Oregon Univ* (Eugene, Ore.) B v 13 no 14 109p Ag 15 '16  
 Rural survey of Sharon parish, Tuscarawas, Ohio. E. de S. Brunner and M. F. Oerter. 7p 3c '16 Moravian country church commission. E. de S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
 Rural surveys. C. W. Thompson. (*In Am. sociological soc., Pub. v. 11, p. 129-33*)  
 Social and economic survey of southern Travis county, Texas. L. H. Haney and G. S. Wehrwein, eds. *il maps Texas Univ* (Austin) B 65:1-149 N 20 '16  
 Social surveys of three rural townships in Iowa. P. S. Peirce. (Univ. of Iowa monographs, 1st ser., no. 12; Studies in the social sciences, v. 5, no. 2) 88p 50c '17 Univ. of Iowa, Iowa City  
 Survey of a Missouri county. W. L. Nelson. *Breeder's Gaz* 72:227 Ag 16 '17  
 Survey of Fry's valley, Ohio. E. de S. Brunner (Pamph. 13) 7p 3c '16 Moravian country church commission, E. de S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
 Survey of Graceham, Frederic county, Maryland. H. E. Stocker and E. de S. Brunner. (Pamph. 11) 9p 3c '16 Moravian country church commission, E. de S. Brunner, sec., 225 N. 10th st., Easton, Pa.  
 Webster county, Ga.: a brief economic and social survey. A. Kidd and E. C. Branson. 10p n.d. Georgia State normal school, Athens

**Social work**

- County unit for social service. S. A. Brown. *Nat Conf Social Work* (315 Plymouth court, Chicago \$2 per yr.) 1917:645-8

**Social work—Continued**

- Development of home economics in social work. W. S. Gibbs. *J Home Econ* 8:68-74 F '16
- \* Proceedings of the sessions on rural communities, nursing and social workers and propaganda. (*In* Am. assn. for study and prevention of infant mortality. Transactions, 1917, p. 182-270) \$3 '18 Medical and chiralurgical faculty bldg., 1211 Cathedral st, Baltimore, Md.
- Providing new agencies for rural community building. C. C. North. Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917:637-9
- Rural social work. W. T. Cross. Nat Conf Social Work (315 Plymouth court, Chicago \$2 per yr.) 1917:639-45
- \* Status of social work in rural communities. H. I. Curry. (Pamph. 131) 8p 5c '18 Nat. conference of social work, Kansas City, Mo.
- \* Village as a factor in social progress. P. L. Vogt. (Pamph. 136) 7p 5c '18 Nat. conference of social work, Kansas City, Mo.
- What I stored up for county work. Rural Manhood 9:241-2 Je '18
- Woman's work in social service. L. Tilson. Wis Hort Soc Rep 48:62-72 '18
- See also Social centers

**Study and teaching**

- Six county work summer schools. Rural Manhood 9:245-6 Je '18
- Socialism in the United States**
- Farmer and the socialist. K. Colegrove. Unpopular Review (18 W. 45th st, N.Y. 75c) 8:287-301 O '17; Excerpts. Ag Digest 2:781-2 Ja '18
- Société cooperative agricole des fromagers de Quebec.** See Quebec cheesemakers' cooperative agricultural society
- Society of agricultural engineers, American.** See American society of agricultural engineers
- Society of agronomy, American.** See American society of agronomy
- Society of American florists**
- Executive board meeting, Philadelphia, Pa., March 28-29; with proposed amendments to constitution. J. Young. Am Flor 46:774-6 Ap 29 '16
- Houston convention garden; plan. Am Flor 46:4-5 Ja 22 '16
- Mid-Lent meeting of the board of directors. New York, March 16-17, 1917. J. Young. Am Flor 48:578-9 Mr 31 '17
- Plans for coming year. Am Flor 49:1305-8 Ja 5 '18
- Preliminary programme of the 34th annual meeting and exhibition. St Louis, Mo., Aug. 20-22. Am Flor 51:50-1 Jl 27 '18
- President's message and appointments. R. C. Kerr. pors Am Flor 47:1333-6 Ja 6 '17
- St Louis convention postponed to Aug. 20-22, 1918. Am Flor 50:241-4 F 23 '18
- Society of American florists in the South. R. C. Kerr. Am Flor 46:62-3 Ja 29 '16
- 32d annual convention, Houston, Texas, Aug. 15-17, 1916. Am Flor 47:229-41, 289-94 Ag 19-26 '16
- 33d annual meeting, New York, Aug. 21-23, 1917. il Am Flor 49:269-82+, 329-36 Ag 25-S 1 '17
- 34th annual convention, St Louis. Am Flor 51:241-9, 297-306 Ag 24-31 '18
- Society of American foresters**
- Annual meeting, Washington, D.C., Jan. 22, 1916; with list of members and constitution. Soc Am For Pro 11:105-70 Ja '16
- Constitution as amended to date and list of members. J For 15:1083-1100 D '17
- Proposed membership changes and the ends which they will accomplish. C. L. Hill. Soc Am For Pro 11:264-8 Ap '16
- Word to the members. F. Roth. J For 16:145-8 F '18
- Sociology**
- Essential factors of rural sociology. H. W. Fleisher. il Purdue Ag 11:14-16 Ja '17
- Rural and community sociologist. See monthly numbers of Rural manhood

- Rural planning and development; a study of rural conditions and problems in Canada. T. Adams. 281p il '17 Canada Comm. of conservation, Ottawa
- Rural social work. W. T. Cross. (Reprint 92 Pro. 1917) 7p 8c '17 Nat. conf. of social work, 315 Plymouth court, Chicago
- Social value of rural experience. E. R. Groves. Rural Manhood 9:12-14 Ja '18
- Sociology of rural life. (Am. sociological soc., Pub. v. 11) 233p \*\$1.50 '17 Univ. of Chicago press, Chicago
- Contents: Countryside and nation, by G. E. Vincent; Country versus city, by W. H. Wilson; Folk depletion as a cause of rural decline, by E. A. Ross; Non-partisan league, by C. E. Russell; Mind of the farmer, by E. R. Groves; Development of rural leadership, by G. W. Fiske; Land problem and rural welfare, by P. L. Vogt; Consolidated school as a community center, by J. H. Cook; Social control: rural religion, by C. O. Gill; Co-operation and community spirit, by A. D. Wilson; Rural surveys, by C. W. Thompson; Results of some rural social surveys in Iowa, by G. H. von Tungeln; Scope and methods of instruction in rural sociology, by J. M. Gillette; Teaching of rural sociology: particularly in the land-grant colleges and universities, by D. L. Sanderson
- Sociology of rural life. A. R. Mann. Cornell Countryman 14:459-61 Mr '17
- Teachers of rural sociology in various institutions in the United States. J. Phelan. Rural Manhood 8:461-2 D '17
- Theory of rural attitudes. L. L. Bernard. Am J Sociology (University of Chicago Press, Chicago 50c) 22:630-49 Mr '17

**Bibliography**

- Bibliography of rural sociology. N Y Farms & Markets Dept Ag B 97:127-35 Jl '17

**Study and teaching**

- Courses in rural improvement. Ag Gaz of Canada 5:1085-8 N '18
- Scope and methods of instruction in rural sociology. J. M. Gillette. (*In* Am. sociological soc., Pub. v. 11, p. 163-80)
- Teaching of rural sociology: particularly in the land-grant colleges and universities; with discussion. D. L. Sanderson. (*In* Am. sociological soc., Pub. v. 11, p. 181-214)
- Sodium carbonate**
- Formation of black alkali (sodium carbonate) in calcareous soils. J. F. Breazeale. il J Ag Research 10:541-90 S 10 '17
- Use of bicarbonate of soda for the reduction of acidity in cream. G. M. Valentine. J Ag New Zealand 15:308-13 D '17
- Sodium fluorid**
- Mites and lice on poultry; sodium fluorid effective against all lice. F. C. Bishop and H. P. Wood. Farmers' B 801:20-4 '17; Excerpts. Prog F 32:860 Ag 11 '17
- Sodium nitrate.** See Saltpeter, Chile
- Sodium salts**
- Effect of sodium salts in water cultures on the absorption of plant food by wheat seedlings. J. F. Breazeale. J Ag Research 7:407-16 N 27 '16
- See also Plants, Effect of sodium salts on
- Soft corn.** See Corn (feed)—Soft corn
- Soil absorption**
- Absorption of cations and anions by soil. A. De Dominicis and others. Int R Sci & Prac Ag 8,no 11:1064-5 N '17
- Factors affecting the absorption and distribution of ammonia applied to soils. R. C. Cook. bibliog Soil Sci 2:305-44 O '16
- Influence of various cations upon the rate of absorption of ammonium ion by soil. K. Miyake. bibliog Soil Sci 2:583-8 D '16
- Phenomenon of absorption in its relation to soils. J. A. Prescott. J Ag Sci 8:111-30 S '16
- Soil acidity**
- Acid soils and soil acidity. C. J. Schollenberger. Ohio Ag Exp B v 2:329-33 O '17



**Soil acidity—Continued**

- Acidity and adsorption in soils as measured by the hydrogen electrode. L. T. Sharp and D. R. Hoagland. *bibliog J Ag Research* 7: 123-45 O 16 '16
- Action of manganese under acid and neutral soil conditions. J. J. Skinner and F. R. Reid. *il U S Ag B* 441:1-12 '16
- Action of neutral salts on humus and other experiments on soil acidity. L. J. Gillespie and L. E. Wise. *Am Chemical Soc J* (Box 505, Washington, D. C. \$6 per yr.) 40:796-813 My '18
- Active and latent soil acidity vs. immediate and continued lime requirement. W. H. MacIntire. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 8:1173 D '16
- Agricultural utilization of acid lands by means of acid-tolerant crops. F. V. Coville. *U S Ag B* 6:1-13 '13
- Alkaline reaction produced by acids in soils, viewed from the standpoint of plant nutrition. G. Masoni. *Int R Sci & Prac Ag* 7,no 6:799-800 Je '16
- Aluminum as a factor influencing the effect of acid soils on different crops. B. L. Hartwell and F. R. Pember. *Am Soc Agron J* 10:45-7 Ja '18
- Blast-furnace slag as a source of bases for acid soils. J. W. Ames. *Ohio Ag Exp B v* 1:359-62 D '16
- Carbonic acid gas in relation to soil acidity changes. H. S. Noyes and L. Yoder. *bibliog il Soil Sci* 5:151-61 F '18
- Cause and nature of soil acidity with special regard to colloids and adsorption. E. Truog. *Int R Sci & Prac Ag* 7,no 11:1587-8 N '16
- Community liming club. G. G. Hayes. *Coop Manager & F* 7:71 D '17
- Co-operative fertilizer plants for sour soil communities. S. R. Winters. *Am Coop J* 13: 113 N '17
- Development of soluble manganese in acid soils as influenced by certain nitrogenous fertilizers. M. J. Funchess. *bibliog il Ala Ag Exp B* 201:37-78 '18
- Effect of ammonium sulfate on soil acidity. F. E. Allison and R. C. Cook. *Soil Sci* 3:507-12 Je '17
- Effect of drainage on soil acidity. S. D. Conner. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:346 O 5 '17
- Effect of grinding on the lime requirement of soils. R. C. Cook. *Soil Sci* 1:95-8 Ja '16
- Effect of some acids and alkalis on soil bacteria in the soil solution. O. M. Gruzit. *bibliog Soil Sci* 3:289-95 Mr '17
- Experiments in methods for determining the reaction of soils. H. R. Christensen. *bibliog Soil Sci* 4:115-78 Ag '17
- Factors influencing the lime and magnesia requirements of soils. W. H. MacIntire. *Tenn Ag Exp B* 115:1-48 '16
- Factors that influence nitrate formation in acid soils. E. B. Fred and E. J. Gaul. *bibliog il Soil Sci* 1:317-38 Ap '16
- Freezing point method as a new means of determining the nature of acidity and lime requirements of soils. G. J. Bouyoucos. *Mich Ag Exp Tech B* 27:1-56 '16; *Same. Mich Ag Bd Rep* 1916:817-68
- Gain in nitrogen from growth of legumes on acid soils. E. B. Fred and E. J. Gaul. *bibliog il map Wis Ag Exp Research B* 39:1-42 '16
- Green manure and sour soil myth. J. C. Temple. *Prog F* 31:322 Mr 4 '16
- Ground limestone for acid soils (B. 400). J. F. Barker and R. C. Collison. *il N Y State Ag Exp Rep* 1915:53-71 '16
- Growth of sheep sorrel in calcareous and dolomitic media. W. H. MacIntire. *il Am Soc Agron J* 10:29-31 Ja '18
- Growth of the potato scab organism at various hydrogen ion concentrations as related to the comparative freedom of acid soils from the potato scab. L. J. Gillespie. *bibliog Phyt* 8:257-69 Je '18
- Hydrogen-ion concentration measurements of soils of two types: Caribou loam and Washburn loam. L. J. Gillespie and L. A. Hurst. *bibliog Soil Sci* 4:313-19 O '17
- Improving acid soils. A. W. Blair. *il N J Ag Exp C* 54:1-11 n.d.
- Influence of fertilizers and soil amendments on soil acidity. J. J. Skinner and J. H. Beattie. *Am Soc Agron J* 9:25-35 Ja '17
- Inversion of cane sugar by soils and allied substances and the nature of soil acidity. F. E. Rice and S. Osugi. *bibliog Soil Sci* 5:333-58 My '18
- Lime and acidity pointers. R. V. Brown. *il Hoard's D* 51:421 Mr 31 '16
- Lime—to assure better crops. D. K. Tressler. *Country Gent* 82:865 My 12 '17
- Liming. W. Frear. *bibliog Am Assn Farmers' Inst Workers Pro* 1917:100-39 '18
- Marl as a sweetener. S. D. Conner. *Country Gent* 83:28 Ap 6 '18
- Methods of determining the reaction of the soil; investigations in Denmark. H. R. Christensen. *Int R Sci & Prac Ag* 8,no 11: 1068-71 N '17
- Nitrification as a measure of the availability of different forms of calcium carbonate when employed as correctors of soil acidity. P. S. Burgess. *Soil Sci* 4:327-36 O '17
- Outline of the relation of the use of lime to the improvement of the soil. E. O. Fippin. *Cornell Ag Ext B* 5:1-16 '16
- Persistence of lawn and other grasses as influenced especially by the effect of manures on the degree of soil acidity. B. L. Hartwell and S. C. Damon. *il R I Ag Exp B* 170:1-24 '17
- Relation between indications of several lime-requirement methods and the soil's content of bases. C. J. Schollenberger. *bibliog Soil Sci* 3:279-88 Mr '17
- Relation of carbon dioxide to soil reaction as measured by the hydrogen electrode. D. R. Hoagland and L. T. Sharp. *bibliog J Ag Research* 12:139-48 Ja 21 '18
- Soil acidity and liming. A. H. Neuman. *Hoard's D* 53:608 Ap 27 '17
- Soil acidity and liming. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:62-8 '16
- Soil acidity and liming. A. R. Whitson and W. W. Weir. *il map Wis Ag Exp B* 230:1-32 '16
- Soil acidity and the hydrolytic ratio in soils. C. H. Spurway. *bibliog J Ag Research* 11: 659-72 D 17 '17
- Soil acidity and the litmus paper method for its detection. J. T. Barlow. *Am Soc Agron J* 8:23-30 Ja '16
- Soil acidity as influenced by green manures. J. W. White. *J Ag Research* 13:171-97 Ap 15 '18
- Soil acidity, its cause, effect, cure. *il Power F* 25:25 Ja; 50 F '16
- Soil acidity; its relation to the growth of plants. E. Truog. *bibliog Soil Sci* 5:169-95 Mr '18
- Soil acidity methods. R. E. Stephenson. *bibliog Soil Sci* 6:33-52 Jl '18
- Sour soils and their treatment. *Hoard's D* 51:364 Mr 17 '16
- Studies in soil reaction as indicated by the hydrogen electrode. J. K. Plummer. *bibliog J Ag Research* 12:19-31 Ja 7 '18
- Testing and liming soils. H. Truitt. *Breeder's Gaz* 69:916 Ap 27 '16
- Toxic action of soluble aluminum salts upon the growth of the rice plant. K. Miyake. *Int R Sci & Prac Ag* 9,no 5:552-4 My '18
- Value of blue litmus paper from different sources as a test for soil acidity. P. E. Kar-raker. *Am Soc Agron J* 10:180-2 Ap '18
- Value of Thomas slag phosphate for neutralizing soil as well as for supplying phosphorus. B. L. Hartwell and others. *il R I Ag Exp B* 171:1-34 '17
- What plants are most helped by lime. J. F. Duggar. *Prog F* 31:992 Ag 12 '16
- Why, when, and where of acid soils and liming. E. Truog. *il Hoard's D* 56:439+ O 25 '18

See also Lime

Soil actinomycetes. See Actinomycetes

**Soil adsorption**

Acidity and adsorption in soils as measured by the hydrogen electrode. L. T. Sharp and D. R. Hoagland. *bibliog J Ag Research* 7: 123-45 O 16 '16

**Soil adsorption—Continued**

Adsorption of ammonium sulphate by soils and quartz sand. M. I. Wolkoff. *Soil Sci* 3: 561-4 Je '17

Availability of nutrient salts. A. G. McCall. *Am Soc Agron J* 8:47-50 Ja '16

Cause and nature of soil acidity with special regard to colloids and adsorption. E. Truog. *Int R Sci & Prac Ag* 7, no 11:1587-8 N '16

Selective adsorption by soils. E. G. Parker. *J Ag Research* 1:179-88 D '13

See also Soil colloids

**Soil aeration**

Ecological significance of soil aeration. W. A. Cannon and E. E. Free. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:178-80 F 23 '17

Importance of soil-aeration in forestry. R. S. Hole. *il Ag J of India Sci Congress* No 1916:27-32 '16

Importance of soil ventilation. *Ag J of India* 13:148-51 Ja '18

Importance of soil ventilation on the alluvium. A. Howard. *Ag J of India Sci Congress* No 1916:46-52 '16

Influence of potsherds of nitrification in the Indian alluvium. Jatindra Nath Sen. *il J Ag Sci* 9:32-42 Ag '18

Manurial value of potsherds. A. Howard. *Ag J of India* 11:256-62 Jl '16

Recent investigations on soil-aeration. A. Howard; R. S. Hole. *il Ag J of India* 13: 416-40 Jl '18

Some factors affecting nitrate-nitrogen accumulation in soil. P. L. Gainey and L. F. Metzler. *bibliog J Ag Research* 11:43-64 O 8 '17

**Soil analysis**

Accurate loss-on-ignition method for determination of organic matter in soils. J. B. Rather. *Ark Ag Exp B* 140:1-16 '17

\* Ammonia and nitric nitrogen determinations in soil extracts and physiological solutions. B. S. Davison. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:600-5 Ag '18

Analyses of one hundred West Virginia soils. F. E. Bear and R. M. Salter. *map W Va Ag Exp B* 161:1-36 '16

Analyses of soils of Dougherty county. W. A. Worsham, jr., and others. *map Ga Ag Coll B* 126:1-47 '17

Analyses of soils of Habersham county. W. A. Worsham, jr., and others. *il map Ga Ag Coll B* 114:1-40 Ja '17

Analyses of soils of Jackson county. W. A. Worsham, jr., and others. *map Ga Ag Coll B* 144:1-23 '18

Analyses of soils of Jasper county, Georgia. *map Ga Ag Coll B* 160:1-46 '18

Analyses of soils of Polk county. W. A. Worsham, jr., and others. *il map Ga Ag Coll B* 127:1-54 '17

Analyses of typical soils. J. W. Ames. *Ohio Ag Exp B v* 1:73-6 Mr '16

Analysis of soils, manures, fodders, &c.; preparation of samples. *Ag Gaz of New South Wales* 29:56-8 Ja '18

Analyzing soils. *Gard Chron Am* 21:60 F '17

Arable lands; analysis of certain soils of Quebec. (*In Report*, 1917, p. 90-100) '17 Quebec ag. dept., Quebec

Calcium compounds in soils. E. C. Shorey and others. *J Ag Research* 8:57-77 Ja 15 '17

Calcium, magnesium, potassium, and sodium in the drainage water from limed and unlimed soil. T. L. Lyon and J. A. Bizzell. *Am Soc Agron J* 8:81-91 Mr '16

Can we make a test tube of the soil? A. T. Morison. *Hoard's D* 53:884 Je 22 '17

Carbon dioxide production in soils and carbon and nitrogen changes in soils variously treated. R. S. Potter and R. S. Snyder. *bibliog Ia Ag Exp Research B* 39:253-309 '16

Chemical composition of the soils of the Freehold area in New Jersey. A. W. Blair and H. C. McLean. *N J Ag Exp B* 309:1-37 '16

Chemical criteria, crop production and physical classification in two soil classes. J. S. Burd. *bibliog Soil Sci* 5:405-19 My '18

Comparisons of methods for determining nitrogen in soils. W. L. Latshaw. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 8:1127 D '16

Composition of the soils of south central Texas. *Tex Ag Exp B* 213:1-48 '17

Condition of fertilizer potash residues in Hagerstown silty loam soil. W. Frear and E. S. Erb. *bibliog J Ag Research* 15:59-81 O 14 '18

County soil report, no. 1; report on Mecklenburg county soils, agriculture and industries. *il N C Ag Dept B v* 38:1-47 Ap '17

Determination of lime and phosphoric acid in peat soils; comparison of Jönköping with Bremen method. C. O. Rost and F. C. Clapp. *bibliog Soil Sci* 5:213-18 Mr '18

Determination of phosphorus in soils. H. A. Noyes. *Assn Offic Ag Chem J* 3:149-51 My '17

Determination of the lime requirements of soils by the use of calcium bicarbonate. L. P. Howard. *Assn Offic Ag Chem J* 3:141-4 My '17

Du Page county soils. C. G. Hopkins and others. *il map Ill Ag Exp Soil Report* no 16: 1-56 '17

Edgar county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* no 15:1-56 '17

Effect of season and crop growth in modifying the soil extract. G. R. Stewart. *bibliog il J Ag Research* 12:311-68 F 11 '18

Estimation of sulfur in plant material and soil. G. A. Olson. *bibliog Wash Ag Exp B* 145:1-12 '17

Extraction of nitrates from soil. R. S. Potter and R. S. Snyder. *Am Soc Agron J* 8:54-5 Ja '16

Have you had your soil analysed? A. R. Whitson and W. J. Geib. *il map Wis Ag Ext C* 64:1-16 '16

Influence of calcite inclusions on the determination of organic carbon in soils. E. C. Shorey and W. H. Fry. *J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:558-9 Je '17

Influence of the presence of calcium carbonate on the determination of available phosphoric acid in soils by Dyer's method. Jatindra Nath Sen. *Ag J of India* 12:258-65 Ap '17

Inorganic composition of some important American soils. W. O. Robinson. *U S Ag B* 122:1-27 '14

Isolation of cyanuric acid from soil. L. E. Wise and E. H. Walters. *bibliog il J Ag Research* 10:85-92 Jl 9 '17

Isolation of para-hydroxybenzoic acid from soil. E. H. Walters. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39: 1778-84 Ag '17

Lime requirements of some acid soils. S. D. Conner. *Assn Offic Ag Chem J* 3:139-40 My '17

Loess soils of the Nebraska portion of the transition region: mechanical composition and inorganic constituents. F. J. Alway and C. O. Rost. *bibliog Soil Sci* 1:405-36 My '16

Memorandum of soil tests. F. B. Linfield. (*In Report*, 1917, p 71-4) '17 Canada Comm. of conservation, Ottawa

Methods in soil analysis. F. E. Bear and R. M. Salter. *W Va Ag Exp B* 159:1-24 '16

Methods of analysis. *bibliog Assn Offic Ag Chem J* 1, no 4, pt 2:17-28 F '16

Mottle-leaf of citrus trees in relation to soil conditions. L. J. Briggs and others. *il J Ag Research* 6:721-40 Ag 7 '16

New apparatus for the determination of soil carbonates and new methods for the determination of soil acidity. E. Truog. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 8:341-5 Ap '16; Discussion. 9:1072-3 N '17

New, rapid and accurate method for estimating lime and potash in soils. T. E. Keitt and C. J. King. *S C Ag Exp B* 188:1-5 n. d.

Note on the loss of phosphoric acid during fusion with ammonium fluoride. W. A. Davis and J. A. Prescott. *J Ag Sci* 8:136-8 S '16

Notes on soils analysed. B. C. Aston. *J Ag New Zealand* 13:36-41 Jl '16



**Soil analysis—Continued**

- Notes on some Poverty Bay soils. B. C. Aston. *il J Ag New Zealand* 17:196-200 O '18
- On taking samples of soil for soil surveys. E. J. Russell. *J Bd Ag* 23:342-9 J1 '16
- On the extraction of ammonia from soil. T. E. Richmond. *Soil Sci* 5:481-6 Je '18
- Organic matter of the soil. R. A. Gortner. bibliog *il Soil Sci* 2:395-441, 539-48 N-D '16
- Organic nitrogen compounds of soils and fertilizers. E. C. Lathrop. bibliog *J Franklin Institute* (Franklin Institute, Philadelphia 50c) 183:303-21, 465-98 Mr-Apr '17
- Potash salts and other salines in the Great Basin region. G. J. Young. *il U S Ag B* 61: 1-96 '14
- Protein decomposition in soils. E. C. Lathrop. bibliog *Soil Sci* 1:509-32 Je '16
- Rapid method for the estimation of calcium oxide in peat soils. R. A. Gortner. *Soil Sci* 1:505-8 My '16
- Reaction between dilute acids and the phosphorus compounds of the soil. E. J. Russell and J. A. Prescott. *J Ag Sci* 8:65-110 S '16
- Reaction of Hawaiian soils with calcium bicarbonate solutions, its relation to the determination of lime requirements of soils, and a rapid approximate method for the determination of lime requirements of soils. M. O. Johnson. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:31-3 Ja '18
- Relation of the mechanical analysis to the moisture equivalent of soils. A. Smith. bibliog *Soil Sci* 4:471-6 D '17
- Report on coastal plain soils, particularly with reference to their nature, plant-food requirements, and suitability for different crops. C. B. Williams and others. *il N C Ag Dept B v* 39:1-175 My '18
- Report on soils. J. W. Ames. *Assn Offic Ag Chem J* 3:121-38 My '17
- Researches on the equilibrium between the nitrogen and carbon in the soil. P. Felber. *Int R Sci & Prac Ag* 8:no 1:22-4 Ja '17
- Soil analysis; analyses of Florida muck soils. R. E. Rose. map *Fla Ag Dept Quar B v* 27: 63-107 O '17
- Soil survey of Alleghany county, North Carolina. R. T. A. Burke and H. D. Lamberty. (Soils bur. advance sheets) 26p map '17 U S Ag
- Soil survey of Barbour county, Alabama. H. C. Smith and others. (Soils bur. advance sheets) 50p map '16 U S Ag
- Soil survey of Blair county, Pennsylvania. J. O. Veatch and others. (Soils bur. advance sheets) 48p map '17 U S Ag
- Soil survey of Bottineau county, North Dakota. W. B. Cobb and others. (Soils bur. advance sheets) 54p maps '17 U S Ag
- Soil survey of Buchanan county, Missouri. B. W. Tillman and C. E. Deardorff. (Soils bur. advance sheets) 46p map '17 U S Ag
- Soil survey of Cumberland county, Maine. C. Van Deyne and M. W. Beck. (Soils bur. advance sheets) 91p map '17 U S Ag
- Soil survey of Davidson county, North Carolina. R. B. Hardison and L. L. Brinkley. (Soils bur. advance sheets) 39p map '17 U S Ag
- Soil survey of Hamilton county, Ohio. A. L. Goodman and others. (Soils bur. advance sheets) 39p map '17 U S Ag
- Soil survey of Hampton county, South Carolina. M. W. Beck and A. L. Goodman. (Soils bur. advance sheets) 37p map '17 U S Ag
- Soil survey of Iowa; Bremer county soils. W. H. Stevenson and others. *il maps Ia Ag Exp Soil Survey Report* no 1:1-48 '17
- Soil survey of Lewis and Gilmer counties, West Virginia. W. J. Latimer. (Soils bur. advance sheets) 34p map '17 U S Ag
- Soil survey of Oneida county New York (B. 362). E. T. Maxon and others. maps *Cornell Ag Exp Rep* 1916:5-59 '17
- Soil survey of Polk county, Nebraska. J. M. Snyder and T. E. Kokjer. (Soils bur. advance sheets) 30p map '17 U S Ag
- Soil survey of Ripley county, Missouri. F. Z. Hutton and H. H. Krusekopf. (Soils bur. advance sheets) 36p map '17 U S Ag
- Soil survey of San Saba county, Texas. J. O. Veatch and others. (Soils bur. advance sheets) 67p maps '17 U S Ag
- Soil survey of the Camden area, New Jersey. A. L. Patrick and others. (Soils bur. advance sheets) 45p *il maps* '17 U S Ag
- Soil survey of the Healdsburg area, California. E. B. Watson and others. (Soils bur. advance sheets) 59p *il map* '17 U S Ag
- Soil survey of the proposed Palouse irrigation project. H. F. Holtz. *il map Wash Ag Exp B* 133:1-14 '16
- Soil survey of Washington county, Nebraska. L. V. Davis and H. C. Mortlock. (Soils bur. advance sheets) 38p map '17 U S Ag
- Soil surveys in Nova Scotia and Ontario. L. C. Harlow; R. Harcourt. *Ag Gaz of Canada* 4: 467-71 Je '17
- Soils and soil analysis. *J Ag (Quebec)* 20:135 D '16
- Soluble nonprotein nitrogen of soil. R. S. Potter and R. S. Snyder. bibliog *J Ag Research* 6:61-4 Ap '16
- Some factors influencing the quantitative determination of nitric nitrogen in the soil. J. E. Greaves and C. T. Hirst. bibliog *il Soil Sci* 4:179-206 S '17
- Sources of error in soil bacteriological analysis. H. C. Lint and D. A. Coleman. *Soil Sci* 2:157-62 Ag '16
- Status of the problem of lime requirement. W. H. McIntire. *Assn Offic Ag Chem J* 3: 144-9 My '17
- Studies of a Scottish drift soil. J. Hendrick and W. G. Ogg. *J Ag Sci* 7:458-69 Ap '16
- Studies on the phenoldisulfonic acid method for determining nitrates in soils. C. W. Davis. bibliog *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:290-5 Mr '17
- Study of soil containing residual limestone. H. A. Noyes. *Assn Offic Ag Chem J* 3:151-3 My '17
- Study of the principal plantation soil types as found on the island of Hawaii. P. S. Burgess. (Ag. and chem. ser. B. 45) 100p map '17 Hawaii sugar planters' assn., Honolulu, Hawaii
- Total carbon in soil by wet combustion. C. J. Schollenberger. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 8:1126 D '16
- Uses and abuses of soil analysis. R. H. Carr. *il Purdue Ag* 12:154-6 D '17
- Variability in soils and its significance to past and future soil investigations; a statistical study of nitrification in soils. D. D. Waynick. bibliog *Cal Univ Pub Ag Sci v* 3:no 9 243-70p '18 (30c)
- Variation in the chemical composition of soils. W. O. Robinson and others. *U S Ag B* 551: 1-16 '17
- Vegetation as an indicator of the fertility of sandy pine plain soils in northern Wisconsin. T. J. Dunnevald. *Am Soc Agron J* 10: 19-23 Ja '18
- Winnebago county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* 12:1-76 '16

*See also* Soil acidity

**Soil bacteriology**

- Alkali soils: some biochemical factors in their reclamation. J. H. Barnes and Barkat Ali. *il Ag J of India* 12:368-89 J1 '17
- Are all the soil bacteria and streptothrices that develop on dextrose agar azotifiers? P. Emerson. bibliog *Soil Sci* 3:417-21 My '17
- Are spore-forming bacteria of any significance in soil under normal conditions? H. J. Conn. *N Y State Ag Exp Tech B* 51:1-9 '16; Same. *J Bact* 1:187-95 Mr '16
- Are unusual precautions necessary in taking soil samples for ordinary bacteriological tests? C. E. Lipman and D. E. Martin. *Soil Sci* 6:131-6 Ag '18
- Assimilation of organic nitrogen by zea mays and the influence of bacillus subtilis on such assimilation. R. O. Brigham. bibliog *il Soil Sci* 3:155-95 F '17
- Azotobacter in Hawaiian soils. P. S. Burgess. *Soil Sci* 2:183-92 Ag '16
- Bacteria of the soil. D. H. Jones. *il Ontario Ag Dept B* 265:4-13 '18
- Bacterial numbers in soils, at different depths, and in different seasons of the year. S. A. Waksman. bibliog *Soil Sci* 1:363-80 Ap '16

**Soil bacteriology—Continued**

- Bacterial toxins in soils. R. Greig-Smith. J Dept Ag Victoria 16:119-20 F '18
- Bacteriological studies of a soil subjected to different systems of cropping for twenty-five years. P. L. Gainey and W. M. Gibbs. bibliog J Ag Research 6:953-75 S 11 '16
- Biological changes in soil during storage. F. E. Allison. bibliog Soil Sci 3:37-62 Ja '17
- Biological variations in soil plots as shown by different methods of sampling. F. E. Allison and D. A. Coleman. Soil Sci 3:499-505 Je '17
- Cause of the disappearance of coumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. bibliog il Ala Ag Exp B 195:49-64 '17
- Cause of the disappearance of coumarin, vanillin, pyridine and quinoline in the soil; preliminary note. W. J. Robbins. Science (Science Press, Garrison, N. Y. 15c) n s 44: 894-5 O 22 '16
- Comparison between agar and gelatin as media for the plate method of counting bacteria. H. J. Conn and W. D. Dotterer. N Y State Ag Exp Tech B 53:12-15 '16
- Correlation between bacterial activity and lime requirement of soils. F. E. Bear. bibliog Soil Sci 4:433-62 D '17
- \* Correlation of the hydrogen-ion exponent and occurrence of bacteria in soil. L. J. Gillespie. Science (Science Press, Garrison, N.Y. 15c) n s 48:393-4 O 18 '18
- Cytological studies of azotobacter chroococcum. A. Bonazzoli. bibliog il J Ag Research 4:225-40 Je '15
- Destruction of vanillin in the soil by the action of soil bacteria. W. J. Robbins and A. E. Elizando. bibliog Ala Ag Exp B 204: 125-31 '18
- Diastase activity and invertase activity of bacteria. G. P. Koch. bibliog Soil Sci 1:179-96 F '16
- Effect of phosphates and sulphates on soil bacteria. Int R Sci & Prac Ag 7,no 2:195 F '16
- Effect of some acids and alkalis on soil bacteria in the soil solution. O. M. Gruzit. bibliog Soil Sci 3:289-95 Mr '17
- Effect of time and depth of cultivating a wheat seed-bed upon bacterial activity in the soil. P. L. Gainey. bibliog Soil Sci 2: 193-204 Ag '16
- Experiments on the growth of azotobacter. A. Cauda. Int R Sci & Prac Ag 7,no 6:801-2 Je '16
- Fertilizers and microbes of the soil. Scientific Am (233 Broadway, N.Y. 10c) 116:129 F 3 '17
- How to get rich lands; soil bacteria and their relation to soil fertility. T. Butler. Prog F 32:943 S 8 '17
- Importance of mold action in soils. P. E. Brown. Ag J of India 13:529-36 J1 '18
- Influence of arsenic on the bacterial activities of a soil. J. E. Greaves. Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:204-9 S '17
- Influence of barnyard manure and water upon the bacterial activities of the soil. J. E. Greaves and E. G. Carter. bibliog J Ag Research 6:889-926 S 4 '16
- Influence of carbonates of magnesium and calcium on bacteria of certain Wisconsin soils. H. L. Fulmer. bibliog J Ag Research 12:463-504 F 25 '18
- Influence of crop, season, and water on the bacterial activities of the soil. J. E. Greaves and others. bibliog J Ag Research 9:293-341 My 28 '17
- Influence of humus forming materials of different nitrogen-carbon ratios on bacterial activities. P. E. Brown and F. E. Allison. Ia Ag Exp Research B 36:1-30 '16
- Influence of nitrates on nitrogen-assimilating bacteria. T. L. Hills. bibliog J Ag Research 12:183-230 Ja 28 '18
- Influence of reaction on nitrogen-assimilating bacteria. E. B. Fred and A. Davenport. bibliog J Ag Research 14:317-36 Ag 19 '18
- Influence of soil conditions on the decomposition of organic matter in the soil. E. J. Russell and A. Appleyard. J Ag Sci 8:385-417 Je '17
- Microscopic study of bacteria and fungi in soil. H. J. Conn. N Y State Ag Exp Tech B 64:1-20 '18
- New method of separating fungi from protozoa and bacteria. N. Kopeloff and others. Bot Gaz 61:247-50 Mr '16
- Next step in improvement in wheat cropping—how to increase wheat production in 1918 and 1919. H. L. Bolley. Science (Science Press, Garrison, N.Y. 15c) n s 46:49-54 J1 20 '17
- Non-persistence of bacterio-toxins in the soil. H. B. Hutchinson and A. C. Thaysen. J Ag Sci 9:43-62 Ag '18
- Occurrence of bacteria in frozen soil. E. C. Harder. Bot Gaz 61:507-17 Je '16
- Occurrence of bacterium lactis viscosum in soil. C. R. Fellers. Soil Sci 5:487-8 Je '18
- Potassium requirements of bacteria. G. P. Koch. bibliog Soil Sci 5:219-24 Mr '18
- Preliminary experiments on some effects of leaching on the soil flora. C. B. Lipman and L. W. Fowler. bibliog Soil Sci 1:291-7 Mr '16
- Preliminary report on muck humus as a fertilizer and carrier of beneficial soil bacteria. T. F. Manns and J. M. Goheen. il Del Ag Exp B 115:1-40 '16
- Proof of microbial agency in the chemical transformations of soil. H. J. Conn. Science (Science Press, Garrison, N.Y. 15c) n s 46: 252-5 S 14 '17
- Quantitative media for the estimation of bacteria in soils. R. C. Cook. bibliog Soil Sci 1:153-61 F '16
- Relation between certain bacterial activities in soils and their crop-producing power. P. E. Brown. J Ag Research 5:855-69 Ja 31 '16
- Relation of manures to bacterial action and growth in the soil. L. E. Husted. Purdue Ag 13:126-7 D '18
- Relation of protozoa to certain groups of soil bacteria. T. L. Hills. bibliog J Bact 1:423-33 J1 '16
- Relative importance of fungi and bacteria in soil. H. J. Conn. Science (Science Press, Garrison, N.Y. 15c) n s 44:857-8 D 15 '16
- Researches in agricultural bacteriology carried out in Denmark during the period 1904-1914. H. R. Christensen. Int R Sci & Prac Ag 7,no 8:1081-4 Ag '16
- Separation of soil protozoa. N. Kopeloff and others. bibliog J Ag Research 5:137-40 O 18 '15
- Soil bacteria and phosphates. C. G. Hopkins and A. L. Whiting. Ill Ag Exp B 190:395-406 '16
- Soil bacteria; their activities have important influences on soil fertility. E. R. Allen. il Ohio Ag Exp B v 2:130-2 Ap '17
- Soil reaction and the growth of azotobacter. P. L. Gainey. J Ag Research 14:265-71 Ag 12 '18
- Some aspects of soil biology. H. A. Noyes. il Purdue Ag 12:548-9 Je '18
- Some bacteriological studies on agar agar. C. R. Fellers. bibliog il Soil Sci 2:255-90 S '16
- Studies on soil protozoa and their relation to the bacterial flora. J. M. Sherman. bibliog J Bact 1:165-85 Mr '16
- Studies on the decomposition of cellulose in soils. I. G. McBeth. bibliog Soil Sci 1:437-87 My '16
- See also Actinomycetes; Ammonification; Ferrification; Nitrification; Soil inoculation; Soil microbiology; Soil protozoa; Sulfocaction
- Soil colloids**
- Flocculation of soil colloidal solutions. M. I. Wolkoff. bibliog Soil Sci 1:585-601 Je '16
- Fundamental interrelationships between certain soluble salts and soil colloids. L. T. Sharp. Cal Univ Pub Ag Sci v 1,no 10:291-339 '16 (50c)
- Importance of colloids in forestry. For Quar 14:327-8 Je '16
- Studies on soil colloids: influence of colloids on electrical conductivity of salts. M. I. Wolkoff. bibliog Soil Sci 3:423-30 My '17
- See also Soil adsorption



**Soil disinfection**

- Blue mould in tobacco plants. J Dept Ag Victoria 14:601-3 O '16
- Can soil be sterilized without radical alteration? D: A. Coleman and others. bibliog Soil Sci 1:259-74 Mr '16
- Cause of the disappearance of coumarin, vanillin, pyridine and quinoline in the soil. W: J. Robbins. bibliog il Ala Ag Exp B 195:49-64 '17
- Cleaning up the land. E. I. Farrington. Country Gent 81:1233 Je 17 '16
- Control of damping-off of coniferous seedlings. C. Hartley and R. G. Pierce. il U S Ag B 453:1-32 '17
- Damping off control. Am Flor 46:256 F 19 '16
- Dry heat a steriliser. P. Aquatias. il Gard Chron (Lond) 59:10 Ja 1 '16
- Effect of heat on some nitrogenous constituents of soil. R. S. Potter and R. S. Snyder. bibliog Soil Sci 5:197-212 Mr '18
- Effect of sterilization of soils by heat and antiseptics upon the concentration of the soil solution. G: P. Koch. bibliog Soil Sci 3:525-30 Je '17
- Extraction and saturation of soils with volatile antiseptics. J. P. du Buisson. bibliog il Soil Sci 3:353-91 Ap '17
- Fall steaming of tobacco plant beds to prevent root rot. A. D. Selby and others. il Ohio Ag Exp B v 1:331-2 N '16
- Hydrocyanic-acid gas as a soil fumigant. E. R. de Ong. il J Ag Research 11:421-36 N 26 '17
- Infected soil. Gard Chron (Lond) 62:26 Jl 21 '17
- Injury by disinfectants to seeds and roots in sandy soils. C. Hartley. il U S Ag B 169:1-35 '15
- Method of sterilisation and chloroforming of the soil in the study of the properties of tchernoziom. S. Skaiskij. Int R Sci & Prac Ag 7,no 9:1249-52 S '16
- Methods of soil sterilization. Market Growers J 18:127 F 15 '16
- Methods used in sterilizing soils. A. G. Tolaas. Market Growers J 22:134 F 15 '18
- New experiments on soil sterilization in France. M. Miège. Int R Sci & Prac Ag 8,no 5:690-3 My '17
- Organic plant poisons: phenols. W. E. Brenchley. Ann Bot 32:259-78 Ap '18
- Practical method of preventing the damping off of coniferous seedlings. C: A. Scott. il J For 15:192-6 F '17
- Recent work at Rothamsted on the partial sterilization of soil. E. J. Russell. bibliog Int R Sci & Prac Ag 8,no 5:673-81 My '17; Same. Ag Gaz of Canada 4:1005-9 N '17
- Review of investigations in soil protozoa and soil sterilization. N. Kopeloff and D. A. Coleman. Soil Sci 3:197-248 Mr '17
- Seed and soil treatments for plant diseases. J. G. Humbert. Ohio Ag Exp B v 1:43-6 F '16
- Soil sterilization. F. O. Ockerblad, jr. Vt Ag Exp B 203:14-16 Mr '17
- Soil sterilization in hotbeds and greenhouses. Rural N Y 75:416 Mr 4 '16
- Steam sterilization of hotbed soils. H: B. Hahn. Market Growers J 22:169-70 Mr 1 '18
- Steam sterilization of seed beds for tobacco and other crops. E. G. Beinhart. il Farmers' B 996:1-15 '18
- Steam sterilization of soil. Rural N Y 76:325 Mr 3 '17
- Steam tractor for sterilizing soils. il Rural N Y 75:1027 Jl 29 '16
- Sterilization of tobacco seed beds. C. W. Adams. Country Gent 81:2048 N 25 '16
- Sterilization of tobacco seed beds. G. H. Chapman. Mass Ag Ext B 18 6p '18
- Sterilizing greenhouse soils. C. W. Waid. il Market Growers J 20:204+ Mr 1 '17
- Study of the action of carbon black and similar absorbing materials in soils. J. J. Skinner and J. H. Beattie. bibliog il Soil Sci 2: 93-101 J '16

**Bibliography**

- Review of investigations in soil protozoa and soil sterilization. N. Kopeloff and D. A. Coleman. Soil Sci 3:248-69 Mr '17

**Soil fertility**

- Accumulated fertility in grass land in consequence of phosphatic manuring. W. Somerville. il J Bd Ag 22:1201-9 Mr '16
- Acre yield of corn. H: Wallace. Wallaces' F 41:397 Mr 10 '16
- Address delivered before the Ohio canners association, Cincinnati, Dec. 11, 1917. 5p n.d. Nat. canners assn., 1739 H st. N.W., Washington, D.C.
- Agricultural geology and history reviewed. W. H. Stout. Pa Ag Dept B 278:121-7 '16
- Are you a soil robber or a soil builder? W. H. Barton. Prog F 31:979 Ag 12 '16
- Are you selling part of your farm each year? T. Butler. Prog F 31:3 Ja 1 '16
- Availability of potash in some common soil-forming minerals—effect of lime upon potash absorption by different crops. J. K. Plummer. bibliog il J Ag Research 14:297-316 Ag 19 '18
- Building up the run-down farm. C. G. Williams. il Ohio F 139:353 Mr 10 '17
- Century of soil improvement. H: G. Bell. Am Fert 45:21-5 Jl 8 '16
- Crop rotation and soil fertility. R. C. Doneghue. il N D Ag Exp B 126:197-251 '18
- Divergent effects of lime and magnesia upon the conservation of soil sulfur. W. H. MacIntire and others. il Soil Sci 4:231-7 S '17
- Dr Hopkins comments on use of raw phosphate. C. G. Hopkins. Nat Stock & F 41:716 O 27 '17
- Does crop rotation maintain the fertility of the soil? J. E. Greaves. Sci Monthly (Science Press, Garrison, N.Y. 30c) 6:458-66 My '18
- Effect of paraffin on the accumulation of ammonia and nitrates in the soil. P. L. Gaihey. bibliog J Ag Research 10:355-64 Ag 13 '17
- Effect of season and crop growth in modifying the soil extract. G. R. Stewart. bibliog il J Ag Research 12:311-68 F 11 '18
- Effects of certain organic compounds on plant growth: coumarin, vanillin, pyridine, quinoline, dihydroxystearic acid, pyrogallol, etc. M. J. Funchess. il Ala Ag Exp B 191: 103-32 '16
- Effects of liming the soil. A. E. Grantham. il Prac F 114:1 Ja 1 '18
- Effects of the peanut crop on soil fertility. J. F. Duggar. Prog F 32:1218 N 17 '17
- Eleventh hour fertility efforts. O Judd Farmer 62:6 Ap 21 '17
- Exploitation of the soil fertility germ. Prog F 33:981 S 7 '18
- Facts on fertility. H: G. Bell and C. A. Waugh. (Soil improvement com. B. 14) 15p il '16 Nat. fertilizer assn., Chicago
- Farm sources of soil fertility. A. Agee. N J Ag Dept B 3:253-90 '17
- Feed your soil. J. W. Lincoln. Coop Manager & F 6:72 Je '17
- Fertility problem. Purdue Ag 12:37 O '17
- Fertilizers and soil fertility. H: G. Bell. Am Fert 44:44+ Ap 15 '16
- Good customers for crops; livestock preserves fertility. J. C. Pridmore. il Country Gent 81:1361 Jl 15 '16
- Good farming will pay there. Prog F 31:496 Ap 8 '16
- Grain, hay, and fertility. C: B. Wing. il Hoard's D 52:908 Ja 19 '17
- Growing fertility in 1916. J. F. Duggar. Prog F 31:288 F 26 '16
- Handling worn soils. Weekly N L 5:8 F 20 '18
- How to enrich the soil. Gard Chron Am 21: 200 My '17
- How to get richer lands. W. F. Massey. Prog F 31:501 Ap 8 '16
- Importance of finding out which element is lacking in the soil. Rural N Y 76:114 Ja 27 '17
- Improving poor soil. Rural N Y 76:407 Mr 17 '17
- Increasing crop production. R. C. E. Wallace. Purdue Ag 12:551-2 Je '18
- Increasing the fertility of the land; with discussion. F. J. Alway. il Minn Hort 44:250-6 Je '16

**Soil fertility —Continued**

- Influence of fineness of division of pulverized limestone on crop yield as well as the chemical and bacteriological factors in soil fertility. N. Kopeloff. bibliog *il Soil Sci* 4: 19-69 J1 '17
- Irrigation and soil fertility. E. O. Larson. *Irr Age* 33:110 Je '18
- Is the humus content of the soil a guide to fertility? R. H. Carr. bibliog *Soll Sci* 3:515-24 Je '17
- Keep an account with your land. B. W. Kilgore. *Prog F* 33:615 My 18 '18
- Keeping up fertility. *Country Gent* 81:1934 N 4 '16
- Lasting benefits of soil blasting. *Sci Am* (233 Broadway, N. Y. 10c) 119:253 S 28 '18
- Legumes, lime, manure and prosperity. G. H. Dacy. *Country Gent* 81:1428 J1 29 '16
- Letting the oat ground rest. *Prog F* 31:818 Je 24 '16
- Lime and soil improvement. C. E. Thorne. *il Cornell Countryman* 15:397-9+ Ap '18
- Live-stock and maintenance of the soil. E. O. Fippin. *Rural N Y* 75:831, 855, 880, 910, 931, 953, 975, 998, 1046 Je 3-J1 22, Ag 5 '16
- Live stock and soil fertility. W. D. McKee. *Mo Ag Bd Yearbook* 1916:477-81
- Live stock and soil fertility. F. B. Mumford. *Jersey B* 35:810 My 24 '16
- Live stock and soil fertility. W. H. Tomhave. *il Prac F* 113:241-2 J1 1 '17
- Livestock and the maintenance of organic matter in the soil. E. O. Fippin. *Am Soc Agron J* 9:97-105 Mr '17
- Livestock farming as affecting soil fertility. *Prog F* 33:1254 N 16 '18
- Livestock vs. grain farming. C. G. Williams. *Ohio Ag Exp B* 328:39-53 '18
- Maintaining and increasing crop yields. H. G. Bell. (Soil improvement com. Pamph. 16) 12p n.d. Nat. fertilizer assn., Chicago; Same. *Am Fert* 44:21-5 Ap 29 '16
- Maintaining soil fertility largely a local problem. A. G. Craig. *Better Fruit* 11:7+ D '16
- Maintaining soil fertility on a rented farm. J. R. Wiley. *il Ohio F* 139:801 Je 23 '17
- Maintenance of soil fertility. C. G. Hopkins. *Hoard's D* 51:870 Je 23 '16
- Maintenance of soil fertility. W. P. Kelley. *Cal State Comm Hort B* v 5:25-7 Ja '16
- Maintenance of soil fertility; liming the corn crop. C. E. Thorne. *Ohio Ag Exp B* v 1: 28-32 Ja '16
- Maintenance of soil fertility; with discussion. C. E. Thorne. *Mass Ag Bd Yearbook* 1916, pt 2:33-48 '17
- Making next year's garden soil better. H. F. Button. *Gard M* 26:86 O '17
- Management of soil fertility. H. G. Bell. (*In Report, Ontario ag. and exp. union, 1916, p. 67-79*) *il '17 Ontario ag. dept., Toronto*
- Managing soils for profit. H. G. Bell. *Am Fert* 45:34-9 N 25 '16
- Measurements of soil fertility. W. H. Jordan. *N Y State Ag Exp B* 424:389-412 '16
- Measuring fertility. D. K. Tressler. *il Country Gent* 81:1573 Ag 26 '16
- Method of sterilisation and chloroforming of the soil in the study of the properties of tchernoziom. S. Skalskij. *Int R Sci & Prac Ag* 7,no 9:1249-52 S '16
- More profitable cropping system. W. R. Perkins. *Prog F* 31:22 Ja 1 '16
- Most profitable system of soil fertility. S. D. Conner. *Purdue Ag* 10:24+ Ap '16
- Nutrition of soil bacteria. E. R. Allen. *Ohio Ag Exp B* v 1:249-50 Ag '16
- Observations on the present status of the subject of the availability of nitrogen in fertilizers. C. B. Lipman. *Am Fert* 45:23-6 O 14 '16
- On the supposed relative unilateral impoverishment of the soil in nitrogen, phosphoric acid and potassium by various crops; action of the root system of the plants. A. Modestov. *Int R Sci & Prac Ag* 8,no 12:1183-5 D '17
- Opening a farm gold mine. E. L. Vincent. *Hoard's D* 51:138 F 18 '16
- Permanent soil fertility. S. B. Haskell. *Am Fert* 46:21-5 Mr 3 '17
- Phosphate and clover revive farm. O Judd Farmer 65:452 N 16 '18
- Plant food and water for apples. F. W. Allen. *il Fruit-Grower* 27:342 J1 1 '16
- Possible to double yields. C. E. Thorne. *Am Coop J* 11:521 Ja '16
- Prepare now for bigger crops next year. F. F. Rockwell. *il Country Life* 32:54-5 S '17
- Recent investigations on the production of plant food in the soil. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 27:277-8 Ap '16
- Redeeming an impoverished soil. C. E. Thorne. *Ohio Ag Exp B* v 2:339-43 O '17
- Relation of fruit growing to soil fertility. R. C. Thompson. *Ark Ag Exp B* 123:1-20 '16
- Results of soil fertility experiments. A. T. Wiancko. *Purdue Ag* 11:19-20 Ap '17
- Rich land, food and feed should be first. *Prog F* 31:1303 N 11 '16
- Saving fertility. L. Dykstra. *Farm Eng* 6:5 Ja '18
- Significance of nitrification as a factor in soil fertility. P. L. Gainey. bibliog *Soil Sci* 3:399-416 My '17
- Simple way to increase crop yields. H. A. Miller. *il Farmers' B* 924:1-24 '18
- Sods save the hills. A. L. French. *il Country Gent* 81:148 Ja 22 '16
- Soil feeding or crop feeding. H. G. Bell. *Am Fert* 46:50-1 Je 23 '17
- Soil fertility a primary requisite. T. Butler. *Prog F* 31:701 My 27 '16
- Soil fertility and vegetable crop. H. Bell. *Gard Chron Am* 20:477 N '16; Same. *Market Growers J* 19:208 N 1 '16
- Soil fertility inventory pays. C. A. LeClair. *il Hoard's D* 55:512 Ap 12 '18
- Soil fertility investigations. A. T. Wiancko. *Ind Ag Exp Rep* 1917:48-53 '18
- Soil fertility; its economic maintenance and increase. F. T. Shutt. 13p '16 Canada Ag
- Soil fertility most neglected factor on farm. *Coop Manager & F* 6:90 F '17
- Soil fertility questions. C. G. Hopkins. O Judd Farmer 64:645; 65:6, 27, 71, 91, 111, 127, 209, Je 22, J1 6-13, 27-Ag 17, S 14 '18
- Soil management for vegetable and truck crops. A. E. Grantham. *Prac F* 113:402, 425 D 1-15 '17
- Some correlations between vegetation and soils, indicated by census statistics. R. S. Harper. *Am Fert* 45:40-2 Ag 5 '16
- Some observations on the occurrence of infertility under trees. Jatindra Nath Sen. *il Ag J of India* 12:390-405 J1 '17
- Sources of fertility and their conservation. W. H. Bowker. 19p '16 Soil improvement com., Nat. fertilizer assn., Chicago
- Truth about live stock farming and soil fertility. J. C. Courter. *Hoard's D* 51:281 Mr 10 '16
- Unproductive soils, their cause and management. A. E. Vinson. *Ariz Ag Exp Timely Hints* 134:1-8 '18
- Water extractions of soils as criteria of their crop-producing power. J. S. Burd. *J Ag Research* 12:297-309 F 11 '18
- What is fertility? *Am Fert* 49:35 D 7 '18
- Where the fertility goes. Wallaces' F 41:309 F 25 '16
- Woodland succession from soil exhaustion. J Ford 15:500-2 Ap '17
- See also Ammonification; Ferrification; Fertilizers; Green manuring; Humus; Legumes; Manures; Nitrification; Rotation of crops; Sulfocation

**Australia**

Fertility of the soil. J Dept Ag S Australia 21:911-13 Je '18

**Denmark**

Heatherland association of Denmark. O. Mølgård. *il Kimball's D F* 15:48+ F 1 '17

**Great Britain**

Methods of adding to our food supplies. R. G. Stapledon. *J Bd Ag* 22:1107-1118 F '16

**Illinois**

Case of Winnebago county. O Judd Farmer 61:5 O 21 '16



**Soil fertility—Illinois—Continued**

- Clover situation in central Illinois. R. C. Bishop. *il O Judd Farmer* 60:3 F 12 '16
- Dead wheat and soil fertility. O Judd *Farmer* 60:10 My 20 '16
- Illinois system of permanent fertility. C. G. Hopkins. Hoard's D 50:820 Ja 14 '16; Same. Wallaces' F 41:218 F 11 '16; Same cond. Green's Fruit Grower 36:8 Mr '16
- Illinois system of soil fertility from the standpoint of the practical farmer; Phosphates and honesty. B. Leo; C. G. Hopkins. *Ill Ag Exp C* 186:3-31 '16
- More data on Illinois soils. *il map O Judd Farmer* 61:10 J1 1 '16
- Need 40 million tons of limestone. C. C. Logan. O Judd *Farmer* 60:11 F 26 '16
- Soil fertility questions; opportunity in southern Illinois. C. G. Hopkins. O Judd *Farmer* 65:71, 91, 121, 127 J1 27-Ag 17 '18
- Soil improvement in Clinton county. A. R. Weed. O Judd *Farmer* 65:48 J1 20 '18
- Some experiments in improving worn soils; with discussion. G. Roberts. *il Ill Farmers Inst Rep* 1917:35-51 '17
- Summary of Illinois soil investigations. C. G. Hopkins and others. *il maps Ill Ag Exp B* 193:451-84 '16
- Why Illinois produces only half a crop. C. G. Hopkins. *Ill Farmers Inst Rep* 1917:22-35 '17; Same. *Ill Ag Exp C* 193:1-16 '17

**Indiana**

- Indiana soils need phosphates. A. T. Wiancko and S. C. Jones. *il Ind Ag Exp C* 79:1-7 '18; Summary. Hoard's D 55:1031 J1 12 '18; Abstract. *Rural N Y* 77:642 My 4 '18
- Lime and fertilizer needs of Indiana soils. S. D. Conner. *il maps Ind Ag Exp C* 66:1-19 '17
- Summaries of soil fertility investigations. A. T. Wiancko and S. C. Jones. *Ind Ag Exp B* 198:1-20 '17

**Iowa**

- Soil work at the Iowa station. H. A. Wallace. Wallaces' F 41:1405 O 27 '16

**Kansas**

- Soil fertility. *il maps Kan Ag Exp B* 220:1-40 '18

**Kentucky**

- National treatment for Kentucky soils. G. Roberts. *il Ky Ag Dept Rep* 1916-1917:401-8 '18

**Nebraska**

- Loess soils of the Nebraska portion of the transition region; the relative rawness of the subsoils. F. J. Alway and others. *bibliog il map Soil Sci* 3:9-35 Ja '17

**New Jersey**

- Report of the extension specialist in soil fertility and agronomy. J. B. R. Dickey. *N J Ag Exp Rep* 1916:267-71 '17

**New York**

- Depleted soils of New York and their economical restoration. F. Mac Nair. 32p '16
- F. MacNair, 318 William st, Elmira, N.Y.
- Fertility problem. J. B. Barker. *N Y Farms & Markets Dept Ag B* 105:188-207 Mr '18

**North Carolina**

- Report on coastal plain soils, particularly with reference to their nature, plant-food requirements, and suitability for different crops. C. B. Williams and others. *il N C Ag Dept B v* 39:1-175 My '18

**North Dakota**

- Soil fertility in North Dakota. T. P. Cooper. *Breeder's Gaz* 71:775 Ap 12 '17

**Ohio**

- County experiment farms in Ohio; annual reports for 1916 and 1917. *il Ohio Ag Exp B* 323:243-486 '18
- Soil tests at Ohio state university. *Am Flor* 45:1296 Ja 1 '16

**Pennsylvania**

- Economic use of lime on Pennsylvania soils. J. W. White. *il Penn State F* 10:167-9 N '17
- Improving run-down soil. *Ohio F* 140:475 N 24 '17

**Southern states**

- Fire is ruining many a farm in South. T. Butler. *Prog F* 31:495 Ap 8 '16
- How to get rich lands. *Prog F* 32:33, 64, 94, 128, 174, 209, 251, 282, 321, 352, 384, 418, 437, 470, 506, 532, 559, 584, 606, 630, 651, 675, 694, 714, 746, 756, 791, 798, 835, 841, 858, 880, 903, 923, 943, 968, 993, 1013, 1030, 1069, 1092, 1123, 1146, 1181, 1208, 1237, 1258, 1283, 1340 Ja 13-D 8, 22 '17

**Virginia**

- In old Virginia. L. Ogilvy. *Breeder's Gaz* 72: 983 N 29 '17

**West Virginia**

- Livestock and soil fertility. W. H. Tomhave. *W Va Ag Dept B* 30:11-15 '17

**Soil fungi**

- Biological changes in soil during storage. F. E. Allison. *bibliog Soil Sci* 3:37-62 Ja '17
- Effect of soil reaction on ammonification by certain soil fungi. N. Kopeloff. *bibliog il Soil Sci* 1:541-74 Je '16
- Environmental factors influencing the activity of soil fungi. D. A. Coleman. *bibliog Soil Sci* 2:1-65 J1 '16
- Fungous flora of pine seed beds. A. E. Rathbun. *bibliog Phyt* 8:469-83 S '18
- Fungous flora of Texas soils. F. C. Werken-thin. *Phyt* 6:241-53 Je '16
- Green vitriol (ferrous sulphate) as a preventive of take-all. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 27:134 F '16
- Importance of mold action in the soil. S. A. Waksman. *bibliog Soil Sci* 6:137-55 Ag '18
- Incubation studies with soil fungi. S. A. Waksman and R. C. Cook. *Soil Sci* 1:275-84 Mr '16
- Inoculation and incubation of soil fungi. N. Kopeloff. *bibliog Soil Sci* 1:381-403 Ap '16
- Is there any fungus flora of the soil? S. A. Waksman. *bibliog Soil Sci* 3:565-89 Je '17
- Microscopic study of bacteria and fungi in soil. H. J. Conn. *N Y State Ag Exp Tech B* 64:1-20 '18
- New method of separating fungi from protozoa and bacteria. N. Kopeloff and others. *Bot Gaz* 61:247-50 Mr '16
- Soil fungi and their activities. S. A. Waksman. *bibliog il Soil Sci* 2:103-56 Ag '16
- Soil fungi in relation to diseases of the Irish potato in southern Idaho. O. A. Pratt. *bibliog il J Ag Research* 13:73-100 Ap 8 '18
- Some bacteriological studies on agar agar. C. R. Fellers. *bibliog il Soil Sci* 2:255-90 S '16
- Studies of the correlation between the production of carbon dioxide and the accumulation of ammonia by soil organisms. J. R. Neller. *bibliog il Soil Sci* 5:225-41 Mr '18

*See also Actinomycetes*

**Soil gases**

- Composition of the soil gases. I. W. Leather. *Int R Sci & Prac Ag* 7,no 3:339-40 Mr '16

**Soil inoculation**

- Alfalfa in eastern Iowa. G. R. Bliss. *il Country Gent* 81:97 Ja 15 '16
- Alfalfa more profitable than wheat. F. D. Baldwin. *il O Judd Farmer* 63:3 Ag 18 '17
- Alfalfa seed production and inoculation. *Ag Gaz of Canada* 3:336-40 Ap '16
- Bacteria needed in soil to promote leguminous crops. *Weekly N L* 6:4 O 16 '18; Same. *Coop Manager & F* 8:70 D '18
- Cross inoculation of legumes. J. L. Kraker. *Country Gent* 81:112 Ja 15 '16
- Effect of different methods of inoculation on the yield and protein content of alfalfa and sweet clover. A. C. Arny and R. W. Thatcher. *Am Soc Agron J* 9:127-37 Mr '17
- Effect of inoculation, fertilizer treatment and certain minerals on the yield, composition and nodule formation of soybeans. C. R. Fellers. *bibliog il Soil Sci* 6:81-129 Ag '18

**Soil inoculation—Continued**

- Farming the air with the cowpea. S C Ag Dept B 57:1-50 '16
- Get a better crop of grass. *il* Va Ag Dept B 109:52-8 '16
- How to inoculate for legumes. Prog F 31:851 JI 8 '16
- How to inoculate soil and seed for legumes. Prog F 33:831 JI 27 '18
- How to inoculate the soil and seed. T. Butler. Prog F 31:943 Ag 5 '16; Same. Prog F 32:815 JI 28 '17
- Inoculating legume seed. E. H. Phreaner. Market Growers J 23:88 S 1 '18
- Inoculation for alfalfa. A. E. Grantham. Prac F 112:108 Mr 1 '16
- Inoculation improves pea crop. A. W. Hopkins. *il* Hoard's D 55:465 Ap 5 '18
- Inoculation of legumes. E. B. Fred. *il* Wis Ag Ext C 96:1-12 '18; Same. Kimball's D F 16: 252-3 Ap 1 '18; Same *abr.* Hoard's D 55:465 Ap 5 '18
- Inoculation of legumes. L. Hegnauer. *il* Wash Ag Ext Pub Ser 1, no 21 4p '16
- Inoculation of legumes; bacteria upon roots often interchangeable among different plants. A. Bonazzi. Ohio Ag Exp B v 3:161-2 My '18
- Inoculation tests on lucerne and lupin seedlings, in Denmark. H. R. Christensen. Int R Sci & Prac Ag 8, no 8:1106-7 Ag '17
- Inoculation: what it is and how to do it. B. White. Prog F 31:949 Ag 5 '16
- Inoculation with nodule-forming bacteria. Mich Ag Ext B 1:1-4 '16
- Is symbiosis possible between legume bacteria and non-legume plants? T. J. Burrill and R. Hansen. bibliog *il* Ill Ag Exp B 202:115-81 '17
- Laboratory inoculating cultures. Prog F 32: 856 Ag 11 '17
- Legume inoculation. L. Knudson. *il* Cornell Ag Ext B 2:19-28 '16; Same. Cornell Ag Exp Rep 1916, v 2:1335-44 '17
- Lime and inoculation—two alfalfa essentials. A. D. Cromwell. *il* Prac F 114:253 Ag 1 '18
- Liming and inoculating soils. C. S. Dorchester and others. *il* map Ia Ag Ext B 40:1-4 '16
- Lucerne inoculation experiment, Hawkesbury agricultural college (New South Wales) 1912-16. J. O. Heinrich. Int R Sci & Prac Ag 7, no 10:1420-3 O '16
- Nitro cultures. J. Vanderleek. *il* J Ag (Quebec) 21:166 My '18
- Note to legume growers. Better Fruit 11:25 My '17
- Physiological studies of bacillus radicola of soybean (soja max Piper) and of factors influencing nodule production. J. K. Wilson. bibliog *il* Cornell Ag Exp B 386:369-413 '17; Same. Cornell Ag Exp Rep 1917:369-413 '18
- Preparation and use of pure cultures for legume inoculation. C. A. Magoon and B. F. Dana. Wash Ag Exp B 149:1-16 '18
- Providing a supply of soil for inoculation. J. F. Duggar. Prog F 31:717 My 27 '16
- Soil fertilisation by means of bacteria. I. A. Makrinov. Int R Sci & Prac Ag 8, no 2:196-8 F '17
- Soil inoculation. P. E. Brown. Ia Ag Exp C 43:1-7 '18
- Soil inoculation for leguminous crops. W. C. Dumas. *il* Ga Ag Dept B 72:1-24 '17
- Studies of bacillus radicola: testing commercial cultures; soil as a medium. J. C. Temple. *il* Ga Ag Exp B 120:67-80 '16
- To inoculate seed. Am Flor 46:909 My 13 '16
- Two ways to inoculate soil for legumes. Jersey B 36:1223 Ag 8 '17
- Value of nitro culture to the crop. Va Ag Dept B 111:19-20 Ap '16
- Variations in nodule formation. L. T. Leonard. Am Soc Agron J 8:116-18 Mr '16
- What about bottled bacteria? Rural N Y 76: 405 Mr 17 '17
- Yield and nitrogen content of soybeans as affected by inoculation. J. G. Lipman and A. W. Blair. Soil Sci 1:579-84 Je '16

**Commercial cultures**

- Beware of cultures claimed to inoculate the soil for every crop. J. F. Duggar. Prog F 33:643 My 25 '18

- Report on the examination of commercial cultures of legume-infecting bacteria. C. R. Fellers. bibliog Soil Sci 6:53-67 JI '18
- Test of an all crops soil inoculum. P. Emerson. *il* Md Ag Exp B 214:127-49 '18
- Tests of commercial cultures for legume inoculation. H. A. Noyes and C. O. Cromer. *il* Soil Sci 6:69-79 JI '18

**Soil leaching. See Soil percolation****Soil microbiology**

- Characteristics of coli-like microorganisms from the soil. B. R. Johnson and M. Levine. bibliog J Bact 2:379-401 JI '17
- Conversion of soluble phosphoric acid into insoluble phosphoric acid in the soil under the influence of physical, chemical and biological factors. S. Skalkij. Int R Sci & Prac Ag 7, no 8:1084-6 Ag '16
- Factors influencing the longevity of soil micro-organisms subjected to desiccation. W. Giltner and H. V. Langworthy. bibliog J Ag Research 5:927-42 F 14 '16
- Importance of mold action in the soil. S. A. Waksman. bibliog Soil Sci 6:137-55 Ag '18
- Influence of energy material upon the relation of soil microorganisms to soluble plant food. C. J. T. Doryland. bibliog N D Ag Exp B 116:319-401 '16
- Micro-flora and -fauna of the soil. Gard Chron (Lond) 60:112 S 2 '16
- Protozoa as affecting bacterial activities in the soil. S. A. Waksman. bibliog Soil Sci 2:363-76 O '16
- Soil fermentation and feeding of crops; the use of sulphur and raw phosphate. J. G. Lipman. Rural N Y 75:1361, 1388 O 28-N 4 '16
- Soil flora studies. H. J. Conn. N Y State Ag Exp Tech B 57:1-41; 58:1-16; 59:1-18; 60:1-25 '17; Same cond. J Bact 2:35-45, 137-54 Ja-Mr '17
- Soil solution as an index of the biological changes in the soil. J. F. Morgan. Mich Ag Exp Tech B 39:1-24 '17
- Stimulating influence of arsenic upon the nitro-fixing organisms of the soil. J. E. Greaves. bibliog J Ag Research 6:289-416 Je 12 '16; Summary. Int R Sci & Prac Ag 8, no 2:193-5 F '17
- Studies on proteolytic activities of soil micro-organisms, with special reference to fungi. S. A. Waksman. bibliog J Bact 3:475-92 S '18
- Studies on soil protozoa. S. A. Waksman. bibliog Soil Sci 1:135-52 F '16
- See also* Actinomycetes; Soil bacteriology; Soil colloids; Soil fungi; Soil protozoa
- Soil milling machines**
- Soil milling machine. J. S. Owens. *il* Penn State F 10:8-9 Ja '17
- Soil moisture**
- Classification and measurement of the different forms of water in the soil by means of the dilatometer method. G. J. Bouyoucos. *il* Mich Ag Exp Tech B 36:1-48 '17
- Climate and plant growth in certain vegetative associations. A. W. Sampson. U S Ag B 700:1-72 '18
- Conserve the moisture. Green's Fruit Grower 36:5 Je '16
- Determination of moisture in soils. B. S. Davison and G. K. Sivaslian. Am Soc Agron J 10:198-204 My '18
- Drains to fight wetness or drought. C. G. Elliott. *il* Country Gent 81:495-6, 623+ Mr 4, 18 '16
- Effect of irrigation water and manure on the nitrates and total soluble salts of the soil. F. S. Harris and N. I. Butt. bibliog J Ag Research 8:333-59 F 26 '17
- Effect of soil moisture on growth and maturity in maize. T. B. Hutcheson and T. K. Wolfe. bibliog Va Ag Exp Tech B 14:73-92 '17; Same. Va Ag Exp Rep 1915-1916:73-92 '17
- Effect of temperature on the movement of water vapor and capillary moisture in soils. G. J. Bouyoucos. bibliog J Ag Research 5: 141-72 O 25 '15; Same. Mich Ag Bd Rep 1916:499-555



**Soil moisture—Continued**

- Effect on soil moisture of changes in the surface tension of the soil solution brought about by the addition of soluble salts. P. E. Karraker. *J Ag Research* 4:187-92 My '15
- Experiments on loss of moisture from soils by evaporation. D. G. De Angelis. *Int R Sci & Prac Ag* 8,no 2:191-3 F '17
- Factors affecting the evaporation of moisture from the soil. F. S. Harris and J. S. Robinson. *bibliog J Ag Research* 7:439-61 D 4 '16
- Factors influencing the longevity of soil micro-organisms subjected to desiccation, with special reference to soil solution. W. Giltner and H. V. Langworthy. *bibliog J Ag Research* 5:927-42 F 14 '16
- Further studies on the freezing point lowering of soils. G. J. Bouyoucos and M. M. McCool. *Mich Ag Exp Tech* B 31:1-51 '16
- Humus holds water. *Irr Ag* 33:49 Ap '18
- Influence of ammonium sulfate on the germination and the growth of barley in sand and soil cultures kept at different moisture contents and at various osmotic concentrations of the soil solution. M. I. Wolkoff. *bibliog Soil Sci* 5:421-79 Je '18
- Influence of soil moisture upon the rate of increase in sugar-beet root-louse colonies. J. R. Parker. *J Ag Research* 4:241-50 Je '15
- Interpretation of field observations on the moistness of the subsoil. F. J. Alway and others. *bibliog Am Soc Agron J* 10:265-78 O '18
- Loess soils of Nebraska; hygroscopicity. F. G. Alway and G. R. McDole. *Soil Sci* 1:214-18 Mr '16
- Manurial value of potsherds. A. Howard. *Ag J of India* 11:256-62 Jl '16
- Measurement of the inactive, or unfree, moisture in the soil by means of the dilatometer method. G. J. Bouyoucos. *bibliog J Ag Research* 8:195-217 F 5 '17
- Measurement of the surface forces in soils. C. A. Shull. *bibliog il Bot Gaz* 62:1-31 Jl '16; Excerpts. *Int R Sci & Prac Ag* 7,no 10: 1409-14 O '16
- Moisture equivalent determinations of salt-treated soils and their relation to changes in the interior surfaces. L. T. Sharp and D. D. Waynick. *Soil Sci* 4:463-9 D '17
- Moisture ratio. A. Smith. *Science (Science Press, Garrison, N. Y. 15c)* n s 48:48-9 Jl 12 '18
- Moisture withholding power of soils. B. Moore. *J For* 15:110-17 Ja '17
- Movement and distribution of moisture in the soil. F. S. Harris and H. W. Turpin. *bibliog J Ag Research* 10:113-55 Jl 16 '17
- Movement of soluble salts through soils. M. M. McCool and L. C. Wheating. *J Ag Research* 11:531-47 D 10 '17
- Nature's plant factory—the seedbed. C. A. Bacon. *il Power F* 25:9+ Ap; 28 My '16
- Note on an enquiry by the government of India into the relation between forests and atmospheric and soil moisture in India. M. Hill. (*Forest B.* 33) 41p map 1s 6d '16 Supt. of govt. printing, Calcutta, India
- Note on soil denudation by rainfall and drainage; conservation of soil moisture. G. D. Hope. *Ag J of India* 11:134-41 Ap '16
- Notes on the presence of nitrates in orchard soils. J. H. Gourley and V. D. Shunk. *N H Ag Exp Tech* B 11:1-31 '16
- Osmotic pressure of soil moisture and glassiness of the grain of Bielotourka wheat. N. Toulakov. *Int R Sci & Prac Ag* 7,no 9:1257-60 S '16
- Practical soil facts in 1917. J. W. Henceroth. *il Am Coop J* 12:557-8 Ap '17
- Preliminary note on soil moisture and temperature factors in the winter-killing of grain crops. S. C. Salmon. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:173-4 F 15 '18
- Preliminary statement on the present status of the humus nitrogen problem in arid soils. C. B. Lipman. *bibliog Soil Sci* 1:285-90 Mr '16
- Rate of water movement in aerated soils. H. E. Pulling. *bibliog Soil Sci* 4:239-68 S '17
- Relation between forests and atmospheric and soil moisture in India. M. Hill. *Int R Sci & Prac Ag* 8,no 4:554-6 Ap '17

- Relation of movement of water in a soil to its hygroscopicity and initial moistness. F. J. Alway. *bibliog J Ag Research* 10:391-428 Ag 20 '17
- Relation of the mechanical analysis to the moisture equivalent of soils. A. Smith. *bibliog Soil Sci* 4:471-6 D '17
- Relation of the water-retaining capacity of a soil to its hygroscopic coefficient. F. J. Alway and G. R. McDole. *bibliog J Ag Research* 9:27-71 Ap '17
- Relationship between the unfree water and the heat of wetting of soils and its significance. G. J. Bouyoucos. *Mich Ag Exp Tech* B 42:1-23 '18
- Reporting moisture results. H. A. Noyes. *il Science (Science Press, Garrison, N.Y. 15c)* n s 47:293-5 Mr 22 '18
- Shrinkage of soils. H. A. Tempany. *J Ag Sci* 8:312-30 Je '17
- Soil moisture a big factor in crop production. A. F. Kidder. *Prog F* 31:304 F 26 '16
- Soil moisture and after-cultivation. *il Va Ag Dept B* 109:30-5 '16
- Soil moisture and tillage. R. S. Dunham. *Farm Eng* 7:6 Ap '18
- Soil moisture index. F. Ramaley. *Bot Gaz* 63: 151-2 F '17
- Soil moisture studies under dry-farming. F. S. Harris and J. W. Jones. *Utah Ag Exp B* 158: 1-51 '17
- Soil moisture studies under irrigation. F. S. Harris and A. F. Bracken. *Utah Ag Exp B* 159:1-26 '17
- Some notes on the direct determination of the hygroscopic coefficient. F. J. Alway and others. *bibliog J Ag Research* 11:147-66 O 22 '17
- Some observations on the occurrence of infertility under trees. Jatrinda Nath Sen. *il Ag J of India* 12:390-405 Jl '17
- Strive to know why. J. W. Henceroth. *il Coop Manager & F* 7:65 My; 44 Je '18
- Studies on capacities of soils for irrigation water, and on a new method of determining volume weight. O. W. Israelsen. *bibliog il J Ag Research* 13:1-36 Ap 1 '18
- Study of soil solutions by means of a semi-permeable membrane supported on a porous clay plate. G. L. Schuster. *Am Soc Agron J* 9:333-40 O '17
- Transpiration as a factor in crop production. T. A. Kieselbach. *bibliog il Neb Ag Exp Research B* 6:1-214 '16
- Uniformity of distribution of moisture in soils. P. E. Fuller. (*In Pan American scientific congress Pro.*, 1915, v. 3, p. 169-87) '17
- Use of the moisture equivalent for the indirect determination of the hygroscopic coefficient. F. J. Alway and J. C. Russell. *bibliog J Ag Research* 6:833-46 Ag 28 '16
- Use of two indirect methods for the determination of the hygroscopic coefficients of soils. F. J. Alway and V. L. Clark. *bibliog J Ag Research* 7:345-59 N 20 '16
- Variations in the moisture content of the surface foot of a loess soil as related to the hygroscopic coefficient. F. J. Alway and G. R. McDole. *bibliog map J Ag Research* 14:453-80 S 9 '18
- Water content of the soil and the composition and concentration of the soil solution. M. M. McCool and C. E. Millar. *bibliog Soil Sci* 3: 113-38 F '17
- Water-holding capacity of soil. E. B. Darlington. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:599 Je 12 '18
- Water supply of the soil. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:24-31 '16
- Water table variations; causes and effects. A. B. Ballantyne. *Utah Ag Exp B* 144:1-22 '16
- Waterproof and wax-bearing soils. B. C. Aston. *J Ag New Zealand* 13:289-92 O '16

See also Drainage; Mulching; Soil absorption; Water requirements of crops

**Soil percolation**

- Fundamental interrelationships between certain soluble salts and soil colloids. L. T. Sharp. *Cal Univ Pub Ag Sci* v 1,no 10:291-339 '16 (50c)

**Soil percolation—Continued**

- How to get rich lands; soil washing and leaching; their relation to soil fertility. B. L. Moss. *Frog F* 32:251 F 24 '17
- Investigations relative to the use of nitrogenous plant-foods, 1898-1912. J. G. Lipman and A. W. Blair. *N J Ag Exp B* 288:1-126 '16
- Loss of fertilizers by leaching. S. E. Collison and S. S. Walker. *Fla Ag Exp B* 132:1-20 '16
- Lysimeter experiments; records for tanks 1 to 12 during the years 1910 to 1914 inclusive. T. L. Lyon and J. A. Bizzell. bibliog il plan Cornell Ag Exp Memoir 12:1-115 '18
- Preliminary experiments on some effects of leaching on the soil flora. C. B. Lipman and L. W. Fowler. bibliog *Soil Sci* 1:291-7 Mr '16
- Washing out of nitrate from arable soil during the past winter. E. J. Russell and A. Appleyard. *J Bd Ag* 23:22-7 Ap '16
- Water penetration in the gumbo soils of the Belle Fourche reclamation project. O. R. Mathews. *U S Ag B* 447:1-12 '16
- See also Lysimeters; Soil absorption; Soil moisture
- Soil products exhibition**
- Prairie provinces; their success at the soil products exhibition. S. T. Newton. il *Ag Gaz of Canada* 5:1165-6 D '18
- Soil protozoa**
- Activity of soil protozoa. G: P. Koch. bibliog *J Ag Research* 5:477-88 D 13 '15
- Method for the counting of certain protozoa in the soil. A. Itano and G. B. Ray. bibliog *Soil Sci* 5:303-10 Ap '18
- New method of separating fungi from protozoa and bacteria. N. Kopeloff and others. *Bot Gaz* 61:247-50 Mr '16
- Relation of carbon bisulphid to soil organisms and plant growth. E. B. Fred. bibliog il *J Ag Research* 6:1-20 Ap 3 '16
- Relation of protozoa to certain groups of soil bacteria. T. L. Hills. bibliog *J Bact* 1:423-33 JI '16
- Review of investigations in soil protozoa and soil sterilization. N. Kopeloff and D. A. Coleman. *Soil Sci* 3:197-248 Mr '17
- Separation of soil protozoa. N: Kopeloff and others. bibliog *J Ag Research* 5:137-40 O 18 '15
- Soil protozoa. G: P. Koch. bibliog *J Ag Research* 4:511-59 S '15
- Studies on soil protozoa. S. A. Waksman. bibliog *Soil Sci* 1:135-52 F '16
- Studies on soil protozoa and their relation to the bacterial flora. J. M. Sherman. bibliog *J Bact* 1:35-66, 165-85 Ja, Mr '16
- Studies on the activity of soil protozoa. G: P. Koch. bibliog *Soil Sci* 2:163-81 Ag '16
- See also Soil microbiology
- Bibliography**
- Review of investigations in soil protozoa and soil sterilization. N. Kopeloff and D. A. Coleman. *Soil Sci* 3:248-69 Mr '17
- Soil sampling**
- Are unusual precautions necessary in taking soil samples for ordinary bacteriological tests? C. B. Lipman and D. E. Martin. *Soil Sci* 6:131-6 Ag '18
- Biological variations in soil plots shown by different methods of sampling. F. E. Allison and D. A. Coleman. *Soil Sci* 3:499-505 Je '17
- Soil sampler. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr). 48:427 N 21 '17
- Soil sampler for bacteriological and chemical purposes. J. R. Neller. il *Soil Sci* 4:109-13 Ag '17
- Soil solution**
- Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on water-soluble nutrients in soils. A. F. Christie and J. C. Martin. bibliog *Soil Sci* 5:383-92 My '18
- Comparative study of salt requirements for young and for mature buckwheat plants in sand cultures. J: W. Shive. bibliog *Soil Sci* 6:1-32 JI '18
- Comparative study of salt requirements for young and for mature buckwheat plants in solution cultures. J: W. Shive and W: H. Martin. bibliog *J Ag Research* 14:151-75 JI 22 '18
- Effect of season and crop growth in modifying the soil extract. G. R. Stewart. bibliog il *J Ag Research* 12:311-68 F 11 '18
- Effect of sterilization of soils by heat and antiseptics upon the concentration of the soil solution. G: P. Koch. bibliog *Soil Sci* 3:525-30 Je '17
- Effect of the concentration of the nutrient solution on the growth of barley and wheat in water cultures. W. E. Brechley. il *Ann Bot* 30:77-90 Ja '16
- Freezing-point method as an index to variations in the soil solution due to season and crop growth. D. R. Hoagland. bibliog *J Ag Research* 12:369-95 F 11 '18
- Further studies on the freezing point lowering of soils. G: J. Bouyoucos and M. M. McCool. *Mich Ag Exp Tech B* 31:1-51 '16; Same. *Mich Ag Bd Rep* 1917:553-605
- Influence of aeration of the nutrient solution in water culture experiments, remarks on the water culture method. W. Stiles and J. Jørgensen. *Int R Sci & Prac Ag* 9,no 1:44-5 Ja '18
- Influence of ammonium sulfate on the germination and the growth of barley in sand and soil cultures kept at different moisture contents and at various osmotic concentrations of the soil solution. M. I. Wolkoff. bibliog *Soil Sci* 5:421-79 Je '18
- Influence of certain added solids upon composition and efficiency of Knop's nutrient solution. E. H. Toole and W. E. Tottingham. bibliog *Am J Bot* 5:452-61 N '18
- New method of extracting the soil solution. C: B. Lipman. *Cal Univ Pub Ag Sci* v 3, no 7 131-4p '18 (5c)
- New three-salt nutrient solution for plant cultures. B. E. Livingston and W. E. Tottingham. *Am J Bot* 5:337-46 JI '18
- On the interpretation of the results of water culture experiments. W. Stiles. *Ann Bot* 30:427-36 JI '16
- Physiological balance in the soil solution. R. P. Hibbard. il *Mich Ag Exp Tech B* 40:1-44 '17
- Relation between biological activities in the presence of various salts and the concentration of the soil solution in different classes of soil. C. E. Millar. *J Ag Research* 13:213-23 Ap 22 '18
- Soil solution as an index of the biological changes in the soil. J. F. Morgan. *Mich Ag Exp Tech B* 39:1-24 '17
- Soil solution obtained by action of a hydraulic press. G. Ramann and others. (abs. in *J. Chem. Soc. [London]* 112 (1917), no. 655, I, p. 311-12). *Exp Sta Record* 38,no 6:512 '18
- Soil solution obtained by the oil pressure method. J. F. Morgan. bibliog il *Mich Ag Exp Tech B* 28:1-38 '16; Same. *Mich Ag Bd Rep* 1917:497-529; Same cond. *Soil Sci* 3:531-45 Je '17
- Study of physiological balance for buckwheat grown in three-salt solutions. J: W. Shive. bibliog *N J Ag Exp B* 319:1-63 '17
- Study of soil solutions by means of semipermeable membrane supported on a porous clay plate. G: L. Schuster. il *Am Soc Agron J* 9:333-40 O '17
- True soil solution. Z. Northrup. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:638-9 Je 28 '18
- Water extractions of soils as criteria of their crop-producing power. J: S. Burd. *J Ag Research* 12:297-309 F 11 '18
- Soil sterilization.** See Soil disinfection
- Soil surveys**
- On taking samples of soil for soil surveys. E. J. Russell. *J Bd Ag* 23:342-9 JI '16
- Soil survey. J. H. Bromley. Cornell Countryman 15:529-30 Je '18
- Soil surveys and their significance. A. T. Wiancko. *Purdue Ag* 10:18-19 Ja '16
- Alabama**
- Soil survey of Barbour county, Alabama. H. C. Smith and others. (Soils bur. advance sheets) 59p map '16 U S Ag



**Soil surveys—Alabama —Continued**

Soil survey of Pickens county, Alabama. A. M. O'Neal, jr., and others. (Soils bur. advance sheets) 41p maps '17 U S Ag  
Soil survey of Washington county, Alabama. L. A. Hurst and others. (Soils bur. advance sheets) 51p il map '17 U S Ag

**Arkansas**

Soil survey of Craighead county, Arkansas. E. B. Deeter and L. V. Davis. (Soils bur. advance sheets) 32p il maps '17 U S Ag  
Soil survey of Hempstead county, Arkansas. A. E. Taylor and W. B. Cobb. (Soils bur. advance sheets) 53p map '18 U S Ag

**California**

Reconnaissance soil survey of the San Diego region, California. L. C. Holmes and R. L. Pendleton. (Soils bur. advance sheets) 77p il maps '18 U S Ag  
Soil survey of the Healdsburg area, California. E. B. Watson and others. (Soils bur. advance sheets) 59p il map '17 U S Ag  
Soil survey of the Honey Lake area, California. J. E. Guernsey and others. (Soils bur. advance sheets) 64p il maps '17 U S Ag  
Soil survey of the Pasadena area, California. E. C. Eckmann and C. J. Zinn. (Soils bur. advance sheets) 56p il map '17 U S Ag  
Soil survey of the San Fernando valley area, California. L. C. Holmes and others. (Soils bur. advance sheets) 61p il map '17 U S Ag

**Canada**

Soil surveys in Nova Scotia and Ontario. L. C. Harlow; R. Harcourt. Ag Gaz of Canada 4:467-71 Je '17

**England**

Soils and crops of the market-garden district of Biggleswade. T. Rigg. maps J Ag Sci 7: 385-431 Ap '16

**Florida**

Soil survey of Hillsborough county, Florida. C. N. Mooney and others. (Soils bur. advance sheets) 42p maps '18 U S Ag

**Georgia**

Analyses of soils of Jasper county. map Ga Ag Coll B 160:1-46 '18  
Soil survey of Brooks county, Georgia. A. T. Sweet and B. W. Tillman. (Soils bur. advance sheets) 42p il map '18 U S Ag  
Soil survey of Jasper county, Georgia. D. D. Long and M. E. Carr. (Soils bur. advance sheets) 43p map '18 U S Ag  
Soil survey of Meriwether county, Georgia. M. Baldwin and J. A. Kerr. (Soils bur. advance sheets) 31p il map '17 U S Ag  
Soil survey of Richmond county, Georgia. T. M. Bushnell and J. M. Snyder. (Soils bur. advance sheets) 38p map '17 U S Ag

**Illinois**

Du Page county soils. C. G. Hopkins and others. il map Ill Ag Exp Soil Report no 16:1-56 '17  
Edgar county soils. C. G. Hopkins and others. il maps Ill Ag Exp Soil Report no 15:1-56 '17  
Kankakee county soils. C. G. Hopkins and others. il maps Ill Ag Exp Soil Report no 13 72p '16  
Tazewell county soils. C. G. Hopkins and others. il map Ill Ag Exp Soil Report no 14: 1-68 '16  
Winnebago county soils. C. G. Hopkins and others. il maps Ill Ag Exp Soil Report 12:1-76 '16

**Iowa**

Soil survey of Iowa; Bremer county soils. W. H. Stevenson and others. il maps Ia Ag Exp Soil Survey Report no 1:1-48 '17  
Soil survey of Mitchell county, Iowa. W. E. Tharp and K. Espe. (Soils bur. advance sheets) 34p maps '18 U S Ag  
Soil survey of Scott county, Iowa. E. H. Stevens and others. (Soils bur. advance sheets) 43p map '17 U S Ag  
Soil survey work in Iowa. map Wallaces' F 43:681 Ap 19 '18

**Kansas**

Soil survey of Jewell county, Kansas. maps Kan Ag Exp B 211:1-36 '16

**Louisiana**

Soil survey of Rapides Parish, Louisiana. E. H. Smies and others. (Soils bur. advance sheets) 43p maps '18 U S Ag

**Maine**

Soil survey of Cumberland county, Maine. C. Van Duyn and M. W. Beck. (Soils bur. advance sheets) 91p map '17 U S Ag

**Maryland**

Soil survey of Howard county, Maryland. W. T. Carter, jr., and J. P. D. Hull. (Soils bur. advance sheets) 34p map '17 U S Ag

**Minnesota**

Surface formations and agricultural conditions of northeastern Minnesota. F. Leverett and F. W. Sardeson. (B. 13) 69p il maps '17 Univ. of Minnesota, Minneapolis

**Mississippi**

Soil survey of Hinds county, Mississippi. A. E. Kocher and A. L. Goodman. (Soils bur. advance sheets) 42p il map '18 U S Ag  
Soil survey of Lee county, Mississippi. W. E. Tharp and E. M. Jones. (Soils bur. advance sheets) 40p map '18 U S Ag  
Soil survey of Newton county, Mississippi. A. L. Goodman and E. M. Jones. (Soils bur. advance sheets) 43p maps '18 U S Ag

**Missouri**

Soil survey of Buchanan county, Missouri. B. W. Tillman and C. E. Deardorff. (Soils bur. advance sheets) 46p map '17 U S Ag  
Soil survey of Newton county, Missouri. A. T. Sweet and E. S. Vanatta. (Soils bur. advance sheets) 41p map '17 U S Ag  
Soil survey of Ripley county, Missouri. F. Z. Hutton and H. H. Krusekopf. (Soils bur. advance sheets) 36p map '17 U S Ag

**Nebraska**

Soil survey of Box Butte county, Nebraska. F. A. Hayes and J. H. Agee. (Soils bur. advance sheets) 34p il maps '18 U S Ag  
Soil survey of Dawes county, Nebraska. R. R. Burn and others. (Soils bur. advance sheets) 41p map '17 U S Ag  
Soil survey of Fillmore county, Nebraska. A. H. Meyer and others. (Soils bur. advance sheets) 24p il map '18 U S Ag  
Soil survey of Hall county, Nebraska. J. O. Veatch and V. H. Seabury. (Soils bur. advance sheets) 41p maps '18 U S Ag  
Soil survey of Kimball county, Nebraska. A. H. Meyer and others. (Soils bur. advance sheets) 28p map '17 U S Ag  
Soil survey of Polk county, Nebraska. J. M. Snyder and T. E. Kokjer. (Soils bur. advance sheets) 30p map '17 U S Ag  
Soil survey of Washington county, Nebraska. L. V. Davis and H. C. Mortlock. (Soils bur. advance sheets) 38p map '17 U S Ag

**New Jersey**

Soil survey of the Camden area, New Jersey. A. L. Patrick and others. (Soils bur. advance sheets) 45p il maps '17 U S Ag  
Soils of southern New Jersey and their uses. J. A. Bonsteel. il maps U S Ag B 677:1-78 '18

**New York**

Soil survey of Cortland county, New York. E. T. Maxon and others. (Soil bur. advance sheets) 28p map '17 U S Ag  
Soil survey of Oneida county, New York (B. 362). E. T. Maxon and others. maps Cornell Ag Exp Rep 1916:5-59 '17  
Soil survey of Schoharie county, New York. E. T. Maxon and others. il map Cornell Ag Ext B 24:85-114 '17  
Soil survey of Yates county, New York. E. T. Maxon. (Soils bur. advance sheets) 36p map '18 U S Ag

**Soil surveys—New York—Continued**

Soils and agricultural development of New York. E. O. Fippin. il Cornell Countryman 14:291-4, 568-71 Ja, Ap '17

**North Carolina**

County soil report, no. 1; report on Mecklenburg county soils, agriculture and industries. il N C Ag Dept B v 38:1-47 Ap '17

How North Carolina soil survey is being used to help the farmers. C. B. Williams. N C Ag Ext C 32:1-8 '16

Soil survey of Alleghany county, North Carolina. R. T. A. Burke and H. D. Lambert. (Soils bur. advance sheets) 26p map '17 U S Ag

Soil survey of Davidson county, North Carolina. R. B. Hardison and L. L. Brinkley. (Soils bur. advance sheets) 39p map '17 U S Ag

**North Dakota**

Soil survey of Bottineau county. R. C. Doneghue. map N D Ag Exp B 124:115-48 '17

Soil survey of Bottineau county, North Dakota. W. B. Cobb and others. (Soils bur. advance sheets) 54p maps '17 U S Ag

Soil survey of Dickey county. T. M. Bushnell and others. il map N D Ag Exp B 121:1-56 '17

**Ohio**

Ohio soil survey. W. C. Boardman. Ohio Ag Exp B v 1:319-20 O '16

Soil survey of Hamilton county, Ohio. A. L. Goodman and others. (Soils bur. advance sheets) 39p map '17 U S Ag

**Oklahoma**

Soil survey of Kay county, Oklahoma. N. M. Kirk and R. C. Journey. (Soils bur. advance sheets) 40p il map '17 U S Ag

**Pennsylvania**

Soil survey of Blair county, Pennsylvania. J. O. Veatch and others. (Soils bur. advance sheets) 48p map '17 U S Ag

Soil survey of Cambria county, Pennsylvania. B. B. Derrick and A. L. Patrick. (Soils bur. advance sheets) 32p map '17 U S Ag

**South Carolina**

Soil survey of Hampton county, South Carolina. M. W. Beck and A. L. Goodman. (Soils bur. advance sheets) 37p map '17 U S Ag

**Texas**

Soil survey of Eastland county, Texas. W. G. Smith and others. (Soils bur. advance sheets) 37p map '17 U S Ag

Soil survey of San Saba county, Texas. J. O. Veatch and others. (Soils bur. advance sheets) 67p maps '17 U S Ag

Soil survey of Taylor county, Texas. W. G. Smith and others. (Soils bur. advance sheets) 40p map '18 U S Ag

Soils of Grayson, Lee, McLennan, Titus, and Tyler counties. G. S. Fraps. Tex Ag Exp B 192:1-51 '16

**Utah**

Indicator significance of vegetation in Tooele valley, Utah. T. H. Kearney and others. il map J Ag Research 1:365-418 F '14

**Virginia**

Descriptive catalogue of the soils of Virginia so far identified in the soil survey. map U S Ag B 46:1-21 '13

**Washington**

Soil survey of the proposed Palouse irrigation project. H. F. Holtz. il map Wash Ag Exp B 133:1-14 '16

**West Virginia**

Analyses of one hundred West Virginia soils. F. E. Bear and R. M. Salter. map W Va Ag Exp B 161:1-36 '16

Soil survey of Jefferson, Berkeley, and Morgan counties, West Virginia. W. J. Latimer. (Soils bur. advance sheets) 74p il map '18 U S Ag

Soil survey of Lewis and Gilmer counties, West Virginia. W. J. Latimer. (Soils bur. advance sheets) 34p map '17 U S Ag

**Soil temperature**

Effect of soil temperature on the growth of bean plants and on their susceptibility to a root parasite. D. Reddick. Am J Bot 4:513-19 N '17

Effect of temperature on the movement of water vapor and capillary moisture in soils. G. J. Bouyoucos. bibliog J Ag Research 5: 141-72 O 25 '15; Same. Mich Ag Bd Rep 1916:499-555

Freezing point method as a new means of measuring the concentration of the soil solution directly in the soil. G. J. Bouyoucos and M. M. McCool. il Mich Ag Bd Rep 1916: 592-631

Influence of soil temperature upon seedling corn. B. D. Halsted and S. A. Waksman. Soil Sci 3:393-8 Ap '17

Relation of soil insects to climatic conditions. A. E. Cameron. Ag Gaz of Canada 4:663-8 Ag '17

Relationship between the unfree water and the heat of wetting of soils and its significance. G. J. Bouyoucos. Mich Ag Exp Tech B 42:1-23 '18

Soil temperature and drainage. A. R. Whitson and H. B. Hendrick. U S Ag B 355:31-3 '16

Soil temperature; experimental data on different types of soil at different depths and under different surface conditions for 1913, 1914, and 1915. G. J. Bouyoucos. Mich Ag Exp Tech B 26:1-133 '16; Same. Mich Ag Bd Rep 1916:688-816

Soil temperatures and crop production. D. L. Hartman. Rural N Y 77:913, 934 Jl 27-Ag 3 '18

Soil temperatures as influenced by cultural methods. J. Oskamp. J Ag Research 5:173-9 O 25 '15

**Soil variation**

Method of correcting for soil heterogeneity in variety tests. F. M. Surface and R. Pearl. bibliog J Ag Research 5:1039-50 F 28 '16

Soil washing. See Erosion

Soiling crops. See Forage plants

**Soils**

Absorption and other modifications of certain fertilising or anti-cryptogamic compounds in various natural and artificial soils. B. De Wilkoszewski. Int R Sci & Prac Ag 9,no 2:145-6 F '18

Action of precipitated magnesium carbonate on soils. W. P. Kelley. bibliog Am Soc Agron J 9:285-96 S '17

Action of solutions of ammonium sulfate on muscovite. R. F. Gardiner and E. C. Shorey. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:589-90 Je '17

Availability of potash in certain orthoclase-bearing soils as affected by lime or gypsum. L. J. Briggs and J. F. Breazeale. J Ag Research 8:21-8 Ja 2 '17; Summary. Int R Sci & Prac Ag 8,no 4:556-8 Ap '17

Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on soil reaction. D. R. Hoagland and A. W. Christie. bibliog Soil Sci 5:379-82 My '18

Chemical effects of CaO and CaCO<sub>3</sub> on the soil; effect on water-soluble nutrients in soils. A. F. Christie and J. C. Martin. bibliog Soil Sci 5:383-92 My '18

Classification of soils in a soil survey. W. C. Boardman. Ohio Ag Exp B v 1:251-2 Ag '16

Clay boulders and the rolling action of water. E. B. Watson. Soil Sci 3:513-14 Je '17

Compaction of soils due to the use of tractors. L. F. Seaton. Am Soc Ag Eng Trans 10,no 1:68-71 '17

Comparison of the nitrifying powers of some humid and some arid soils. C. B. Lipman and others. bibliog J Ag Research 7:47-82 O 9 '16

Decay and soil toxins. G. B. Rigg. bibliog Bot Gaz 61:295-310 Ap '16



**Soils—Continued**

- Effect of decomposing organic matter on the solubility of certain inorganic constituents of the soil. C. A. Jensen. *J Ag Research* 9: 253-68 My 21 '17
- Effect of drainage on soil texture. J. A. Mosier. *Power F* 26:48 S '17
- Excess soluble salts in humid soils. S. D. Conner. *Am Soc Agron J* 9:297-301 S '17
- Further studies on the freezing point lowering of soils. G. J. Bouyoucos and M. M. McCool. *Mich Ag Exp Tech B* 31:1-51 '16
- Harmful effects of aldehydes in soils. O. Schreiner and J. J. Skinner. *U S Ag B* 108: 1-26 '15
- Hydrogen-ion concentration measurements of soils of two types: Caribou loam and Washburn loam. L. J. Gillespie and L. A. Hurst. *bibliog Soil Sci* 4:313-19 O '17
- Influence of available carbohydrates upon ammonia accumulation by microorganisms. S. A. Waksman. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39:1503-12 Jl '17
- Influence of growth of cowpeas upon some physical, chemical, and biological properties of soil. C. A. LeClair. *il J Ag Research* 5:439-48 D 6 '15
- Influence of soil variation on crop production: soils suited to varieties of apples. H. J. Wilder. *Mass Ag Bd B* 2 (5th ed):35-53 '16
- Influence of the chemical structure of the compounds to be ammonified upon the rate of ammonification. K. Miyake. *Am Chemical Soc J* (Box 505, Washington, D.C. \$6 per yr.) 39:2378-82 N '17
- Looking under the surface. G. F. Jordan. *Power F* 25:37 O '16; Same. *Am Coop J* 12: 394 Ja '17
- Making a soil out of a dump heap. *Rural N Y* 76:118 Ja 27 '17
- Management of orchard soils. J. Farrell. *il J Dept Ag Victoria* 16:80-8 F '18
- Management of tobacco soils. J. Johnson. *il Wis Ag Exp B* 27:1-29 '17
- Manganese as a cause of the depression of the assimilation of iron by pineapple plants. M. O. Johnson. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr.) 9:47-9 Ja '17
- Nature's cycle in the soil. *Gard Chron* (Lond) 59:153 Mr 18 '16
- Nature's plant factory—the seedbed. C. A. Bacon. *il Power F* 25:9 Mr; 9+ Ap; 28 Mr; 12 Je; 12 Jl '16
- Nitrification in semiarid soils. W. P. Kelley. *bibliog J Ag Research* 7:417-37 D 4 '16
- Nitrogen in plants. F. C. Robb. *il Fruit-Grower* 28:278 Je 1 '17
- Notes on the presence of nitrates in orchard soils. J. H. Gourley and V. D. Shunk. *N H Ag Exp Tech B* 11:1-31 '16
- On the rawness of subsoils. C. B. Lipman. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:288-90 S 21 '17
- \* On theories concerning soils as media for plant growth. C. B. Lipman. *School Sci and Math* (2059 E. 72d place, Chicago 30c) 18: 686-97 N '18 (to be cont)
- Orchard soil management. W. H. Chandler and R. W. Rees. *il Cornell Reading Course* 125:303-20 '17
- Organic nitrogen compounds of soils and fertilizers. E. C. Lathrop. *J Franklin Institute* (Franklin Institute, Philadelphia 50c) 183: 169-206 F '17
- Physical factors in soil management. R. C. E. Wallace. *Purdue Ag* 10:20-1+ F '16
- Practical suggestions on irrigation and drainage. D. H. Anderson. *Irr Age* 33:17-20 Mr '18
- Preparing the garden soil. *Better Fruit* 11: 28 My '17
- Preparing the soils. J. M. Patterson. *Gard M* 23:104 Mr '16
- Present status and future development of soil classification. G. N. Coffey. *Am Soc Agron J* 8:239-43 Jl '16
- Production of carbon dioxide by molds inoculated into sterile soil. R. S. Potter and R. S. Snyder. *il Soil Sci* 5:359-77 My '18
- Profitable handling of farm soils. H. G. Bell. *Farmers' Nat Congress Pro* 1916:34-42
- Rawness of subsoils. F. J. Alway. *Science* (Science Press, Garrison, N.Y. 15c) n s 47: 196-8 F 22 '18
- Rejuvenation of earth and man. S. Morgan. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:402-3 D 29 '17
- Relation of plant to soil. *Gard Chron Am* 21: 246 Je '17
- Relative rawness of some humid subsoils. P. M. Harmer. *il map Soil Sci* 5:393-403 My '18
- Remaking a poor garden soil. J. R. Mattern. *Gard M* 23:46 F '16
- Rules for selecting a farm; facts about different soils. H. E. Cox. *Rural N Y* 75:1123 Ag 26 '16
- Securing organic matter in orchard soils. J. R. Mattern. *Better Fruit* 11:8 Ag '16
- Selecting soils for apples of various varieties. E. W. Gage. *il Green's Fruit Grower* 36:1 My '16
- Shrinkage of soils. H. A. Tempany. *J Ag Sci* 8:312-30 Je '17
- Soil. Wallaces' F 43:623 Ap 5 '18
- Soil aldehydes; scientific study of a new class of soil constituents unfavorable to crops, their occurrence, properties and elimination in practical agriculture. J. J. Skinner. *il J Franklin Inst* (Franklin Inst., Philadelphia 50c) 186:165-86. 289-316. 449-80 Ag-O '18 (to be cont)
- Soil constituents which inhibit the action of plant toxins. E. Truog and J. Sykora. *bibliog il Soil Sci* 3:333-51 Ap '17
- Soil improvement and plant growth. *il Va Ag Dept B* 109:17-30 '16
- Soil is the plant kitchen. R. S. Goodhue. *Hoard's D* 55:340 Mr 15 '18
- Soil management. *Hoard's F* 51:377+ Mr 24 '16
- Soil management in relation to winter-killing of wheat. *Purdue Ag* 10:21-22+ Je '16
- Soil management in the home orchard. R. W. Rees. *il Cornell Countryman* 15:531-2 Je '18
- Soil management investigations in a young apple orchard. C. G. Woodbury and others. *il Ind Ag Exp B* 205:1-52 '17
- Soil solution obtained by the action of a hydraulic press. G. Ramann and others. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 84:227 O 13 '17
- Soil toxics. O Judd *Farmer* 64:20 Ja 12 '18
- Soils. W. Kennedy. *Wis Hort Soc Rep* 1917: 80-2
- Soils and their preparation. *il Country Gent* 82:203 F 3 '17
- Strive to know why. J. W. Henceroth. *il Coop Manager & F* 7:66 Ap; 65 My; 44 Je; 68 Jl; 52 Ag '18
- Summary of researches by Messrs. Müntz and Lainé on the control of irrigation according to the physical properties of soils. H. Hittier. *Int R Sci & Prac Ag* 8,no 7:974-8 Jl '17
- Survey of the Bureau of soils. M. Whitney. *Purdue Ag* 11:9 O '16
- To increase the yield of food. D. T. MacDougal. *North Am Review* (171 Madison av., N.Y. 35c) 206:62-9 Jl '17
- Trees and soil sterility. *Gard Chron* (Lond) 63:56 F 9 '18
- Vegetation experiment on the availability of nitrogenous fertilizers in an arid soil. C. B. Lipman and W. F. Gericke. *bibliog Soil Sci* 2:575-81 D '16
- What kind of soil have you got? A. E. Wilkin-son. *il Gard M* 27:30 F '18
- See also* Agriculture; Color of soils; Desert lands; Drainage; Fertilizers; Humus; Irrigation; Loess; Manures; Marl; Marsh lands; Tillage; also headings beginning Soil and Soils

**Ammonia content**

- On the extraction of ammonia from soil. T. E. Richmond. *Soil Sci* 5:481-6 Je '18

*See also* Ammonification

**Analysis**

*See* Soil analysis

## Soils—Continued

## Bibliography

Soils and fertilizers; list of United States government publications, for sale by superintendent of documents, Washington, D.C. (Price list 46—11th ed) 22p '18 Supt. of doc., Washington, D.C.

## Calcium content

Calcium compounds in soils. E. C. Shorey and others. *J Ag Research* 8:57-77 Ja '17  
Effect of elemental sulphur and of calcium sulphate on plant life. W. Pitz. *il J Ag Research* 5:771-80 Ja '17

## Carbon content

Loess soils of Nebraska. F. G. Alway and G. R. McDole. *Soil Sci* 1:226-34 Mr '16  
Organic matter of the soil: a study of carbon and nitrogen in seventeen successive extracts; with some observations on the nature of the black pigment of the soil. R. A. Gortner. *bibliog Soil Sci* 2:539-48 D '16  
Total nitrogen and carbon in cultivated land and land abandoned to grass and weeds. A. W. Blair and H. C. McLean. *bibliog Soil Sci* 4:283-92 O '17

## Carbon dioxide content

Effect of certain factors on the carbon-dioxide content of soil air. J. A. Bizzell and T. L. Lyon. *Am Soc Agron J* 10:97-112 Mr '18

## Classification

Chemical criteria, crop production and physical classification in two soil classes. J. S. Burd. *bibliog Soil Sci* 5:405-19 My '18  
Report of the committee of the American society of agronomy. *Am Soc Agron J* 8:387-90 N '16

## Colloid content

See Soil colloids

## Composition

Calcium, magnesium, potassium, and sodium in the drainage water from limed and unlimed soil. T. L. Lyon and J. A. Bizzell. *Am Soc Agron J* 8:81-91 Mr '16  
Carbon and nitrogen changes in the soil variously treated: soil treated with lime, ammonium sulfate and sodium nitrate. R. S. Potter and R. S. Snyder. *bibliog il Soil Sci* 1:76-94 Ja '16  
Composition of soils and the formation of humus. *J For* 16:115-19 Ja '18  
 $\alpha$ -Crotonic acid, a soil constituent. E. H. Walters and L. E. Wise. *bibliog il J Ag Research* 6:1043-6 S '16  
Decomposition of soil carbonates. W. H. MacIntire. *J Ag Research* 3:79 O '14  
Detailed study of effects of climate on important properties of soils. C. B. Lipman and D. D. Waynick. *bibliog il Soil Sci* 1:5-48 Ja '16  
Does  $\text{CaCO}_3$  or  $\text{CaSO}_4$  treatment affect the solubility of the soil's constituents? C. B. Lipman and W. F. Gerick. *Cal Univ Pub Ag Sci v 3*, no 7 271-82p '18 (10c)  
Effect of quicklime on organic matter in soils. F. E. Bear. *Am Soc Agron J* 8:111-13 Mr '16  
Field test with a toxic soil constituent: vanillin. J. J. Skinner. *il U S Ag B* 164:1-9 '15  
How soils are made. T. Butler. *Prog F* 31:47 Ja '16  
Influence of the mechanical composition of the soil on the availability of nitrate of soda and dried blood. *il N J Ag Exp Rep* 1916: 369-80 '17  
Inorganic composition of some important American soils. W. O. Robinson. *U S Ag B* 122:1-27 '14  
Loess soils of the Nebraska portion of the transition region; mechanical composition and inorganic constituents. F. J. Alway and C. O. Rost. *bibliog Soil Sci* 1:405-36 My '16  
Loess soils of the Nebraska portion of the transition region: potash, soda, and phosphoric acid. F. J. Alway and R. M. Isham. *bibliog map Soil Sci* 1:299-316 Ap '16

Loess soils of the Nebraska portion of the transition region: the water-soluble constituents. F. W. Upson and others. *bibliog map Soil Sci* 2:377-86 O '16

Nitrogenous soil constituent: tetracarbonimid. E. C. Shorey and E. H. Walters. *bibliog J Ag Research* 3:175-8 N '14

Organic matter of the soil. R. A. Gortner. *bibliog Soil Sci* 2:395-441, 539-48; 3:1-8 N '16-Ja '17

Organic matter of the soil: some data on humus-phosphoric acid. R. A. Gortner and W. M. Shaw. *bibliog Soil Sci* 3:99-111 F '17

Origin, formation, and composition of soils. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:2-10 '16

Petrography of some North Carolina soils and its relation to their fertilizer requirements. J. K. Plummer. *il J Ag Research* 5: 569-82 D 27 '15

Presence of some benzene derivatives in soils. E. C. Shorey. *J Ag Research* 1:357-63 F '14

Relation of some of the rarer elements in soils and plants. W. O. Robinson and others. *bibliog plans U S Ag B* 600:1-25 '17

Researches on the equilibrium between the nitrogen and carbon in the soil. P. Felber. *Int R Sci & Prac Ag* 8, no 1:22-4 Ja '17

Soil formation and composition. J. W. Ames. *Ohio Ag Exp B v 1*:46-9 F '16

\* Soil sickness researches. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:378 D 14 '18

Solubility of plant-food elements as modified by fertilizers. C. A. Jensen. *Am Soc Agron J* 8:100-5 Mr '16

Studies on the organic matter of the soil of the United States. *Int R Sci & Prac Ag* 9, no 1:25-31 Ja '18

Variation in the chemical composition of soils. W. O. Robinson and others. *U S Ag B* 551: 1-16 '17

Water extractions of soils as criteria of their crop-producing power. J. S. Burd. *J Ag Research* 12:297-309 F '11 '18

See also Soil bacteriology; Soil fungi; Soil microbiology; Soil protozoa

## Crotonic acid content

See Crotonic acid

## Experiments

Effect of liming on crop yields in cylinder experiments. J. G. Lipman and A. W. Blair. *il Soil Sci* 6:157-61 Ag '18

Experiments in methods for determining the reaction of soils. H. R. Christensen. *bibliog Soil Sci* 4:115-78 Ag '17

Facilities for lysimeter and out-door pot culture work at the station. J. F. Barker. *il N Y State Ag Exp Tech B* 61:1-10 '17

Freezing point method as a new means of studying velocity of reaction between soils and chemical agents and behavior of equilibrium. G. J. Bouyoucos and W. A. Laude-man. *Mich Ag Exp Tech B* 37:1-32 '17

Growing plants in large containers under control conditions. R. C. Wright. *il Am Soc Agron J* 8:113-16 Mr '16

Kankakee county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* no 13 72p '16

Method for determining the volume weight of soils in field condition. C. F. Shaw. *Am Soc Agron J* 9:38-42 Ja '17

New method of extracting the soil solution. C. B. Lipman. *Cal Univ Pub Ag Sci v 3*, no 7 131-4p '18 (5c)

Preliminary investigations in comparison of field with laboratory experiments in soil biology. G. P. Koch. *Soil Sci* 2:87-92 Jl '16

Quantitative media for the estimation of bacteria in soils. R. C. Cook. *bibliog Soil Sci* 1:153-61 F '16

Size of plots for field experiments with soils. T. L. Lyon. *bibliog Am Soc Agron J* 9:405-10 D '17

Soil experiment fields—a progress report. G. Roberts. *il Ky Ag Exp B* 199:43-93 '16



**Soils—Experiments—Continued**

Soil solution obtained by the oil pressure method. J. F. Morgan. bibliog *il Mich Ag Exp Tech B* 28:1-38 '16; Same. *Mich Ag Bd Rep* 1917:497-529; Same cond. *Soil Sci* 3: 531-45 Je '17

See also Dilatometers; Freezing points; Soil samplers; Soil sampling

**Gas content**

See Soil gases

**Iron content**

Use of iron in agriculture. A. Monnier and L. Kuczyaski. *Int R Sci & Prac Ag* 8,no 5: 693-5 My '17

**Nitrogen content**

Changes in the nitrogen content of stored soils. W. A. Aldrecht. bibliog *Am Soc Agron J* 10:83-8 F '18

Cylinder experiments relative to the utilization and accumulation of nitrogen. J. G. Lipman and A. W. Blair. *il N J Ag Exp B* 289:1-88 '16

Comparative study of the nitrogen economy of certain Tennessee soils. C. A. Mooers. *Tenn Ag Exp B* 118:127-87 '17

Effect of heat on some nitrogenous constituents of soil. R. S. Potter and R. S. Snyder. bibliog *Soil Sci* 5:197-212 Mr '18

Effect of prolonged growing of alfalfa on the nitrogen content of the soil. C. O. Swanson. *Am Soc Agron J* 9:305-14 O '17

Further studies of the nitric nitrogen content of the country rock. R. Stewart and W. Peterson. *il Utah Ag Exp B* 150:1-20 '17

Maintaining the nitrogen supply of the soil. A. W. Blair. *il N J Ag Exp B* 305:1-16 '17

Nitrification and total nitrogen as affected by crops, fertilizers, and copper sulfate. C. A. Jensen. *Am Soc Agron J* 8:10-22 Ja '16

Nitrogen distribution of fibrin hydrolyzed in the presence of ferric chloride. C. A. Morrow and W. R. Fetzer. bibliog *Soil Sci* 5:163-7 F '18

Nitrogen supply of the soil. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:41-6 '16

Nitrogen: what it is and how to get it. T. Butler. *Prog F* 31:179 F 5 '16

Nitrous nitrogen in irrigated soils. J. E. Greaves and others. *il Soil Sci* 3:149-54 F '17

Organic matter of the soil: a study of the nitrogen distribution in different soil types. C. A. Morrow and R. A. Gortner. bibliog *Soil Sci* 3:297-331 Ap '17

Organic matter of the soil: a study of carbon and nitrogen in seventeen successive extracts; with some observations on the nature of the black pigment of the soil. R. A. Gortner. bibliog *Soil Sci* 2:539-48 D '16

Organic nitrogenous compounds in peat soils. C. S. Robinson and E. J. Miller. *il Mich Ag Exp Tech B* 35:1-29 '17

Protein decomposition in soils. E. C. Lathrop. bibliog *Soil Sci* 1:509-32 Je '16

Relation of bacterial transformations of soil nutrition to nutrition of citrus plants. K. F. Kellerman and R. C. Wright. bibliog *J Ag Research* 2:101-13 My '14

Relation of the transformation and distribution of soil nitrogen to the nutrition of citrus plants. I. G. McBeth. bibliog *J Ag Research* 9:183-252 My '14

Soil reaction and the growth of azotobacter. P. L. Gainey. *J Ag Research* 14:265-71 Ag 12 '18

Soluble nonprotein nitrogen of soil. R. S. Potter and R. S. Snyder. *J Ag Research* 6:61-4 Ap 10 '16

Total nitrogen and carbon in cultivated land and land abandoned to grass and weeds. A. W. Blair and H. C. McLean. bibliog *Soil Sci* 4:283-92 O '17

See also Nitrification

**Phosphorus content**

Determination of phosphorus in soils. H. A. Noyes. *Assn Offic Ag Chem J* 3:149-51 My '17

Determination of soil phosphorus. C. O. Rost. bibliog *Soil Sci* 4:295-311 O '17

Distribution of phosphorus in a vertical section of bluegrass soil. A. M. Peter. *Soil Sci* 2:387-93 O '16

Does vanadium interfere with the determination of phosphorus in soils when the phosphorus is weighed as magnesium pyrophosphate? R. A. Gortner and W. M. Shaw. bibliog *Soil Sci* 2:299-304 S '16

Organic phosphorus of soil. R. S. Potter and T. H. Benton. bibliog *Soil Sci* 2:291-8 S '16

Phosphorus and potassium of soils. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:47-54 '16

Reactions of the phosphorous of the thickened root of the flat turnip. B. L. Hartwell and others. bibliog *J Ag Research* 11:359-70 N 19 '17

Vertical distribution of phosphorus in the surface soil of prairies. F. J. Alway and C. O. Rost. bibliog *Soil Sci* 2:493-7 N '16

See also Phosphates

**Potassium content**

Phosphorus and potassium of soils. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355: 47-54 '16

Solubility of the soil potash in various salt solutions. D. K. Tressler. bibliog *Soil Sci* 6:237-57 S '18

**Protein content**

See Proteins

**Sampling**

See Soil sampling

**Study and teaching**

Extension course in soils for self-instructed classes in movable schools of agriculture. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:1-92 '16

Soils courses at the Iowa state college. P. E. Brown. *Am Soc Agron J* 8:42-7 Ja '16

**Sulfur content**

Divergent effects of lime and magnesia upon the conservation of soil sulfur. W. H. MacIntire and others. *il Soil Sci* 4:231-7 S '17

Loss of sulphur in drainage water. T. L. Lyon and J. A. Bizzell. *Am Soc Agron J* 8:88-91 Mr '16

Relation of sulfur to soil productivity. F. L. Duley. *Am Soc Agron J* 8:154-60 My '16

Sulfur content of some typical Kansas soils, and the loss of sulfur due to cultivation. C. O. Swanson and R. W. Miller. bibliog *Soil Sci* 3:139-48 F '17

Sulphur in relation to soils and crops. J. W. Ames and G. E. Boltz. bibliog *Ohio Ag Exp B* 292:221-56 '16

See also Sulfonation; Sulfur as fertilizer

**Testing**

Soil tests in Missouri. R. R. Hudelson. *Mo Ag Bd Yearbook* 1917:225-6

Spotting slacker soils. *il Scientific Am* (233 Broadway, N.Y. 10c) 117:500 D 29 '17

See also Litmus paper

**Translocation**

Movement of soluble salts through soils. M. M. McCool and L. C. Wheating. *J Ag Research* 11:531-47 D 10 '17

**Alabama**

Preliminary soil census of Alabama and west Florida. R. M. Harper. map *Soil Sci* 4:91-107 Ag '17

Soil survey of Barbour county, Alabama. H. C. Smith and others. (Soils bur. advance sheets) 50p map '16 U S Ag

Soil survey of Pickens county, Alabama. A. M. O'Neal, Jr., and others. (Soils bur. advance sheets) 41p maps '17 U S Ag

Soil survey of Washington county, Alabama. L. A. Hurst and others. (Soils bur. advance sheets) 51p il map '17 U S Ag

**Arkansas**

Soil survey of Craighead county, Arkansas. E. B. Deeter and L. V. Davis. (Soils bur. advance sheets) 32p il maps '17 U S Ag

**Soils—Arkansas—Continued**

Soil survey of Hempstead county, Arkansas. A. E. Taylor and W. B. Cobb. (Soils bur. advance sheets) 53p map '18 U S Ag

**Australia**

Catlins district mossbanks; an experiment in treatment. R. McGillivray. *il J Ag New Zealand* 13:198-9 S '16

Soils of the South-East; drainage, liming and cultivation. L. S. Davie. *J Dept Ag S Australia* 20:796-9 My '17

**California**

Fertilizing California soils for the 1918 crop. C. B. Lipman. *Cal Ag Exp C* 170:1-8 '17

Reconnaissance soil survey of the San Diego region, California. L. C. Holmes and R. L. Pendleton. (Soils bur. advance sheets) 77p *il maps* '18 U S Ag

Soil survey of the Healdsburg area, California. E. B. Watson and others. (Soils bur. advance sheets) 59p *il map* '17 U S Ag

Soil survey of the Honey Lake area, California. J. E. Guernsey and others. (Soils bur. advance sheets) 64p *il maps* '17 U S Ag

Soil survey of the Pasadena area, California. E. C. Eckmann and C. J. Zinn. (Soils bur. advance sheets) 56p *il map* '17 U S Ag

Soil survey of the San Fernando valley area, California. L. C. Holmes and others. (Soils bur. advance sheets) 61p *il map* '17 U S Ag

**Canada**

Arable lands; analysis of certain soils of Quebec. (*In Report*, 1917, p. 90-100) '17 Quebec ag. dept., Quebec

Soil surveys in Nova Scotia and Ontario. L. C. Harlow; R. Harcourt. *Ag Gaz of Canada* 4:467-71 Je '17

Soils of Quebec. *J Ag (Quebec)* 21:21 Ag '17  
Soils of Quebec. map *J Ag (Quebec)* 20:55-6 S '16

**Colorado**

Alkalis in Colorado (including nitrates). W. P. Headden. *Colo Ag Exp B* 239:1-58 '18

Black alkali in the San Luis valley. W. P. Headden. *Colo Ag Exp B* 231:1-15 '17

**Florida**

Preliminary soil census of Alabama and west Florida. R. M. Harper. map *Soil Sci* 4:91-107 Ag '17

Soil analysis; analyses of Florida muck soils. R. E. Rose. map *Fla Ag Dept Quar B* v 27: 53-107 O '17

Soil survey of Hillsborough county, Florida. C. N. Mooney and others. (Soils bur. advance sheets) 42p maps '18 U S Ag

**Georgia**

Analyses of soils of Dougherty county. W. A. Worsham, jr., and others. map *Ga Ag Coll B* 126:1-54 '17

Analyses of soils of Habersham county. W. A. Worsham, jr., and others. *il map Ga Ag Coll B* 114:1-40 Ja '17

Analyses of soils of Jackson county. W. A. Worsham, jr., and others. map *Ga Ag Coll B* 144:1-23 '18

Analyses of soils of Jasper county. map *Ga Ag Coll B* 160:1-46 '18

Analyses of soils of Polk county. W. A. Worsham, jr., and others. *il map Ga Ag Coll B* 127:1-54 '17

Geography of the soils of Georgia. F. A. Merrill. maps 11p n.d. Georgia State normal school, Athens

Soil survey of Brooks county, Georgia. A. T. Sweet and B. W. Tillman. (Soils bur. advance sheets) 42p *il map* '18 U S Ag

Soil survey of Jasper county, Georgia. D. D. Long and M. E. Carr. (Soils bur. advance sheets) 43p map '18 U S Ag

Soil survey of Meriwether county, Georgia. M. Baldwin and J. A. Kerr. (Soils bur. advance sheets) 31p *il map* '17 U S Ag

Soil survey of Richmond county, Georgia. T. M. Bushnell and J. M. Snyder. (Soils bur. advance sheets) 38p map '17 U S Ag

**Great Britain**

Studies of a Scottish drift soil. J. Hendrick and W. G. Ogg. *J Ag Sci* 7:458-69 Ap '16  
Studies on the palæozoic soils of North Wales. G. W. Robinson. maps *J Ag Sci* 8:338-84 Je '17

See also Soil fertility—Great Britain

**Hawaiian Islands**

Azotobacter in Hawaiian soils. P. S. Burgess. *Soil Sci* 2:183-92 Ag '16

Composition of Hawaiian soil particles. W. T. McGeorge. *Hawaii Ag Exp B* 42:1-12 '17

Effect of fertilizers on the physical properties of Hawaiian soils. *Int R Sci & Prac Ag* 7, no 1:45 Ja '16

Phosphate fertilizers for Hawaiian soils, and their availability. W. T. McGeorge. *il Hawaii Ag Exp B* 41:1-45 '16

Study of the principal plantation soil types as found on the island of Hawaii. P. S. Burgess. (Ag. and chem. ser. B. 45) 100p map '17 Hawaii sugar planters' assn., Honolulu, Hawaii

**Idaho**

Soils of Latah county, Idaho. P. P. Peterson. *il map Idaho Ag Exp B* 107:1-21 '18

**Illinois**

Du Page county soils. C. G. Hopkins and others. *il map Ill Ag Exp Soil Report* no 16: 1-56 '17

Edgar county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* no 15:1-56 '17

Kankakee county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* no 13 72p '16

Opportunity in southern Illinois. C. G. Hopkins. *il O Judd Farmer* 65:137-+ Ag 24 '18  
Tazewell county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* no 14:1-68 '16

Winnebago county soils. C. G. Hopkins and others. *il maps Ill Ag Exp Soil Report* 12:1-76 '16

See also Soil fertility—Illinois

**India**

Phosphate depletion of soils of Bihar and its contingent risks of malnutrition and endemic disease; a warning. W. A. Davis. *Ag J of India* 12:181-4 Ap '17

Phosphate depletion of the soils of Bihar: its effect on the quality and yield of crops and the contingent risks of malnutrition and endemic disease in cattle and man. W. A. Davis. *Ag J of India Sci Congress* No 1917: 77-89

**Indiana**

Value of lime on Indiana soils. A. T. Wiancko and others. *il Ind Ag Exp B* 213:1-6 '18; Excerpts. *Am Fert* 48:80 Je 22 '18

Value of phosphates on Indiana soils. A. T. Wiancko and S. C. Jones. *il Ind Ag Exp B* 210:1-16 '18

See also Soil fertility—Indiana

**Iowa**

Alkali soils of Iowa. R. L. Bancroft. *il Ia Ag Exp B* 177:187-208 '18

Soil survey of Iowa; Bremer county soils. W. H. Stevenson and others. *il maps Ia Ag Exp Soil Survey Report* no 1:1-48 '17

Soil survey of Mitchell county, Iowa. W. E. Tharp and K. Espe. (Soils bur. advance sheets) 34p maps '18 U S Ag

Soil survey of Scott county, Iowa. E. H. Stevens and others. (Soils bur. advance sheets) 43p map '17 U S Ag

Soil survey work in Iowa. map Wallaces' F 43:681 Ap 13 '18

Soil surveys, field experiments and soil management in Iowa. W. H. Stevenson and P. E. Brown. *Ia Ag Exp C* 51:1-21 '18

**Italy**

On the origin of terra rossa (red soil) in Italy. M. Gortani. *Int R Sci & Prac Ag* 9, no 1: 23-4 Ja '18



Soils —Continued

Kansas

Sulfur content of some typical Kansas soils, and the loss of sulfur due to cultivation. C. O. Swanson and R. W. Miller. bibliog Soil Sci 3:139-48 F '17

Kentucky

Distribution of phosphorus in a vertical section of bluegrass soil. A. M. Peter. Soil Sci 2:387-93 O '16

Effect of sulphur on different crops and soils. O. M. Shedd. bibliog J Ag Research 11:91-103 O 22 '17

Soil experiment fields—a progress report. G. Roberts. il Ky Ag Exp B 199:43-93 '16

Soils; study course for boys' agricultural clubs. P. E. Karraker. Ky Ag Ext C 54:1-37 '17

Louisiana

Soil survey of Rapides Parish, Louisiana. E. H. Smies and others. (Soils bur. advance sheets) 43p maps '18 U S Ag

Soils and soil types. F. V. Emerson. map La Ag Ext C 12:1-27 '16

Maine

Soil survey of Cumberland county, Maine. C. Van Duyne and M. W. Beck. (Soils bur. advance sheets) 91p map '17 U S Ag

Soil test experiment at Aroostook farm. Maine Ag Exp B 269:17-30 '18

Maryland

Soil resources of Maryland. A. G. McCall. Md Ag Soc Rep 1916, v 1:211-24 '17

Soil survey of Howard county, Maryland. W. T. Carter, jr., and J. P. D. Hull. (Soils bur. advance sheets) 34p map '17 U S Ag

Massachusetts

Formation and characteristics of Massachusetts peat lands and some of their uses. A. P. Dachnowski. Mass Hort Soc Trans 1917, pt 1:29-45 '17

Minnesota

Influence of gypsum upon the solubility of potash in soils. P. R. McMiller. bibliog J Ag Research 14:61-6 J1 1 '18

Surface formations and agricultural conditions of northeastern Minnesota. F. Leverett and F. W. Sardeson. (B. 13) 69p il maps '17 Univ. of Minnesota, Minneapolis

Mississippi

Soil survey of Hinds county, Mississippi. A. E. Kocher and A. L. Goodman. (Soils bur. advance sheets) 42p il map '18 U S Ag

Soil survey of Lee county, Mississippi. W. E. Tharp and E. M. Jones. (Soils bur. advance sheets) 40p map '18 U S Ag

Soil survey of Newton county, Mississippi. A. L. Goodman and E. M. Jones. (Soils bur. advance sheets) 43p maps '18 U S Ag

Soils of Mississippi. W. N. Logan. il maps Miss Ag Exp Tech B 7:1-84 '16

Missouri

Soil experiments on the Ozark upland. M. F. Miller and F. L. Duley. il Mo Ag Exp B 148: 1-28 '17

Soil survey of Buchanan county, Missouri. B. W. Tillman and C. E. Deardorff. (Soils bur. advance sheets) 46p map '17 U S Ag

Soil survey of Newton county, Missouri. A. T. Sweet and E. S. Vanatta. (Soils bur. advance sheets) 41p map '17 U S Ag

Soil survey of Ripley county, Missouri. F. Z. Hutton and H. H. Krusekopf. (Soils bur. advance sheets) 36p map '17 U S Ag

Soils of Missouri. M. F. Miller and H. H. Krusekopf. il maps Mo Ag Exp B 153:1-130 '18

Nebraska

Conservation survey of Nemaha county, Nebraska. G. E. Condra. il map Neb Ag Bd B 245:291-334 '18

Loess soils of Nebraska and their relation to fruit raising. G. E. Condra. il (*In* Nebraska Horticulture v. 6, no. 12, p. 35-40) (F) '17 Neb. state hort. soc., Lincoln

Loess soils of the Nebraska portion of the transition region: humus, humus-nitrogen and color. F. J. Alway and M. J. Blish. bibliog map Soil Sci 1:239-58 Mr '16

Loess soils of the Nebraska portion of the transition region: hygroscopicity, nitrogen and organic carbon. F. J. Alway and G. R. McDole. bibliog il maps Soil Sci 1:197-238 Mr '16

Loess soils of the Nebraska portion of the transition region: mechanical composition and inorganic constituents. F. J. Alway and C. O. Rost. bibliog Soil Sci 1:405-36 My '16

Loess soils of the Nebraska portion of the transition region: potash, soda, and phosphoric acid. F. J. Alway and R. M. Isham. bibliog map Soil Sci 1:299-316 Ap '16

Loess soils of the Nebraska portion of the transition region: the relative rawness of the subsoils. F. J. Alway and others. bibliog il map Soil Sci 3:9-35 Ja '17

Loess soils of the Nebraska portion of the transition region: the water-soluble constituents. F. W. Upson and others. bibliog map Soil Sci 2:377-86 O '16

Soil survey of Box Butte county, Nebraska. F. A. Hayes and J. H. Agee. (Soils bur. advance sheets) 34p il maps '18 U S Ag

Soil survey of Dawes county, Nebraska. R. R. Burn and others. (Soils bur. advance sheets) 41p map '17 U S Ag

Soil survey of Fillmore county, Nebraska. A. H. Meyer and others. (Soils bur. advance sheets) 24p il map '18 U S Ag

Soil survey of Hall county, Nebraska. J. O. Veatch and V. H. Seabury. (Soils bur. advance sheets) 41p maps '18 U S Ag

Soil survey of Kimball county, Nebraska. A. H. Meyer and others. (Soils bur. advance sheets) 28p map '17 U S Ag

Soil survey of Polk county, Nebraska. J. M. Snyder and T. E. Kokjer. (Soils bur. advance sheets) 30p map '17 U S Ag

Soil survey of Washington county, Nebraska. L. V. Davis and H. C. Mortlock. (Soils bur. advance sheets) 38p map '17 U S Ag

Variations in the moisture content of the surface foot of a loess soil as related to the hygroscopic coefficient. F. J. Alway and G. R. McDole. bibliog J Ag Research 14: 453-80 S 9 '18

New England

Soils of Massachusetts and Connecticut with especial reference to apples and peaches. H. J. Wilder. il maps U S Ag B 140:1-73 '15

New Jersey

Chemical composition of the soils of the Freehold area in New Jersey. A. W. Blair and H. C. McLean. N J Ag Exp B 309:1-37 '16

Sands of New Jersey. Rural N Y 76:1462 D 29 '17

Soil survey of the Camden area, New Jersey. A. L. Patrick and others. (Soils bur. advance sheets) 45p il maps '17 U S Ag

Soils of southern New Jersey and their uses. J. A. Bonsteel. il maps U S Ag B 677:1-78 '18

New York

Soil survey of Cortland county, New York. E. T. Maxon and others. (Soils bur. advance sheets) 28p map '17 U S Ag

Soil survey of Oneida county New York (B. 362). E. T. Maxon and others. maps Cornell Ag Exp Rep 1916:5-59 '17

Soil survey of Schoharie county, New York. E. T. Maxon and others. il map Cornell Ag Ext B 24:85-114 '17

Soil survey of Yates county, New York. E. T. Maxon. (Soils bur. advance sheets) 36p map '18 U S Ag

Soils and agricultural development of New York. E. O. Fippin. il Cornell Countryman 14:291-4, 568-71 Ja, Ap '17

Soils for timothy in New York. E. O. Fippin. N Y Ag Dept B 87:2737-44 S '16

Study of soils in relation to apple growing. H. J. Wilder. N Y State Fruit Growers' Assn Pro 1916:238-54

New Zealand

Estuarial lands of the North Island. D. M. Ross. J Ag New Zealand 14:125-32 F '17

**Soils—New Zealand—Continued**

Lime and magnesia in New Zealand soils. B. C. Aston. *J Ag New Zealand* 12:47-54 Ja '16

Notes on soils analysed. B. C. Aston. *J Ag New Zealand* 13:36-41 Jl '16

Notes on some Poverty Bay soils. B. C. Aston. *J Ag New Zealand* 17:196-200 O '18

Some soils of the southern island of New Zealand with special reference to their lime requirements. L. J. Wild. *J Ag Sci* 8:154-77 Mr '17

Studies on the lighter soils of the North island; coarse pumice soils. B. C. Aston. *J Ag New Zealand* 15:196-203 O '17

**North Carolina**

County soil report, no. 1; report on Mecklenburg county soils, agriculture and industries. *N C Ag Dept B v 38:1-47 Ap '17*

Field study and classification of soils. C. B. Williams. *N C Ag Exp Rep* 1917:17-28

Petrography of some North Carolina soils and its relation to their fertilizer requirements. J. K. Plummer. *J Ag Research* 5:569-82 D 27 '15

Report on coastal plain soils, particularly with reference to their nature, plant-food requirements, and suitability for different crops. C. B. Williams and others. *N C Ag Dept B v 39:1-175 My '18*

Soil survey of Alleghany county, North Carolina. R. T. A. Burke and H. D. Lambert. (Soils bur. advance sheets) 26p map '17 U S Ag

Soil survey of Davidson county, North Carolina. R. B. Hardison and L. L. Brinkley. (Soils bur. advance sheets) 39p map '17 U S Ag

**North Dakota**

Soil survey of Bottineau county. R. C. Doneghue. map *N D Ag Exp B* 124:115-48 '17

Soil survey of Bottineau county, North Dakota. W. B. Cobb and others. (Soils bur. advance sheets) 54p maps '17 U S Ag

Soil survey of Dickey county. T. M. Bushnell and others. *il map N D Ag Exp B* 121:1-56 '17

**Ohio**

Accumulation of salts in Ohio soils. J. W. Ames and C. J. Schollenberger. *Soil Sci* 1:575-8 Je '16

Distribution of the Ohio broods of periodical cicada with reference to soil. H. A. Gossard. *il maps Ohio Ag Exp B* 311:555-77 '17

Liming and lime requirement of soil. J. W. Ames and C. J. Schollenberger. *Ohio Ag Exp B* 306:281-396 '16

Soil survey of Hamilton county, Ohio. A. L. Goodman and others. (Soils bur. advance sheets) 39p map '17 U S Ag

Some extremes in Ohio soils. C. E. Thorne. *il Ohio Ag Exp B v* 1:77-85 Mr '16

*See also* Soil fertility—Ohio

**Oklahoma**

Soil survey of Kay county, Oklahoma. N. M. Kirk and R. C. Journey. (Soils bur. advance sheets) 40p *il map '17 U S Ag*

**Oregon**

Drainage of white land and other wet lands in Oregon. W. L. Powers; T. A. H. Teeter. *il maps Ore Ag Exp B* 137:1-80 '16

**Pennsylvania**

Fertilizer experiments on DeKalb soils. J. W. White. *il Pa Ag Exp B* 151:1-12 '18

Soil survey of Blair county, Pennsylvania. J. O. Veatch and others. (Soils bur. advance sheets) 48p map '17 U S Ag

Soil survey of Cambria county, Pennsylvania. B. B. Derrick and A. L. Patrick. (Soils bur. advance sheets) 32p map '17 U S Ag

**South Africa**

Viticulture in South Africa. A. I. Perold. *Int R Sci & Prac Ag* 7,no 1:4-5 Ja '16

**South Carolina**

Comparative tests of sources of nitrogen on coastal plains soils. T. E. Keitt. *S C Ag Exp B* 192:1-14 '17

Soil survey of Hampton county, South Carolina. M. W. Beck and A. L. Goodman. (Soils bur. advance sheets) 37p map '17 U S Ag

**Southern states**

Important soil type of the South and its possibilities. J. N. Harper. (*In* Am. fertilizer hdbk., 1918, p. 73-5) \$1.50 '18 Ware bros co., 1010 Arch st, Philadelphia

Organic matter and crop production. A. F. Kidder. *Prog F* 33:1251 N 16 '18

Soils of the coastal plains area. C. F. Marbut. (*In* Cut-over land conf. of the South, 1917, p. 68-77) \$2.50 '17 Southern pine assn., New Orleans, La.

*See also* Soil fertility—Southern states

**Tennessee**

Comparative study of the nitrogen economy of certain Tennessee soils. C. A. Mooers. *Tenn Ag Exp B* 118:127-87 '17

**Texas**

Composition of the soils of south central Texas. *Tex Ag Exp B* 213:1-48 '17

Soil survey of Eastland county, Texas. W: G. Smith and others. (Soils bur. advance sheets) 37p map '17 U S Ag

Soil survey of San Saba county, Texas. J. O. Veatch and others. (Soils bur. advance sheets) 67p maps '17 U S Ag

Soil survey of Taylor county, Texas. W: G. Smith and others. (Soils bur. advance sheets) 40p map '18 U S Ag

Soils of Grayson, Lee, McLennan, Titus, and Tyler counties. G. S. Fraps. *Tex Ag Exp B* 192:1-51 '16

**United States**

Clyde series of soils. J. A. Bonsteel. *il map U S Ag B* 141:1-60 '14

Fertilizer needs of the United States. H. J. Wheeler. *Am Fert* 48:37-8+ Mr 30 '18

Interpretation of the so-called paraffin dirt of the Gulf Coast oil fields. A. D. Brokaw. *Am Inst Mining Eng B* (29 W. 39th st, N.Y. 50c) 136:947-50 Ap '18

Miami series of soils. J. A. Bonsteel. *il map U S Ag B* 142:1-59 '14

Soils of the Sassafras series. J. A. Bonsteel. *il map U S Ag B* 159:1-52 '15

*See also* United States—Soils, Bureau of

**Uruguay**

El manganeso en la capa arable del Uruguay. J. M. Sarrasin. map. (*In* Pan American scientific congress Pro., 1915, v. 3, p. 687-701) '17

**Utah**

Indicator significance of vegetation in Tooele valley, Utah. T. H. Kearney and others. *il map J Ag Research* 1:365-418 F '14

**Virginia**

Descriptive catalogue of the soils of Virginia so far identified in the soil survey. map *U S Ag B* 46:1-21 '13

Ten-year study of the effect of fertilizers on the soluble plant food in the soil and on the crop yield. W. B. Ellett and H. H. Hill. *Va Ag Exp Tech B* 13:46-72 '17; Same. *Va Ag Exp Rep* 1915-1916:46-72 '17

**Washington**

Soil survey of the proposed Palouse irrigation project. H. F. Holtz. *il map Wash Ag Exp B* 133:1-14 '16

**West Virginia**

Analyses of one hundred West Virginia soils. F. E. Bear and R. M. Salter. map *W Va Ag Exp B* 161:1-36 '16

Soil survey of Jefferson, Berkeley, and Morgan counties, West Virginia. W. J. Latimer. (Soils bur. advance sheets) 74p *il map '18 U S Ag*

Soil survey of Lewis and Gilmer counties, West Virginia. W. J. Latimer. (Soils bur. advance sheets) 34p map '17 U S Ag



Soils—Continued

Wisconsin

- Have you had your soil analysed? A. R. Whitson and W. J. Geib. *il map Wis Ag Ext C* 64:1-16 '16  
Influence of carbonates of magnesium and calcium on bacteria of certain Wisconsin soils. H. L. Fulmer. *bibliog J Ag Research* 12:463-504 F 25 '18  
Vegetation as an indicator of the fertility of sandy pine plain soils in northern Wisconsin. T. J. Dunnewald. *Am Soc Agron J* 10: 19-23 Ja '18

Soils, Alkali

- Alkali content of irrigation water. R. Stewart and C. T. Hirst. *il Utah Ag Exp B* 147:1-18 '16  
Alkali soils of Iowa. R. L. Bancroft. *il Ia Ag Exp B* 177:187-208 '18  
Alkali soils: some biochemical factors in their reclamation. J. H. Barnes and Barkat Ali. *il Ag J of India* 12:368-89 Jl '17  
Alkalis in Colorado (including nitrates). W. P. Headden. *Colo Ag Exp B* 239:1-58 '18  
Black alkali in the San Luis valley. W. P. Headden. *Colo Ag Exp B* 231:1-15 '17  
\* Composition of the waters of the intermountain region. J. E. Greaves and C. T. Hirst. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:1001-4 D '18  
Control of alkali. F. S. Harris. *Country Gent* 81:657 Mr 18 '16  
Copper and zinc as antagonistic agents to the alkali salts in soils. C. B. Lipman and W. F. Gericke. *il Am J Bot* 5:151-70 Ap '18  
Effect of alkali salts in soils on the germination and growth of crops. F. S. Harris. *bibliog J Ag Research* 5:1-53 O 4 '15  
Effects of alkali salts on nitrification. P. E. Brown and E. B. Hitchcock. *bibliog Soil Sci* 4:207-29 S '17  
Effects of certain alkali salts on ammonification. P. E. Brown and D. R. Johnson. *bibliog Ia Ag Exp Research B* 44:1-24 '18  
Experiments in the production of crops on alkali land on the Huntley reclamation project, Montana. D. Hansen. *il U S Ag B* 135: 1-19 '14  
Formation of black alkali (sodium carbonate) in calcareous soils. J. F. Breazeale. *il J Ag Research* 10:541-90 S 10 '17  
Handling salt land in coastal plains. G. A. Smith. *Tex Ag Ext B* C-3 4p '17  
Influence of salts on the bacterial activities of the soil. J. E. Greaves. *bibliog Soil Sci* 2: 443-80 N '16  
Origin of alkali. R. Stewart and W. Peterson. *bibliog J Ag Research* 10:331-53 Ag 13 '17  
Practical suggestions on irrigation and drainage. D. H. Anderson. *Irr Age* 33:113-16 Je '18 (to be cont)  
Preliminary experiments on some effects of leaching on the soil flora. C. B. Lipman and L. W. Fowler. *bibliog Soil Sci* 1:291-7 Mr '16  
Preliminary report on Kearney vineyard experimental drain, Fresno county, California. W. W. Weir. *il Cal Ag Exp B* 273:103-23 '16; Same. *Irr Age* 32:151-8 Ag '17  
Reclaiming nitre soil in the Grand valley, Colo. E. P. Sandsten. *il Colo Ag Exp B* 235:1-8 '17  
Relationship between the osmotic pressure of the soil solution and the growth of wheat. M. N. Toulakow. *Int R Sci & Prac Ag* 7, no 12:1741-4 D '16  
Soil alkali studies: quantities of alkali salts which prohibit the growth of crops in certain Utah soils. F. S. Harris. *il Utah Ag Exp B* 145:1-21 '16  
Some alkali soils in Ohio. J. W. Ames. *Ohio Ag Exp B v* 1:209-10 Jl '16  
Sweetening alkali spots. H. R. Richardson. *il Farm Eng* 5:6 Ja '17  
Work of the Truckee-Carson reclamation project experiment farm in 1917. F. B. Headley. (W. I. A. C. 23) 24p *il '18 U S Ag*

Soils, Ammonia in

- Ammoniacal nitrogen of peats and humus soils. J. C. B. Ellis and C. G. T. Morison. *J Ag Sci* 8:1-6 S '16

Soils, Arsenic in

- Fate and effect of arsenic applied as a spray for weeds. W. T. McGeorge. *J Ag Research* 5:459-63 D 13 '15

Soils, Calcareous

- Assimilation of iron by rice from certain nutrient solutions. P. L. Gile and J. O. Carrero. *bibliog J Ag Research* 7:503-28 D 18 '16  
Chlorosis of sugar cane. Porto Rico Ag Exp Rep 1917:10-19 '18

Soils, Calcium in

- See also Plants, Effect of calcium on; Soils—Calcium content

Soils, Chernozem

- Loess soils of the Nebraska portion of the transition region: hygroscopicity, nitrogen and organic carbon. F. J. Alway and G. R. McDole. *bibliog il maps Soil Sci* 1:197-238 Mr '16

Soils, Clay

- Chalking: a useful improvement for clays overlying the chalk. E. J. Russell. *il J Bd Ag* 23:625-32 O '16  
Clay soils. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:70-4 '16  
Condition of fertilizer potash residues in Hagerstown silty loam soil. W. Frear and E. S. Erb. *bibliog J Ag Research* 15:59-81 O 14 '18  
Ed Green's clay hillsides. E. V. Laughlin. *Country Gent* 81:1275 Je 24 '16  
Improving stiff clay soils. *Rural N Y* 76:577 Ag 21 '17  
Making the best of it: plants that will grow in heavy clay. S. F. Hamblin. *il Gard M* 23:164-5 Ap '16

Soils, Color of. See Color of soils

Soils, Effect of climate on

- Detailed study of effects of climate on important properties of soils. C. B. Lipman and D. D. Waynick. *bibliog il Soil Sci* 1:5-48 Ja '16  
Loess soils of the Nebraska portion of the transition region: hygroscopicity, nitrogen and organic carbon. F. J. Alway and G. R. McDole. *bibliog il maps Soil Sci* 1:197-238 Mr '16  
Preliminary statement on the present status of the humus nitrogen problem in arid soils. C. B. Lipman. *bibliog Soil Sci* 1:285-90 Mr '16

Soils, Effect of heat on

- Effect of heat on some nitrogenous constituents of soil. R. S. Potter and R. S. Snyder. *bibliog Soil Sci* 5:197-212 Mr '18

Soils, Gases in. See Soil gases

Soils, Magnesium in

- See also Plants, Effect of magnesium on

Soils, Muck

- Digging muck by machinery. *Rural N Y* 76:893 Jl 21 '17  
Future of peat and muck soils in Florida. R. Ransom. *Fla Ag Dept Quar B* 26:25-32 Ap '16  
Growing vegetable crops on muck land. P. Work. *Market Growers J* 18:277-8 Ap 15 '16  
Handling muck and marl. *Rural N Y* 76:68 Ja 20 '17  
Management of muck-land farms in northern Indiana and southern Michigan. H. R. Smalley. *il map Farmers' B* 761:1-26 '16  
Marsh soils. A. R. Whitson and H. B. Hendrick. *U S Ag B* 355:75-9 '16  
Muck land and muck land crops in New York state. E. L. Kirkpatrick. (*In Ohio vegetable growers' assn. directory*, 1918, p. 18-22) n.d. Ohio vegetable growers' assn., Columbus  
Muck swamps with marl. *Rural N Y* 76:417 Mr 17 '17  
Practical handling of swamp muck. *Rural N Y* 77:188 F 9 '18  
Preliminary report on muck humus as a fertilizer and carrier of beneficial soil bacteria. T. F. Manns and J. M. Goheen. *il Del Ag Exp B* 115:1-40 '16

**Soils, Muck—Continued**

- Soil analysis; analyses of Florida muck soils. R. E. Rose, map Fla Ag Dept Quar B v 27: 53-107 O '17
- Soils and agricultural development of New York. E. O. Fippin, il Cornell Countryman 14:568-71 Ap '17
- Some muck land problems. A. E. Wilkinson. Market Growers J 22:210 Mr '18

**Soils, Peat**

- Ammoniacal nitrogen of peats and humus soils. J. C. B. Ellis and C. G. T. Morison. J Ag Sci 8:1-6 S '16
- Determination of lime and phosphoric acid in peat soils: comparison of Jönköping with Bremen method. C. O. Rost and F. C. Clapp. bibliog Soil Sci 5:213-18 Mr '18
- Development of peat swamps. R. Reynolds, il J Ag New Zealand 15:9-15 Jl '17
- Draining peaty soil. Farm Eng 7:26 Mr '18
- Experiments on the cultivation of meadows on peat soils in Russia. V. A. Fominykh. Int R Sci & Prac Ag 7, no 10:1445-6 O '16
- Formation and characteristics of Massachusetts peat lands and some of their uses. A. P. Dachnowski. Mass Hort Soc Trans 1917, pt 1:29-45 '17
- Future of peat and muck soils in Florida. R. Ranson. Fla Ag Dept Quar B v 26:25-32 Ap '16
- Investigations on the microorganisms of peat soils, waste and cultivated. T. Arnd. Int R Sci & Prac Ag 7, no 12:1744-5 D '16
- Organic nitrogenous compounds in peat soils. C. S. Robinson and E. J. Miller, il Mich Ag Exp Tech B 35:1-29 '17
- Rapid method for the estimation of calcium oxide in peat soils. R. A. Gortner. Soil Sci 1:505-8 My '16
- Reclaiming shallow peat area. O Judd Farmer 61:6 O 28 '16
- Reclamation of peat bogs by gravelling. J. Orchiston. J Ag New Zealand 17:9-11 Jl '18
- Vegetation on swamps and marshes as an indicator of the quality of peat soil for cultivation. T. J. Dunnewald. Am Soc Agron J 9:322-4 O '17

*See also* Peat

**Soils, Salts in**

- Availability of nutrient salts. A. G. McCall. Am Soc Agron J 8:47-50 Ja '16
- Effect of irrigation water and manure on the nitrates and total soluble salts of the soil. F. S. Harris and N. I. Butt. bibliog J Ag Research 8:333-59 F 26 '17
- Effect on soil moisture of changes in the surface tension of the soil solution brought about by the addition of soluble salts. P. E. Karraker. J Ag Research 4:187-92 My '15
- Excess soluble salts in humid soils. S. D. Conner. Am Soc Agron J 9:297-301 S '17
- Freezing point method as a new means of measuring the concentration of the soil solution directly in the soil. G. J. Bouyoucos and M. M. McCool. il Mich Ag Bd Rep 1916: 592-631
- Influence of salts on the bacterial activities of the soil. J. E. Greaves. bibliog Soil Sci 2:443-80 N '16
- Movement of soluble salts through soils. M. M. McCool and L. C. Wheating. J Ag Research 11:531-47 D 10 '17
- Origin of alkali. R. Stewart and W. Peterson. bibliog J Ag Research 10:331-53 Ag 13 '17
- Relation between biological activities in the presence of various salts and the concentration of the soil solution in different classes of soil. C. E. Millar. J Ag Research 13:213-23 Ap 22 '18

*See also* Salts as fertilizer

**Soils, Sandy**

- Blow sand yields profitable crops. il O Judd Farmer 60:3 Ja 8 '16
- Building up poor sandy soil. Rural N Y 75:580 Ap 8 '16
- Building up the sandy farm. W. Harper. il Country Gent 81:1108 My 27 '16
- Crimson-clover Bob; South Carolina peatland yields much cotton and other crops. H. S. Stabler, il Country Gent 81:1319-20 Jl 8 '16

- Enriching sandy soils. J. C. Beaver. Breeder's Gaz 69:965 My 4 '16
- Farming practice in the sand hills section of Nebraska. J. Cowan, il map Neb Ag Exp B 156:1-67 '16
- Holding the farm down to earth. il O Judd Farmer 65:205 S 14 '18
- Lime and weeds. H. W. Collingwood. il Country Life 30:44-5 My '16
- Making sandy land produce; Mason county has reclaimed 3500 acres of sand dunes. O Judd Farmer 65:229 S 21 '18
- Making the best of it; a garden in pure sand. S. F. Hamblin. il Gard M 23:81-3 Mr '16
- Management of sandy-land farms in northern Indiana and southern Michigan. J. A. Drake. il Farmers' B 716:1-28 '16
- Physiological balance of nutrient solutions for plants in sand cultures. A. G. McCall. bibliog il Soil Sci 2:207-54 S '16
- Potatoes on sand barrens; beans and vetch build up land to profit. O. Van Epps. il Country Gent 81:959 My 6 '16
- Rebuilding sandy loam farms. Power F 25:27 Ag '16
- Sands of New Jersey. Rural N Y 76:1462 D 29 '17
- Sandy soils. A. R. Whitson and H. B. Hendrick. U S Ag B 355:68-71 '16
- Solving the million acre mystery. F. H. Demaree. il map O Judd Farmer 61:5 N 25 '16
- Vegetable tests on sandy soil at the Umatilla experiment farm. R. W. Allen. il Ore Ag Exp B 136:1-38 '16
- Vegetation as an indicator of the fertility of sandy pine plain soils in northern Wisconsin. T. J. Dunnewald. Am Soc Agron J 10: 19-23 Ja '18
- What rotation of forage crops and manures for the improvement of bracken land? J Dept Ag S Australia 21:869-72 Je '18
- Work of the Umatilla reclamation project experiment farm in 1915 and 1916. P. W. Allen. (W. I. A.—17) 37p il '17 U S Ag

*See also* Sand dunes

**Soils and crops.** *See* Crops and soils

**Soils and plant growth**

- Antagonism between anions as affecting barley yields on a clay-adobe soil. C. E. Lipman and W. F. Gericke. bibliog il J Ag Research 4:201-18 Je '15
- Cause of the disappearance of coumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. bibliog il Ala Ag Exp B 195: 49-64 '17
- Effect of alkali salts in soils on the germination and growth of crops. F. S. Harris. bibliog J Ag Research 5:1-53 O 4 '15
- Effect of sodium salts in water cultures on the absorption of plant food by wheat seedlings. J. F. Breazeale. J Ag Research 7: 407-16 N 27 '16
- Effect on plant growth of sodium salts in the soil. F. B. Headley and others. J Ag Research 6:857-69 Ag 28 '16
- Influence of calcium and magnesium compounds on plant growth. F. A. Wyatt. bibliog il J Ag Research 6:589-620 Jl 17 '16
- Influence of energy material upon the relation of soil microorganisms to soluble plant food. C. J. T. Doryland. bibliog N D Ag Exp B 116:319-401 '16
- Live-stock and maintenance of the soil, a safe ideal of soil management. E. O. Fippen. Rural N Y 75:880 Je 17 '16
- Nitrification of pyridine, quinoline, guanidine carbonate, etc., in soils. M. J. Funchess. bibliog Ala Ag Exp B 196:65-82 '17
- On the relation of root growth and development to the temperature and aeration of the soil. W. A. Cannon. Am J Bot 2:211-24 My '15
- Relation of plant to soil. Gard Chron (Lond) 59:144-5 Mr 11 '16
- Relation of sulfur to soil productivity. F. L. Duley. Am Soc Agron J 8:154-60 My '16
- Soil and plant growth. A. R. Whitson and H. B. Hendrick. U S Ag B 355:10-17 '16



**Soils and plant growth—Continued**

- Some availability studies with ammonium phosphate and its chemical and biological effects upon the soil. F. E. Allison. *bibliog Soil Sci* 5:1-80 Ja '18  
Study of Colorado wheat. W. P. Headen. *Col Ag Exp B* 217:1-46 '16  
Types of soil in relation to crops. J. F. Duggar. *Prog F* 31:75 Ja 15 '16  
What makes the difference between rich and poor land? T. Butler. *Prog F* 31:109 Ja 22 '16

**Soja beans.** See Soybeans

**Solanaceae**

- Abscission of flowers and fruits in the solanaceae, with special reference to nicotiana. J. N. Kendall. *bibliog il Cal Univ Pub Botany v* 5, no 12 347-428p, 49-53pl '18 (85c)  
Note on the alkaloids of some Egyptian solanaceae. F. Hughes. *Egypt Ag Tech & Sci B* 3:1-5 '16 (5c)

**Solandra**

- Solandra longiflora*; a new drug plant. E. N. Ward. *Ag Gaz of New South Wales* 28:670 S '17

**Solanum**

- Mutations of wild species of tuberiferous solanum. J. Aumiot. *Int R Sci & Prac Ag* 7, no 3:359-60 Mr '16  
On cultural bud mutations of some species of solanum and on the acclimatization in France of some Bolivian species. C. Verne. *Int R Sci & Prac Ag* 8, no 8:1115-16 Ag '17  
See also Horse nettles; Potatoes; Sandburs

**Solder and soldering**

- Some practical points on soldering. L. B. Minges. *plan Power F* 27:22 D '18

**Soldier bugs**

- Green soldier bug. R. D. Whitmarsh. *il Ohio Ag Exp B* 310:519-52 '17; Same cond. *Ohio Ag Exp B v* 2:288-90 S '17  
Tomato and bean bug. W. W. Froggatt. *il Ag Gaz of New South Wales* 27:649-50 S '16

**Soldiers**

- America's fighting stocks. *il J Heredity* 8:435-41 O '17  
Food, health and water; how your boy is treated. C. H. Lerrigo. *Rural N Y* 77:900 Ji 20 '18  
Link between the soldier and home. W. H. Crawford. *Better Fruit* 13:8 O '18

**Soldiers, Disabled**

- Acquisition of small holdings by military pensioners in France. *Ag Gaz of Canada* 5:1195 D '18  
Give a bushel; share with those who have suffered in service at the front. *il Country Gent* 83:13 S 21 '18  
When flowers mean more than medicines; service of flowers among the soldiers in our hospitals. S. Kerr. *il Gard M* 28:129-32 D '18  
Winning back to health and strength. R. F. Wilson. *il Country Life* 35:46-51 N '18

**Re-education**

- Disabled soldiers for farming. W. J. Wright. *il Nat Stock & F* 42:304 Je 22 '18  
Duty of the employer in the reconstruction of the crippled soldier. D. C. McMurtrie. *Am Fert* 48:54+ Je 8 '18; Same. *Creamery* 7:25-6 Ji '18  
Gardening for re-educating disabled soldiers. G. Harris. *il Gard M* 28:45-6 S '18  
Technical re-education in establishments depending on the ministry of agriculture of men mutilated in the war. *Int R Ag Econ* 82:56-66 O '17  
War cripple in the dairy. W. M. Hussie. *Hoards D* 56:550 N 15 '18

**Soldiers, Discharged**

- After-war settlement and employment of ex-service men in the oversea dominions. Review. *Ag J of India* 12:174-6 Ja '17  
Agrarian reorganization. New Republic (421 W. 21st st, N.Y. 10c) 13:333-4 Ja 19 '18  
Agricultural training for returned soldiers. W. J. Black. *Ag Gaz of Canada* 5:1123-6 D '18

- Cut-over lands. J. T. Liegel. *Rural N Y* 77:1347 D 7 '18

- Empire settlement committee's report. *J Bd Ag* 24:641-6 S '17

- Employment of ex-service men in agriculture. *J Bd Ag* 23:378-82 Ji '16

- Extending agriculture after the war. *Wallaces' F* 43:1036 Ji 12 '18

- \* Farms for returned soldiers. F. K. Lane. *il map Sci Am* (233 Broadway, N.Y. 10c) 119:372-3 N 9 '18

- How finance settlers on farm lands? *World's Work* (Garden City, N.Y. 25c) 35:361-2 F '18

- Land for Britain's fighting men. *Breeder's Gaz* 70:144 Ji 27 '16

- Land settlement for sailors and soldiers. *J Bd Ag* 22:1166-72 F '16

- \* Land settlement for soldiers in Australia. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 5:691-4 O '17

- Land settlement of ex-service men. *J Bd Ag* 25:71-5 Ap '18

- Loi concernant la colonisation par les combattants blessés en Allemagne. *Int Yearbook Ag Leg* 1916:1104-6 '17

- Loi modifiant la loi de 1915 concernant la colonisation des terres de la couronne en Australie par les soldats congédiés. *Int Yearbook Ag Leg* 1916:1111-12 '17

- Loi n. 21 portant des dispositions pour la colonisation des terres domaniales ou de terres acquises en vertu des lois sur la colonisation intérieure par des soldats congédiés en Australie. *Int Yearbook Ag Leg* 1916:1112-16 '17

- Loi pour la concession de homesteads et de prêts d'amélioration des homesteads aux soldats libérés au Canada. *Int Yearbook Ag Leg* 1916:1117-21 '17

- Million farms for soldiers. J. R. McMahon. *il Country Gent* 83:7-8 N 9 '18

- Mustered out. W. B. Holliday. *il Rural Manhood* 9:163-4 Ap '18

- \* Other countries busy with farms for soldiers plan. *Business Digest* (241 W. 37th st, N.Y. 15c) 22:92 O 15 '18

- Post-war settlement of soldiers and imperial migration. C. G. Wade. *19th Century* (249 W. 13th st, N.Y. 50c) 82:1156-70 D '17

- Preparing land to receive the returning soldiers. F. K. Lane. *Am Fert* 48:66+ Je 22 '18

- Reclaiming farm lands for soldiers. R. H. Moulton. *il Hoards D* 56:356 O 11 '18

- Returned soldiers and land settlement; Land settlement and after-war employment problems. by J. H. T. Falk. (*In* T. Adams. *Rural planning and development*, p. 207-16, 268-70) '17 Comm. of conservation, Ottawa, Canada

- Returned warriors now till the soil. R. Innes. *il Rural Manhood* 9:205-7 My '18

- Ruling concerning soldiers homestead rights. *Irr Age* 32:86 Ap '17

- Settlement of ex-service men on the land. A. D. Hall. *J Bd Ag* 25:875-7 O '18

- Settlement of ex-service men within the British empire after the war. *Int R Ag Econ* 83:75-80 N '17; Same. *Ag Gaz of Canada* 5:427-31 Ap '18

- Settlement of ex-soldiers in Canada. *J For* 15:1070-1 D '17

- \* Soldier, the worker, and the land's resources. B. Mackaye. *Monthly R* (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:48-56 Ja '18

- \* Soldiers' settlement in Canada. New Statesman (10 Great Queen st, Kingsway, London, W. C. 6d) 11:447-9 S 7 '18

- When Johnny comes marching home. E. Davenport. *Country Gent* 83:3-4+ N 16 '18

- When our soldiers come home. F. K. Lane. *Rural N Y* 77:1109, 1130 S 28-O 5 '18; Same cond. *Banker-F* 5:12 N '18

- Soldiers as farm laborers

- \* How the soldier becomes a farmer at harvest time in Europe. *il Touchstone* (118 E. 30th st, N.Y. 35c) 4:91-7 N '18

- Soldier farm furloughs; with general orders and form of application. *Kimball's D F* 16:352 My 1 '18; Same (general orders). *Weekly N L* 5:9 Ap 17 '18; Same (form of application). *O Judd Farmer* 64:6 Ap 20 '18

- Soldiers' home, United States.** See United States soldiers' home
- Solenopsis.** See Ants
- Solms-Laubach, Hermann, graf zu, 1842-1915**  
Appreciation. D. H. Scott. *por Bot Gaz* 61:433-4 My '16
- Solubility**  
Solubility of plant-food elements as modified by fertilizers. C. A. Jensen. *Am Soc Agron J* 8:100-5 Mr '16
- Soluble ferments.** See Enzymes
- Solutions (chemistry)**  
See also Electrolytes
- Somaliland**  
Land tenure and colonization. bibliog *Int R Ag Econ* 75:94-115 Mr '17
- Songs (with music)**  
Songs for girls' clubs. L. P. Dowdle. *Ga Ag Coll (Ext)* B 131 14p '17
- Soot**  
Prevention of soot and chimney deposits. Wallaces' F 43:1820 D 13 '18
- Sordago**  
Sordago disease in the marvel of Peru. C. Correns. *Int R Sci & Prac Ag* 7,no 6:884-5 Je '16
- Sorghum**  
Breeding millet and sorgho for drought adaptation. A. C. Dillman. *U S Ag B* 291:1-19 '16  
Comparative study of the root systems and leaf areas of corn and the sorghums. E. C. Miller. bibliog *il J Ag Research* 6:311-32 My 29 '16  
Comparative transpiration of corn and the sorghums. E. C. Miller and W. B. Coffman. *il J Ag Research* 13:579-604 Je 10 '18  
Daily variation of water and dry matter in the leaves of corn and the sorghums. E. C. Miller. *il J Ag Research* 10:11-46 Jl 2 '17  
Dry-land grain sorghums, trials at experiment farms. E. Breakwell. *il Ag Gaz of New South Wales* 27:471-8 Jl '16  
Effect of temperature and other meteorological factors on the growth of sorghums. H. N. Vinall and H. R. Reed. bibliog *il J Ag Research* 13:133-48 Ap 8 '18  
Farmers' experiment plots; dry-land grain sorghums. G. G. Potts. *Ag Gaz of New South Wales* 29:639-40 S '18  
Foods from the grain sorghums. C. K. Francis. *il Okla Ag Ext C* 53 6p '17  
Further experiments with grain sorghums. E. Breakwell. *il Ag Gaz of New South Wales* 28:695-703 O '17  
Grain sorghum seed. E. B. Babcock. *il Cal Ag Exp C* 177:1-8 '17  
Grain sorghums. B. A. Madson. *il Cal Ag Exp B* 278:227-50 '17  
Grain sorghums for Oklahoma. M. A. Beeson. *il Okla Ag Ext C* 73:1-13 '18  
Grain sorghums in Kansas, Oklahoma and Texas. *U S Seed Rep* 1:6 Ja '18  
Grain sorghums in the North-west. R. W. McDiarmid. *Ag Gaz of New South Wales* 29:346-7 My '18  
Growing corn and the grain sorghums in Arizona. S. F. Morse. *Ariz Ag Ext C* 3:1-22 '16  
Growing grain sorghums in the San Antonio district of Texas. C. R. Letteer. *il Farmers' B* 965:1-12 '18  
Growing sorghum for forage and sugar. A. E. Grantham. *Prac F* 114:221 Je 15 '18  
Growing sorghum in Kansas. C. C. Cunningham and R. Kenney. *il maps Kan Ag Exp B* 218:1-54 '17  
Harvesting and storing sorghums requires special care in drying. *Weekly N L* 6:15 Ag 7 '18  
How to use sorghum grain. C. R. Ball and B. E. Rothgeb. *il Farmers' B* 972:1-17 '18  
Importance of sweet sorghum. A. Piédallu. *Int R Sci & Prac Ag* 9,no 2:195 F '18  
Importance of thick seeding in the production of milo in the San Antonio region. S. H. Hastings. *il U S Ag B* 188:1-21 '15  
Kafir and milo sorghum as grain crops and fodder crops in arid soils, experiments made in the Argentine. A. Villalba. *Int R Sci & Prac Ag* 8,no 9:1243-5 S '17
- Note on the inheritance of certain stem characters in sorghum. G. R. Hilson. *il Ag J of India* 11:150-5 Ap '16  
Progress report, Lubbock, 1909-1914; grain sorghum. *il Tex Ag Exp B* 219:7-12 '17  
Progress report, Spur, 1909-1914; grain sorghums and sorgho. *Tex Ag Exp B* 218:16-20 '17  
Pure sorghum seed. G. W. Rhine. *il Country Gent* 81:1523 Ag 12 '16  
Recurring of milo and some factors influencing it. A. B. Conner and R. E. Karper. *il Tex Ag Exp B* 204:1-30 '17  
Shallu, or Egyptian wheat. B. E. Rothgeb. *il Farmers' B* 827:1-8 '17  
Sorghum and millet. F. A. Welton. *il Ohio Ag Exp B v* 1:168-74 Je '16  
Sorghum as a forage crop. W. R. Perkins. *Prog F* 31:344 Mr 4 '16  
Sorghum as a silage crop. T. Butler. *Prog F* 33:683 Je 8 '18  
Sorghum as a substitute for sugar. C. E. Thorne. *il Ohio Ag Exp B v* 3:33-5 F '18  
Sorghum as forage. Wallaces' F 41:734 My 12 '16  
Sorghum for forage in cotton belt. Hoard's D 51:328+ Mr 17 '16  
Sorghum for molasses. H. K. Combs. Hoard's D 55:690 My 10 '18  
Sorghum in Illinois. O Judd Farmer 64:548 My 25 '18  
Sorghum or dari, a new substitute for malt used in brewing. J. Raux. *Int R Sci & Prac Ag* 9,no 5:613 My '18  
Sorghum silage—a new problem. *il Concrete (Telegraph bldg., Detroit, Mich. 20c)* 12:123-4 Ap '18  
Sorghum syrup. J. Marsh. *il Nat Stock & F* 41:370 Jl 7 '17  
Sorghum to help the sugar shortage. F. J. McClure. *Purdue Ag* 12:553-4 Je '18  
Sorghums. Wallaces' F 42:146 Ja 26 '17  
Sorghums for forage in South Dakota. M. Champlin and G. Winright. *il S D Ag Exp B* 174:624-45 '17  
Sorghums in the dry country. F. B. Nichols. *il Country Gent* 81:2072 D 2 '16  
Starches of the grain sorghums. C. K. Francis and O. C. Smith. *il Okla Ag Exp B* 110:1-38 F '16  
Studies of the digestibility of the grain sorghums. C. F. Langworthy and A. D. Holmes. *U S Ag B* 470:1-30 '16  
Sweet sorghums for forage. B. A. Madson. *il Cal Ag Exp B* 293:271-83 '18  
Sweeten up with sorghum. O Judd Farmer 65:359 O 19 '18  
Triple-seeded spikelets in sorghum. A. B. Cron. *il Am Soc Agron J* 8:237-8 Jl '16  
Utilization of the red dye obtained from the leaf-sheaths and stalks of certain varieties of sorghum. C. G. Dudgeon. *Int R Sci & Prac Ag* 9,no 4:506-7 Ap '18
- See also Broom corn; Feeding and feeding stuffs—Sorghum; Kafir corn; Sudan grass
- Composition**  
Fats and fatty acids of the grain sorghums. C. K. Francis and W. G. Friedemann. *Okla Ag Exp B* 117:1-14 '17  
Studies on the cyanogenetic compounds of sorghum. J. J. Willaman. *Int R Sci & Prac Ag* 9,no 4:429-30 Ap '18
- Diseases and pests**  
Bacillus oemulansii n. sp. as the cause of bacillary gummosis of sorghum. I. L. Serbinov. *Int R Sci & Prac Ag* 8,no 1:165-7 Ja '17  
Studies on a fusarium disease of corn and sorghum. L. H. Pammel and others. *il Iowa Ag Exp Research B* 33:115-36 '16
- See also Sorghum smut
- Hydrocyanic acid content**  
Effect of climatic factors on the hydrocyanic-acid content of sorghum. J. J. Willaman and R. M. West. bibliog *J Ag Research* 6:261-72 My 15 '16  
Hydrocyanic-acid content of sorghum. J. J. Willaman and R. M. West. bibliog *J Ag Research* 4:179-85 My '15



**Sorghum**—Hydrocyanic acid content—*Continued*  
Poisoning of stock by sorghum plant. Hoard's  
D 51:186 F 25 '16

**Seed**

Condition and movement of sorghum seed in  
Kansas and Missouri. U S Seed Rep 1:3 D  
'17

Sorgo or cane seed outlook. U S Seed Rep 2:  
6-7 D '18

Sorgo or cane sorghum seed review. U S Seed  
Rep 1:6 Ja '18

Tabulation of reports from shippers of sorghums  
and millets under date of December  
31, 1917. U S Seed Rep 1:3 F '18

**Analysis**

Composition of grain sorghum kernels. J. A.  
Le Clerc and L. H. Bailey. bibliog Am Soc  
Agron J 9:1-16 Ja '17; Summary. Int R Sci  
& Prac Ag 9,no 2:156-8 F '18

**Statistics**

Commercial stocks of grain sorghums (kafir,  
milo, etc.), Jan. 1. U S Food Surveys 1:8-9  
Jl 20 '18

Commercial stocks of grain sorghums (kafir,  
milo, etc.), July 1. U S Food Surveys 2:7-8  
O 1 '18

**Storage**

Storing kafir grain. Country Gent 83:5 F 2 '18

**Varieties**

Grain-sorghum experiments in the panhandle  
of Texas. C. R. Ball and B. E. Rothgeb.  
bibliog il map U S Ag B 698:1-91 '18

Grain sorghums. E. Breakwell. Ag Gaz of  
New South Wales 29:685-95 O '18

New sorghum varieties for the central and  
southern great plains. H. N. Vinal and  
R. W. Edwards. il U S Ag B 383:1-15 '16

New strains of sorgo and millet. Country  
Gent 81:260 F 5 '16

Relative water requirement of corn and the  
sorghums. E. C. Miller. il J Ag Research  
6:473-84 Je 26 '16

Selection of sorghum in Queensland, Australia.  
G. B. Brooks. Int R Sci & Prac Ag 9,no 1:  
51-2 Ja '18

Sorghum varieties for Kansas. F. B. Nichols.  
Hoard's D 53:47 F 2 '17

**Sorghum clubs**

Sorghum clubs; final report and record book  
for members. Kan Ag Ext x—Form 2:1-15  
'16

**Sorghum meal**

Composition of grain sorghum kernels. J. A.  
Le Clerc and L. H. Bailey. bibliog Am Soc  
Agron J 9:1-16 Ja '17; Summary. Int R Sci  
& Prac Ag 9,no 2:156-8 F '18

**Sorghum sirup**

Catering to our sweet tooth. L. L. Rummell.  
il Ohio F 142:237 S 14 '18

Chemical changes which are caused by defe-  
cation of sorghum juice for sirup manu-  
facture. A. K. Anderson. J Industrial & Eng  
Chemistry (Easton, Pa. 60c) 9:492-9 My '17

Clarifying cane juice. Wallaces' F 42:1283  
S 21 '17

Experience with sorghum sirup. O. G. Cran-  
dall. Rural N Y 77:695 My 18 '18

Growing sorghum cane and making sirup. A.  
T. Erwin. Ia Ag Ext Emergency Leaflet 40  
4p '18

Home-made sorghum evaporators. C. E.  
Thorne. Ohio Ag Exp B v 3:279-80 S '18

Long sweetening. J. K. Wright. il Country  
Gent 83:5 Ja 26 '18

Making good sorghum sirup on the farm. Va  
Ag Dept B 115:55-7 '17

Making good sorghum sirup on the farm. Va  
Ag Dept B 133:7-10 O '18

Making sorghum sirup. A. B. Ballantyne. Ariz  
Ag Ext C 19 2p '17

Manufacturing sorghum sirup. C. E. Thorne.  
Ohio Ag Exp B v 3:213-14 Jl '18

Sorghum sirup question. Wallaces' F 43:1253  
S 6 '18

Sources and composition of some commercial  
invert sugar syrups with notes on sorghum  
sirup. S. Jordan and A. L. Chesley. J In-  
dustrial & Eng Chemistry (Easton, Pa. 60c)  
9:757-8 Ag '17

Sirup from sweet sorghum. W. V. Cruess.  
il Cal Ag Exp C 198:1-16 '18

**Sorghum smut**

Head smut of sorghum and maize. A. A. Pot-  
ter. bibliog il J Ag Research 2:339-72 Ag '14

Sorgo. See Sorghum

**Sorossporella**

Sorossporella uvella and its occurrence in cut-  
worms in America. A. T. Speare. bibliog il  
J Ag Research 8:189-94 F 5 '17

**Sorrel**

Red sorrel. F. J. Pipal. Purdue Ag 10:18-19  
My '16

Red sorrel and its control. F. J. Pipal. il  
Ind Ag Exp B 197:1-28 '17

Soudan grass. See Sudan grass

**Soup**

Foods and food preparation; cream of vege-  
table soups. F. Campbell. J Ag (Quebec) 19:  
225 Ap '16

Nutritious vegetable soups. E. Sprague. J  
Home Econ 19:80-4 F '18

Soup recipes. Prog F 33:1315 N 30 '18

Soups that nourish. Weekly N L 4:10-11 My 9  
'17

Substantial Irish potato soups. R. M. F. Berry.  
Rural N Y 76:1301 N 10 '17

Wide-awake girls learn how to make soups.  
Prog F 31:372 Mr 11 '16

**Canning**

Canned soups. Nat Stock & F 40:335 Je 24  
'16

Canning soups on the farm. Mrs R. Mason.  
Prac F 112:306 Ag 15 '16

Homemade soup. G. V. Gray. Country Gent  
82:1434 S 15 '17

Sour sap. See Fruit—Diseases and pests

Sour scab. See Citrus scab

**South**

See also subhead Southern states under  
special subjects, e.g., Agriculture—Southern  
states, Dairying—Southern states

**Economic conditions**

Address before National agricultural society.  
Mrs G. W. Mathis. Ag Digest 1:414-16 My 1  
'17

**Industries and resources**

Cotton's magical rise enriching the nation. il  
Literary Digest (354 4th av., N.Y. 10c) 53:  
1517-22+ D 9 '16

Increasing pastures in the South. A. M. Soule.  
Breeder's Gaz 69:127 Ja 20 '16

**Social life and customs**

Vanished plantation system. E. Damer. il  
Country Life 34:90 My '18

**South Africa**

See also subhead South Africa under  
special subjects, e.g., Agriculture—South  
Africa, Dairying—South Africa

**Industries and resources**

Markets for agricultural implements and ma-  
chinery in South Africa. J. Homs. (Special  
agents ser. no. 146) 231p il map 20c '17 U.S.  
Bur. of foreign and domestic commerce,  
Washington, D.C.

South Africa as a beef producing country.  
E. N. Gunsaulus. Wallaces' F 41:1185 S 8 '16

South Africa to have electrochemical indus-  
tries. Am Fert 44:48 Je 10 '16

Viticulture in South Africa. A. I. Perold. Int  
R Sci & Prac Ag 7,no 1:1-30 Ja '16

See also Forests and forestry—South  
Africa

**Social life**

Tribal life in South Africa. S. Nkomo. Rural  
Manhood 8:352-4 O '17

**South America**

See also names of countries; also subhead South America under special subjects, e.g. Agriculture—South America, Botany—South America

**Industries and resources**

South American markets for fresh fruits. W. Fischer. (Special agents ser. no. 131) 163p il '17 U. S. Bureau of foreign and domestic commerce, Washington, D.C.

With Curtiss in South America. Wallaces' F 41:1406 O 27 '16

See also Forests and forestry—South America

**Social conditions**

Our opportunity in rural South America. C. J. Ewald. Rural Manhood 8:60-4 F '17

**South Australia**

See also subhead Australia under special subjects

**Advisory board of agriculture**

Meeting, Adelaide, Nov. 14. J Dept Ag S Australia 21:410-12 D '17

**Agricultural bureau**

See Agricultural bureau of South Australia

**South Carolina**

See also Clemson agricultural college of South Carolina; also subhead South Carolina under special subjects, e.g. Agriculture—South Carolina, Soils—South Carolina

**Agriculture, commerce and fisheries, Commissioner of**

13th annual report, 1916. 162p il maps '17 S. C. Commissioner of agriculture, commerce and fisheries, Columbia

**South Carolina agricultural experiment station**  
29th annual report for the year ending June 30, 1916. 64p '16 S. C. ag. experiment station, Clemson College

30th annual report for the year ending June 30, 1917. S C Ag Exp Rep 1917:1-32

**South Carolina, Clemson agricultural college of.**  
See Clemson agricultural college of South Carolina

**South Dakota**

See also subhead South Dakota under special subjects, e.g. Agriculture—South Dakota, Irrigation—South Dakota

**Agriculture, Board of**

Report, 1916. S D Ag Bd Rep 1916:1-14 '17

Report, 1917. S D Ag Bd Rep 1917:1-16 '18

**Law**

Workmen's compensation law of South Dakota. Am Coop J 12:671 Je '17

**Live stock sanitary board, State**

\* Annual report for the fiscal year ending June 30th, 1917. 14p '17 S.D. State live stock sanitary bd., Pierre

\* Annual report for the fiscal year ending June 30, 1918. 15p n.d. S.D. State live stock sanitary bd., Pierre

**South Dakota agricultural experiment station**

Annual report for fiscal year ending June 30, 1916. S D Ag Exp Rep 1916:1-27 n.d.

Annual report for fiscal year ending June 30, 1917. S D Ag Exp Rep 1917:1-38 n. d.

**South Dakota dairymen's and buttermakers' association**

11th annual meeting, Watertown, Dec. 5-6, 1916. N Y Prod R 43:320 D 20 '16

**South Dakota farmers' cooperative society**

Convention, Watertown, Jan. 29-31. Am Coop J 13:252-3 F '18

Report of 9th annual convention, Watertown, S.D., Jan. 25-27, 1916. Am Coop J 11:583-95 F '16

10th annual convention, Sioux Falls, Dec. 12-14. Coop Manager & F 6:36-9 Ja '17

10th annual convention, Sioux Falls, Dec. 12-14, 1916. F. S. Betz. Am Coop J 12:379-83 Ja '17

11th annual convention, Watertown, Jan. 29-31. Coop Manager & F 7:38-45 Mr '18

**South Dakota horticultural society**

Annual meeting, Aberdeen, Jan. 22-24. A. Terry. Minn Hort 46:190-1 My '18

**South Dakota shippers' conference**

Shippers' conference, Watertown, July 19-20. Coop Manager & F 6:64-5 Ag '17

**South Dakota state fair**

Dairy exhibit at the South Dakota state fair. R. Wylie. Hoard's D 56:408 O 18 '18

Fair at Huron, S.D. Breeder's Gaz 70:486g S 21 '16

Huron, S. D., show. Breeder's Gaz 72:450 S 20 '17

**South Haven fruit exchange**

South Haven fruit exchange. W. F. Vedder. Il Am Coop J 13:40 S '17; Same cond. Ag Digest 2:671 O '17

**South Mississippi dairymen's association**

Mississippi dairymen meet. Kimball's D F 15: 865 D 1 '17

Spring convention, Brookhaven, May 25, 1917. Prog F 32:703 Je 16 '17

**South Pacific Islands. See Cotton—South Pacific islands****Southeastern fair**

1917 Southeastern fair, Atlanta, Ga. Breeder's Gaz 72:844 N 8 '17

Southeastern fair at Atlanta, 1916. Breeder's Gaz 70:784-6 O 26 '16

**Southeastern food conference**

Proceedings of conference held at Atlanta, April 5, 1917. 14p '17 Atlanta Chamber of commerce, Atlanta, Ga.

**Southeastern land show**

Fertilizer day at a land show. Am Fert 46: 27 F 17 '17

**Southeastern states butter and cheese show**

Southeastern butter and cheese; a large exhibit at the recent fair at Atlanta, Georgia. N Y Prod R 45:52 N 14 '17

**Southeastern states veterinary medical association**

2d annual meeting, Chattanooga, Tenn., Dec. 27-29, 1917. Am Vet M Assn J 52:748-52 F '18

**Southern alluvial land association**

1st annual meeting, Memphis, Tenn. Am Lumberman (431 S. Dearborn st, Chicago 15c) 2227:53 Ja 19 '18

**Southern army worm. See Fall army worm****Southern cattlemen's association**

Convention, Atlanta, Ga., April 4-6, 1917. Kimball's D F 15:316 My 1 '17

4th annual convention, Shreveport, La., Aug. 16-18, 1916. Hoard's D 52:174 S 1 '16

4th annual convention, Shreveport, La., Aug. 16-17, 1916. A. F. Kidder. Prog F 31:1062 S 2 '16

5th annual meeting, Atlanta, Ga., April 4-6, 1917. Prog F 32:516 Ap 21 '17

6th annual meeting, Little Rock, Ark. Hoard's D 55:328 Mr 15 '18

**Southern cut-over land association. See Cut-over land conference of the South****Southern fertilizer association**

Annual convention, Atlanta, Oct. 30. Am Fert 47:40-3 N 10 '17

Annual summer meeting, Atlantic City, N. J., July 16. Am Fert 49:138u-138w Ag 3 '18

Farmers' service organization. Am Fert 46: 24 Ja 6 '17

Meeting, Hot Springs, Va., July 11, 1916. Am Fert 45:136+ JI 22 '16

Meeting, White Sulphur Springs, W. Va., July 11, 1917. Am Fert 47:108-9 JI 21 '17

Salesmen's meetings in the South. Am Fert 47:34-34c S 29 '17

10th annual meeting, Atlanta, Nov. 9, 1916. Am Fert 45:21-3 N 25 '16

13th annual meeting, Atlanta, Nov. 15. Am Fert 49:25-6 N 23 '18

**Soil improvement committee**

Review of 1916-17. (In Am. fertilizer hdbk., 1917, p. 71-2) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia



**Southern fert. assn.**—Soil improvement com.—*Cont.*  
Soil improvement committee activities for the year 1917-18. (*In* Am. fertilizer hdbk., 1918, p. 40-1) \$1.50 '18 Ware Bros. co., 1010 Arch st., Philadelphia

Work of the soil improvement committee of the Southern fertilizer association. H. Hodgson. *Am Fert* 46:24-5 F 17 '17

**Southern green plant bugs**

Southern green plant-bug. T: H. Jones. bibliog il map U S Ag B 689:1-27 '18

**Southern Illinois horticultural society**

44th annual convention, Centralia. O Judd Farmer 63:8 D 8 '17

**Southern Illinois milk producers' association**

Plan summer campaign. O Judd Farmer 60:7 My 13 '16

St Louis dealers and producers in deadlock. B. E. Coffin. *Hoard's D* 54:332 O 5 '17

St Louis milk conditions. F. W. Schroeder. O Judd Farmer 60:9 My 27 '16

**Southern settlement and development organization**

More sheep needed in the Southland. F. H. Abbott. *Am Sheep B & W* 36:668 N '16

**Southern states.** See subhead Southern states under special subjects, e.g. Agriculture—Southern states, Dairying—Southern states

**Southwest**

Lure of the Southwest: advantages and disadvantages the settler will find. S. F. Morse. *il Country Gent* 81:1444 J1 29 '16

Pioneer recounts old days of great Southwest; autobiography of T: P. James. *Am Sheep B & W* 36:266-7 My '16

**Southwest American live stock show**

Spring show at Oklahoma City. *Breeder's Gaz* 71:577 Mr 15 '17

**Southwest Jersey cattle breeders' association**

Annual meeting, Kansas City, Dec. 9, 1916. Kimball's D F 14:832 Ja 1 '17

5th annual meeting, Kansas City, Dec. 15, 1917. *Jersey B* 37:5-6+ Ja 2 '18; *Hoard's D* 54:830 Ja 4 '18

Jersey breeders at Longview. J. G. Watson. Kimball's D F 14:458 J1 15 '16

**Southwestern dairy show**

First southwestern dairy show. *il Hoard's D* 52:387+ O 13 '16

Kansas City's dairy show. J. A. Rickart. *il Country Gent* 81:1901 O 28 '16

Southwestern dairy show. *Breeder's Gaz* 70:549-50+ S 28 '16; Kimball's D F 14:654+ O 15 '16

**Southwestern exposition and fat stock show**

22d annual show, March 11-16. J. M. Jones. *Am Sheep B & W* 38:330-1 My '18

**Southwestern Jersey cattle show**

Jersey show at Kansas City. *il Kimball's D* F 16:559+ O 1 '18

Show at Kansas City, Sept. 17-21. H. E. Colby. *il Hoard's D* 56:358 O 11 '18

**Sow thistles**

Control of the sow thistle in Manitoba. T. J. Harrison. *il Manitoba Ag Dept Farmers' Lib Ext B* 4:1-30 J1 '16

Sow thistles. *Hoard's D* 56:75 Ag 9 '18

**Sowbugs**

Sow bug eradicators. H. Clarke. *Gard M* 23:262 My '16

Sowbug remedies. D. M. Tipton. *Am Flor* 46:170 F 12 '16

**Sowing**

Experiments in fall seed sowing. H. O. Werner. *Market Growers J* 18:208 Mr 15 '16

Planting small seeds. J. H. Sperry. *Country Gent* 81:1305 J1 1 '16

**Sows, Care of.** See Swine—Care of sows

**Soybean flour**

Use soy-bean flour to save wheat, meat, and fat. U S Ag C 113:1-4 '18

**Soybean harvesters**

Soybean harvesters. W. F. Pate. *il N C Ag Ext C* 56:1-8 '17

Soybean harvesters. W. F. Pate. *il N C Ag Ext C* 80:1-8 '18

**Soybean hay**

Soybean hay and feeding costs. S. E. Stowe. *Ohio F* 140:427 N 10 '17

**Soybean oil**

Soya bean oil. W. F. Washburn. *N D Ag Exp B* 118:35-42 '16

**Soybeans**

Commercial growing of soybeans. E. F. Johnson. *il Purdue Ag* 11:17-21 O '16

Commercial use of the soybean. N C Ag Ext C 29:1-16 '16

Concerning alfalfa and soy beans. J. L. Hills. *Vt Ag Exp B* 204:63-72 My '17

Cottonseed, soy bean and velvet bean products compared. T. Butler. *Prog F* 33:1303 N 30 '18

Cowpeas and soy beans: their place in southern farming. B. L. Moss. *Prog F* 31:927 J1 29 '16

Cow peas vs. soy beans. *Rural N Y* 76:1008 Ag 25 '17

Cowpeas vs soy beans. A. M. Ten Eyck. O Judd Farmer 60:6 My 27 '16

Effect of ammonium sulfate in nutrient solution on the growth of soybeans in sand cultures. M. I. Wolkoff. *bibliog Soil Sci* 5:123-50 F '18

Effect of inoculation, fertilizer treatment and certain minerals on the yield, composition and nodule formation of soybeans. C. R. Fellers. *bibliog il Soil Sci* 6:81-129 Ag '18

Eight years growing soy beans. C. L. Me-harry. O Judd Farmer 62:1+ F 17 '17

Great utility of the soy bean. *Ohio F* 141:695 My 25 '18

Grow a few soy beans. *Prac F* 113:164 Ap 15 '17

Grow soy beans with corn. J. L. Justice. O Judd Farmer 60:2 My 13 '16

Growing soybeans. H: Dorsey. *il W Va Ag Ext C* 204:1-8 '18

Growing soy beans. J. L. Justice. *il Hoard's D* 55:282 Mr 8 '18

Growing soy beans in Alabama. E. F. Cauthen. *Prog F* 33:718 Je 15 '18

Growing soybeans with corn. O. W. Mansfield. *Purdue Ag* 11:22 Ap '17

Harvesting soy and velvet beans. *Prog F* 33:318 Mr 9 '18

Harvesting soy beans. *Coop Manager & F* 7:77 D '17

Harvesting soy beans. C. B. Williams. *Prog F* 33:349 Mr 16 '18

Harvesting soy beans for seed. J. F. Dug-gar. *Prog F* 31:1134 S 23 '16

How to grow soy beans. *Prog F* 33:213 F 16 '18

How to harvest soy beans. A. G. Smith. *Prog F* 33:1038 S 21 '18

How to succeed with soy beans. J. F. Seip. *Prog F* 31:767 Je 10 '16

Influence of various salts on the growth of soybeans. J: W. Shive. *Soil Sci* 1:163-70 F '16

It's not too late to plant soys. W. Harper. *il Country Gent* 82:957 Je 2 '17

Labor-saving soy. W: R. Butler. *il Country Gent* 81:964-5 My 6 '16

Lesson from the Orient. *Scientific Am* (233 Broadway, N.Y. 10c) 118:230 Mr 16 '18

Management of sandy-land farms. J. A. Drake. *il Farmers' B* 716:6-11 '16

\* Maternal inheritance in the soy bean. H. Terao. *Am Naturalist* (Science Press, Gar-ri-son, N.Y. 40c) 52:51-6 Ja '18

More meat on stock, more fertility, from soy beans. *Weekly N L* 6:7 S 11 '18

More soy beans for the South. C. B. Williams. *il Prog F* 31:467 Ap 1 '16

New products from soy beans. G: H. Dacy. *il Country Gent* 81:1145 Je 3 '16

New use for soy beans. *Hoard's D* 51:94 F 11 '16

Oats and soy beans a valuable cropping combination. T. Butler. *Prog F* 31:899 J1 22 '16

Physiological studies of bacillus radicicola of soybean (soja max Piper) and of factors influencing nodule production. J. K. Wilson. *bibliog il Cornell Ag Exp B* 386:369-413 '17; Same. *Cornell Ag Exp Rep* 1917:369-413 '18

Products obtained from cotton seed and soy beans. *Prog F* 31:1443 D 16 '16

**Soybeans—Continued**

- Prolific soya bean. Scientific Am (233 Broadway, N.Y. 10c) 116:492 My 19 '17
- Saving soy bean crop. J. L. Justice. O Judd Farmer 63:2 Ag 25 '17
- Soy bean. Va Ag Dept B 118:4-6 Je '17
- Soy bean. E. F. Gaskill. Mass Ag Ext C 56:3p '18
- Soy bean. R. I. Lynch. il Gard Chron (Lond) 63:38 Ja 26 '18
- Soybean—a crop for emergencies. W. C. Smith. il Country Gent 83:8 Ap 13 '18
- Soy bean a great soil builder. F. P. Latham. Prog F 31:342 Mr 4 '16
- Soy bean a husky ally. S. Jordan. il Country Gent 83:7 Jl 13 '18
- Soy bean a useful crop. Jersey B 36:323 F 28 '17; Same. Weekly N L 4:3 F 7 '17; Same abridged. Ohio F 139:377 Mr 10 '17; Same cond. J Home Econ 9:183-4 Ap '17
- Soybean and cowpea (C. 45). F. H. Hall. N Y State Ag Exp Rep 1915:116-21 '16
- Soy bean as a farm crop. C. F. Class. il Hoard's D 53:789 Je 1 '17
- Soybean crop. C. G. Williams. il Ohio Ag Exp B v 2:139-41 My '17
- Soy bean culture. il Hoard's D 53:600 Ap 27 '17
- Soy-bean experience. J. W. R. Smith. Nat Stock & F 42:124 Ap 27 '18
- Soy bean in New Hampshire. F. S. Prince. il N H Ag Exp B 181:1-20 '17
- Soy-bean industry in the United States. W. J. Morse. il U S Ag Yearbook 1917:101-11; Same. Separate 740
- Soy bean industry of eastern North Carolina. B. White. il N C Ag Ext C 9:1-8 '16
- Soy bean: its culture and uses. W. J. Morse. il map Farmers' B 973:1-32 '18
- Soy-bean products and their uses. C. B. Williams. N C Ag Exp C 34:1-7 '16
- Soy bean thrives in United States. Weekly N L 4:4 Ja 10 '17
- Soy bean useful crop. Coop Manager & F 6:40 My '17
- Soy bean useful crop. il Va Ag Dept B 126:174-6 '18
- Soy bean, with special reference to its utilization for oil, cake, and other products. C. V. Piper and W. J. Morse. il map U S Ag B 439:1-20 '16; Excerpts. Hoard's D 53:641 My 4 '17
- Soy beans. Wallaces' F 42:586 Mr 30 '17
- Soy beans. T. A. Kiesselbach. il Neb Ag Exp B 166:1-16 '18
- Soy beans. E. R. Minn. il N Y Ag Dept B 87:2938-44 S '16
- Soy beans. J. C. Pridmore. (B. 17) 6p il n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.
- Soybeans. N. Schmitz. il Md Ag Exp B 201:131-58 '17; Same. Md Ag Exp Rep 1916-1917 '17; Same cond. Pa Ag Ext C 59:1-16 '17
- Soy beans. H. D. Wilson. La Ag Bd 7p n.d.
- Soybeans—a crop worth growing. R. A. Moore and E. J. Delwiche. il Wis Ag Exp B 289:1-16 '18
- Soybeans—a future economic factor in North Carolina. C. B. Williams. il N C Ag Ext C 57:1-11 '17
- Soy beans and cowpeas. J. R. Fain and P. O. Vanatter. Ga Ag Coll (Ext) C 46:1-8 '17
- Soybeans and cowpeas in Illinois. W. L. Burlison and O. M. Allyn. Ill Ag Exp B 198:1-20 '17
- Soy beans as a cash crop. T. Butler. Prog F 31:751 Je 10 '16
- Soybeans as grown in Adams county, Ill. E. W. Rusk. O Judd Farmer 64:3 Mr 23 '18
- Soy beans for fall pasture. F. R. Finch. Rural N Y 76:788 Je 16 '17
- Soy beans for hay and silage. C. B. Wing. Rural N Y 75:1559 D 23 '16
- Soy beans for Illinois. W. E. Riegel. O Judd Farmer 64:574 Je 1 '18
- Soy beans for Quebec. J. Murray. il J Ag (Quebec) 21:180 Je '18
- Soy beans for seed. Weekly N L 4:1 Je 20 '17
- Soy beans for seed. C. B. Williams. Country Gent 81:1592 Ag 26 '16
- Soy beans for southern farmers. F. P. Latham. Prog F 31:286 F 26 '16
- Soy beans for southern farmers. C. B. Williams. Prog F 33:328 Mr 9 '18
- Soybeans—40 questions and answers. S. M. Jordan. il Mo Ag Bd B v 15:25-8 Je '17
- Soy beans from soup to nuts. S. Jordan. il Country Gent 83:7+ S 28 '18
- Soy beans have many virtues. G. Y. Helper. O Judd Farmer 62:19 Mr 31 '17
- Soy beans in North Carolina. C. B. Williams. Country Gent 81:738 Ap 1 '16
- Soybeans in rotation. T. D. Phillips. il Ohio F 137:455 Mr 25 '16
- Soy beans in systems of farming in the cotton belt. A. G. Smith. il Farmers' B 931:1-22 '18
- Soy beans in the corn belt. R. Stewart. il Country Gent 82:828 My 5 '17
- Soy beans no harm to corn. W. E. Farver. Nat Stock & F 42:72 Ap 13 '18
- Soybeans planted with corn. W. S. Tomlinson. Ohio F 137:707 My 20 '16
- Soy beans; questions and answers. S C Ag Ext B 22:1-15 n.d.
- Soybeans: their culture and use. C. G. Williams and J. B. Park. il Ohio Ag Exp B 312:581-600 '17; Excerpts. Ohio Ag Exp B v 2:253-4 Ag '17
- Soybeans with corn. J. C. Beavers. Breeder's Gaz 69:1160 Je 1 '16
- Soy beans with corn. S. W. Huff. Country Gent 82:1021 Je 16 '17
- Soy succatash for hogs. A. T. Morison. il Country Gent 82:1846 N 24 '17
- Soya bean. J Bd Ag 22:1286-7 Mr '16
- Special southern grain and forage crops: acreage 1916 and 1917. map Monthly Crop Rep 4:48 My '18
- Study of climatic conditions in Maryland (United States) as related to the growth of the soy-bean. F. T. McLean. Int R Sci & Prac Ag 8:no 6:835-6 Je '17
- Study of the toxic influence of the phosphate salts on soybean seedlings. J. W. Shive. N J Ag Exp Rep 1916:449-57 '17
- Success with soy beans. il Prog F 33:316 Mr 9 '18
- Suggestions for growing soy beans. A. E. Grantham. Prac F 112:192 My 1 '16
- Tests of soy beans, 1915. E. H. Jenkins and others. il Conn State Ag Exp B 191:1-14 '16
- Tests of soy beans, 1916. E. H. Jenkins and others. Conn State Ag Exp B 193:1-12 '17
- Toxicity of monobasic phosphates toward soybeans grown in soil- and solution-cultures. J. W. Shive. bibliog Soil Sci 5:87-122 F '18
- Use native soy beans. Weekly N L 4:8 Je 27 '17
- Uses of soy beans. Hoard's D 51:852 Je 16 '16
- Variations in nodule formation. L. T. Leonard. Am Soc Agron J 8:116-18 Mr '16
- Way to grow soybeans. W. C. Etheridge. Mo Ag Ext C 20:1-4 '17
- When the soy beans are harvested. E. E. Miller. il Country Gent 82:1141 Jl 14 '17
- Yield and nitrogen content of soybeans as affected by inoculation. J. G. Lipman and A. W. Blair. Soil Sci 1:579-84 Je '16
- Yield and nitrogen content of soybeans as influenced by lime. J. G. Lipman and A. W. Blair. bibliog Soil Sci 4:71-7 Jl '17
- See also Feeding and feeding stuffs—Soybeans

**Composition**

- Chemical tests of Manchurian soy beans. A. A. Williamson. (Commerce Reports no. 101) p 406-7 (Ap 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Influence of lime upon the growth and nitrogen content of soybeans (vines and roots): Protein content of soybeans as influenced by associative growth with a non-legume. N J Ag Exp Rep 1916:393-5, 395-7 '17

**Diseases and pests**

- Fusarium-blight, or wilt disease of the soybean. R. O. Cromwell. bibliog il J Ag Research 8:421-40 Mr 12 '17

**Protein content**

- Digestibility of protein supplied by soy-bean and peanut press-cake flours. A. D. Holmes. U S Ag B 717:1-26 '18
- Factors influencing the protein content of soybeans. J. G. Lipman and A. W. Blair. Soil Sci 1:171-8 F '16



**Soybeans —Continued**

**Seed**

- Harvesting soy-bean seed. W. J. Morse. *il Farmers' B* 886:1-8 '17  
 Imported soy bean seed. *Weekly N L* 5:4 Mr 6 '18  
 Soy bean seed. J. L. Justice. *Hoard's D* 55:654 My 3 '18  
 Tabulation of reports from shippers of cow-peas, soy beans, and lespedeza, under date of December 31, 1917. *U S Seed Rep* 1:2 F '18

**Varieties**

- Purification of soy bean varieties. D. F. Jones and H. K. Hayes. *Conn State Ag Exp Rep* 1910,pt 5:348-53 '17  
 Soya-bean variety test. *J Ag New Zealand* 13:140 Ag '16  
 Soy bean and cow pea varieties. O Judd *Farmer* 62:6 Ap 28 '17  
 Varieties of soybeans. F. A. Welton. *Ohio Ag Exp B v* 1:99-101 Ap '16  
 Variety of soy beans to grow. C: B. Wing. *Hoard's D* 51:580 Ap 28 '16  
 What variety of soy beans? *Wallaces' F* 41:265 F 18 '16

**Soybeans as food**

- Cheap foods from soy beans. G: H. Dacy. *il Country Gent* 82:863 My 12 '17  
 Cheap homemade soy-bean meal for diabetics. L. J. Roberts and E. W. Miller. *J Home Econ* 10:64-70 F '18  
 Cooking soy beans. *Weekly N L* 5:6 D 26 '17  
 How to cook soy beans. *Wis Ag Ext C* 79 4p '17; Same. *Kimball's D F* 15:502 Jl 15 '17  
 How to cook soybeans. A. R. Van Meter. *Ohio F* 139:701 My 19 '17  
 How to cook soybeans and cowpeas. W. Windsor. *Mo Ag Ext C* 45:1-4 '18  
 Navy bean has rival. *N Y Prod R* 44:565 Ag 1 '17  
 Soy bean—a little known legume. M. Campbell. *R I State Bd Health B* (Providence) 3:46-9 Jl '17  
 Soy bean cookery. N. Beaubien. *J Home Econ* 9:273-4 Je '17  
 Soy beans as a cereal. F. P. Latham. *Prog F* 31:254 F 19 '16  
 Soy beans as food. *J Ag* (Quebec) 22:48 S '18  
 Soy beans as food. *Weekly N L* 4:7 Ap 11 '17  
 Soy beans as food. *Weekly N L* 5:6 Mr 27 '18  
 Soy beans as human food. *Prac F* 113:290 Ag 15 '17  
 Soy beans as human food. A. Itano. *Mass Ag Exp B* 182:1-10 '18  
 Soybeans as human food. J. B. Park. *Ohio Ag Exp B v* 2:299-303 S '17  
 Soybeans for human food. *Ohio F* 139:377 Mr 10 '17  
 Soybeans for human food. J. B. Park. *Ohio F* 139:687 My 19 '17  
 Soy beans, used like navy kind, make valuable food. *Weekly N L* 5:3 My 22 '18

**Spain.** See subhead Spain under special subjects, e.g. Agriculture, Cooperative—Spain, Food control—Spain, Forests and forestry—Spain

**Spanish cedar.** See Cedar

**Sparassis**

- Sparassis radicata*, an undescribed fungus on the roots of conifers. J. R. Weir. *il Phyt* 7:166-77 Je '17

**Spark plugs**

- Locating spark plug and engine wiring troubles. P. T. Hines. *Prog F* 33:244 F 23 '18

**Sparrow;** story. W. P. Lawson. *il Country Gent* 83:18-19+ Ja 19 '18

**Sparrow hawks**

- Sparrow hawk biography. R. W. Shufeldt. *il Country Life* 30:39 Jl '16

**Sparrow traps**

- New sparrow trap. *Am P Advocate* 25:370 Ap '17; *Wallaces' F* 42:946 Je 22 '17; *Ohio F* 140:59 Jl 28 '17

**Sparrows**

- Field sparrow. E. S. Jones. *il Ohio F* 139:100 Ja 20 '17  
 House sparrow and the brown rat in the prairie provinces of Canada. N. Criddle. *Ag Gaz of Canada* 5:348-9 Ap '18

- Sparrows. *il Am For* 22:722 D '16  
 White-throated sparrow, songster. C. J. Stanwood. *il Country Life* 31:71 Mr '17  
*See also* English sparrows

**Spartan grasses**

- Physiological anatomy of *spartina Townsendii*. G: K. Sutherland and A. Eastwood. *biolog il Ann Bot* 30:333-51 Ap '16

**Spavin**

- Historical facts concerning the pathology of spavin. S. A. Goldberg. *biolog Am Vet M Assn J* 53:745-56 S '18  
 Veterinary problems; spavin—bone and bog. *Prog F* 33:659 Je 1 '18

**Speaking of utility;** story. A. P. Terhune. *il Country Gent* 83:16-17+ Ap 13 '18

**Spearmint**

- Cultivation of peppermint and spearmint. W. Van Fleet. *Farmers' B* 694:1-13 '17  
 Influence of time of harvest, drying and freezing of spearmint upon the yield and odorous constituents of the oil. F. Rabak. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:275-9 Ap '18  
 Mint growing in northern Indiana. C. B. Sayre. *il Ind Ag Exp C* 65:1-14 '17  
 Peppermint and spearmint as commercial crops. *Ohio F* 137:52 Ja 8 '16

**Special trains, Educational**

- Apple-packing train. F. S. Welsh. *il N Y Ag Dept B* 79,pt 1:679-83 Ja '16; Same. *N Y Ag Dept Rep* 1916,pt 2:679-83 '17  
 Better farming special. C. T. Rice. *il Hoard's D* 51:4 Ja 28 '16  
 Better farming train. A. M. Shaw. *il Ag Gaz of Canada* 3:909-13 O '16  
 Dairy campaign in Iowa. *Jersey B* 36:554 Ap 11 '17  
 Dairy instruction car. *Ag Gaz of Canada* 3:449-50 My '16  
 First agricultural demonstration trains in Russia. V. Benzine. *Int R Sci & Prac Ag* 8,no 1:14-16 Ja '17  
 Hessian fly train. G: D. Dean. *il J Econ Entom* 9:139-41 F '16  
 Home economics demonstration car, 1917-1918. *il Ill Ag Ext C* 15:1-6 '17  
 Homemaking on wheels. *Country Gent* 81:366 F 12 '16  
 Illinois domestic science car. *Wallaces' F* 41:20 Ja 7 '16  
 Iowa's special dairy train. *il Kimball's D F* 14:149 Mr 1 '16  
 Poultry demonstration trains are popular. *il Reliable P J* 24:504-5+ Ag '17  
 Sixteenth Iowa dairy special. E. S. Estel. *il Kimball's D F* 14:428 Jl 1 '16  
 Special dairy car. K. G. Mackay. *Hoard's D* 51:666 My 12 '16  
 Special dairy train. *Wallaces' F* 41:414 Mr 10 '16

**Species**

- Age and area hypothesis and the problem of endemism. E. W. Sinnott. *Ann Bot* 31:209-16 Ap '17  
 Age and area hypothesis of Willis. E. W. Sinnott. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:457-9 N 9 '17  
 Distribution of species in New Zealand. J. C. Willis. *Ann Bot* 30:437-57 Jl '16  
 Evolution of species in Ceylon, with reference to the dying out of species. J. C. Willis. *Ann Bot* 30:1-23 Ja '16  
 Experimental study of genetic relationships. H. H. Bartlett. *Am J Bot* 2:132-55 Mr '15  
 Further evidence for age and area; its applicability to the ferns, etc. J. C. Willis. *biolog Ann Bot* 31:335-49 Jl '17  
 Is species-specificity a Mendelian character? J. Loeb. *Science* (Science Press, Garrison, N.Y. 15c) n s 45:191-3 F 23 '17  
 Note on the age and area hypothesis. E. W. Berry. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:539-40 N 30 '17  
 On endemism and the mutation theory. H. N. Ridley. *Ann Bot* 30:551-74 O '16  
 On pairs of species. R. R. Gates. *il Bot Gaz* 61:177-212 Mr '16

**Species—Continued**

- \* Relative age of endemic species. H. de Vries. Science (Science Press, Garrison, N.Y. 15c) n s 47:629-30 Je 28 '18

Relative age of endemic species and other controversial points. J. C. Willis. bibliog Ann Bot 31:189-208 Ap '17

Sources and distribution of the New Zealand flora, with a reply to criticism. J. C. Willis. bibliog Ann Bot 32:339-67 Jl '18

See also Breeding; Evolution; Hybridization; Natural selection; Plant breeding; Variation (biology)

**Specimens, Preservation of.** See Plants—Collection and preservation

**Speculation**

Business problems of the month. Coop Manager & F 7:46 S '17

Future trading in wheat. L. D. H. Weld. il Country Gent 82:1701 N 3 '17

In a pig's eye. C. E. Gapen. il Country Gent 83:17 Ja 5 '18

Iowa tries to shut out private wires. Am Coop J 12:581 Ap '17

Protecting grain hedge; speculation insures against price flurries. J. H. Collins. Country Gent 81:1835 O 14 '16

Trading in grain futures. L. D. H. Weld. (In Pan American scientific congress Pro., 1915, v. 3, p. 430-9) '17

See also Investments; Securities; Stocks

**Spelling**

Natural way to start reading and spelling. E. F. Lynch. Country Gent 81:769 Ap 1 '16

**Spelt**

Hybridisation tests between spelt and wheat in Holland. H. M. Gmelin. Int R Sci & Prac Ag 8,no 9:1236-9 S '17

See also Emmer

**Spermatogenesis in animals**

Mules that breed. O. Lloyd-Jones. bibliog il J Heredity 7:494-502 N '16

**Spermatogenesis in plants**

Pollen tube and spermatogenesis in iris. M. L. Sawyer. il Bot Gaz 64:159-64 Ag '17

Spermatogenesis of polytrichum juniperinum. C. E. Allen. bibliog il Ann Bot 31:268-91 Ap '17

**Spermatozoa**

On the life duration of the horse spermatozoon outside of the body. S. Satō. (Acta Scholae Med. Univ. Imp. Kioto, 1, no. 3 361-74p '16). Exp Sta Record 38:170 F '18

**Sphaeralcea.** See Globe mallow

**Sphaeronema**

Conidial formation in sphaeronema fimbriatum. S. G. Lehman. il Mycol 10:155-63 My '18

**Sphaeropsis malorum.** See Apple canker

**Sphagnum moss**

\* Are you collecting sphagnum; a sort of moss of great value for surgical dressings. G. E. Nichols. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:308-10 N 16 '18

Growth of trees in sphagnum. G. B. Rigg. Bot Gaz 65:359-62 Ap '18

Lysichiton camtschaticense (L.) Schott. and its behavior in sphagnum bogs. G. Tureson. bibliog il Am J Bot 3:189-209 Ap '16

Sphagna, their habitats, adaptations, and associates. W. Watson. Ann Bot 32:535-51 O '18

**Sphenophorus callosus.** See Corn bill bugs

**Sphinx, Catalpa.** See Catalpa sphinx

**Spice bush****Diseases and pests**

Gloeosporium disease of the spice bush. J. J. Taubenhaus. Am J Bot 1:340-2 Jl '14

**Spices**

Report on spices. H. E. Sindall. Assn Offic Ag Chem J 2:197-201 F '17

**Analysis**

Preliminary report on determination of ash, especially in spices. C. S. Brinton. Assn Offic Ag Chem J 2:201-3 F '17

Spices and other condiments. Assn Offic Ag Chem J 2,no 3,pt 2:317-26 N '16

**Spider webs**

Weaving of a spider's web. F. Cuttriss. il Country Life 31:33-5 N '16

When spiders fly. A. L. B. King. Country Life 33:84 N '17

**Spiders**

Spiders. Wallaces' F 41:77 Ja 21 '16

Spiders. A. B. Comstock. il Cornell Rural School Leaflet v 11,no 1:131-7 '17

Transcanadian spiders. J. H. Emerton. (In Report, Entom. Soc. of Ontario, 1917, p. 76-8) map '18 Ontario ag. dept., Toronto

**Spike-horned leaf-miners**

Spike-horned leaf-miner [cerodonta dorsalis Loew] an enemy of grains and grasses. P. Luginbill and T. D. Urbahns. map U S Ag B 432:1-20 '16

**Spinach**

Experiences with spinach; symposium. Market Growers J 23:78+ Ag 15 '18

Extra early spinach. Fruit-Grower 27:459 O 15 '16

Growing spinach for northern markets. C. L. Bartles. Market Growers J 18:120 F 15 '16

Spinach as market-garden crop. Mass Ag Bd B 5:152-3 '18 (3d ed. rev.)

Spinach crop. J. T. Rosa, jr. il Country Gent 82:403 Mr 3 '17

Spinach; experiences in growing. Market Growers J 19:48-9 Jl 15 '16

Spinach for fall and winter use. R. W. De Baun. Rural N Y 75:1026, 1047 Jl 29-Ag 5 '16

Spinach in a number of ways. M. H. Neil. il Country Gent 82:1132 Jl 7 '17

Spinach production in California. Market Growers J 22:400 Je 1 '18

See also New Zealand spinach

**Diseases and pests**

True nature of spinach-blight and relation of insects to its transmission. J. A. McClintock and L. E. Smith. il J Ag Research 14:1-60 Jl 1 '18

**Seed**

Spinach seed in Europe. Am Flor 49:1240 D 22 '17

**Spinach carrion beetles**

Spinach carrion beetle. R. A. Cooley. il J Econ Entom 10:94-102 F '17

**Spindle trees.** See Evonymus

**Spindling-sprout disease.** See Potatoes—Diseases and pests

**Spinose ear tick**

Contribution to the life-history and habits of the spinose ear tick, ornithodoros megnini. W. B. Herms. J Econ Entom 10:407-11 Ag '17

Spinose ear tick and methods of treating infested animals. M. Imes. il Farmers' B 980: 1-8 '18

**Spiny elm caterpillars**

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16,no 26:34-6 '16

**Spireas**

Beautiful spirea. il Gard Chron Am 22:255 O '18

Cleaning a pasture of hardhack. Rural N Y 76:915 Jl 28 '17

New race of hardy astilbes. A. E. Thatcher. il Gard M 25:237-8 My '17

On the distribution of abnormalities in the inflorescence of spiraea. Vanhouttei. J. A. Harris. il Am J Bot 4:624-36 D '17

Spiraeas. Am Flor 50:3 Ja 19 '18

Spiraeas for greenhouse decoration. il Gard Chron Am 20:313 Jl '16

**Spiral gearing.** See Gearing

**Spirituous liquors.** See Liquors

**Spirochaeta**

Further studies on hog cholera with reference to spirochaeta hyos. W. E. King and R. H. Drake. bibliog il Am Vet M Assn J 50:168-88 N '16

**Spirogyra**

Abnormal conjugation in spirogyra. J. G. Brown. il Bot Gaz 66:269-71 S '18



**Spirogyra—Continued**

- Cross-conjugation in *spirogyra* Weberi. B. Cunningham. il Bot Gaz 66:272-3 S '18  
Nuclear division of *spirogyra*. M. L. Merri-  
man. bibliog il Bot Gaz 61:311-24 Ap '16  
Peculiar effects of barium, strontium, and  
cerium on *spirogyra*. S. S. Chien. Bot Gaz  
63:406-9 My '17  
Sexuality of filament of *spirogyra*. B. Cun-  
ningham. bibliog il Bot Gaz 63:486-500  
Je '17  
Specific action of barium. W. J. V. Osterhout.  
Am J Bot 3:481-2 N '16

**Splachnidium**

- Contribution to our knowledge of *splach-*  
*nidium*. M. L. Roe. bibliog il Bot Gaz 62:  
400-8 N '16

**Splicing.** See Knots and splices

**Spode, Josiah, 1754-1827**

- Porcelains of Josiah Spode. W. A. Dyer. il  
Country Life 33:74 D '17

**Spokane interstate fair**

- Spokane interstate fair. Breeder's Gaz 72:452  
S 20 '17

**Spondyliocladium atrovirens.** See Potato silver-  
scurf

**Spongospora.** See Potato powdery scab

**Spontaneous combustion**

- Apparatus to prevent spontaneous combustion  
of hay racks. E. Ford. il Int R Sci & Prac  
Ag 8,no 9:1279-80 S '17  
Spontaneous combustion. Hoard's D 55:432 Mr  
29 '18  
Spontaneous combustion as a cause of fires.  
A. R. Lamb. Ia Ag Exp C 36 4p '17  
Spontaneous combustion in clover and alfalfa.  
Rural N Y 76:1105 S 22 '17  
Spontaneous heating of a heap of oats. Int R  
Sci & Prac Ag 7,no 2:294 F '16

**Sporangia**

- Ginkgo and the microsporangial mechanisms  
of the seed plants. E. C. Jeffrey and R. E.  
Torrey. il Bot Gaz 62:281-92 O '16

**Sporelings.** See Sporophytes

**Sporophytes**

- Prothallia and sporelings of three New Zealand  
species of *lycopodium*. C. J. Chamberlain.  
bibliog il Bot Gaz 63:51-65 Ja '17

**Sporotrichum**

- Sporotrichum globuliferum* Speg., a natural  
enemy of the alfalfa weevil. L. P. Rock-  
wood. J Econ Entom 9:493-9 O '16

**Sports**

- Heard in the locker room. H. Reed. il Coun-  
try Life 30:48-9 My '16  
Sports for Maryland country boys and girls.  
W. Adler. il Country Gent 81:1584 Ag 26 '16  
Washington's country life. H. Brooks. il  
Country Life 34:40-6 S '18

*See also* Amusements; Games; Horse rac-  
ing

**Spotted fever ticks**

- Experiments in the use of sheep in the erad-  
ication of the Rocky Mountain spotted fever  
tick. H. P. Wood. U S Ag B 45:1-11 '13  
Some results of two years' investigations of  
the Rocky Mountain spotted fever tick in  
eastern Montana. R. R. Parker. J Econ  
Entom 11:189-94 Ap '18

**Spray mixtures.** See Spraying materials

**Spraying, Cooperative**

- Cooperative spraying of potatoes. W. B.  
Cookingham. il Country Gent 83:34 Ap 20  
'18

**Spraying and dusting**

- Arsenical residues after spraying. W. C.  
O'Kane and others. bibliog il N H Ag Exp B  
183:1-62 '17  
Dust spray vs. wet spray. O Judd Farmer 63:  
7 D 1 '17  
Dust sprays in the home garden. E. I. Far-  
rington. il Country Life 31:106 F '17  
Dusting and spraying nursery stock. V. B.  
Stewart. il Cornell Ag Exp B 385:337-61 '17;  
Same. Cornell Ag Exp Rep 1917:337-61 '18

- Dusting nursery stock for the control of leaf  
diseases. V. B. Stewart. il Cornell Ag Exp  
C 32:1-10 '16; Same. Cornell Ag Exp Rep  
1916:1a-10a '17

- Further report on the value of dusting versus  
spraying to control fruit tree insects and  
fungus diseases. L. Caesar. (In Report,  
Entom. Soc. of Ontario, 1917, p. 79-85) '18  
Ontario ag. dept., Toronto

- Garden and small-fruit insects; with notes on  
spraying in general. A. G. Ruggles and S. A.  
Graham. il Minn Ag Ext Spec B 29:1-32 '18  
Getting ready to spray. I. G. Shellabarger.  
Ohio F 139:151 F 3 '17

- How the Ridge sprayed its trees. D. C. Weld,  
jr. il Gard M 22:191-2 Ja '16

- Insect enemies of shade trees and shrubs;  
sprays and spraying apparatus. M. W.  
Blackman and W. O. Ellis. N Y State Coll  
For B v 16,no 26:113-23 '16

- Is spraying dangerous? H. A. Gossard. Ohio F  
139:554 Ap 14 '17

- Let us spray; production may be increased  
enormously by controlling insects and dis-  
ease. Nat Stock & F 42:176 My 11 '18

- Miscellaneous notes on economic work; or-  
chard and shade tree insects, spraying,  
truck and field crops. A. G. Ruggles. (In  
Report State entomologist, 1915-1916, p. 59-  
64) '16 Minn. ag. exp. station, St Paul  
New kinks in spraying. P. J. Parrott. il O  
Judd Farmer 62:3 F 10 '17

- Power sprayers combat gypsy and brown-tail  
moths. W. A. Colton. il Am City (Tribune  
bldg., N.Y. 35c) 17:428-9 N '17

- Problems connected with the treatment of  
fungous diseases by spraying. E. S. Salmon  
and J. V. Eyre. Gard Chron (Lond) 60:229  
N 11 '16

- Progress in insect control; with discussion.  
H. F. Wilson. Wis Hort Soc Rep 48:192-200  
'18

- Solid-stream spraying against the gypsy moth  
and the brown-tail moth in New England.  
L. H. Worthley. il U S Ag B 480:1-15 '17

- Some aspects of spraying against pests. A. H.  
Lees. Royal Hort Soc J 42,pts 2-3:213-23  
S '17

- Spraying. C. A. McCue. Prac F 112:56 F 1 '16

- Spraying and spray mixtures. H. J. Darwent.  
J Dept Ag S Australia 21:830-2 My '18

- Spraying for insects. Prac F 112:84 F 15 '16

- Spraying manual. Ark Ag Ext 16p '16

- Spraying program for 1917. A. Frank. West-  
ern Wash Ag Exp B v 4:13-19 Mr '17

- Spraying treatments for insects. Prog F 32:  
207 F 17 '17

- Spraying work of this season. J. J. Levison.  
il Am For 23:236-7 Ap '17

- Sprays and spraying. F. B. Paddock. il Tex  
Ag Exp B 187:1-36 '16

- Work for May with orchard and truck crops.  
L. A. Niven. Prog F 33:560 My 4 '18

*See also* Fruit—Diseases and pests; Fruit  
culture; Nozzles; Spraying materials; Vege-  
tables—Diseases and pests

**Apparatus and equipment**

- All kinds of spray pumps. W. C. O'Kane. il  
Country Gent 83:6 Ja 19 '18

- Buying the sprayer. D. W. LeGore. il Fruit-  
Grower 27:198 Mr 15 '16

- Discussion of the spray-gun. Rural N Y 77:  
994 Ag 24 '18

- Economy in equipment. J. G. Boyle. il Fruit-  
Grower 27:41-2 Ja 15 '16

- Effective spraying machinery. J. R. Wooden.  
Rural N Y 75:385 Mr 4 '16

- Engine equipped field sprayer. il Farm Eng  
5:9 S '17

- Farm spraying outfit. W. W. Magill. il Purdue  
Ag 11:14-15 Ap '17

- Homemade automobile power sprayer. N. E.  
Booth. Rural N Y 76:452 Mr 24 '17

- Homemade sprayer. Rural N Y 77:954 Ag  
10 '18

- Information for fruit growers about insec-  
ticides, spraying apparatus, and important  
insect pests. A. L. Quaintance and E. H.  
Siegler. il Farmers' B 908:1-99 '18

# Spraying and dusting—Apparatus and equipment—Continued

Insect enemies of shade trees and shrubs; sprays and spraying apparatus. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v 16*, no 26:118-22 '16

Kind of spray nozzle to use. *Better Fruit* 10:38 Ap '16

Kinks in the spray hose. L. Sulfur. *Fruit-Grower* 28:36 Ja 1 '17

New spray gun. R. Cruickshank. *il Ohio F* 141:226 F 16 '18

New uses for an irrigation system. R. W. De Baun. *Rural N Y* 76:787 Je 16 '17

Orchard spraying through pipe lines. G. E. Starcher. *Rural N Y* 75:512 Mr 25 '16

Selecting a spraying machine. *Prac F* 114:157 Ap 15 '18

Selection of a spraying outfit. *il Green's Fruit Grower* 36:1+ F '16

Spray mixer. W. Ford. *il Country Gent* 81:794 Ap 8 '16

Spray-mixing equipment. *il Country Gent* 83:46 F 2 '18

Spraying. A. G. Ruggles. (C. 48) 15p *il '18 Minnesota State entomologist, University Farm, St Paul*

Spraying apparatus and how to use it. R. W. Harned. *Prog F* 32:131 F 3 '17

Spraying apparatus and materials. F. C. Sears. *Mass Ag Ext C* 34:1-2 '17

Spraying engine troubles. *Fruit-Grower* 28:48 Ja 15 '17

Spraying machinery. V. R. Gardner. *Ore Ag Ext Coll B* 228 (ser 2, no 48):25-32 n.d.

Spraying machinery. L. L. Newland. *Purdue Ag* 11:43-4 Ja '17

Spraying number. *il Minn Insect Life (State Entomologist, St Paul)* 4:1-8 Ap '17

That Ozark orchard. C. N. Crottsburg. *Fruit-Grower* 28:281 Je 1 '17

What are you going to do about it? *Green's Am Fruit Grower* 38:6 Ap '18

When a barrel pump pays. J. G. Boyle. *il Fruit-Grower* 27:42 Ja 15 '16

Why we bought a power spray rig. J. L. Shawver. *Power F* 26:16 Ag '17

See also Fruit culture—Apparatus and equipment

## Calendars and programs

Black leaf 40 spraying information. (B 12-M) 4p '16 Kentucky tobacco product.co., Louisville, Ky.

Condensed spray calendar. *Green's Fruit Grower* 37:16 F '17

Condensed spray calendar; tabulation. *Green's Fruit Grower* 36:36 F '16; Same. *Green's Fruit Grower* 37:16 F '17

Control of insects and diseases of fruits and vegetables. E. N. Cory. *Md Ag Ext B* 11 n.p. '18

Gardener's spray calendar. *Country Gent* 82:902 My 19 '17

Handy spray calendar. *Country Life* 29:88 Mr '16

Handy spray calendar and general information on spraying orchards and gardens. A. A. Gold and C. E. Wheeler. *W Va Ag Dept B* 35:1-16 '17

How to control garden pests. G. C. Starcher and others. *Ala Ag Ext C* 18:36-42 '18

Idaho spray calendar. C. C. Vincent and M. A. Willis. *Idaho Ag Exp C* 6:1-8 '18

Insects and plant diseases attacking garden crops. J. H. Merrill and L. E. Melchers. *Kan Ag Exp C* 65:1-12 '18

Making a spraying program. C. H. Baldwin. *Fruit-Grower* 27:6+ Ja 1 '16

More important fruit tree diseases of Ontario. J. E. Howitt and L. Caesar. *il Ontario Ag Dept B* 257:40-1 '17

Orchard spray calendar. S. P. Hollister. *Conn Ag Coll Ext C* 14 4p '17

Orchard spraying. A. Frank. *Western Wash Ag Exp B v* 5:171-2 F '18

Pruning and spraying: what to do each month. *Prog F* 33:187 F 16 '18

Some horticultural insects and diseases and their control. *Purdue Ag* 11:30-3 Ap '17

Spray calendar. *il Conn State Ag Exp B* 199:51-98 '18

Spray calendar for apples. E. H. Forbush. *Mass Ag Bd B* 2 (5th ed):166-8 '16

Spray calendar for apples and quinces. *il N J Ag Exp C* 93:1-4 '18 (rev. C. 75)

Spray calendar for Georgia. T. H. McHatton and J. W. Floror. *Ga Ag Coll (Ext) C* 62:1-8 '17

Spray calendar for 1916. H. E. Hodgkiss. *N Y State Fruit Growers' Assn Pro* 1916:312-16

Spray calendar for orchard fruits. *Prog F* 32:1284 D 8 '17

Spray calendar for orchard fruits. L. G. Heron. *Prog F* 33:193 F 16 '18

Spray calendar for pears. *N J Ag Exp C* 76 2p '17

Spray calendar for plum. *N J Ag Exp C* 78 2p '17

Spray calendar for sweet cherry. *N J Ag Exp C* 77 2p '17

Spray calendar for the peach. *il N J Ag Exp C* 94:1-4 '18 (rev. C. 79)

Spray calendar for the truck patch. *Market Growers J* 18:395 Je 15 '16

Spray calendar with seed, soil and disinfection treatment methods. W. J. Green and others. *Ohio Ag Exp B* 309:485-516 '17

Spray program for fruit. C. A. McCue. *Prac F* 112:166 Ap 15 '16

Spray program for the control of insect pests and plant diseases of the apple. L. Childs. *Better Fruit* 11:10 Mr '17

Spray program for the northwest apple orchards. L. Childs. *il Better Fruit* 12:6-7 Ap '18

Spray schedule for fruits and vegetables. A. S. Colby. *Green's Am Fruit Grower* 38:9-10 F '18

Spraying schedule for 1918. *Nat Stock & F* 41:1288 Mr 9 '18

Truck spray calendar. *Country Gent* 81:974 My 6 '16

## Costs

Cost of spraying. F. I. Odell. *il Fruit-Grower* 28:3 Ja 1 '17

Cost of spraying in the control of the pear thrips in British Columbia. A. E. Cameron and others. *Ag Gaz of Canada* 4:13-16 Ja '17

Dollars and cents in spraying. E. H. Favor. *il Fruit-Grower* 28:4 Ja 1 '17

Reducing the cost of commercial spraying. R. S. Woglum. *J Econ Entom* 9:392-5 Ag '16

What spraying costs. *il Fruit-Grower* 28:81 F 1 '17

## Fruit

A B C of spraying. A. Fearing. *il Gard M* 24:170-2 D '16

Apple dusting in Nova Scotia. P. A. Murphy. *il Ag Gaz of Canada* 4:254-9 Ap '17

Apple spraying experiments in 1916 and 1917. W. J. Morse. *Maine Ag Exp B* 271:101-28 '18

Apples follow the spray. J. J. Newlin. *il Am Fruit Grower* 38:22 D '18

Best time for lime-spraying fruit trees. *il J Bd Ag* 23:1091-5 F '17

Combination spraying for insect pests and fungus. P. R. Jones. *Better Fruit* 10:7-9 Mr '16

Combined spraying; a chemical guide chart for fruitgrowers. J. A. Campbell. *J Ag New Zealand* 12:193-5 Mr '16

Coming fruit drive. M. G. Kains. *il Gard M* 27:189 My '18

Common orchard pests and their control. G. C. Starcher and others. *Ala Ag Ext C* 7:1-16 '17

Compulsory spraying for fruit insects and diseases. K. A. Kirkpatrick. *Minn Hort* 45:77-80 F '17

Control of American gooseberry mildew by spraying. F. R. Petherbridge and A. C. Cole. *J Bd Ag* 23:750-5 N '16

Control of peach scab by dusting; an experiment in New Jersey. A. J. Farley. *Rural N Y* 77:640 My 4 '18

Control of pests of fruit trees in gardens and small orchards. *il J Bd Ag* 25:41-53 Ap '18

Control of the apple capsid bug by spraying. F. R. Petherbridge. *il J Bd Ag* 24:1401-10 Mr '18

Controlling plant diseases and insect pests by dusting. C. B. Savage and M. D. Leonard. *il Field* 11:27:194-5 Mr '17



## Spraying and dusting—Fruit—Continued

- Cost of dusting and spraying a New York apple orchard. C. R. Crosby. *J Econ Entom* 9:375-6 Je '16
- Cost of spraying, by H. M. Dunlap; Codling moth control, results of dusting spraying experiments 1917, by W. P. Flint; Orchard spraying, by W. S. Perrine; Spraying apples, by B. S. Pickett. *Ill State Hort Soc Trans* 1917:146-51, 169-80, 265-74, 328-38 '18
- Destructive spraying; how it both kills the bees and sterilizes the pollen. L. P. Tanton. *Gleanings* 45:335 My '17
- Directions for spraying fruit trees in Illinois. *il Ill Ag Exp C* 212:1-12 '13
- Do sprays cause any injury? A. Fearing. *il Gard M* 25:325 Jl '17
- Dormant spray. G. W. Hood. *Fruit-Grower* 27:59 Ja 15 '16
- Dormant spraying. O. G. Anderson. *il Purdue Ag* 10:38-41 F '16
- Dormant spraying. L. M. Frederick. *Farm Eng* 5:12 F '17
- Dormant spraying. C. A. McCue. *Prac F* 112:8, 30 Ja 1-15 '16
- Dormant spraying for apple orchards. F. C. McConnell. *Purdue Ag* 13:113-14 D '18
- Dust spraying. F. A. Frazier. *Better Fruit* 11:10 Ja '17; Excerpts. (*In* 8th annual report, 1916, p. 30-3) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.
- Dusting, a substitute for spraying in the apple orchard. D. Reddick. *il Maine Ag Dept B v* 17:52-9 S '18
- Dusting and spraying experiments with apples. W. C. Dutton. *Mich Ag Exp Spec B* 87:1-24 '18
- Dusting and spraying experiments with apples. D. Reddick and C. R. Crosby. *il Cornell Ag Exp B* 369:309-56 '16; Same. *Cornell Ag Exp Rep* 1916:309-56 '17; Same cond. *Country Gent* 81:695 Mr 25 '16; Abstract. *Fruit-Grower* 27:197 Mr 15 '16
- Dusting apples. E. W. Mitchell. *Rural N Y* 75:427 Mr 11 '16
- Dusting as a substitute for spraying: history and progress. H. H. Whetzel. (*In* Report, Fruitgrowers' assn., 1916, p. 37-47) '17 Ontario ag. dept., Toronto
- Dusting experiments in 1917. V. B. Stewart. *Phyt* 8:63-4 F '18
- Dusting for cedar rust. F. D. Fromme and H. E. Thomas. *il Va Ag Exp Rep* 1915-1916: 179-83 '17
- Dusting for peach scab. H. E. Thomas. *il Va Ag Exp Rep* 1915-1916:184-6 '17
- Dusting for tender fruits and apples. L. Caesar. (*In* Report, Fruitgrowers' assn., 1916, p. 47-51) '17 Ontario ag. dept., Toronto
- Dusting fruit trees and grapes for the control of diseases and biting insects. L. Caesar. (*In* Report, Entomological soc. of Ontario, 1916, p. 31-43) *il '17 Ontario ag. dept., Toronto*
- Dusting instead of spraying. L. R. Taft. *il Country Gent* 83:20 Mr 23 '18
- Dusting the apple orchard. D. Reddick and C. R. Crosby. *N Y State Fruit Growers' Assn Pro* 1916:61-7
- Dusting to control fruit diseases. V. B. Stewart. *il Fruit-Grower* 28:6 Ja 1 '17
- Dusting versus liquid spraying. W. S. Blair. *Ag Gaz of Canada* 5:226-7 Mr '18
- Dusting vs. liquid spraying in Quebec. C. E. Petch. *il Ag Gaz of Canada* 5:231-3 Mr '18
- Dusting vs. liquid spraying in the provinces. *il Ag Gaz of Canada* 5:254-61 Mr '18
- Early sprayer catches the worm. *Prog F* 31: 523 Ap 8 '16
- Economical sprays and spraying for 1918. L. Caesar. (*In* Report, Ontario fruit growers' assn., 1917, p. 20-5) '18 Ontario ag. dept., Toronto
- Efficiency of spraying. F. Garcia. *Fruit-Grower* 28:237 Ap 15 '17; Same. *Ag Digest* 1:470 My '17
- Experiments in spraying apple orchards to control aphids and false red-bug. W. E. Britton and M. P. Zappe. *Conn State Ag Exp B* 203:259-62 '18
- Experiments on the control of eudemis and cochylis (polychrosis botrana and cochylis ambiguella) in Piedmont, Italy. M. Topi. *Int R Sci & Prac Ag* 8,no 9:1328-9 S '17
- Failure of pest control in spraying. *Wis Hort Soc Rep* 1917:42-5
- Field experiments in spraying apple orchards. *il Ill Ag Exp B* 185:1-12 '16
- Field experiments in spraying apple orchards in 1913 and 1914. B. S. Pickett and others. *il Ill Ag Exp B* 206:427-509 '18
- Field experiments in spraying apple orchards in 1916. A. J. Gunderson and W. S. Brock. *Ill Ag Exp C* 194:1-15 '17
- Fighting fruit pests. J. Crowder. *il Fruit-Grower* 28:11 Ja 1 '17
- Fruit tree spraying. *Gard Chron (Lond)* 63: 115 Mr 16 '18
- Helpful hints on dusting peaches. W. W. Chase. *Ga Entom Bd C* 24:1-7 '18
- High cost of spraying. B. W. Douglass. *il Rural N Y* 77:324, 376 Mr 2-9 '18
- Honeybees and spraying. T. J. Talbert. *Am Bee J* 57:128 Ap '17
- How I spray. H. Koeller. *Fruit-Grower* 28:9 Ja 1 '17
- How we spray. W. Walton. *Fruit-Grower* 27: 45 Ja 15 '16
- Improving the apple crop by summer spraying. W. A. Radsspinner. *Purdue Ag* 12:544-5 Je '18
- Increase grape yield by spraying. *Fruit-Grower* 28:289 Je 1 '17; Same. *Better Fruit* 12:17 Jl '17
- Kill the worms and save the apples. H. F. Wilson. *il Wis Ag Ext C* 78:1-8 '17
- Little kinks in spraying. F. I. Odell. *il Fruit-Grower* 27:43 Ja 15 '16
- Massachusetts spraying campaign. *Ag Digest* 2:493 Je '17
- Mechanical side of spraying. A. C. Weed. *Rural N Y* 75:362-4 Mr 4 '16
- Methods of spraying. G. A. Yeaton. *Maine Ag Dept B v* 18:6-13 Je '18
- More facts on dusting apple trees. E. W. Mitchell. *Rural N Y* 75:742 My 13 '16
- Mississippi orchard spray catechism; what to do, when to do, how to do. L. G. Herron. *Miss Ag Ext C* 19:1-7 '17
- 1916 tests of sulfur-arsenical dusts against the strawberry weevil. T. J. Headlee. *N J Ag Exp C* 65:1-7 '17; *J Econ Entom* 10:287-90 Ap '17
- Notes on spraying. *il J Ag (Quebec)* 21:147 Ap '18
- Notes on spring spraying. E. P. Felt. *Rural N Y* 77:516 Ap 6 '18
- Novel spraying. *Country Gent* 82:1294 Ag 18 '17
- Observations on spray injury of fruit and foliage of the apple. L. Childs. (*In* 8th annual report, 1916, p. 20-9) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.
- Observations on the relation of the height of fruit to apple scab infection. L. Childs. *il Ore Ag Exp B* 141:5-17 '17; Same. *Better Fruit* 11:5-8 Ap '17
- Orchard rejuvenation in southeastern Ohio. F. H. Ballou. *il Ohio Ag Exp B* 301:1-40 '16
- Orchard spraying. W. H. Alderman. *W Va Ag Ext C* 172 4p '18
- Orchard spraying. F. Sherman. *il N C Ag Ext C* 66:1-27 '18
- Orchard-spraying experiments in the Stoke district. *J Ag New Zealand* 15:30-6 Jl '17
- Orchard spraying in 1916; with discussion. H. Simmons. *il Minn Hort* 45:109-17 Mr '17
- Orchard spraying in Oregon 1916: Spraying machinery. H. P. Barss and others. *Ore Ag Ext Coll B* 228 (ser 2, no 48):1-32 n.d.
- Orchard sprays and spraying. G. Esam. *J Ag New Zealand* 17:103-9 Ag '18
- Pioneer in orchard spraying. B. H. Bruner. *O Judd Farmer* 62:17 Ja 6 '17
- Piping system for orchard spraying. G. P. Weldon. *il Cal State Comm Hort B v* 5: 273-7 Ag '16
- Plant lice and their control. I. C. Mead. *Purdue Ag* 12:567-8 Je '18
- Practical spraying for practical orchardists. E. F. White. *il Miss Ag Ext B* 4:1-12 '16
- Prospects for wormy apples. *Better Fruit* 11: 21 Ag '16
- Protecting the home apple crop by dusting. D. Reddick and C. R. Crosby. *il Cornell Ag Exp Rep* 1916, v 2:1321-32 '17

Spraying and dusting—Fruit—*Continued*

- Protecting the orchard by dusting. D. Reddick. *il Green's Am Fruit Grower* 38:3-4 Ap '18
- Pruning and spraying fruit trees. *Prac F* 114: 137 Ap 1 '18
- Pruning and spraying the home orchard. C. J. Hayden. *Prog F* 32:92 Ja 27 '17
- Report of investigation of alleged spray-injury to apricot buds. G. P. Gray. *Cal State Comm Hort B v* 7:454 Jl '18
- Results from spraying apples. *Fruit-Grower* 27:127 F 15 '16
- Results from spraying in Nova Scotia. G. E. Sanders and W. H. Brittain. 11p '16 *Canada Ag*
- Results of orchard spraying demonstrations in Iowa. R. S. Herrick. *il Minn Hort* 46:114-17 Mr '18
- Results of spraying experiments at Flora in 1917. A. J. Gunderson. *Ill State Hort Soc Trans* 1917:406-13 '18
- Shall we continue to spray our apple orchards?; with discussion. (*In Report, Quebec Pomological and fruit growing soc., 1916, p. 53-73*) '16
- Simple facts about spraying. *Fruit-Grower* 28: 13 Ja 1 '17; Same cond. *Gard Chron Am* 21: 21 Ja '17
- Six years of experimental apple spraying at Highmoor farm. W. J. Morse. *Maine Ag Exp B* 249:81-96 '16
- Some practical suggestions for spraying. V. H. Davis. *il Ohio F* 139:309+ Mr 3 '17
- Some reasons for spraying to control insect and mite enemies of citrus trees in Florida. W. W. Yothers. *U S Ag B* 645:1-19 '18
- Some results of the spraying service in pear orchards of Niagara county in 1917. L. F. Strickland. *N Y State Fruit Growers' Assn Pro* 1918:21-31
- Some spraying experiments. *Fruit-Grower* 27: 204 Mr 15 '16
- Spray and practice outline for fruit growers. C. P. Halligan and R. H. Pettit. *il Mich Ag Exp Spec B* 86:1-24 '18
- Spray to save the fruit crop from insects and diseases. A. L. Quaintance. *Weekly N L* 4: 4-6 My 2 '17; Same. *Better Fruit* 11:18+ Je '17
- Spray your orchard suggestions. L. G. Herron. *il Prog F* 32:1305 D 15 '17
- Spraying. *il Wallaces' F* 42:456 Mr 9 '17
- Spraying a peach orchard. R. M. Hitt. *Fruit-Grower* 27:50 Ja 15 '16
- Spraying a young Michigan orchard. W. W. Clark. *Rural N Y* 75:376 Mr 4 '16
- Spraying apple trees paid well. *Green's Fruit Grower* 36:15 My '16
- Spraying apples and pears. H. P. Barss and A. L. Lovett. *il Ore Ag Ext B* 193:1-8 '17
- Spraying controls peach-leaf curl. *Better Fruit* 10:10 Ap '16
- Spraying costs and profits. *Fruit-Grower* 27: 365 Jl 15 '16
- Spraying demonstration at Havelock. E. M. Ricker. *il J Ag (Quebec)* 21:5 Jl '17
- Spraying experiments and apple diseases in 1915. W. J. Morse. *il Maine Ag Exp B* 252: 169-92 '16
- Spraying experiments in Canada. *il Ag Gaz of Canada* 4:193-214 Mr '17
- Spraying experiments in Nebraska. J. R. Cooper. *il map Neb Ag Exp Research B* 10: 1-98 '17; Summary (Why, when, and how to spray). (*Pop ed*) B 158:1-20 '17
- Spraying farm orchards by the club plan. R. D. Jay. *il Green's Fruit Grower* 37:1+ F '17
- Spraying for insects affecting apple orchards in Nova Scotia. G. E. Sanders and W. H. Brittain. 11p '16 *Canada Ag*
- Spraying for ripe-rot of the plantain fruit. Jehangir Fardunji Dastur. *il Ag J of India* 11:142-9 Ap '16
- Spraying for the control of insects and mites attacking citrus trees in Florida. W. W. Yothers. *il Farmers' B* 933:1-38 '18
- Spraying for the large and small grower. H. A. Gossard. *il Ohio F* 137:329 Mr 4 '16
- Spraying formulas for orchard insects. A. L. Melander. *il Wash Ag Ext Ser* 1, no 39:1-16 '18
- Spraying fruit. *Prac F* 113:353 O 15 '17
- Spraying fruit trees in Pennsylvania. J. P. Stewart. *Penn State F* 9:369 Ap '16
- Spraying guaranteed my crop. C. C. Conger, Jr. *Prac F* 114:45 F 1 '18
- Spraying in Chautauqua belt. A. M. Loomis. *Fruit-Grower* 27:48 Ja 15 '16
- Spraying in Mississippi. L. G. Herron. *il Miss Ag Ext B* 6:1-20 '17
- Spraying is well worth while. O. G. Anderson. *il Purdue Ag* 12:407-9 Ap '18
- Spraying necessary for the elimination of San Jose and oyster shell scale. L. M. Frederick. *il Farm Eng* 3:157 F '16
- Spraying of fruits; materials, schedules, etc. *il Pa Ag Ext C* 55:1-15 '17
- Spraying of orchards; how scab and codling worm may be controlled in Quebec orchards. J. Ag (Quebec) 20:203, 219 Ap-May '17
- Spraying of the peach. L. F. Reese. *il Penn State F* 9:390-1 My '16
- Spraying orchards. H. Garman. *il Ky Ag Dept Rep* 1916-1917:425-36 '18
- Spraying orchards with reference to aphid control. S. W. Foster. *Better Fruit* 11:7-8 F '17
- Spraying paid well. J. C. Whitten. *Fruit-Grower* 27:208 Mr 15 '16
- Spraying peaches. H. P. Barss and A. L. Lovett. *Ore Ag Ext B* 195 4p '17
- Spraying peaches for the control of brownrot, scab, and curculio. W. M. Scott and A. L. Quaintance. *il Farmers' B* 440:1-24 '18 (abr. reprint)
- Spraying plums for brown rot. E. C. Stakman. *il Minn Hort* 44:148-55 Ap '16
- Spraying problem; high grade apples. *Rural N Y* 76:335+ Mr 3 '17
- Spraying problems and the outlook for 1918. L. Childs. *Better Fruit* 12:12 Ja '18
- Spraying program. *Fruit-Grower* 28:56 Ja 15 '17
- Spraying programs for the small home orchard and fruit garden. H. A. Gossard and W. J. Green. *Ohio Ag Exp B v* 1:103-7 Ap '16
- Spraying prunes and plums. H. P. Barss and A. L. Lovett. *Ore Ag Ext B* 194:1-4 '17
- Spraying service in Niagara county in 1917. L. F. Strickland and N. R. Peet. *il maps N Y Farms & Markets Dept Ag B* 106:1-147 Ap '18
- Spraying suggestions for 1918. M. A. Blake. *il Field* 11:28:161-2+ Mr '18
- Spraying tests at Te Kauwhata. *J Ag New Zealand* 16:228-30 Ap '18
- Spraying the apple. *Prac F* 113:146 Ap 1 '17
- Spraying the apple. D. W. Legore. *Fruit-Grower* 27:22 Ja 1 '16
- Spraying the apple orchard. *il Mass Ag Ext C* 61 4p '18
- Spraying the apple orchard. R. S. Duncan. *Green's Fruit Grower* 36:2 F '16
- Spraying the orchard. H. M. Dunlap. *Minn Hort* 44:119-24, 213-16 Mr, My '16
- Status of spraying practices for the control of plant lice in apple orchards (B. 402). P. J. Parrott and H. E. Hodgkiss. *il N Y State Ag Exp Rep* 1915:385-402 '16
- Stippen and spray injury. C. H. Crabill and H. E. Thomas. *Phyt* 6:51-4 F '16
- Suggestions for the control of the more serious plant diseases occurring at Hood River. L. Childs. *Ore Ag Exp B* 141:28-32 '17
- Summary of field experiments in spraying conducted by the University of Illinois between 1903 and 1916, by B. S. Pickett; Spraying experiments in 1916 for the control of apple blotch, by A. J. Gunderson; Results of spraying experiments at the Neoga station, Cumberland county, 1916, by W. S. Brock; Spraying the peach, by W. White; with discussion; Spraying for aphid in the orchard, by U. S. Safran; Spraying demonstrations in 1916, by W. S. Brock; with discussion. *Ill State Hort Soc Trans* 1916:227-47, 248-51, 252-73, 490-503, 504-16, 541-63 '17
- Summer spraying. *il Va Ag Dept B* 116:8-10 Ap '17
- Summer spraying for stone fruits. W. B. Lanham. *Prog F* 31:567 Ap 22 '16



**Spraying and dusting—Fruit—Continued**

Summer sprays against American gooseberry-mildew. B. T. P. Barker and A. H. Lees. J Bd Ag 22:1244-9 Mr '16  
Things that save time. E. F. Stephens. Fruit-Grower 27:49 Ja 15 '16  
Vineyard spraying. F. de Castella. il J Dept Ag Victoria 16:141-56 Mr '18  
Well-sprayed orchard in June. A. S. Colby. Green's Am Fruit Grower 38:14 Je '18  
Why spray? Wallaces' F 43:697 Ap 19 '18  
Winter spraying with solutions of nitrate of soda. W. S. Ballard and W. H. Volck. il J Ag Research 1:437-44 F '14  
Worth while spraying in war time; with discussion. P. J. Parrott. N Y State Fruit Growers' Assn Pro 1918:33-49; Excerpt. Nat Stock & F 41:1140 F 9 '18

**Laws**

Ohio spraying laws. N. E. Shaw. Ohio F 137: 513 Ap 1 '16

**Vegetables**

A B C's of potato spraying. G. B. Ramsey. Maine Ag Ext B 119:1-7 '18  
Continue the spraying. J. M. Patterson. Gard M 23:344 Jl '16  
Control of tomato leaf-spot. (C. T., & F. C. D. C. 4) 4p il '18 U.S. Bur. of plant industry, Washington, D.C.  
Co-operative potato spraying 1916. G. P. Clinton and F. E. Rogers. Conn State Ag Exp Rep 1916.pt 5:355-64 '17  
Dry sprays in the home garden. il Gard M 23: 100 Mr '16  
Everyman's garden; various members of the bug family. il Country Gent 82:1116 Jl 7 '17  
Getting the jump on the garden Huns. F. F. Rockwell. il Gard M 27:187-8 My '18  
How to increase the potato crop by spraying. F. H. Chittenden and W. A. Orton. il maps Farmers' B 868:1-22 '17  
Insects and diseases of vegetables and how to combat them. C. P. Close. (Doc. 52) 10p il '17 U.S. States relations service, Washington, D.C.  
Irish potato spraying. H. P. Stuckey and B. B. Higgins. il Ga Ag Exp B 123:115-24 '16  
Potato spraying. S. Pickering. Gard Chron (Lond) 64:131 S 28 '18  
Potato-spraying experiments at Rush, N. Y., 1914 (B.495). F. C. Stewart. N Y State Ag Exp Rep 1915:313-17 '16  
Potato spraying for farmers. E. S. Salmon. il J Bd Ag 24:265-74 Je '17  
Potato spraying in 1917. Gard Chron (Lond) 62:150 O 13 '17  
Potato-spraying lessons. D. Dean. il Rural N Y 75:179-80, 229 F. 5-12 '16  
Potato spraying pays. Weekly N L 5:8 Mr 13 '18  
Practical hints on potato spraying. J Bd Ag 25:198-203 My '18  
Report of potato spraying experiments. H. C. Lint. N J Ag Exp Rep 1916:604-17 '17  
Saving potatoes by spraying; symposium. O Judd Farmer 60:26 Mr 4 '16  
Spray potatoes this summer. C. L. Fitch. il Wallaces' F 41:902 Je 23 '16  
Spraying. F. C. Stewart. il N Y Ag Dept Rep 1916.pt 2:356-62 '17  
From N Y Ag Dept B 77  
Spraying and dusting tomatoes. F. D. Fromme and H. E. Thomas. il Va Ag Exp B 213:1-14 '16  
Spraying beans and peas. W. C. O'Kane. il Country Gent 83:24 Ap 6 '18  
Spraying for tomato diseases. il Ohio Ag Exp B v 3:180-1 Je '18  
Spraying formulas for garden insects. A. L. Melander. il Wash Ag Ext Ser 1.no 35:1-16 '18  
Spraying of garden crops. H. J. Reed and W. A. Huelsen. Purdue Ag 12:483-4 My '18  
Spraying potatoes. W. C. O'Kane. il Country Gent 83:24 Mr 16 '18  
Spraying potatoes. W. Taylor. Gard Chron (Lond) 62:191 N 10 '17  
Spraying potatoes in 1916. il Maine Ag Exp Doc 522:1-11 '16  
Spraying the under sides. J. T. Rosa, jr. Country Gent 81:1543 Ag 19 '16

Spraying to protect the potato crop. E. G. McCloskey. Market Growers J 22:359 My 15 '18  
Spraying vine crops profitable. J. T. Rosa, jr. il Market Growers J 20:430 Je 1 '17  
Summer spraying for garden pests. A. Frank. Western Wash Ag Exp B v 5:50-3 Jl '17  
Tomato spraying experiments at Salem, New Jersey. W. H. Martin. N J Ag Exp Rep 1916:575-83 '17  
Warning about celery spraying. Market Growers J 18:339 My 15 '16  
When does the cost of spraying truck crops become prohibitive? V. I. Safro. J Econ Entom 10:521-3 D '17

**Weeds**

Herbicides. A. A. Hansen. il Penn State F 9:411+ Je '16  
Kill garlic and wild onion by oil spraying. A. D. Selby and D. R. Van Atta. il Ohio Ag Exp B v 1:355-8 D '16  
Spraying experiments to destroy prickly pear. G. P. Darnell-Smith and H. Ross. il Ag Gaz of New South Wales 29:1-12 Ja '18

**Spraying materials**

Ammonium sulphide wash for American gooseberry-mildew. J Bd Ag 23:1698-1100 F '17  
Arsenate of lime in combination with soluble sulphur as a spray material for the apple. G. E. Sanders. Ag Gaz of Canada 3:305-6 Ap '16  
Arsenicals for spraying apples. Prac F 114:68 F '18  
Carriers and diluents for dusting. C. E. Petch. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 28-9) '17  
Combined spraying; a chemical guide chart for fruitgrowers. J. A. Campbell. J Ag New Zealand 12:193-5 Mr '16  
Consumption and cost of the economic poisons in California, 1916. G. P. Gray. Cal State Comm Hort B v 7:140-4 Mr '18  
Directions for making. W. C. Edmundson. Idaho Ag Exp B 87:28-30 '16  
Directions for making spray mixtures. Ill State Hort Soc Trans 1916:34-44 '17; Same. Ill State Hort Soc Trans 1917:30-8 '18  
Diseases of fruit trees and their treatment. H. W. Davey. J Dept Ag Victoria 16:101-7 F '18  
Double-purpose spray. A. A. Ramsay. Ag Gaz of New South Wales 28:435-7 Je '17  
Effects of formalin-Bordeaux mixture on citrus canker. E. D. Doryland. Philippine Ag R 10, no 1:51-4 '17  
Effects of freezing arsenate of lead pastes. R. A. Dutcher. il J Econ Entom 9:561-6 D '16  
Effects of various salts, acids, germicides, etc., upon the infectivity of the virus causing the mosaic disease of tobacco. H. A. Allard. J Ag Research 13:619-37 Je 17 '18  
Field experiments in spraying apple orchards. il Ill Ag Exp B 185:9-10 '16  
Formulas for controlling insects and diseases. Rural N Y 77:330 Mr 2 '18  
Home made sprays. il Ag Digest 2:492 Jo '17  
How spray kills. A. L. Melander. Better Fruit 10:18+ Ja '16  
Kill the bugs! il Country Gent 82:1004 Je 9 '17  
Larger buying cuts spraying costs. Fruit-Grower 28:284 Je 1 '17  
Lime-wash for fruit trees. A. H. Lees. Gard Chron (Lond) 59:65 Ja 29 '16  
Making the spray solution. C. N. Crotsenburg. il Fruit-Grower 28:43 Ja 15 '17  
Materials for the control of injurious insects and plant diseases. H. T. Fernald and A. V. Osmun. Mass Ag Ext C 6:1-4 '16  
Micellar emulsions and hydrogels of oil. K. F. Kellerman and W. T. Swingle. Am Soc Agron J 8:51-3 Ja '16  
Miscible oils. G. Shumaker. il Purdue Ag 11: 40-1 D '16  
Nicotine-paraffin emulsion. A. H. Lees. J Bd Ag 24:1411-14 Mr '18  
Notes on insect control. E. N. Cory. (In Peninsula hort. soc. Trans., 1916, p. 54-7) '16 W. Webb, sec., Dover, Del.  
Orchard experimental work by Stoke fruit-growers' association. J Ag New Zealand 17: 225-30 O '18

**Spraying materials—Continued**

- Potato crop and blight. B. F. Lutman. Rural N Y 75:707 My 6 '16
- Protecting the home garden from insects and fungous diseases. C. H. Nissley. il N J Ag Dept C 11 7p '17
- Regulations, etc., fungicides act. J Dept Ag Victoria 16:51-3 Ja '18
- Remedies for the control of insects and diseases. Wis Hort Soc Rep 48:16-22 '18
- Revised compatibility chart of insecticides and fungicides. G. P. Gray. Cal Ag Exp C 195 2p '18
- Soaps and miscible oils. E. R. de Ong. Cal State Comm Hort B v 5:172-6 My '16
- Some important diseases of truck crops in Florida. C. D. Sherbakoff. il Fla Ag Exp B 139:193-203 '17
- Some means of controlling insects, fungi, and other pests in Porto Rico. R. H. Van Zwaluwenburg and H. E. Thomas. Porto Rico Ag Exp C 17:1-30 '18
- Some points on spraying. Fruit-Grower 28: 52 Ja 15 '17
- Some results of spraying experiments in Nova Scotia in 1916. G. E. Sanders. il Ag Gaz of Canada 4:115-19 F '17
- Spray calendar. il Conn State Ag Exp B 199: 51-98 '18
- Spray formulas for 1917. A. L. Melander. Better Fruit 11:5-6 Mr '17
- Spray formulas for the small grower. P. Thayer. Market Growers J 18:391 Je 15 '16
- Spray formulas for the small place. P. Thayer. Green's Fruit Grower 37:3 F '17
- Spray formulas for the town lot. P. Thayer. Ohio Ag Exp B v 1:114-16 Ap '16
- Spray-testing at Arataki; experiments with peach-trees. J. A. Campbell. J Ag New Zealand 13:454-8 D '16
- Spraying. A. G. Ruggles. (C. 48) 15p il '18 Minnesota State entomologist, University Farm, St Paul
- Spraying and spraying mixtures and apparatus. R. W. Harned. Prog F 31:1198 O 14 '16
- Spraying fruit trees. J. H. Merrill. Kan Ag Exp C 66:1-8 '18
- Spraying mixture. A. G. Ruggles and E. C. Stakman. Minn Hort 45:222-5 My '17
- Spraying problems. T. G. Bunting. J Ag (Quebec) 19:233 My '16
- Spraying suggestions. S. W. Foster. Better Fruit 10:28 My '16
- Sprays you need to know. W. C. O'Kane. il Country Gent 83:12 Ja 26 '18
- Spreaders for arsenate sprays. A. L. Lovett. J Econ Entom 11:66-9 F '18
- Substitute for self-boiled lime-sulfur and other summer sprays for peaches. L. G. Gillam. N J Ag Exp C 63:1-4 '17
- Suggestions for the control of injurious insects and plant diseases. G. M. Bentley. il Tenn Ag Exp B 117:111-23 '17
- Sulphur injury in Yucaipa, 1917. J. B. Hundley. Cal State Comm Hort B v 6:402-7 O '17
- Toxic values and killing efficiency of the arsenates. A. L. Lovett and R. H. Robinson. J Ag Research 10:199-207 Jl 23 '17
- What insecticides and fungicides shall we use in 1917, and when shall we spray this year? (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 42-4) '17
- Winter sprays. F. W. Allen. Wallaces' F 42:98 Ja 19 '17
- Winter sprays: lime-sulphur spray and crude oil emulsions. A. L. Melander. Wash Ag Exp Pop B 107:1-12 '17
- See also Arsenic as a spray; Bordeaux mixture; Calcium arsenate; Copper sulfate; Fish-oil-soap spray; Fungicides; Hydrated lime sulfur; Insecticides; Iron sulfate spray; Kerosene spray; Lead arsenate; Lime-sulfur; Miscible oil spray; Tobacco spray; also United States—Insecticide and fungicide board
- Analysis**
- Analyses of some materials sold as insecticides and fungicides. A. J. Patten and D. C. Kellogg. Mich Ag Ed Rep 1916:340-8
- Analyses of some more recent and older pest remedies. M. R. Miller. Cal State Comm Hort B v 6:23-6 Ja '17
- Commercial agricultural seeds, 1917; insecticides and fungicides, 1916 and 1917. C. D. Woods. Maine Ag Exp Off Inspec 86:1-32 '18
- Costs**
- Arsenate of lead costs for spraying apple orchards. Better Fruit 12:17 F '18
- Laws**
- Agricultural law, 1916; prevention of fraud in sale of Paris green and other substances. N Y Ag Dept B 83:2028-30 My '16; Same. N Y Ag Dept Rep 1916, pt 3:2028-30 '17
- Loi régularisant la vente des produits anti-cryptogamiques et insecticides, des produits servant à la destruction des fléaux des champs et des mauvaises herbes et visant aussi d'autres fins en Australie. Int Year-book Ag Leg 1916:869-73 '17
- Manual of laws pertaining to the Department of farms and markets; prevention of fraud in sale of Paris green and other substances. N Y Farms & Markets Dept Ag B 108:136-8 Je '18
- Spring**
- Skirmish line of spring. W. P. Eaton. il Country Life 31:41-4 Mr '17
- Spring canker worms. See Canker worms
- Spring grain aphid**
- Contribution to the knowledge of toxoptera graminum in the South. P. Luginbill and A. H. Beyer. il J Ag Research 14:97-110 Jl 8 '18
- Green bug. C. E. Sanborn. Okla Ag Ext C 30 4p '16
- Green bug or spring grain aphid. S. W. Bilsing. il Tex Ag Exp C 13:1-8 '16
- Green-bug (toxoptera graminum Rond.) outbreak of 1916. E. O. G. Kelly. J Econ Entom 10:233-48 Ap '17
- Spring grain aphid or green bug in the Southwest and the possibilities of an outbreak in 1916. F. M. Webster. il U S Ag C 55:1-3 '16
- Springs**
- Improving a spring. H. E. Cox. Rural N Y 76:810 Je 23 '17
- Springs (mechanism)**
- Pays to use bolster springs. O. F. Taylor. Fruit-Grower 27:369 Jl 15 '16
- Value of bolster springs. J. S. Underwood. Market Growers J 18:8 Ja 1 '16
- Sprinklers**
- Garden sprinkler. A. Marple. il Farm Eng 4: 35 Ag '16
- Green grass in dry weather. F. F. Rockwell. il Country Life 30:24 Ag '16
- Irrigation, watering, sprinkling. F. Steele. il Gard M 23:297-9 Je '16
- Making the garden safe for the summer; what modern irrigation means. F. F. Rockwell. il Gard M 25:280-1 Je '17
- Sprocket wheels**
- Sprocket wheels for detachable link belting. F. N. G. Kranich. Am Soc Ag Eng Trans 9:115-26 '16
- Standardization of sprocket wheel design. W. F. MacGregor. Am Soc Ag Eng Trans 10, no 2:98-100 '17
- Spruce**
- Accelerated growth of spruce after cutting in the Adirondacks. A. B. Recknagel. J For 15:896-8 N '17
- Christmas tree plantations. A. K. Chittenden. il Mich Ag Exp Spec B 78:1-8 '16
- Colorado blue spruce. Gard Chron Am 21:16 Ja '17
- Commercial uses of red spruce. il Am For 22: 707-11 D '16
- Cultivating the Norway spruce. A. C. Weed. Rural N Y 77:666 My 11 '18
- Effect of varying certain cooking conditions in the production of sulphite pulp from spruce. S. E. Lunak. il plan U S Ag B 620: 1-23 '18
- Flying on wings of spruce. E. A. Sterling. il Am For 24:133-9 Mr '18



**Spruce—Continued**

- \* Getting out airplane spruce. F. W. Vincent. il Sci Am (233 Broadway, N.Y. 10c) 119:438-9 N 30 '18
- Height growth of young spruce. For Quar 14: 514-17 S '16
- Method of spruce production. Am Architect (243 W. 39th st. N.Y. 25c) 114:348-9 S 18 '18
- \* Possibilities of future airplane spruce production in the Pacific Northwest. A. J. F. Brandstrom. (In Forest club annual, p. 15-17) il '18 College of forestry, Univ. of Wash., Seattle
- Preliminary study of white spruce in Minnesota. W. H. Kennedy. il map Minn Ag Exp B 168:1-30 '17
- Race for airplane spruce and ship timbers. il Am For 24:523-7 S '18
- Red spruce: identification and characteristics. P. L. Buttrick. il map Am For 22:705-7 D '16
- Red spruce: its growth and management. L. S. Murphy. il U S Ag B 544:1-100 '17
- Reproduction of black spruce. W. H. Kenety. J For 15:446-8 Ap '17
- Some factors influencing the reproduction of red spruce, balsam fir, and white pine. B. Moore. J For 15:827-53 N '17
- Spruce and balsam fir trees of the Rocky Mountain region. G. B. Sudworth. il maps U S Ag B 327:1-43 '16
- Spruce for airplanes—the eyes of the allied armies. il Am For 24:323-8 Je '18
- Spruce in higher altitudes. For Quar 14:133-5 Mr '16
- Spruce management in France. J For 16:603-5 My '18
- Thirty-seven years of spruce selection, in Austria. Int R Sci & Prac Ag 8,no 8:1116-18 Ag '17
- Trees of Vermont; the spruces. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:36-45 '16
- Wood for water and air ships must be had. il Am For 24:624-5 O '18

**Diseases and pests**

- Contribution to the life history and anatomy of lyda hypotrophica. F. Sheldter. Int R Sci & Prac Ag 7,no 8:1217-19 Ag '16
- Lyda hypotrophica, a hymenopterous pest of epicea in the forests of Roggenburg, Germany. Int R Sci & Prac Ag 7,no 7:1064-6 Jl '16
- New leaf and twig disease of picea engelmanni. J. R. Weir. il J Ag Research 4:251-4 Je '15

See also Spruce budworms

**Spruce budworms**

- Spruce budworm. il Maine Ag Exp Doc 528: 1-11 '16

**Squabs. See Pigeons**

**Square (instrument)**

- Use of hand tools on the farm. J. R. Stone. Power F 26:22 F '17

**Squash borers**

- Cutting out the squash borer. J. B. Morman. il Gard M 23:212 Ap '16
- Methods for control. H. A. Gossard. Ohio F 139:770 Je 9 '17

**Squash bugs. See Cucurbits—Diseases and pests**

**Squashes**

- Dry pumpkins and squash which may not keep in storage. E. L. Kirkpatrick. il Rural N Y 76:1439 D 22 '17
- Experience with squashes; symposium. Market Growers J 21:233-5 N 15 '17
- Field culture of the squash. F. Dunning. Minn Hort 46:411-14 N '18
- Growing and marketing of squashes, melons and cucumbers. H. M. Howard. Mass Ag Bd B 5:116-25 '18 (3d ed. rev.)
- Influence of light and chlorophyll formation on the minimum toxic concentration of magnesium nitrate for the squash. R. B. Harvey and R. H. True. il Am J Bot 4:407-10 Jl '17
- Partial directions for raising, harvesting and storing of onions, squashes, cabbages. Maine Ag Dept B v 15:8-13 Je '16

- Some ways with squash. M. G. Feint. il Rural N Y 75:1107 Ag 19 '16
- Squash that grew with a force of two and one half tons. il Scientific Am (233 Broadway, N.Y. 10c) 116:492 My 19 '17
- Unusual variation in crook-neck squash. J. G. Cook. il J Heredity 9:24 Ja '18

**Diseases and pests**

- Squash disease caused by choanephora cucurbitarum. F. A. Wolf. il J Ag Research 8: 319-28 F 26 '17

See also Squash borers

**Squirrels**

- Angelo Fiendo. S. M. Weed. il Country Life 29:78 F '16
- My squirrel. K. Henry. il Country Life 33: 90 Ap '18
- Revision of the American flying squirrel. A. H. Howell. il maps U S Ag No Am Fauna 44:1-64 '18
- Squirrel that flies. R. W. Shufeldt. il Country Life 32:66 Je '17
- What Frisky is telling the veteran horticulturist. C. F. Gardner. il Minn Hort 44:350-1 S '16

See also Ground squirrels

**Squirreltail grass**

- Squirreltail grass or wild barley. L. H. Pammel. il Ia Ag Exp C 52 2p '18

**Stables. See Barns and stables**

**Stacks (hay, grain, etc.)**

- Apparatus to prevent spontaneous combustion of hay ricks. E. Fordi. il Int R Sci & Prac Ag 8,no 9:1279-80 S '17
- Building a grain stack. Wallaces' F 41:1022 Jl 28 '16
- Building a sheaf-stack. W. Dibble. J Ag New Zealand 15:338-40 D '17
- Building a stack of grain bundles. C. O. Ormsbee. Rural N Y 77:935 Ag 3 '18
- Notes on stacking grain. Rural N Y 77:871 Jl 13 '18
- Protect your grain. il Power F 25:37 Jl '16
- Stacking grain. il Am Coop J 12:722-3 Jl '17
- Stacking hay and grain. E. V. Laughlin. Country Gent 81:1340 Jl 8 '16
- Stacking wheat and oats. W. L. Nelson. il Country Gent 83:28 Jl 27 '18

**Staffordshire ware**

- Cottage ornaments by Ralph Wood. A. Fearling. il Country Life 31:82-+ Ap '17

**Stagger grass. See Fly poison (plant)**

**Stains and staining**

- Floor finish. Nat Stock & F 41:200 My 12 '17
- Use of stains. G. E. Walsh. Country Life 29: 54 Ja '16

**Stains and staining (microscopy)**

- Imbedding and staining of diseased wood. J. S. Boyce. Phyt 8:432-6 Ag '18
- Manipulating microscopic organisms in staining. J. B. Hill. Bot Gaz 63:410-12 My '17
- Method for staining antherozoid of fern. W. N. Steil. il Bot Gaz 65:562-3 Je '18
- Notes on effect of dyes on endothia parasitica. C. Rumbold. Bot Gaz 64:250-2 S '17
- Picro-nigrosin, a combination fixative and stain for algae. O. F. Curtis and R. H. Colley. bibliog Am J Bot 2:89-92 F '15
- Staining of wood fibers for permanent microscopic mounts. H. N. Lee. Bot Gaz 62: 318-19 O '18

**Stairways**

- How to build stairs. H. A. Roberts. Country Gent 83:33 Mr 16 '18

See also Garden steps

**Stairways, Concrete**

- Concrete step construction. Wallaces' F 43: 825 My 17 '18
- Making concrete steps. Prac F 113:181 My 1 '17; Same cond. Rural N Y 75:477 Mr 18 '16
- Simple concrete step construction. J Ag (Quebec) 19:170 F '16

**Stalk borers**

- Stalk borers; farm practices that aid in destroying the pests. T. L. Guyton. Ohio Ag Exp B v 3:244-6 Ag '18

**Stallion law**

- Agricultural law, 1916; the licensing of stallions and breeding of horses. N Y Ag Dept B 83:2024-7 My '16; Same. N Y Ag Dept Rep 1916, pt 3:2024-7 '17
- \* Creating a new state live stock sanitary board as amended by laws of 1917; relating to the state live stock sanitary board, its powers and duties, and to live stock. (In B. 9) p56-8 '18 S. D. State live stock sanitary bd., Pierre
- Iowa stallion law. (In 5th annual Report Stallion registration division, p. 13-16) '17 Ia. ag. dept., Des Moines
- Law regulating the public service of stallions and jacks in Illinois and enforcement of lien. Ill Ag Dept 16p '17
- Manual of laws pertaining to the Department of farms and markets; the licensing of stallions and breeding of horses. N Y Farms & Markets Dept Ag B 108:115-18 Je '18
- Need of a stallion law, by W. G. Hollingworth; Effects of the Wisconsin stallion law, by A. S. Alexander; Stallion enrollment law, by E. S. Akin. N Y Ag Dept Rep 1916, pt 2:207-15 '17
- From N Y Ag Dept B 76
- New Illinois stallion law. O Judd Farmer 63:6 Ag 11 '17
- New stallion laws in Illinois. Breeder's Gaz 71:1275 Je 28 '17
- North Dakota stallion laws. J. L. Tompkin. Breeder's Gaz 69:1069 My 18 '16
- \* Ontario stallion act. (In Report, Stallion Enrollment bd., 1917, p. 6-15) '18 Ontario ag. dept., Toronto
- Passing of the scrub. F. B. Nichols. il Country Gent 83:11 Mr 30 '18
- Practical results of stallion enrollment laws. C. M. McConnell. il Ohio F 140:286 O 6 '17
- Proposed Illinois stallion law modification. Breeder's Gaz 71:276 F 8 '17
- Requirements for inter-state shipment of stallions. J. F. Gillespie. Am Vet M Assn J 52:167-77 N '17
- Soundness in public service stallions. E: N. Wentworth. Breeder's Gaz 70:201 Ag 10 '16
- Stallion enrollment. C. D. McGilvray. Am Vet M Assn J 54:222-6 D '18
- Stallion enrollment law and the farmer in Indiana. H. E. McCartney. map Ind Ag Exp C 52:1-16 '16
- Stallion-law benefits. F. L. Snow. Country Gent 82:544 Mr 17 '17
- Stallion law benefits and defects. Breeder's Gaz 69:672 Mr 23 '16
- Stallion law in Indiana. S. W. Taylor. Breeder's Gaz 69:1332 Je 29 '16
- Stallion law in New York. Nat Stock & F 40:262 Je 3 '16
- Stallion laws. J. J. Hooper. Nat Stock & F 40:1157 F 3 '17
- Stallion laws improve horse quality. C. M. McConnell. il Ohio F 142:167 Ag 24 '18
- Stallion legislation and the horse-breeding industry. C: C. Glenn. il map U S Ag Year-book 1916:289-99; Same. Separate 692
- Stallion registration and licenses for the year 1916. Okla Ag Exp C 42:xii-xvi '17
- Stallion registration law. H. P. Miller. Ohio F 141:458 Mr 30 '18
- Stallion registration law of the state of Oregon. 14p '17 Stallion registration board, Corvallis, Ore.
- Stallion regulation in Kansas. Breeder's Gaz 69:495 Mr 2 '16
- State stallion licensing laws. Breeder's Gaz 69:495 Mr 2 '16
- Value of stallion enrollment. C. M. McConnell. Ohio F 138:102 Ag 5 '16
- West Virginia sire registration law. W Va Ag Dept B 23:1-8 '16
- What is a sire worth? C. G. Good. Breeder's Gaz 73:63 Ja 10 '18

**Stallion shows**

- Clydesdales at the Scottish stallion show. A. Mowat. Breeder's Gaz 69:727-8 Mr 30 '16
- Iowa stallion show and sale. il Breeder's Gaz 69:371 F 17 '16
- Iowa's second spring stallion show. Wallaces' F 41:292 F 18 '16

- Scottish stallion show. A. Mowat. Breeder's Gaz 71:1242 Je 21 '17
- Spring stallion show. P. C. Tomlinson. Wallaces' F 43:658 Ag 12 '18
- Spring stallion show at Des Moines. Wallaces' F 41:142 Ja 28 '16
- Stallion-owners' colt show. H. E. McCartney. Breeder's Gaz 72:843 N 8 '17

**Stallions**

- Better stallions. Weekly N L 4:3 My 23 '17
- Breeding draft geldings in Alberta. B. H. Bunny. Breeder's Gaz 74:15 Jl 4 '18
- Care and management of the draft stallion. P. Imel. il Purdue Ag 10:22-3+ Ja '16
- Care of stallions. W. L. Houser. Breeder's Gaz 69:870 Ap 20 '16
- Care of the stallion. J. Gelder. il N Y Ag Dept Rep 1916, pt 2:141-7 '17
- From N Y Ag Dept B 76
- Carnot, a distinguished Percheron sire. C. M. McConnell. il Ohio F 142:242 S 14 '18
- Demand for good draft stallions. W. Dinsmore. Ag Digest 1:264 Ja '17
- Distribution of public service stallions in Wisconsin. A. S. Alexander. il Wis Ag Exp B 273:1-64 '16
- Effective stallion advertising. C. M. McConnell. il Breeder's Gaz 70:1289 D 28 '16
- Eliminating the scrub stallion. E. McFarland. Breeder's Gaz 73:1144 My 30 '18
- Feed and exercise for a stallion. E. A. Trowbridge. Breeder's Gaz 69:80-1 Ja 13 '16
- Government certification of stallions. J Dept Ag Victoria 14:280-7 My '16
- Government certification of stallions. W. A. N. Robertson. J Dept Ag Victoria 15:258-76 My '17
- Government certification of stallions; ninth annual report (season 1915) on the veterinary examination of stallions. W. A. N. Robertson. J Dept Ag Victoria 14:354-65 Je '16
- Government certification of stallions with supplementary list of life certificated stallions. W. A. N. Robertson. J Dept Ag Victoria 16:276-88 My '18
- Handling the stallion. W: Crownover. Wallaces' F 42:694 Ap 20 '17
- Illinois stallion statistics. Breeder's Gaz 73:377 F 21 '18
- Need for great stallions. E. McFarland. il Field 11 28:644-5 S '18
- Peter the Great. L. R. Himmelberger. il Country Gent 81:742 Ap 1 '16
- Peter the Great sold for \$50,000. Breeder's Gaz 69:430 F 24 '16
- Report of stallion enrollment work for the year 1916 with lists of stallions and jacks enrolled. H. E. McCartney. il Ind Ag Exp C 58:1-182 '17
- Report of stallion enrollment work for the year 1917 with lists of stallions and jacks enrolled. H. E. McCartney. Ind Ag Exp C 73:1-120 '18
- Selecting a stallion. L. Ogilvy. Breeder's Gaz 72:890 N 15 '17
- Soundness in public service stallions. E: N. Wentworth. Breeder's Gaz 70:201 Ag 10 '16
- Stallion at work. A. J. Pittenger. il Wallaces' F 41:925 Je 30 '16
- Stallion inspection. N. E. McEwen. J Ag (Quebec) 20:77 O '16
- Stallion inspection in Quebec. N. E. McEwen. J Ag (Quebec) 22:94 D '18
- Stallion legislation and the horse-breeding industry. C: C. Glenn. il map U S Ag Year-book 1916:288-99; Same. Separate 692
- Stallion service. J. H. McKenney. il Nat Stock & F 40:231 My 27 '16
- Stallioner's program. J: I. Colgan. Breeder's Gaz 71:828 Ap 19 '17
- Success with stallions. C. T. Conklin. Breeder's Gaz 70:1024 N 30 '16
- Ten and twenty dollar stallion fees. C. M. McConnell. il Ohio F 139:187 F 10 '17
- Thoroughbred stallion from the royal stud. Ag Gaz of Canada 3:410-11 My '16
- Veteran breeder holds pasture indispensable. Breeder's Gaz 74:267 Ag 22 '18
- See also Horse breeding; also Iowa—Stallion registration division



**Stallions —Continued**

**Directories**

- \* Directory of stallions licensed in the state of South Dakota during the fiscal year beginning July 1st, 1917, and ending July 1st, 1918. (*In B. 9*) p 4-55 '18 S.D. State live stock sanitary bd., Pierre
- Distribution of public service stallions in Wisconsin. A. S. Alexander. *Wis Ag Exp B* 273:1-64 '16
- Distribution of public service stallions in Wisconsin. A. S. Alexander. *Wis Ag Exp B* 283:1-64 '17
- Enrolment by counties. (*In Report, Stallion Enrolment bd.*, 1917, p 20-77) '18 Ontario ag. dept., Toronto
- Licensed stallions in Utah during the season of 1916. W. E. Carroll. *map Utah Ag Exp B* 24:1-25 '17
- Licensed stallions in Utah during the season of 1917. W. E. Carroll. *Utah Ag Exp C* 27:1-29 '17
- Names and routes of the super, king's and board's premium stallions. *J Bd Ag* 23:164-86 My '16
- Names and routes of the super, king's and board's premium stallions. *il J Bd Ag* 24:209-32 My '17
- Registered purebred stallions and jacks; list of stallions and jacks licensed during 1917. *Okla Ag Exp C* 44:36-117 '18
- Report of the stallion enrolment board of Ontario, 1917. 96p '17 Ontario ag. dept., Toronto
- Stallion registration and licenses for the year 1916. *Okla Ag Exp C* 42:1-105 '17
- Stallion registration department; directory of stallions. (B. 8) 58p '17 S. D. Live stock sanitary bd., Pierre

**Stammering**

- Help the stammering child. *Rural N Y* 75:898 Je 17 '16
- Influence of heredity in stammering. F. A. Bryant. *J Heredity* 8:46-7 Ja '17
- Stammering and its correction in the home. E. Tompkins. *J Home Econ* 8:606-7 N '16

**Stanchions.** See Barns and stables—Dairy barns

**Standard of living**

**Bibliography**

- Some recent magazine articles on the standard of living. L. Perry. *J Home Econ* 9:550-8; 10:9-17 D '17-Ja '18
- Standard of value.** See Value
- Standing crop competitions**
- Appendix to annual report of the agricultural societies of the province of Ontario 1917; results of competitions in standing field crops and prize-winning grain at winter fairs. 126p '18 Ontario ag. dept., Toronto
- Field crop competitions. *Ag Gaz of Canada* 5:471-4 My '18
- Improving field crop competitions, seed fairs, and exhibitions. G: H. Clark. *Ag Gaz of Canada* 5:670-2 Jl '18
- Nhill agricultural society annual crop and fallow competitions, 1915. T. A. J. Smith. *J Dept Ag Victoria* 14:79-87 F '16
- Nhill agricultural society annual crop and fallow competitions, 1916. T. A. J. Smith. *J Dept Ag Victoria* 15:169-75 Mr '17
- Nhill agricultural society annual crop and fallow competitions, 1917. H. A. Mullett. *il J Dept Ag Victoria* 16:65-79 F '18
- R.A.S. field wheat competition. *Ag Gaz of New South Wales* 29:181-7 Mr '18
- Standing crop competitions. F. N. Savoie. *Ag Gaz of Canada* 4:303-4 Ap '17
- Wagga growing-crop competition. *Ag Gaz of New South Wales* 27:81-7 F '16
- Wagga growing-crop competition. *Ag Gaz of New South Wales* 29:89-96 F '18
- Wagga growing-crop competitions. *Ag Gaz of New South Wales* 28:31-8 Ja '17

**Stangeria**

- Stangeria paradoxa*. C: J. Chamberlain. *bibliog il Bot Gaz* 61:353-72 My '16

**Staphyleas**

- Staphyleas*. *Am Flor* 49:86 Jl 28 '17

**Star woman; story.** J. W. Schultz. See weekly numbers of National stockman and farmer beginning December 22, 1917

**Starch**

- Comparison of the digestibility of starch in typical batter and dough mixtures. A. L. Daniels and L. Strickler. *J Home Econ* 9:109-14 Mr '17
- Digestibility of bread; erythrodextrin in starch hydrolysis. J. C. Blake. *Am Chemical Soc J* (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:623-36 Ap '18
- Digestion of starch by the young calf. R. H. Shaw and others. *il J Ag Research* 12:575-8 Mr 4 '18
- Effect of frost and decay upon the starch in potatoes. H. A. Edson. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:725-6 S '18
- Effect of time of digestion on the hydrolysis of casein in the presence of starch. J. S. McHargue. *J Ag Research* 12:1-7 Ja 7 '18
- Starch congestion accompanying certain factors which retard plant growth. E. L. Hartwell. *R I Ag Exp B* 165:1-23 '16
- Starch formation in zygema. H. Bourquin. *Bot Gaz* 64:426-34 N '17
- Starches of the grain sorghums. C. K. Francis and O. C. Smith. *il Okla Ag Exp B* 110:1-38 '16
- What starch foods shall we eat? *Prog F* 32:804 Jl 21 '17

See also Corn starch; Potato starch

**Laws**

- Décret n. 342 du ministre du commerce, d'accord avec les ministres intéressés, concernant la création, pour la durée de la guerre, d'une fédération de l'industrie de la féculerie, annulant l'ordonnance du 1<sup>er</sup> octobre 1915 en Autriche. *Int Yearbook Ag Leg* 1916:542-8 '17

**Statistics**

- Commercial stocks of food starches, Jan. 1. *U S Food Surveys* 1:17-19 Je 14 '18
- Commercial stocks of food starches, July 1. *U S Food Surveys* 2:14-16 S 18 '18

**State farms**

- Dairy herd at National soldiers' home. W. C. Barnes. *il Breeder's Gaz* 74:115 Jl 25 '18
- 14th biennial report of the prison division, Department of agriculture of Florida, 1915 and 1916. *il Fla Ag Dept Rep* (Prison Division) 1915-1916:1-85 '17
- Ohio's practical state farms; how the commonwealth employs its wards economically. T. W. Yocum. *il Ohio F* 138:197-8 S 2 '16
- Report of the specialist in farm management. W: B. Duryee. *N J Ag Dept B* 17:91-105 '18
- 2d annual report of the Indiana state farm. Putnamville, Ind. 41p '16 Indiana State farm, R. R. no. 7, Greencastle
- State institution farms. W. B. Duryee. *il N J Ag Dept B* 10:365-95 '17
- State institution farms. H: M. Sage. *il N Y Farms & Markets Dept Ag B* 105:116-21 Mr '18
- Why Virginia needs prison farms for misdemeanants. 8p n.d. Va. Bd. of charities and corrections, Richmond

**State horticultural association of Pennsylvania**

- 58th annual meeting, Harrisburg, Jan. 23-25, 1917. *Nat Stock & F* 40:1173 F 3 '17
- Fifty-eighth annual meeting, Harrisburg, Jan. 23-25, 1917. C. T. Fox. *Fruit-Grower* 28:140 F 15 '17
- 59th annual meeting, Harrisburg, Jan. 22-24. H. F. Hershey. *Nat Stock & F* 41:1102 F 2 '18

See also Vegetable growers section of the State horticultural association of Pennsylvania

**State legislation.** See Legislation

**State livestock association of Illinois**

- New Illinois association. *Country Gent* 81:1197 Je 10 '16

**State parks.** See Forest reserves

# **Staten Island**

## **Architecture**

Historic Dutch houses upon old Staten Island, H. S. Gillespie. *il Country Life* 31:74-5 Ap '17

# **Statice**

Everlasting sea lavenders. G: W. Kerr. *il Country Gent* 83:49 Ap 20 '18

Morphology and anatomy of the genus *statice* as represented at Blakeney Point. E. de Fraine. *il Ann Bot* 30:239-82 Ap '16

# **Statistics**

Application of statistics to budget making for lunch rooms. R. H. Vivian. *J Home Econ* 8:19-28 Ja '16

See also Vital statistics; also subhead Statistics under special subjects, e.g. Agriculture—Statistics

## **Laws**

Organisation des services de statistique aux États-Unis, aux Pays-Bas et à l'Uruguay. *Int Yearbook Ag Leg* 1916:1-13 '17

**Statistics, Vital.** See Vital statistics

# **Steam**

Exhaust steam for heating water and for pasteurizing; U.S. Dairy division letter. *Creamery* 6:88 O '17; *N Y Prod R* 44:952 O 10 '17; *Hoard's D* 54:503 N 2 '17

Steam from hot water. *Power F* 25:43 S '16

# **Steam engines**

About compound steam engines. L. J. Watson. *Power F* 25:49 D '16

Care of engine; keeping power equipment in condition in creamery. *N Y Prod R* 41:574-5 F 2 '16

Setting eccentric on steam engine when out of adjustment or loose. *N Y Prod R* 46:46 My 8 '18

# **Steam heating**

Heating your home; the vapor-vacuum system. C. F. Herington. *Country Gent* 81:40 Ja 1 '16

Steam heating a small house. J: R. McMahon. *il Country Gent* 82:118 Ja 20 '17

# **Steam power**

Some possibilities of steam power. E. T. Adams. *Power F* 27:41+ Ja '18

# **Steamboats**

River steamboating sixty years ago. W. A. Graham. *Ohio F* 141:502 Ap 6 '18

# **Stearic acid**

Determination of stearic acid in butter fat. E. B. Hoiland and others. *bibliog J Ag Research* 6:101-13 Ap 17 '16

# **Steel**

Fertilizers from steel. F: W. Brown. *Country Gent* 83:32 Ja 12 '18

**Steeple chasing.** See Horse racing

# **Stem maggots**

Stem maggots attacking growing grain. N. Criddle. *il Ag Gaz of Canada* 3:504-7 Je '16

# **Stemphylium**

*Stemphylium* leafspot of cucumbers. G: A. Osner. *il J Ag Research* 13:295-306 Ap 29 '18

# **Stems**

Region of greatest stem thickness in *raphidophora*. F. C. Gates. *il Am J Bot* 3:65-7 F '16

# **Stencil work**

\* Stencils vitalize school work. 9p *il '17 Int. harvester co., Chicago*

# **Stenographers**

Girl who must earn her own living; stenography. *Prog F* 31:191 F 5 '16

# **Stephenson, Clement**

Career of a noted Angus breeder. J. R. Barclay. *Breeder's Gaz* 74:184 Ag 8 '18

**Stepping stones;** story. *Rural N Y* 77:698, 726 My 18-25 '18

**Stereoisomerism.** See Isomerism

# **Sterigmatocystis**

*Sterigmatocystis* smut of figs. R. W. Hodgson. *Phyt* 8:545-6 O '18

# **Sterility in animals**

Barrenness in livestock. W. J. Colebatch. *il J Dept Ag S Australia* 20:775-82 My '17

Cause of barrenness in dairy cattle. *J Ag (Quebec)* 19:242 My '16

Economic burden of sterility and abortion in cattle. W. L. Williams. *il Cornell Countryman* 15:393-4+ Ap '18

Sterility in cows. H. E. Bemis. *Ia Ag Coll Offic Pub v 14*, no 36:218-26 '16

Sterility in mares, with recommendations to breeders of heavy horses. F. H. A. Marshall and W. P. Crosland. *J Ed Ag* 24:1357-64 Mr '18

Sterility of cows. F. W. Caldwell. *Hoard's D* 55:878 Je 14 '18

# **Sterility in plants**

How the strawberry sets fruit. W. D. Valleau. *il Minn Hort* 46:449-54 D '18

Lethal factors and sterility. J: Belling. *bibliog J Heredity* 9:161-5 Ap '18

On the partial sterility of *nicotiana* hybrids made with *n. sylvestris* as a parent; an account of the mode of floral abscission in the *F.* species hybrids. T. H. Goodspeed and J. N. Kendall. *bibliog Cal Univ Pub Botany v 5*, no 10 293-9p '16 (5c)

Pollen sterility in relation to the geographical distribution of some *onagraceae*. C. C. Forsaith. *bibliog il Bot Gaz* 62:466-87 D '16

Population analyses and inheritance studies concerning self-sterility, self-fertility, and sterility in rye. N. Heribert-Nilsson (*Ztschr. Pflanzenzucht*, 4, no. 1 44p. '16). *Exp Sta Record* 38, no 3:236-7 '18

Self-sterility in dewberries and blackberries. L. R. Detjen. *il N C Ag Exp Tech B* 11:1-37 '16; Same. *N C Ag Exp Rep* 1917:1-37

Sterility as the result of hybridization and the condition of pollen in *rubus*. C. S. Hoar. *bibliog il Bot Gaz* 62:370-88 N '16

Sterility in the strawberry. W. D. Valleau. *bibliog il J Ag Research* 12:613-70 Mr 11 '18

# **Sterilization**

Influence of cold shock in the sterilization of canned foods. L. D. Bushnell. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:432-6 Je '18

See also Liquids—Sterilization

**Sterilization of cream.** See Cream—Pasteurization

**Sterilization of milk.** See Milk—Pasteurization

# **Sterilizers**

Automatic water level for Arnold sterilizers. I. C. Hall. *il J Bact* 3:7-8 Ja '18

Demonstration of simple steam sterilizer for farm and dairy utensils. G: B. Taylor. *Assn Am Dairy Food and Drug Offic Pro* 1916: 92-5

Home-made sterilizer. *Hoard's D* 51:176 F 13 '16

Simple means of sterilizing farm dairy utensils. *il Hoard's D* 53:1005 J1 20 '17

Simple steam sterilizer for farm dairy utensils. *Farmers' B* 748:1-11 '16; Same. *il Ia Ag Bd Yearbook* 1916:352-62; Same cond. *Creamery* 4:17 Ag '16; Same cond. *Ohio F* 138:325 O 7 '16; Same cond. *Jersey B* 35:1769 N 8 '16; Same cond. *Hoard's D* 52:621 N 24 '16; Same cond. *Power F* 25:44+ D '16; Abstract. *Prog F* 31:1032 Ag 26 '16; Abstract. *O Judd Farmer* 62:14 F 10 '17

Sterilization of dairy utensils on the farm and a demonstration of a new steam sterilizer. G: B. Taylor. *il Int Assn Dairy & Milk Inspc Rep* 1916:200-6

Sterilizing dairy utensils. H. F. Judkins. *Kimball's D F* 16:583 J1 15 '18

To sterilize milk containers. *Creamery* 5:53 Mr '17

# **Stewart, John K.**

Life and work. *Am Sheep B & W* 36:337 Je '16

**Stimulants.** See Liquors

# **Stink bugs**

Life-history notes on *apateticus cynicus* and *maculiventris*. R. D. Whitmarsh. *J Econ Entom* 9:51-3 F '16

**Stippen injury.** See Apples—Diseases and pests



**Stipules (botany)**

Investigations on the phylogeny of the angiosperms; nodal anatomy and the morphology of stipules. E. W. Sinnott and I. W. Bailey. *il Am J Bot* 1:441-53 N '14

**Stock breeding.** See Breeding; Cattle breeding; Horse breeding; Sheep breeding; Swine breeding

**Stock farming.** See Live stock; Live stock farms

**Stock farms.** See Live stock farms

**Stock judging.** See Live stock—Judging

**Stock poisoning.** See Forage poisoning

**Stock raising.** See Live stock

**Stock ranges.** See Ranges

**Stocks**

Difference between preferred and common stocks. J. R. Milligan. *Ohio F* 138:67 JI 22 '16

See also Bonds; Investments

**Stocks (flowers)**

Double stocks. *Gard Chron (Lond)* 59:76 F 5 '16

Mutation in *matthiola annua*, a Mendelizing species. H. H. Bartlett. *Bot Gaz* 63:82-3 Ja '17

Mutation in *matthiola annua*, a Mendelizing species. H. B. Frost. *bibliog il Am J Bot* 3:377-83 JI '16

**Stockyards fever.** See Horses—Diseases and pests

**Stomata**

Contributions to the physiology of stomata in observations on transpiration in sugarcane. *Int R Sci & Prac Ag* 7,no 2:209-11 F '16

Description of a recording porometer and a note on stomatal behaviour during wilting. C. G. P. Laidlaw and R. C. Knight. *bibliog Ann Bot* 30:47-56 Ja '16

Interrelations of stomatal aperture, leaf water-content, and transpiration rate. R. C. Knight. *bibliog Ann Bot* 31:221-40 Ap '17

Relation of stomatal movement to infection by *cercospora beticola*. V. W. Pool and M. B. McKay. *bibliog il J Ag Research* 5:101-138 F 28 '16

Study of the relation of transpiration to the size and number of stomata. W. L. C. Muenscher. *bibliog Am J Bot* 2:487-504 N '15

Use of the porometer in stomatal investigation. R. C. Knight. *bibliog Ann Bot* 30:57-76 Ja '16

**Stomatitis, Pustular**

Contagious pustular stomatitis of the horse, equine variola and vaccinia. D. A. de Jong. *Am Vet M Assn J* 52:782-4 Mr '18

**Stomatitis, Vesicular**

Outbreak of vesicular stomatitis. *Am Vet M Assn J* 50:667-70 F '17

Vesicular stomatitis. (In Report, 1917, Bur. of animal industry, p. 5-7) '17 U S Ag

Vesicular stomatitis may conceal presence of foot-and-mouth disease. *Weekly N L* 4:2 Ja 31 '17

Vesicular stomatitis of horses and cattle. J. R. Mohler. *il U S Ag B* 662:1-10 '18; Same. *Am Vet M Assn J* 52:410-22 Ja '18

**Stomatograph**

Description of a recording porometer and a note on stomatal behaviour during wilting. C. G. P. Laidlaw and R. C. Knight. *bibliog Ann Bot* 30:47-56 Ja '16

**Stonecrops.** See Sedum

**Stoneflies**

Some stoneflies injurious to vegetation. E. J. Newcomer. *il J Ag Research* 13:37-42 Ap 1 '18

**Stoner wheat.** See Wheat

**Stools**

Old joint-stools. W. A. Dyer. *il Country Life* 31:58 Ja '17

**Storage batteries**

Care of batteries. P. T. Hines. *Country Gent* 83:39 Ja 5 '13

Care of your storage battery. W. Calligan. *Power F* 27:44 F '18

Caring for starting and lighting systems. P. T. Hines. *il Prog F* 33:519 Ap 20 '18

Facts about storage batteries. J. B. Kelley. *Kimball's D F* 16:634 Ag 15 '18

Storage battery and its maintenance. A. Johnston. *Country Life* 32:96 Je '17

**Storage houses and cellars**

Air storage houses. W. H. Wilson. *Better Fruit* 12:8 Ap '18

Build a potato curing house. plans *Ga Ag Coll (Ext)* Poster 14

Common-storage sense. M. L. Williams. *il Country Gent* 82:1051 Je 23 '17

Concrete storage cellar for the orchardist; with discussion. W. G. Kaiser. *il Ill State Hort Soc Trans* 1917:58-69 '18

Efficient apple storage house. *il plan Ohio F* 142:170 Ag 24 '18

Essentials of air-cooled storage houses. W. C. Quick. *Better Fruit* 12:5+ My '18

Farm vegetable and fruit storage. *il plans Power F* 26:13 S '17

Frost-proof storage houses. *plan Rural N Y* 76:155 D 3 '17

Fruit and vegetable storage. H. C. Campbell. *il Hoard's D* 56:131 Ag 23 '18

Helping Hoover with concrete—storage cellars. *il plan Concrete (Telegraph bldg., Detroit, Mich. 20c)* 12:191-3 Je '18

Holding crops for winter. *il Country Gent* 82:1108 JI 7 '17

Home fruit storage. *il Nat Stock & F* 40:526 Ag 19 '16

Home storage for apples. J. M. Myers. *il Rural N Y* 76:69 Ja 20 '17

How to build a sweet potato storage house. *plan Prog F* 33:723 Je 22 '18

Lake Forest type of storage house. W. C. Byers. *il Cornell Countryman* 15:523-5 Je '18

Making and using sweet potato storage houses. T. H. Holloway. *Prog F* 33:894 Ag 10 '18

Management of common storage houses for apples in the Pacific Northwest. H. J. Ramsey and S. J. Dennis. *il Farmers' B* 852:1-23 '17

Modern methods of storage of fruits and vegetables. S. A. Campbell. *il Purdue Ag* 13:111-13 D '18

Ohio vegetable storage houses, with plan. F. W. Ives. *Farm Eng* 7:16-18 Mr '18

Out door storage cellars for home grown fruits. *il Green's Fruit Grower* 37:1 Ag '17

Potato storage and storage houses. W. Stupart. *il plans Farmers' B* 847:1-27 '17; Abstract. *Field* 11 27:685 S '17

Potato storage house; building one that has a capacity of twenty-five thousand bushels. E. V. Laughlin. *Farm Eng* 5:6 Ap '17

Potato storage house that keeps the crop for high prices. A. E. Wilkinson. *il Country Gent* 81:409 F 19 '16

Potato storehouse. M. Ringelmann and M. Krotoff. *Int R Sci & Prac Ag* 8,no 10:1406-7 O '17

Practical farm apple cellar. *Rural N Y* 76:830 Je 30 '17

Practical up-ground cellar. F. W. Ives. *plan Ohio F* 141:392 Mr 16 '18

Root and vegetable cellars. Mrs W. W. Burdett. *il Rural N Y* 75:1231 S 23 '16

Scientific conservation of fruits and vegetables. H. M. Bainer. *plan Gard Chron Am* 22:111-13 Ap '18

Scientific methods of conserving vegetables. *Gard Chron Am* 22:13-14 Ja '18

Storage for war-garden crops. J. N. Phillips. *il Country Gent* 83:2+ JI 27 '18

Storage of apples on the farm. P. W. Douglass. *il Rural N Y* 76:639 My 5 '17

Store that surplus food. R. J. H. DeLoach. *il plans Country Life* 34:59-61 Ag '18

Storing root crops on the farm. *il plans Hoard's D* 54:213 S 14 '17

Sweet potato, p 20-30 *il plans '16 Ag. and industrial comm., St. Louis Southwestern ry. lines, St Louis, Mo.*

Sweet potato curing house. W. F. Massey. *Prog F* 33:636 My 25 '18

Sweet potato curing in Texas. E. W. Cole. *il Tex Ag Dept B* 49:1-18+ n.d.

**Storage houses and cellars—Continued**

- Sweet-potato storage. H. C. Thompson. *il* Farmer's B 970:1-27 '18
- Sweet potato storage houses. G. H. Alford. *Prog F* 33:678 Je 1 '18
- Vegetable and fruit storage. H. C. Campbell. *il* Wallaces' F 42:1103 Ag 10 '17
- \* Vegetable cellar is a good investment for the gardener. C. C. Sherlock. *il* Bldg Age (243 W. 39th st, N.Y. 25c) 40:523 N '18
- Vegetable or root storage cellars. H. C. Campbell. *il* plans Hoard's D 54:212 S 14 '17
- Vegetable storage. F. E. McCall. *il* plans S D Ag Ext C 9:1-12 '18
- Vegetable storage cellar. *il* Kimball's D F 16: 672 S 1 '18
- Vegetable storage cellars save food. *il* Power F 27:41 O '18

**Designs and plans**

- Build small meat-curing, cold storage house. *Ga Ag Coll (Ext) Poster* 20

**Storage of farm produce**

- Allowance for drriage of crops in settlement operations. S. Grantham. *Ag J of India* 12: 543-9 O '17
- Chaff-mite; methods of control. A. H. Cockayne and R. Waters. *il* J Ag New Zealand 12:372-9 My '16
- Common storage of fruits and vegetables. E. H. Forbush. *il* plans Mass Ag Bd Year-book 1917, pt 2:134-45 '18; Same. Mass Ag Bd B 5:172-83 '18 (3d ed. rev.)
- Control of insects affecting stored seed and food products. G. G. Becker. *il* Ark Ag Exp C 33:1-8 n.d.
- Drriage; the loss in weight of crops after harvesting. G. Evans. *Ag J of India* 12:224-9 Ap '17
- Each farmer should be prepared to store his crops. *Va Ag Dept B* 120:14-17 Ag '17
- Farm storage. *il* Purdue Ag 11:35-7 O '16
- Farm storage for common crops. O Judd Farmer 61:5 N 4 '16
- Farm storage for potatoes and fruit. R. W. Mc Keen. *Rural N Y* 75:1330 O 21 '16
- Farm storage of crops. B. F. Harris. *Breeder's Gaz* 72:119 Jl 26 '17
- Fruit and vegetable storage. plan *Rural N Y* 76:1237 O 27 '17
- Home storage of food staples. J. R. McMahon. *il* Country Gent 82:1301 Ag 18 '17
- Insects and rodents injurious to stored products. E. N. Cory and H. S. McConnell. *il* Md Ag Ext B 8:122-44 '17
- Insects injuring stored food products in Connecticut. W. E. Britton. *il* Conn State Ag Exp B 195:1-21 '17; Same. Conn State Ag Exp B 203:330-44 '18
- Insulating for storage. *Fruit-Grower* 27:296 My 15 '16
- Let nothing be lost because of inadequate storage. *Prog F* 32:950 S 8 '17
- Market pathology; a new phase of plant disease work. E. H. Toole. *il* Purdue Ag 13: 62-3 N '18
- Planning for winter supplies. *il* Country Gent 81:1270 Je 24 '16
- Prepare now to save it for winter. *il* Gard M 28:18-19 Ag '18
- Prepare now to store food crops for winter use. *Weekly N L* 4:1-8 Jl 25 '17
- Scientific conservation of fruits and vegetables. H. M. Bainer. plan *Gard Chron Am* 22:111-13 Ap '18
- Storage inquiry. *Fruit-Grower* 27:429 S 15 '16
- Storage of fruits and vegetables. J. L. Stahl. *Western Wash Ag Exp B v* 6:52-5 Jl '18
- Storing fruits and vegetables. L. L. Rummell. *il* Rural N Y 76:1288 N 10 '17
- Storing fruits and vegetables for winter use. J. S. Underwood. *Green's Fruit Grower* 36:4 O '16
- Storing of food products. C. Pancoast. *Mo Ag Bd B v* 15:50-2 Ag '17
- Storing the crops for winter use. R. L. Kirkpatrick. *il* Gard M 28:85-7 O '18
- Storing the harvest. F. C. Minkler. *il* Field II 28:500-1 Jl '18

Superheating as a control method for insects which infest stored products. A. Gibson. (*In* Pro., Entom Soc. of British Columbia, 1916, p. 83-4) '16

Winter storage; symposium. *Market Growers J* 23:57+ Ag 1 '18

Winter storage in barrels. *Country Gent* 81:16 Ja 1 '16

*See also* Cold storage; also subhead Storage under names of products, e.g. Apples—Storage, Eggs—Storage, Fruit—Storage, Root crops—Storage, Sweet potatoes—Storage, Vegetables—Storage

**Stores, Cooperative.** See Cooperative stores

**Stores, Grocery.** See Grocery trade

Story of John and Mary; they want to farm, but how can they afford it? E. Davenport. *Country Gent* 83:15 Ap 13 '18

Story of Martin. J. B. Weaver. *il* Wallaces' F 42:1718-19 D 21 '17

**Stoves**

Care of stoves. Mrs E. H. Ervin. *Ohio F* 141: 236 F 16 '18

How to operate a kerosene heater. L. Robbins. *Power F* 27:50-1 Mr '18

Oil stove. *Prog F* 32:700 Je 16 '17

Oil stoves. *Nat Stock & F* 41:348 Je 30 '17

**Stoves, Franklin**

Franklin stove. *il* Country Life 31:70 D '16

**Straw**

Bale straw after harvest. J. Higby. O Judd Farmer 61:8 S 9 '16

\* British utilization of straw for paper making. P. B. Kennedy. (*Commerce Reports* no. 247) p 280-1 (O 21) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Let straw help produce food. *il* O Judd Farmer 65:45 Jl 20 '18

Prairie signals vs. straw spreaders. J. W. Henceroth. *il* Power F 25:8 N '16

Rye-com straw for thatching. A. W. Green. *il* J Ag New Zealand 12:196-8 Mr '16

Save the straw. *Ohio F* 140:211 S 15 '17

Save the straw. W. F. Purdue. *Ohio F* 142:26 Jl 13 '18

Save the straw via the spreader. O Judd Farmer 60:10 Ja 22 '16

Value of straw. Wallaces' F 41:157 F 4 '16

What to do with the straw stack. J. R. Stone. *il* Power F 26:12 N '17

Why spread straw. Wallaces' F 42:1554 N 16 '17

**Grading**

Grades of hay and straw. N Y Ag Dept B 87:2796-7 S '16

**Prices**

Règlement de la vente du foin, de la paille d'avoine et du blé en Grande-Bretagne, en Irlande, et dans l'île de Man. *Int Year-book Ag Leg* 1916:383-4 '17

**Straw as feed.** See Feeding and feeding stuffs

**—Straw****Straw balers**

Mechanism for clutching and declutching the feed device in straw balers. *Int R Sci & Prac Ag* 7, no 11:1657-9 N '16

**Straw spreaders**

Use of straw spreader. Wallaces' F 43:1293 S 13 '18

**Strawberries**

Adventure with berries. F. J. Dieter. *il* Fruit-Grower 27:157 Mr 1 '16

Amateur's berries. *Country Gent* 81:1083 My 20 '16

Berry-built towns in Delaware. M. G. Kains. *Ohio F* 137:139 Ja 29 '16

Berry of berries. W. D. Gay. *il* Wallaces' F 41:544 Mr 31 '16

Big yield of everbearers. L. Knudson. *Fruit-Grower* 28:164 Mr 1 '17

Can and preserve your strawberries for the winter months. *Prog F* 31:627 My 6 '16; Same. *Prog F* 32:511 Ap 21 '17

Care of fruited strawberry beds. O Judd Farmer 60:13 Mr 4 '16

Culture of the strawberry. M. A. Blake. *il* Field II 28:510-11 Je '16



**Strawberries—Continued**

- Essential of small fruit growing. F. L. Beatty. N Y State Fruit Growers' Assn Pro 1916:157-74
- Essentials of small fruit growing. F. E. Beatty. il Green's Fruit Grower 36:2 Je; 5 Jl '16
- Everbearing strawberries. F. E. Beatty. il Green's Fruit Grower 37:26 Mr '17
- Everbearing strawberries. G. M. Darrow. il Farmers' B 901:1-19 '17
- Everbearing strawberries. G. J. Kellogg. il Minn Hort 44:125-30 Mr '16
- Everbearing strawberries. R. E. Loree. Country Gent 81:1336 Jl 8 '16
- Everbearing strawberries. W. T. Macoun. Ag Gaz of Canada 5:855-6 S '18
- Everbearing strawberries. C. H. Sapp. Ohio F 139:12 Ja 6 '17
- Everbearing strawberries. L. G. Tingle. Market Growers J 18:157 F 15 '16
- Everbearing strawberries; a novelty that has become a staple. F. E. Beatty. il Country Gent 81:145 Ja 22 '16
- Everbearing strawberries at Osage, Iowa, in 1916. C. F. Gardner. il Minn Hort 45:351-4 S '17
- Everbearing strawberries for the first fruitless summer. Gard M 27:40 F '18
- Everbearing strawberries in the provinces. Ag Gaz of Canada 5:870-1 S '18
- Everbearing strawberry. Rural N Y 76:312, 375 Mr 3-10 '17
- Everbearing strawberry. E. H. Riehl. Fruit-Grower 27:81 F 1 '16
- Everbearing strawberry and why. il O Judd Farmer 62:8 Mr 3 '17
- Everbearing strawberry field; with discussion. A. Brackett. Minn Hort 45:62-7 F '17
- Everbearing strawberry in 1917. C. F. Gardner. il Minn Hort 46:241-3 Je '18
- Experience with everbearing strawberries. W. H. Jenkins. Ohio F 142:358 O 12 '18
- Experience with strawberries; symposium. Market Growers J 20:264-5+, 357+ Mr 15, Ap 15 '17
- Experience with strawberries. F. Plessinger. Prac F 113:28 Ja 15 '17
- Fall berries make a hit; symposium. il Fruit-Grower 27:160 Mr 1 '16
- Fall or ever-bearing strawberries a success. L. J. Farmer. Green's Am Fruit Grower 38:6 My '18
- Fall-set strawberries. W. J. Green. Ohio F 140:170 S 1 '17
- Fall strawberries in Dakota. C. B. Waldron. Country Gent 81:61 Ja 8 '16
- Fertilizer for strawberries. E. W. Gage. Green's Fruit Grower 36:21 Ap '16
- Few ways to serve strawberries. Mrs E. O. Swope. Nat Stock & F 40:287 Je 10 '16
- \$52.10 net from one-tenth acre strawberries. H. L. Spooner. il Green's Fruit Grower 37:2 My '17
- Forcing of strawberries. F. I. Kinnison. il Colo Ag Exp B 222:1-8 '17
- Girls' club, strawberry instruction sheet no. 1-2. W Va Ag Ext C 61, 86 '16
- Grow more strawberries. E. W. Townsend. Fruit-Grower 27:63 Ja 15 '16
- Growing strawberries. F. D. Lewis. Green's Fruit Grower 36:3 My '16
- Growing strawberries for market. S. Goodley, jr. il Prac F 114:25 Ja 15 '18
- Growing strawberries in Virginia. G. E. Wray. il O Judd Farmer 60:17 Ap 15 '16
- Harvesting strawberries. E. H. Miller. O Judd Farmer 60:10 Ap 1 '16
- Harvesting strawberries. C. R. Weidle. Country Gent 81:995 My 6 '16
- Harvesting the southern strawberry crop. Prog F 31:328 Mr 4 '16
- Have some strawberries. E. P. Loomis. il Ohio F 137:802 Je 10 '16
- Hill culture for strawberries. Rural N Y 77:805, 830 Je 22-23 '18
- Home canning. A. M. Johnson. il Country Gent 82:948 My 26 '17
- Home garden; start a strawberry bed now. il Country Gent 83:34 Jl 27 '18
- How the strawberry sets fruit. W. D. Val-leau. il Minn Hort 46:449-54 D '18
- How to get a stand. C. W. Hemple. Fruit Grower 28:165 Mr 1 '17
- Important place of strawberries. Green's Fruit Grower 36:40 F '16; Same. Green's Fruit Grower 36:10 My '16
- Improved everbearing strawberries. il O Judd Farmer 62:3 Mr 24 '17
- Intensive culture of strawberries. Gard Chron Am 20:281 Je '16
- Intensive strawberry culture. C. O. Ormsbee. Fruit-Grower 27:388 Ag 15 '16
- Intercropping strawberries. G. A. Balden. Market Growers J 22:112 F 1 '18
- Interesting strawberry pedigree. R. D. Anthony. J Heredity 8:509 N '17
- Is the strawberry crop as profitable as the orchard? il Green's Fruit Grower 36:1 Ap '16
- June-bearing strawberries. G. J. Kellogg. Minn Hort 44:53-7 F '16
- Land of strawberries. E. W. Gage. il Green's Fruit Grower 36:1 Je '16
- Late planting of strawberries. Rural N Y 76:892 Jl 21 '17
- Late strawberries. Gard Chron (Lond) 64:79 Ag 24 '18
- Lessons from a successful strawberry farm. il Nat Stock & F 40:309 Je 17 '16
- Lessons from the strawberry patch. A. F. Tenny. Fruit-Grower 27:179 Mr 1 '16
- Making a permanent strawberry bed. Green's Fruit Grower 36:17 Ap '16
- Matted row and hill culture. O. M. Taylor. Rural N Y 75:377 Mr 4 '16
- Merits of everbearing strawberry. O Judd Farmer 60:3 Mr 4 '16
- Mulching for late strawberries. Country Gent 81:159 Ja 22 '16
- Mulching strawberries. M. N. Edgerton. O Judd Farmer 61:4 D 16 '16
- Mulching strawberries. J. S. Underwood. Green's Fruit Grower 36:4 S '16
- Northern strawberries. J. Demary. Country Gent 82:397 F 24 '17
- Northern strawberries. H. N. Wells. il Country Gent 83:25 Mr 30 '18
- Old berries on old soil. C. N. Crotsenburg. Fruit-Grower 27:361 Jl 15 '16
- Onions and strawberries in combination. W. Ramsdell. Market Growers J 18:278 Ap 15 '16
- Our method of growing and handling strawberries in the Clarkson district; with discussion. C. R. Terry. (In Report, Fruit-growers' assn., 1916, p. 61-5) '17 Ontario ag. dept., Toronto
- Preparation of strawberries for market. C. T. More and H. E. Truax. il Farmers' B 979:1-27 '18
- Prepare for this year's strawberry planting. il Green's Fruit Grower 36:22 Ap '16
- Production of strawberries in the lower Mississippi valley. 16p il '16 Illinois Central railroad, Chicago
- Protecting strawberries. J. A. Paice. Gard Chron (Lond) 63:235 Je 8 '18
- Raising strawberries and sweet corn together. R. L. Watts. Nat Stock & F 42:48 Ap 6 '18
- Renewing the strawberry bed. Country Gent 81:1341 Jl 8 '16
- Renewing the strawberry bed. R. T. Miksch. Ohio F 138:3 Jl 1 '16
- Setting strawberry plants. il Nat Stock & F 42:79 Ap 13 '18
- Small fruit culture. C. W. Mann and E. L. Hall. Green's Am Fruit Grower 38:8 Ja '18
- Small fruit on the farm. J. L. Hartwell. Wis Hort Soc Rep 48:116-20 '18
- Spring work in the strawberry patch. Ohio F 137:602 Ap 22 '16
- Spuds and strawberries. il Country Gent 82:696 Ap 7 '17
- Start some strawberries now. il Country Gent 81:1692 S 16 '16
- Sterility in the strawberry. W. D. Val-leau. bibliog il J Ag Research 12:613-70 Mr 11 '18
- Strawberries. Gard Chron (Lond) 64:56 Ag 10 '18
- Strawberries. Nat Stock & F 40:286 Je 10 '16
- Strawberries. Wallaces' F 42:727 Ap 27 '17
- Strawberries. A. J. Olney and C. W. Mathews. il Ky Ag Ext B 216:67-94 '18

**Strawberries —Continued**

- Strawberries. G. C. Starcher and L. A. Hawkins. Ala Ag Ext C 22 6p '18
- Strawberries; symposium. Market Growers J 18:220+ Mr 15 '16
- Strawberries as a side issue. F. J. Kelleher. Fruit-Grower 27:57 Ja 15 '16
- Strawberries as an intercrop. C. C. Fultz. il Purdue Ag 11:20-1 Mr '17
- Strawberries, currants and gooseberries; with discussion. A. W. Brayton. Ill State Hort Soc Trans 1917:257-64 '18
- Strawberries for home use. J. S. Underwood. Green's Fruit Grower 36:5 Ap '16
- Strawberries for market. F. E. Beatty. il Country Gent 81:947 Ap 29 '16
- Strawberries in Florida. D. L. Hartman. Rural N Y 76:933-4 Ag 4 '17
- Strawberries in New York state. W. Palmer. il N Y Ag Dept B 79,pt 2:1343-7 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1343-7 '17
- Strawberries in Pennsylvania. G. A. Leader. Market Growers J 19:158 O 1 '16
- Strawberries in south Jersey. H. T. Kille. il Fruit-Grower 27:178 Mr 1 '16
- Strawberries in western Washington. J. L. Stahl. Western Wash Ag Exp B v 4:3-5 S '16
- Strawberries pay big. M. E. Bacon. il Fruit-Grower 28:331 Ag 1 '17
- Strawberries: planting, cultivation and care. W. F. Massey. Prog F 32:244 F 24 '17
- Strawberries that work all summer. Wallaces' F 41:605 Ap 14 '16
- Strawberries up to Thanksgiving. J. R. Mat-tern. il Country Life 31:65-7 Mr '17
- Strawberries with irrigation; with discussion. N. A. Rasmussen. il Minn Hort 45:244-9 Je '17
- Strawberry. W. S. Brown. Ore Ag Ext B 146:1-8 '16
- Strawberry acreage report, 1916 and 1917. Monthly Crop Rep 3:33 Ap '17
- Strawberry business. W. J. Green. Ohio F 137:570 Ap 15 '16
- Strawberry by-product. Country Gent 81:890 Ap 22 '16
- Strawberry crop. T. G. Bunting. il J Ag (Quebec) 22:19 Ag '18
- Strawberry-culture. J. W. Collard. il J Ag New Zealand 12:13-18 Ja '16
- Strawberry culture. C. P. Halligan. Country Gent 81:453 F 26 '16
- Strawberry culture. C. P. Halligan. il Mich Ag Exp Spec B 84:1-19 '18
- Strawberry culture. S. G. Shurtliff. il Maine Ag Dept B v 17:8-14 S '18
- Strawberry culture. O. M. Taylor. Mass Hort Soc Trans 1917, pt 1:89-101 '17
- Strawberry-culture. W. H. Taylor. il J Ag New Zealand 16:142-9 Mr '18
- Strawberry culture in Tennessee, Kentucky, and West Virginia. G. M. Darrow. il Farmers' B 854:1-23 '17
- Strawberry growing in Prince Edward county; with discussion. H. Leavens. (In Report, Ontario fruit growers' assn., 1917, p. 46-52) '18 Ontario ag. dept., Toronto
- Strawberry growing in South Dakota. Green's Fruit Grower 36:36 Mr '16
- Strawberry mulching cheapened. C. A. Le-Clair. Green's Fruit Grower 36:15 Ag '16
- Strawberry notes. W. R. Ballard. il Md Ag Exp B 211:51-76 '18
- Strawberry plants in pots for Christmas. S. L. Harper. Am Flor 49:491 S 22 '17
- Strawberry plants smothered by mulch of straw or manure. C. A. Green. Green's Fruit Grower 36:21 My '16
- Strawberry preserves. Weekly N L 4:11 My 16 '17; Same. Better Fruit 11:8 Je '17; Same. Ohio F 139:772 Je 9 '17
- Strawberry specialist's intensive systems. F. H. Valentine. il Gard M 26:20 Ag '17
- Strawberry supply and distribution in 1914. W. A. Sherman and others. map U S Ag B 237:1-10 '15
- Strawberry varieties and cultural hints. J. Oskamp. il Ind Ag Exp B 200:1-16 '17
- Styles in berry rows. M. N. Edgerton. il Fruit-Grower 27:159+ Mr 1 '16
- Success with everbearing strawberries. M. G. Kirkpatrick. Prac F 112:290 Ag 1 '16

- Success with Superb strawberries. F. P. Robinson. Market Growers J 18:365 Je 1 '16
- Successful strawberry culture. J. S. Underwood. Green's Fruit Grower 37:16 Ap '17
- Successful way of growing strawberries. F. E. Beatty. il Green's Am Fruit Grower 38:3-4 F '18
- Sweet strawberries. O. M. Taylor. Rural N Y 75:377 Mr 4 '16
- \$32,566.31 from berries. R. M. Sears. il Fruit-Grower 28:159 Mr 1 '17
- Treatment of strawberry beds. H. E. Kemp. Gard Chron (Lond) 61:47 F 3 '17
- Two crops you want—strawberries and potatoes. il Country Gent 81:848 Ap 15 '16
- War strategy and strawberries; the Norfolk (Va.) district crop slumped this season to one-eighth its normal size. F. A. Waugh. il Country Gent 83:8-9 Ag 3 '18
- Way I grow berries. H. H. Wood. Fruit-Grower 28:193 Mr 15 '17
- When to plant strawberries. F. A. Waugh. il Country Gent 81:746 Ap 1 '16
- Winter and spring care of strawberries. J. F. Holmes. Purdue Ag 12:162-3 D '17
- Winter protection of strawberries. Wallaces' F 41:54 Ja 14 '16

**Bibliography**

- North American varieties of the strawberry; bibliography of North American literature of the strawberry. Va Ag Exp Tech B 11:104-26 '16

**Breeding**

- Inheritance of sex in strawberries. R. D. Anthony and U. P. Hedrick. N Y State Ag Exp Tech B 63:1-10 '17
- Southern strawberries. G. M. Darrow. il J Heredity 7:531-40 D '16; Abstract (Strawberry selection in the United States). Int R Sci & Prac Ag 8,no 4:579-81 Ap '17
- Strawberry, a triumph of plant breeding. J Heredity 7:191 Ap '16

**Composition**

- Composition of the juice of Hungarian strawberries. M. Somogyi and S. Weiser. Int R Sci & Prac Ag 8,no 7:1049-50 Jl '17

**Diseases and pests**

- Further studies of the rots of strawberry fruits. N. E. Stevens and R. B. Wilcox. bibliog U S Ag B 686:1-14 '18
- Pathological histology of strawberries affected by species of botrytis and rhizopus. N. E. Stevens. il J Ag Research 6:361-6 Je 5 '16
- Rhizopus rot of strawberries in transit. N. E. Stevens and R. B. Wilcox. bibliog il U S Ag B 531:1-22 '17
- Some changes produced in strawberry fruits by rhizopus nigricans. N. E. Stevens and L. A. Hawkins. bibliog Phyt 7:178-84 Je '17
- Strawberry weevil. T. J. Headlee. il plans N J Ag Exp B 324:1-19 '18

See also Strawberry crown borers; Strawberry leaf-rollers; Strawberry root weevils; Strawberry rot; Strawberry weevils

**Marketing**

- Local market for strawberries. Country Gent 81:1193 Je 10 '16
- Marketing and distribution of strawberries in 1915. O. W. Schleussner and J. C. Gilbert. maps U S Ag B 477:1-32 '17
- Marketing strawberries. G. D. Smith. il Country Gent 81:842 Ap 15 '16
- New method of selling strawberries. F. E. Cutting. Green's Fruit Grower 36:22 Je '16
- Selling Ozark strawberries. S. O. Rice. il Country Gent 83:1-4 Mr 16 '18
- Unsalable berries. E. H. Favor. il Fruit-Grower 27:326 Je 15 '16

**Packing**

- Case of dishonesty. E. H. Favor. il Fruit-Grower 27:344 Jl 1 '16
- Strawberries are ripe. Green's Fruit Grower 36:10 Je '16
- Strawberry inspection in Sacramento county. F. C. Brosius. Cal State Comm Hort B v 6:334-5 Ag '17



**Strawberries—Continued****Standards**

Strawberry inspection Sacramento county season 1918. F. C. Erosius. Cal State Comm Hort B v 7:504-6 Ag '18

**Statistics**

Commercial production of strawberries. Monthly Crop Rep 3:49 Je '17  
Table showing acreage and production in quarts of strawberries in New York state. N Y Ag Dept B 79,pt 2:1348-9 Ja '16; Same. N Y Ag Dept Rep 1916,pt 3:1348-9 '17

**Transportation**

Factors in transportation of strawberries from the Ozark region. V. W. Ridley. (Markets, Doc. 8) 10p '18 U S Ag  
Rhizopus rot of strawberries in transit. N. E. Stevens and R. B. Wilcox. bibliog il U S Ag B 531:1-22 '17  
Shipping strawberries without loss. C. E. Brehm. il Country Gent 83:15 My 4 '18

**Varieties**

Four varieties famous for size and quality. L. R. Johnson. Market Growers J 18:17 Ja 1 '16  
Newer varieties of strawberries. O. M. Taylor. il N Y State Ag Exp B 447:55-73 '18  
North American varieties of the strawberry. S. W. Fletcher. bibliog il Va Ag Exp Tech B 11:1-126 '16  
Strawberry varieties (B. 401). O. M. Taylor. N Y State Ag Exp Rep 1915:609-36 '16  
What is a good strawberry? Gard M 28:147 D '18

**Strawberry crown borers**

Strawberry crown borer. Purdue Ag 11:34 O '16

**Strawberry leaf-rollers**

Notes on the strawberry leaf-roller. R. L. Webster. bibliog J Econ Entom 11:42-5 F '18  
Strawberry leaf-roller. Purdue Ag 11:34 O '16  
Strawberry leaf-roller. R. L. Webster. il Ia Ag Exp B 179:1-4 '18 (abr. ed.)

**Strawberry planters**

Strawberry planter. W. J. Galbraith. Country Gent 82:54 Ja 13 '17

**Strawberry root weevils**

Strawberry root weevil. A. L. Melander. Better Fruit 12:7-8 My '18

**Strawberry rot**

New strawberry fungi. F. L. Stevens and A. Peterson. il Phyt 6:258-67 Je '16

**Strawberry weevils**

Control of the strawberry weevil. N J Ag Exp Rep 1916:490-4 '17  
Further trial of sulphur-arsenate of lead dust against the strawberry weevil. T. J. Headlee. J Econ Entom 10:287-90 Ap '17; N J Ag Exp C 65:1-7 '17  
Strawberry weevil. il Minn Hort 44:220-1 My '16  
Strawberry weevil. Wallaces' F 41:734 My 12 '16  
Strawberry weevil. T. J. Headlee. N J Ag Exp C 56:1-8 n.d.  
Strawberry weevil. T. J. Headlee. il plans N J Ag Exp B 324:1-19 '18  
Strawberry weevil in Minnesota. S. Marcovitch. (In Report State entomologist, 1915-1916, p. 109-34) bibliog il '16 Minn. ag. exp. station, St Paul  
Sulphur-arsenate dusts against the strawberry weevil. T. J. Headlee. J Econ Entom 9:84-8 F '16

**Stream measurement**

Flow of water in wood-stave pipe; with discussion. F. C. Scobey. il U S Ag B 376:1-96 '16  
Flow through submerged rectangular orifices with modified contractions. V. M. Cone. J Ag Research 9:97-114 Ap 23 '17  
Measuring stream flow. Irr Age 31:85 Ap '16  
Measuring the power of a stream. Rural N Y 76:1315 N 17 '17  
Venturi flume. V. M. Cone. J Ag Research 9: 115-29 Ap 23 '17

Water power for electric light. Rural N Y 75: 258 F 12 '16

**Streams. See Rivers****Streets**

City planning and beautification. H: Busch. Gard Chron Am 21:167-8 Ap '17

**Streptocarpus. See Cape primroses****Streptococci**

Ability of streptococci to survive pasteurization. S. H: Ayers and W: T. Johnson, jr. J Ag Research 2:321-30 Jl '14  
Colon bacteria and streptococci and their significance in milk. L. A. Rogers and others. Creamery 4:11-15 My '16  
Origin of some of the streptococci found in milk. L. A. Rogers and A. O. Dahlberg. J Ag Research 1:491-511 Mr '14  
Proteolysis of streptococcus erysipelatis and streptococcus lacticus compared under different hydrogen ion concentration. A. Itano. Mass Ag Exp B 167:178-85 '16  
Some characters which differentiate the lactic-acid streptococcus from streptococci of the pyogenes type occurring in milk. J. M. Sherman and W. R. Albus. bibliog J Bact 3: 153-74 Mr '18  
Study of the diphtheroid group of organisms with special reference to their relation to the streptococci. R. R. Mellon. il J Bact 2: 81-107, 269-307, 447-500 Mr-Jl '17  
Study of the streptococci concerned in cheese ripening. A. C. Evans. bibliog J Ag Research 13:235-52 Ap 22 '18

**Strikes**

World war and union labor. Ag Digest 2:960 My '18

**Striped peach worms. See Peach worms, Striped****Strong winds—south prevailing; story. L. Davis. O Judd Farmer 64:635 Je 15 '18****Strongylidosis**

Anthelmintic treatment of equine intestinal strongylidosis. M. C. Hall and others. bibliog Am Vet M Assn J 54:47-55 O '18  
Clinical study of equine strongylidosis. M. C. Hall. Am Vet M Assn J 49:102-6 Ap '16  
Equine strongylidosis. A. Liautard. Am Vet M Assn J 49:161-3 My '16  
Horse strongyles in Canada. B. H. Ransom and S. Hadwen. bibliog il Am Vet M Assn J 53:202-14 My '18  
Sclerostomes in horses. W. J. Hartman. il bibliog Mont Ag Exp C 58:221-36 '16

**Strychnos**

Genus strychnos in India and the Far East. A. W. Hill. Int R Sci & Prac Ag 8,no 12: 1229-30 D '17

**Stuart, Henry Carter, 1855-**

Best farmer in Virginia. T. J. Murphy. por il Country Gent 83:5-6- Ag 17 '18  
Cattleman by birth; a statesman by acclamation. por Field Il 26:598 Jl '16

**Stucco**

Rejuvenating the old house with stucco. H. C. Campbell. il Hoard's D 51:659-+ My 12 '16

**Students. See College girls; College students****Students' dairy products judging contest**

Students' dairy products judging contest. W. P. B. Lockwood. J Dairy Sci 1:425-7 Ja '18

**Students' national contest in judging dairy cattle**

Dairy judging teams. E. L. Anthony and I. J. Bibby. Penn State F 10:93 My '17  
National dairy show; valuable prizes to be awarded. N Y Prod R 42:821 S 20 '16  
9th contest at National dairy show. N Y Prod R 44:1130 O 31 '17  
Report of the committee on methods of conducting the Students' national contest in judging dairy cattle. H. Rabild and others. J Dairy Sci 1:150-9 Jl '17  
Results of the students' national contest in judging dairy cattle. N Y Prod R 42:1140 O 25 '16

Students' judging contest at National. Jersey B 36:1792 N 14 '17

**Students' nat. contest in judging—Continued**

- Students' judging contest at 1916 National dairy show, Jersey B 35:1692 O 25 '16;  
Hoard's D 52:666 D 1 '16  
Students' national contest in judging dairy cattle; National dairy show, Columbus, Ohio, H. Rabild, J Dairy Sci 1:421-4 Ja '18  
Teams from 13 states competed in the 9th annual contest, Hoard's D 54:540 N 9 '17  
10th annual students' national contest, Creamery 7:37 D '18

**Stumps.** See Clearing of land

**Style (in dress).** See Fashion

**Subirrigation.** See Irrigation

**Subsoiling.** See Tillage

**Substitute;** a story of a farmer and the draft, G. E. A. Coley, il Am Coop J 14:50+ O '18

**Substitute foods**

- Food substitutes, Gard Chron (Lond) 63:188 My 4 '18  
Foodless food substitutes attack health of America, A. W. McCann, Pa Ag Dept Dairy B v 16:30-4 Ag '18  
Substitute foods, fictitious and otherwise, C. H. LaWall, Pa Ag Dept Dairy B v 16:5-7 F '18  
Warning is issued against freak food substitution ideas, R. H. Bishop, jr, Ohio Pub Health J (State dept. of health, Columbus) 8:506 N '17

See also Butter, Substitutes for; Coffee, Substitutes for; Eggs, Substitutes for; Sugar, Substitutes for; Wheat conservation

**Substitutes for gasoline.** See Gasoline, Substitutes for

**Success**

- Success, Wallaces' F 41:177 F 4 '16  
Unsuccessful men, H. E. Tweed, Ohio F 141:395 Mr 16 '18  
What is success? C. Poe, Prog F 31:17, 51, 82 Ja 1-15 '16

**Sucrose.** See Sugar

**Sudan.** See Irrigation—Sudan

**Sudan grass**

- Do you know about garawi? G. H. Dacy, il Country Life 31:68 Ja '17  
Experiments with Sudan grass, E. Breakwell, Ag Gaz of New South Wales 29:559-67 Ag '18  
Experiments with Sudan grass, C. A. Whittle, Prog F 31:12 Ja 1 '16  
Handling Sudan grass in Missouri, J. C. Hackleman, O Judd Farmer 61:6 N 25 '16  
Progress report, Lubbock, 1909-1914; Sudan grass, il Tex Ag Exp B 219:13-17 '17  
Progress report, Spur, 1909-1914; Sudan grass, Tex Ag Exp B 218:14-16 '17  
Sudan—a new forage crop, J. R. Holbert, il Purdue Ag 10:20-1 Mr '16  
Sudan grass, il Hoard's D 51:788 Je 2 '16  
Sudan grass, Wallaces' F 43:962 Je 21 '18  
Sudan grass, T. B. Hutcheson and others, il Va Ag Exp B 212:1-15 '16  
Sudan grass, B. A. Madson and P. B. Kennedy, il Cal Ag Exp B 277:196-224 '17  
Sudan grass, J. Marsh, Hoard's D 53:474 Ap 6 '17  
Sudan grass, A. J. Maurer; J. C. Hackleman, Wallaces' F 41:584 Ap 7 '16  
Sudan grass, N. Schmitz, il Md Ag Exp B 194:47-62 '16; Same, Md Ag Exp Rep 1915-1916:47-62 '16  
Sudan grass, C. G. Williams, il Ohio Ag Exp B v 1:67-70 Mr '16  
Sudan grass a great hay crop, L. A. Markham, il Prog F 31:647 My 13 '16  
Sudan grass and Canada thistles, il Rural N Y 76:543 Ap 14 '17  
Sudan grass as hay, F. A. Brown, Rural N Y 76:37 Ja 13 '17  
Sudan grass; comparisons with planters' friend and maize, E. Breakwell, il Ag Gaz of New South Wales 27:543-8 Ag '16  
Sudan grass experience, E. T. Leavitt, il Hoard's D 55:319 Mr 15 '18  
Soudan grass experience, W. E. Mies, Wallaces' F 41:182 F 4 '16  
Sudan grass for hay and seed, B. E. Miller, Prog F 31:282 F 26 '16

Sudan grass for Missouri, Country Gent 81:887 Ap 22 '16

Sudan grass great hay plant, B. E. Miller, Prog F 31:789 Je 17 '16

Sudan grass; history, Prac F 112:232 Je 1 '16  
Sudan grass in Kansas, G. E. Thompson, il Kan Ag Exp B 212:1-29 '16

Sudan grass in Missouri, C. B. Hutchinson, Breeder's Gaz 69:518 Mr 2 '16

Sudan grass in the South, F. A. Brown, Breeder's Gaz 71:140 Ja 18 '17

Sudan grass in Virginia, W. E. Bowers, Country Gent 82:894 My 19 '17

Sudan grass; its behaviour in various experiments, E. Breakwell, il Ag Gaz of New South Wales 28:609-20 S '17

Sudan grass on the mother lode, R. J. Baker, Breeder's Gaz 69:180 Ja 27 '16

Sudan grass winning favor, Hoard's D 55:225 Mr 1 '18

Sweet clover and Sudan, O Judd Farmer 60:5 My 27 '16

Trial of Sudan grass: Grafton experiment farm, 1917-18, E. Gollidge, Ag Gaz of New South Wales 29:797-8 N '18

Value of Sudan grass as a forage crop, Int R Sci & Prac Ag 7,no 1:63 Ja '16

See also Feeding and feeding stuffs—Sudan grass

**Composition**

Composition and digestibility of Sudan grass hay, W. G. Gaessler and A. C. McCandlish, bibliog Ia Ag Exp Research B 46:67-75 '18

**Seed**

Distinguishing characters of the seeds of Sudan grass and Johnson grass, F. H. Hillman, il U S Ag B 406:1-5 '16

Sudan grass report for December 31, 1917, U S Seed Rep 1:2 F '18

Sudan grass seed, U S Seed Rep 1:5 Ja '18

Sudan grass seed outlook, U S Seed Rep 2:8 D '18

**Sudan-grass hay**

Composition and digestibility of Sudan-grass hay, W. G. Gaessler and A. C. McCandlish, bibliog J Ag Research 14:176-85 Jl 22 '18

**Suffolks (horses)**

Suffolk horse in America, A. G. Galbraith, il Country Gent 82:141 Ja 27 '17

Suffolk Punch draft horses, R. A. Hayne, il Nat Stock & F 41:442 Ag 4 '17

Suffolk's best year, C. H. Clarke, il Breeder's Gaz 73:761 Ap 11 '18

Why not the Suffolk? E. S. Akin, il Breeder's Gaz 72:1158 D 20 '17

**Sugar**

About sugar, Wallaces' F 43:130 Ja 25 '18

Agricultural situation for 1918; sugar; more beet and cane sugar should be produced, map U S Ag C 86:1-34 '18

Allied sugar bowl, Hoard's D 56:160 Ag 30 '18

Beet-sugar production; northwestern Ohio farms adapted to beet culture, C. E. Thorne, Ohio Ag Exp B v 3:77-8 Mr '18

Beeting the sugar famine, R. H. Moulton, il Am Coop J 13:325-6 Ap '18

Cane cultivation and sugar making, Fla Ag Dept Quar B v 28:33-9 Ja '18

Cane sugar vs. beet sugar, Ohio F 139:564 Ap 14 '17

Conserving sugar in ice cream manufacture, H. A. Ruehe, il Ag Exp C 219:1-2 '18; Same, Creamery 7:50 My '18; Same, N Y Prod R 46:54 My 8 '18

Contribution on the use of sugar as a dressing in veterinary surgery, Int R Sci & Prac Ag 7,no 2:237-9 F '16

Cuba's sugar, W. W. Rasor, Pan Am Magazine (70 5th av, N.Y. 25c) 26:240-1 Mr '18

Direct determination of sucrose in the presence of reducing sugars, M. A. Schneller, La Ag Exp B 156:1-12 '16

\* Economising sugar, Nature (St Martin's st, London, W. C. 6d) 100:347-8 Ja 2 '18

Enough sugar for ice cream, Creamery 7:52 My '18; Same, N Y Prod R 46:48 My 8 '18



**Sugar—Continued**

- Experiment in the education of chemical engineers; the 25th anniversary of the Audubon sugar school. C. E. Coates. *il plan J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:379-86 Ap '17
- Honey versus sugar. *Am Bee J* 58:406 D '18
- How can I save sugar on a 2 lb. ration? *J Home Econ* 10:423 S '18
- Ice cream sugar restriction. W. C. Hughes. *N Y Prod R* 45:714 Mr '13 '18
- Increase sugar supply; maple trees, bees, sugar beets, sweet sorghum, and cull apples furnish sweets. *Weekly N L* 5:5 F 20 '18
- Inversion of cane sugar by soils and allied substances and the nature of soil acidity. F. E. Rice and S. Osugi. *bibliog Soil Sci* 5: 333-58 My '18
- Invert sugar; its nature and mode of manufacture, and its use in ice cream making. W. B. Brownell. *N Y Prod R* 44:1062 O 24 '17
- Keep up sugar crop. *Weekly N L* 5:7 N 21 '17
- New rules for sugar consumption. *Creamery* 7:42+ JI '18
- Practical data on invert sugar. *Creamery* 7:44 Mr '18
- Resumption of French sugar production. C. W. A. Veditz. (Commerce Reports no. 252) p 372-3 (O 27) '17 U. S. Bur. of foreign and domestic commerce, Washington, D.C.
- Save our sugar; emergency recipes. B. E. Shapleigh. *ilp* 10c '17 Am. home economics assn., Emergency committee, 19 W. 44th st, N.Y.
- Save sugar. *Prog F* 33:48 Ja 12 '18
- Shortage of sugar and coal. A. A. Jones. *Congressional Record* (Washington, D.C.) 56:4167-86 Mr 22 '18
- Shortage of 2,000,000 tons of sugar reason for saving. *Weekly N L* 5:5 My 15 '18
- Study of the sucrose variations in successive cane joints as they attain maturity with special reference to the death of the leaves. T. S. Venkataraman and K. Krishnamurti Row. *Ag J of India Sci Congress* No 1917:117-24
- Sugar. (*In* Geography of the world's agriculture, p. 71-6) maps '17 U S Ag
- Sugar. (*In* Official statement, no. 7, p. 16-17) '18 U.S. Food administration, Washington, D.C.
- Sugar. H. Goddard. *New Republic* (421 W. 21st st, N.Y. 10c) 13:73-4 N 17 '17
- Sugar and character. *il Good Housekeeping* (119 W. 40th st, N.Y. 20c) 67:56 N '18
- Sugar-farming in Cuba as a new and sure way to get rich quickly. *il Current Opinion* (63 W 36th st, N.Y. 25c) 63:423-4 D '17
- Sugar for manufacturers. *Creamery* 7:49 My '18
- Sugar in ice cream. L. O. Thayer. *N Y Prod R* 44:156 My 23 '17
- Sugar in surgery. G. Bussano. *Am Vet M Assn J* 48:662-5 Mr '16
- Sugar making in Cuba. *il Sci Am Sup* (233 Broadway, N.Y. 10c) 86:120 Ag 24 '18
- Sugar prices and distribution under food control. R. G. Blakey. *Quarterly J Econ* (Harvard Univ. Press, Cambridge, Mass. \$3 per yr.) 32:567-96 Ag '18
- Sugar problem. Engineer (33 Norfolk st., Strand, London, W. C. 2) 123:85-6 Ja 26 '17
- Sugar rations and jam. *Better Fruit* 12:18 Je '18
- Sugar rights and needs. *Ohio F* 142:256 S 14 '18
- Sugar supply sources. *Weekly N L* 5:11 Ap 17 '18
- Valuation of raw sugars. W. D. Horne. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:809-12 O '18
- Value of sugar as food for bees. P. J. Baldensperger. *Am Bee J* 57:230-1 JI '17
- What industry owes to science. Engineer (33 Norfolk st., Strand, W. C. 2) 123:488 Je 1 '17
- See also* Caramel; Maple sugar

**Analysis and testing**

- Constants of the quartz-wedge saccharimeter and the specific rotation of sucrose. F. Bates and R. F. Jackson. (B. 13) p 67-128 '16 U.S. Bureau of standards, Washington, D.C.
- Practical laboratory apparatus—filtering rack for sugar solutions. C. W. Hines. *il Philippine Ag R* 10,no 4:434-5 '17
- Simplified inversion process for the determination of sucrose by double polarization. H. S. Walker. *J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:490-2 My '17
- Manufacture**
- Cane-juice clarification. C. W. Hines. *Philippine Ag R* 9,no 4:339-47 '16
- Chemical control in cane sugar factories: a review. C. Somers Taylor. *Ag J of India* 12:532-5 O '17
- Coloring matter of cane juices. M. A. Schneller. *La Ag Exp B* 157:1-16 '16
- Economy of electric drive in cane sugar mills. C. A. Kelsey. *il General Electric Review* (Schenectady, N.Y. 20c) 21:252-68 Ap '18
- Experimental studies of vacuum juice heaters. E. W. Kerr and S. J. Webre. *il La Ag Exp B* 159:1-46 '16
- Extraction of sugar-cane mills. P. H. Parr. Engineer (33 Norfolk st., Strand, London, W. C. 2) 123:148-9 F 16 '17
- Manufacture and use of lime for cane lands and sugar manufacture. C. W. Hines. *il Philippine Ag R* 10,no 4:350-60 '17
- Mechanical equipment of a Hawaiian sugar plantation. *il Am Machinist* (10th av. at 36th st., N.Y. 15c 47:45-8 JI 12 '17
- New process for the recovery of sucrose from final molasses. *Scientific Am* (233 Broadway, N.Y. 10c) 116:110 Ja 27 '17
- Production of sugar from sugar-beets: patented by G. H. Benjamin. *Metallurgical and Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:286 Mr 1 '17
- Recent developments in operating sugar mills. *Metallurgical and Chemical Eng* (239 W. 39th st., N.Y. 25c) 16:288 Mr 1 '17
- Role of oxidases and of iron in the color changes of sugar cane juice. F. W. Zerban. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10:814-17 O '18
- Seeding method of graining sugar. H. E. Zitkowski. *J Industrial & Eng Chemistry* (Am. Chemical Soc., Easton, Pa. 60c) 10: 992-4 D '18
- Sulphitation in white sugar manufacture, by F. Maxwell. *Review. Ag J of India* 12:167-9 Ja '17
- Waste product of the rice field now used in the sugar refinery. *Scientific Am* (233 Broadway, N.Y. 10c) 117:36 JI 14 '17

**Prices**

- Argentine sugar situation. W. H. Robertson. (Commerce Reports no. 215) p 977-8 (S 13) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Chapter on sugar. *Rural N Y* 76:1445 D 22 '17
- Queensland—Act amending sugar cane prices bill, setting up local boards to regulate the prices to be paid for sugar cane. Provision is also made for appointment of a valuator to meet complaints of too high prices by mill owners. Power is given to check chemists operating from central board already in existence to enter mills and use appliances in laboratories for proper analysis of sugar. (Passed Assembly S 6 '17)

**Statistics**

*See* Sugar industry—Statistics

**Storage**

- Deterioration of cane sugars in storage; its causes and suggested measures for its control. W. L. Owen. *bibliog La Ag Exp B* 162:1-121 '18

**Sugar, Substitutes for**

- Beekeeping and the war. E. F. Phillips. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 6:444-9 My '18
- Corn sugars to replace half of cane sugar. *Creamery* 7:40+ Ja '18

**Sugar, Substitutes for—Continued**

- Corn syrup as a substitute for sugar. C. Peckinpauge. *Purdue Ag* 12:576 Je '18
- \* Doing without sugar. (Ser. 3, no. 5) 16p '18 Winthrop normal and industrial coll., Rock Hill, S.C.
- Friends of Captain Sugar. E. R. Burt. *J Home Econ* 10:408-10 S '18
- Glucose and its household uses. *J Ag (Quebec)* 22:64 O '18
- Home grown sweetening. Wallaces' *F* 43:646 Ap 12 '18
- Honey as a sugar substitute. *Rural N Y* 76: 1336, 1347 N 17-24 '17
- How to save sugar. M. E. Robinson. *Mo Ag Ext C* 47:1-4 '18
- Proved ways of using less sugar. *Prac F* 114: 236 Jl 1 '18
- Save on sugar says Uncle Sam. A. G. Vestal. *Power F* 27:40 N '18
- Save the sugar; 24 recipes using sugar substitutes. M. M. Lawrence. *Tex Univ (Austin)* Ext Food Conservation Leaflet 2:1-15 '17
- Sirup of grapes as a substitute for sugar. *Scientific Am* (233 Broadway, N.Y. 10c) 117:185 S 15 '17
- Sorghum as a substitute for sugar. C. E. Thorne. *il Ohio Ag Exp B v* 3:33-5 F '18
- Sorghum to help the sugar shortage. F. J. McClure. *Purdue Ag* 12:553-4 Je '18
- Substitute for sugar obtained from grapes. J. E. Haven. (Commerce Reports no. 276) p 756 (N 24) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Substitutes for a part of the cane sugar in ice cream. S. H. Ayres and others. *Creamery* 7:48-9 My '18; Same. *N Y Prod R* 45:910 Ap 17 '18
- Substitutes for sugar. *Nation* (20 Vesey st., N.Y. 10c) 105:477-8 N 1 '17
- Substitutes for sugar. *N Y City Dept Health Weekly B n s* 6:356-7 N 10 '17
- Substitutes for sugar. G. V. Gray. *il Country Gent* 83:32 Jl 6 '18
- \* Substitution of saccharin for sugar. W. E. Burge. *Science (Science Press, Garrison, N.Y. 15c) n s* 48:549-50 N 29 '18
- Sugar in war time. V. J. Anderson. *Ill Univ (Urbana) B v* 15, no 47 3p Jl 22 '18
- Sugar savers. *Cornell Countryman* 15:202-3 Ja '18
- Sugar-saving substitutes in ice cream. J. H. Frandsen and others. *Neb Ag Exp B* 168: 1-8 '18; Same. *N Y Prod R* 46:1026-7 O 30 '18; Same. *Creamery* 7:40-2 S '18
- Suggestions for sugar saving. *Ia Ag Ext Emergency Leaflet* 43:1-4 '18
- Sweeten up with sorghum. *O Judd Farmer* 65:359 O 19 '18
- Use less sugar. M. L. Matthews. *Purdue Ag Ext Leaflet* 93:1-4 '18
- Sugar-beet leafspot**
- Climatic conditions as related to cercospora beticola. V. W. Pool and M. B. McKay. *bibliog il J Ag Research* 6:21-60 Ap 3 '16
- Effect of attacks by cercospora beticola on the composition of sugar beets. E. Saillard. *Int R Sci & Prac Ag* 7, no 3:448 Mr '16
- Relation of stomatal movement to infection by cercospora beticola. V. W. Pool and M. B. McKay. *bibliog il J Ag Research* 5: 1011-38 F 28 '16
- Sugar-beet nematodes**
- Control of the sugar-beet nematode. H. B. Shaw. *il Farmers' B* 772:1-19 '16
- Sugar-beet root-lice**
- Influence of soil moisture upon the rate of increase in sugar-beet root-louse colonies. J. R. Parker. *J Ag Research* 4:241-50 Je '15
- Some factors influencing the distribution of pemphigus betæ Doane in beet fields. A. C. Maxson. *J Econ Entom* 11:231-6 Ap '18
- Unpublished notes on pemphigus betæ Doane. A. C. Maxson. *J Econ Entom* 9:500-5 O '16
- Sugar-beet thrrips**
- Sugar-beet thrrips. W. H. White. *bibliog il U S Ag B* 421:1-12 '16
- Sugar-beet thrrips; greenhouse pest which attacks sugar-beet. *Weekly N L* 4:2 Mr 14 '17
- Thrips as pollinators of beet flowers. H. B. Shaw. *il U S Ag B* 104:1-12 '14
- Sugar-beet webworms**
- Note on the life cycle of the sugar-beet webworm. H. O. Marsh. *J Econ Entom* 10:543-4 D '17
- Sugar beets. See Beets**
- Sugar cane**
- Action of copper arsenate and arsenious acid on sugar cane roots. E. Jarvis. *Ag J of India* 13:145-7 Ja '18
- Cane by-products in Natal. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:745 S '18
- Commercializing a Cuban jungle. P. Shive. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:359 Je 9 '17
- Cross-pollination of sugar cane. H. B. Cowgill. *bibliog Am Soc Agron J* 10:302-6 O '18
- Fertilizing sugar cane. J. F. Duggar. *Prog F* 31:377 Mr 11 '16
- Improved sugarcane in the United Provinces. G. Clarke. *il Ag J of India* 11:243-5 Jl '16
- Louisiana sugar cane acreage 1918; sugar and sirup production, 1917. *Monthly Crop Rep* 4: 51 My '18
- Manurial experiments on sugar cane, 1914-1915. J. de Verteuil. *Int R Sci & Prac Ag* 7, no 5:690-1 My '16
- Motor-plowing sugar land. A. Wilkinson. *Country Gent* 82:1026 Je 16 '17
- Notes on improved methods of cane culture, by G. Clarke and Naib Husain. *Review. Ag J of India* 12:170-2 Ja '17
- Origin of the Uba cane. C. A. Barber. *Ag J of India* 13:544-6 Jl '18
- Origin of the Uba cane. N. Deerr. *Ag J of India* 13:727-8 O '18
- Resumé of work of plant industry division, 1916: cane varieties; with report of analyses. A. M. Burton. *il Philippine Ag R* 10, no 4: 369-88 '17
- Seedling cane. C. W. Hines. *il Philippine Ag R* 10, no 1:32-42 '17
- Selecting sugar cane before planting: some demonstrative experiments. A. H. Rosenfeld. *Ag J of India* 13:695-700 O '18
- Sliding scale bonuses in the sugar-cane plantations of Hawaii. *Int R Ag Econ* 9, no 3:258-60 Mr '18
- Some sugarcane experiments in Travancore. N. Kunjan Pillai. *Ag J of India* 11:79-81 Ja '16
- Stable manure as a fertilizer for sugar cane. T. F. Johnson. *Prog F* 31:468 Ap 1 '16
- Studies in inheritance in sugar cane. H. B. Cowgill. *J Dept Ag Porto Rico* 2:33-41 Ja '18
- Study of the arrowing (flowering) in the sugarcane with special reference to selfing and crossing operations. T. S. Venkataraman. *il Ag J of India Sci Congress* No 1917: 97-108
- Study of the root system of the sugar cane and its application to the production of ratoon crops. C. W. Hines. *il Philippine Ag R* 10, no 2:151-61 '17
- Study of the sucrose variations in successive cane joints as they attain maturity with special reference to the death of the leaves. T. S. Venkataraman and K. Krishnamurti Row. *Ag J of India Sci Congress* No 1917: 117-24
- Sugar cane cultivation and the manufacture of sugar in the republic of Salvador, Central America. H. A. Downie. *Int R Sci & Prac Ag* 9, no 1:62-3 Ja '18
- Sugar-cane culture for sirup production in the United States. P. A. Yoder. *il U S Ag B* 486:1-45 '17
- Sugar cane in Arizona. A. M. McOmie. *Ariz Ag Exp Timely Hints* no 116:1-8 '16
- Sugar cane paper for fighting weeds. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:358 Ap 20 '18
- Sugar cane that outgrew itself. H. B. Cowgill. *il J Heredity* 7:96 F '16
- Testing new cane seedlings in north India. C. A. Barber. *Ag J of India* 13:243-8 Ap '18



**Sugar cane—Continued**

\* Weed destruction in sugar cane fields. Sci Am Sup (233 Broadway, N.Y. 10c) 86:343 N 30 '18

See also Japanese sugar cane

**Analysis**

Studies in Indian sugar canes, no. 2. C. A. Barber. Int R Sci & Prac Ag 7, no 12:1775-81 D '16

**By-products**

Manufacture of natalite and other cane by-products. Ag J of India 13:729-31 O '18

**Diseases and pests**

Chlorosis of sugar cane. Porto Rico Ag Exp Rep 1917:10-19 '18

Epiphytotic of cane disease in Porto Rico. J. A. Stevenson. il Phyt 7:418-25 D '17

Fungoid diseases of the sugarcane at Tucuman (Argentina). Int R Sci & Prac Ag 7, no 7:1039-40 J1 '16

History and cause of the rind disease of sugar cane. J. R. Johnston. bibliog il J Bd Ag Porto Rico 1:17-45 Ja '17

Insect pests of the sugarcane in Queensland, Australia. E. Jarvis. Int R Sci & Prac Ag 7, no 9:1385-6 S '16

List of insect pests of the sugar-cane in Queensland, accompanied by particulars as to the nature and extent of the damage sustained and the habits and distribution of these insects

Mottling disease of cane. bibliog Porto Rico Insular Exp Rep 1916-1917:40-78 '17

Sugar-cane fungi and diseases of Porto Rico. J. R. Johnston and J. A. Stevenson. bibliog il J Dept Ag Porto Rico 1:177-251, 19-31pl O '17

Tylenchus similis, the cause of a root disease of sugar cane and banana. N. A. Cobb. J Ag Research 4:561-8 S '15

White-grubs injuring sugar cane in Porto Rico. E. G. Smyth. bibliog il J Dept Ag Porto Rico 1:47-92, 141-69 Ap-J1 '17

See also Sugar-cane beetle borers; Sugar-cane moth borers; Sugar-cane root borers; Sugar-cane smut

**Storage**

After-ripening of cane; chemical changes which take place after cutting. J. H. Barnes. Ag J of India 12:200-15 Ap '17

**Varieties**

Method of identification and description of sugar cane varieties, and its application to types grown in Porto Rico. H. B. Cowgill. il J Dept Ag Porto Rico 1:119-140 J1 '17

**Sugar-cane beetle borers**

Cane borer beetle in Hawaii and its control by natural enemies. F. Muir and O. H. Swezey. (Entom. ser. B. 13) 102p il '16 Exp. station of the Hawaiian sugar planters' assn., Honolulu

**Sugar-cane moth borers**

Emergence response of trichogramma minutum Riley to light. G. N. Wolcott. J Econ Entom 11:205-9 Ap '18

Larval characters and distribution of two species of diatraea. T. E. Holloway. il J Ag Research 6:621-6 J1 '16

New species of alcohol forming bacterium isolated from the interior of stalks of sugar cane infested with the cane-borer diatraea saccharalis. W. L. Owen. bibliog il J Bact 1:235-47 Mr '16

**Sugar-cane root borers**

Sugar-cane root-boring weevils of the West Indies. W. D. Pierce. il J Ag Research 4: 255-64 Je '15

**Sugar-cane smut**

On the mode of infection and prevention of the smut disease of sugarcane. S. J. Ajrekar. il Ag J of India 11:288-95 J1 '16

**Sugar factories**

Tests of boilers with bagasse as fuel. E. W. Kerr. La Ag Exp B 160:1-58 '16

Tests of the power and steam consumption of sugar factories. E. W. Kerr and others. La Ag Exp B 158:1-45 '16

**Sugar industry**

American beet sugar industry. Ohio F 138. 539 D 2 '16

Annual report of the American sugar refining company for the 27th year ending Dec. 31, 1917. 35p maps '17 Am. sugar refining co., 117 Wall st., N.Y.

Beet-sugar industry in the United States. C. O. Townsend. bibliog il U S Ag B 721:1-54 '18

Beet sugar industry in the United States and Europe. Econ World (128 Water st, N.Y. 25c) n s 13:627-8 My 5 '17

Better marketing for beet sugar. J. H. Collins. il Country Gent 81:1786 O 7 '16

Boost for the sugar crop. J. R. McMahon. il Country Gent 82:2014-15 D 22 '17

British beet sugar industry. H. F. Easton. Engineer (33 Norfolk st, Strand, London, W. C. 2) 123:321 Ap 6 '17

Business, politics and religion in Utah; the Utah-Idaho sugar company versus the people of Utah and Idaho. C. G. Patterson. 3d ed 23p 50c '16 C. G. Patterson, Box 136, Salt Lake City, Utah

Cane sugar industry; agricultural, manufacturing, and marketing costs in Hawaii, Porto Rico, Louisiana, and Cuba. (Misc. ser. no. 53) 462p 50c '17 U. S. Bur. foreign and domestic commerce, Washington, D.C.

Census of manufactures, 1914; the sugar industry. J. D. Boyle. 13p '17 U.S. Bur. of the census, Washington, D.C.

Child labor in the sugar-beet fields of Colorado. E. N. Clopper and L. W. Hine. (Pamph. 259) 34p il 25c '16 Nat. child labor com., 105 East 22d st., N.Y.

Development of an important sugar industry by the Japanese. Econ World (128 Water st, N.Y. 25c) n s 14:772 D 1 '17

Drawback on sugar. R. F. Broussard. Am Economist (339 Broadway, N.Y. \$2 per yr) 60:103-8,iii-iv, 118-20,iii-iv Ag 31-S 7 '17

Speech in the Senate of the United States, Aug. 15, 1917

General report re cost of living; sugar. W. F. O'Connor. (7 George V Sessional paper no. 189) 39p '17 Canada Ag

High price of sugar and how to reduce it, by H. H. Smith. Review. Ag J of India 13:566-8 J1 '18

In the sugar fields and mills of Cuba; pictures. Country Gent 82:supl D 22 '17

Indian sugar industry. W. Sayer. Ag J of India 11:42-64 Ja '16

Influence of sugar beet cultivation on German agriculture. Ag J of India 12:302-7 Ap '17

Louisiana's sugar industry revives. F. Williams. il Country Gent 82:1696 N 3 '17

Michigan sugar beet growers active. Rural N Y 76:513 Ap 7 '17

Natal sugar crop. W. W. Masterson. (Commerce Reports no. 224) p 1128-9 (S 24) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

Necessity for sugar conservation. (B. 1402) 6p mim '18 U.S. Food administration, Washington, D.C.

\* Necessity for sugar conservation. (In Official statement no. 4, p. 8-11) '18 U.S. Food administration, Washington, D.C.

New process in Hawaiian sugar industry. Ag J of India 13:728-9 O '18

Problem of sugar manufacture in India. Ag J of India 13:747-59 O '18

Problem of sugar manufacture in India. W. Sayer. Ag J of India 12:550-65 O '17

Production of sugar in the United States and foreign countries. P. Elliott. U S Ag B 473: 1-70 '17; Excerpts. Ag Digest 1:339 Mr '17

Profit sharing in the sugar business. 23p 50c '17 C. G. Patterson, Box 136, Salt Lake City

Report on the beet sugar industry in the United States. 164p '17 Federal trade commission, Washington, D.C.

Scientific progress in sugar cultivation and manufactures, pursuant to S. Res. 163; a years. H. C. Prinsen Geerligs. Ag J of India 13:701-9 O '18

Scrapping the American sugar bowl. J. R. McMahon. il Country Gent 82:1958-9 D 15 '17

**Sugar industry—Continued**

- Secrets of the Utah-Idaho sugar company; an open letter to the beet growers of the intermountain region. 7p '17 C. G. Patterson, Box 136, Salt Lake City
- Shortage of sugar; hearings before the subcommittee of the Senate Committee on manufacture in Java during the last three resolutions to investigate the causes of the shortage of coal and sugar. 1048p '18 Apply to congressmen
- Some considerations on the advisability of endeavoring to establish the sugar beet industry in South Australia. A. J. Perkins. J Dept Ag S Australia 21:547-70 F '18
- Some experiments in the improvement of the date-palm sugar industry. H. E. Annett. Ag J of India 12:442-5 J1 '17
- Some results of experiments on the palm sugar industry. H. E. Annett. Ag J of India 12:144-50 Ja '17
- Sugar accounting. W. T. Woodbridge. J Accountancy (20 Vesey st, N.Y. 30c) 25:255-8 Ap '18
- Sugar beet supremacy. G. F. Stratton. il Country Gent 83:13+ Ja 5 '18
- \* Sugar industry after the war. T. E. Thorpe. Nature (St Martin's st, London, W. C. 6d) 101:344-6 J1 4 '18
- Sugar industry in India. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:64 Ja 26 '18
- Sugar industry in Russia. N. A. Krioukov. Int R Sci & Prac Ag 8:no 3:452-5 Mr '17
- \* Sugar industry of Barcelona district. H. N. Cookingham. (Commerce Reports no. 267) p 602-3 (N 13) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Sugar industry of Colorado has become welfare factor. Commercial (Denver civic and commercial assn. 5c) 9:13 Ja 24 '18
- Sugar industry of the Philippines. Philippine Ag R 10,no 2:161-2 '17
- Sugar shortage. G. F. Stratton. il Country Gent 83:8 O 26 '18
- Sugar supply of the United States. F. Andrews. U S Ag Yearbook 1917:447-60
- Sugar supply of the United States: its extent and distribution on August 31, 1917. U S Ag C 96:1-55 '18
- Two lumps or one; photographs. Ag Digest 2:796-7 Ja '18
- Value theories applied to the sugar industry. P. G. Wright. Quarterly J Economics (Harvard Univ. Press, Cambridge, Mass. \$3 per yr.) 32:101-21 N '17
- Vegetable decolorizing carbons and their use in the cane sugar industry. F. W. Zerban. bibliog La Ag Exp B 161:1-39 '18
- Who gets the profits from sugar beets? 23p 50c '17 C. G. Patterson, Box 136, Salt Lake City
- World's sugar supply; its sources and distribution. 46p '17 National bank of commerce, N.Y.
- See also Intermountain association of sugar beet growers

**Laws and regulation**

- Arrêté n. 5139 concernant le commerce du sucre de consommation en Allemagne. Int Yearbook Ag Leg 1916:180-3 '17
- Décret de la lieutenance n. 1332 soumettant à un contrôle la consommation du sucre, augmentant la surtaxe de fabrication et fixant le prix de vente de ce produit en Italie. Int Yearbook Ag Leg 1916:208-9 '17
- Loi n. 2577 portant amendement de certaines parties de la loi n. 2479 intitulée, The sugar central act, aux Iles Philippines. Int Yearbook Ag Leg 1916:652-4 '17
- Règlement de la loi sur l'eau-de-vie à l'Equateur. Int Yearbook Ag Leg 1916:649-51 '17
- \* Regulation of sugar consumption. (In Official statement no. 1, p. 3-4) '18 U.S. Food administration, Washington, D.C.
- \* Sugar. (In Official statement no. 5, p. 11-13) '18 U.S. Food administration, Washington, D.C.

- \* Sugar situation; consumption restricted to 2 pounds per person per month from August 1 to January 1. (In Official statement no. 3, p. 6) '18 U.S. Food administration, Washington, D.C.
- \* Summary of rules governing distribution of sugar. (In Official statement no. 2, p. 2-3) '18 U.S. Food administration, Washington, D. C.

**Statistics**

- Area of sugar beets planted, 1918. Monthly Crop Rep 4:76 J1 '18
- Beet sugar production of the United States in the campaign of 1917-1918. Econ World (128 Water st, N.Y. 25c) n s 15:628 My 4 '18
- Commercial stocks of sugar, Jan. 1. U S Food Surveys 1:1-4 Je 14 '18
- Commercial stocks of sugar, July 1. U S Food Surveys 2:2-4 S 18 '18
- Comparative statistical report of sugar manufactured in Porto Rico from the crops of 1909 to 1917; tabulation. 1 sheet '17 Dept. of finance, San Juan, Porto Rico
- \* General summary of sugar situation for September, 1918. (In Official statement no. 7, p. 31-2) '18 U.S. Food administration, Washington, D.C.
- Heavy reduction in the 1918 sugar beet acreage in the United States. Economic World (128 Water st, N.Y. 25c) n s 16:232 Ag 17 '18
- \* Monthly summary of sugar supply, March, 1918. (In Official statement no. 1, p. 9-10) '18 U.S. Food administration, Washington, D.C.
- Spanish sugar production and consumption. (Commerce Reports no. 229) p 1211 (S 30) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Statistics of sugar in the United States and its insular possessions, 1881-1912. F. Andrews. U S Ag B 66:1-25 '14
- Sugar and beet sugar in the United States and its possessions, including imports and exports. See United States Department of agriculture Yearbooks, also published as Separates
- Sugar beets and beet sugar, 1917. Monthly Crop Rep 3:119 D '17
- Sugar crop in Santo Domingo consular district. C. S. Edwards. (Commerce Reports no. 233) p 58 (O 4) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Sugar crop of Matanzas province. P. L. Clugston. (Commerce Reports no. 231) p 17-19 (O 2) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Sugar production, imports, and exports. (Commerce Reports no. 208) p 884 (S 6) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- \* Sugar situation; Jan.-June, 1918. (In Official statement no. 3, p. 15) '18 U.S. Food administration, Washington, D.C.
- \* Sugar situation; Jan.-July 1918. (In Official statement no. 4, p. 18) '18 U.S. Food administration, Washington, D.C.
- \* Sugar situation; Jan.-Aug. 1918. (In Official statement no. 5, p. 29) '18 U.S. Food administration, Washington, D.C.
- Sugar supply of the United States: its extent and distribution on August 31, 1917. U S Ag C 96:24-55 '18
- \* Summary of sugar supply from Mar. 30 to June 1, 1918. (In Official statement no. 2, p. 15-16) '18 U.S. Food administration, Washington, D.C.
- Willett and Gray's revised estimate of the world's sugar production for 1917-1918. Econ World (128 Water st, N.Y. 25c) n s 14:627 N 3 '17
- Sugar machinery
- Mechanical equipment of a Hawaiian sugar plantation. il Am Machinist (10th av. at 36th st., N.Y. 15c) 47:45-8 J1 12 '17
- Simple laboratory apparatus. C. W. Hines. Philippine Ag R 10,no 3:221-2 '17
- Sugar maple borers
- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. il N Y State Coll For B v 16,no 26:60-5 '16



**Sugar of lead.** See Lead acetate

**Sugar of milk.** See Lactose

**Sugar palm**

*Arenga saccharifera*. *il Gard Chron (Lond)* 63: 169 Ap 20 '18

**Sugar pine.** See Pine

**Sugar spindle.** See Saccharometers

**Sugarfish.** See Silverfish (insect)

**Sugars**

Determination of saccharin in foods. C. B. Gnadinger. *Assn Offic Ag Chem J* 3:25-32 My '17

Effect of sterilization upon sugars in culture media. C. S. Mudge. *J Bact* 2:403-15 Jl '17

Invert sugar; its use in ice cream making recommended. *N Y Prod R* 44:516 Jl 25 '17

\* Substitution of saccharin for sugar. W. E. Burge. *Science (Science Press, Garrison, N.Y. 15c)* n s 48:549-50 N 29 '18

Toxicity of galactose and mannose for green plants and the antagonistic action of other sugars toward these. L. Knudson. *il Am J Bot* 4:430-7 Jl '17

See also Galactose; Mannose; Plants, Effect of sugars on; Saccharometers

#### Analysis

Direct determination of sucrose in the presence of reducing sugars. M. A. Schneller. *La Ag Exp B* 156:1-12 '16

Estimation of carbohydrates; the supposed precipitation of reducing sugars by basic lead acetate. W. A. Davis. *J Ag Sci* 8:7-15 S '16

Report on sugar. C. A. Browne. *Assn Offic Ag Chem J* 2,no 3,pt 1:134-43 N '16

Saccharine products; methods of analysis. *bibliog Assn Offic Ag Chem J* 2,no 2,pt 1: 121-39 Ag '16

**Sulfate of ammonia.** See Ammonium sulfate

**Sulfocation**

Oxidation of sulfur by microörganisms in its relation to the availability of phosphates. H. C. McLean. *bibliog Soil Sci* 5:251-90 Ap '18

Oxidation of sulfur in soils as a means of increasing the availability of mineral phosphates. J. G. Lipman and others. *Soil Sci* 1:533-9 Je '16

Studies in sulfocation. P. E. Brown and H. W. Johnson. *la Ag Exp Research B* 34:1-24 '16; Same. *Soil Sci* 1:339-62 Ap '16

Sulfocation in relation to nitrogen transformations. J. W. Ames and T. E. Richmond. *Soil Sci* 5:311-21 Ap '18

Sulfur oxidation in soils and its effect on the availability of mineral phosphates. J. G. Lipman and others. *bibliog Soil Sci* 2:499-538 D '16

**Sulfur**

Estimation of sulfur in plant material and soil. G. A. Olson. *bibliog Wash Ag Exp B* 145:1-12 '17

Fermentation of manure treated with sulfur and sulfates: changes in nitrogen and phosphorus content. J. W. Ames and T. E. Richmond. *bibliog Soil Sci* 4:79-89 Jl '17

Investigation of the wet thiothen process. A. E. Wells. *Am Fert* 47:64+ S 29 '17

Lipman process of making superphosphate; what the sulphur does to compost. J. G. Lipman. *Rural N Y* 76:1343 N 24 '17

Production of available phosphorus from rock phosphate by composting with sulfur and manure. P. E. Brown and H. W. Warner. *bibliog Soil Sci* 4:269-82 O '17

Production of sulphur, pyrite and sulphuric acid in 1916. *Am Fert* 47:46 O 27 '17

Studies on the bacterial metabolism of sulfur. F. W. Tanner. *bibliog J Bact* 2: 585-93 S '17

Sulphur. P. S. Smith. *Am Fert* 46:62+ My 26 '17

Sulphur: an example of industrial independence. J. E. Pogue. *il Am Fert* 48:72+ Ja 5 '18

Sulphur and pyrite in 1916. P. S. Smith. (*In Am. fertilizer hdbk.*, 1918, p. 42-50) \$1.50 '18 Ware bros. co., 1010 Arch st, Philadelphia; Same. *Am Fert* 48:38-40+ Mr 2 '18

Sulphur and pyrites in 1917. P. S. Smith. *Am Fert* 49:36-42+ Ag 17 '18

Sulphur and pyrites situation in relation to the fertilizer industry. A. D. Ledoux. *Am Fert* 49:113-14 Ag 3 '18

Sulphur census ordered by Italy. D. F. Wilber. *Am Fert* 47:38g S 15 '17

Sulphur injury in Yucaipa, 1917. J. B. Hundley. *Cal State Comm Hort B v* 6:402-7 O '17

Sulphur materials—their production, distribution and control. *Am Fert* 49:25-30 Jl 20 '18

Sulphur, pyrite and sulphuric acid in 1915. W. C. Phalen. *Am Fert* 45:21-30 N 11 '16

Sulphur, pyrite and sulphuric acid in 1917. *Am Fert* 48:31 My 25 '18

Wet thiothen process for recovering sulphur. *Am Fert* 48:31 My 25 '18

See also Lime-sulfur; Soils—Sulfur content

#### Statistics

International movement of fertilisers and chemical products useful to agriculture. (no. 8) p 44-51 My '18 *Int. inst. of ag., Rome*

International movement of fertilisers; chemical products useful to agriculture. *Int Crop Report and Ag Statistics (Int. inst. of ag., Rome)* 7th year, no 9 p 665-72 S '16

**Sulfur as fertilizer**

Brimstone for the land's sake. W. L. Powers. *Rural N Y* 77:1373 D 14 '18

Effect of elemental sulphur and of calcium sulphate on plant life. W. Pitz. *il J Ag Research* 5:771-80 Ja 17 '16

Effect of sulfur and manure on availability of rock phosphate in soil. P. E. Brown and A. R. Gwynn. *la Ag Exp Research B* 43: 369-89 '17

Effect of sulphur in the cultivation of the potato; experiments in Chili. G. R. Opazo. *Int R Sci Prac Ag* 7, no 10:1443-4 O '16

Effect of sulphur on different crops and soils. O. M. Shedd. *bibliog J Ag Research* 11:91-103 O 22 '17

New experiments on the action of sulphur on crop production. *Int R Sci & Prac Ag* 8,no 1:32-4 Ja '17

Relation of sulphur compounds to plant nutrition. E. B. Hart and W. E. Tottingham. *bibliog il J Ag Research* 5:233-50 N 8 '15

Relation of sulphur to soil fertility. *Int R Sci & Prac Ag* 7,no 2:198-203 F '16

Relation of sulfur to soil productivity. F. L. Duley. *Am Soc Agron J* 8:154-60 My '16

Soil fermentation and feeding of crops; the use of sulphur and raw phosphate. J. G. Lipman. *Rural N Y* 75:1361, 1388 O 28-N 4 '16

Sulphur as a fertilizer. *Rural N Y* 75:1174 S 9 '16

Sulphur as a fertilizing material. W. B. Phillips. *Am Fert* 47:58 S 15 '17

Sulphur experiments. R. A. Ward. *Better Fruit* 13:20 D '18

Sulphur in relation to soils and crops. J. W. Ames and G. E. Boltz. *bibliog Ohio Ag Exp B* 292:221-56 '16; Summarized (Influence of sulphur on crop production). *Ohio Ag Exp B v* 1:307-10 O '16

Sulphur to increase yields. *Country Gent* 82: 1311 Ag 25 '17

Volumetric determination as sulfates in water extracts of soils. A. W. Christie and J. C. Martin. *bibliog Soil Sci* 4:477-9 D '17

**Sulfur as fungicide**

Further studies on the spread and control of hop mildew (B. 395). F. M. Blodgett. *bibliog il N Y State Ag Exp Rep* 1915:239-90 '16

**Sulfur as spraying material**

Wettable sulfurs. G. P. Gray. *Cal State Comm Hort B v* 7:191-2 Ap '18

**Sulfur dioxide**

Preliminary study of the bleaching of oats with sulphur dioxide. G. H. Baston. *il U S Ag B* 725:1-11 '18

Sulphurous acid in chemical combination in musts and wines. *Int R Sci & Prac Ag* 7, no 11:1676-85 N '16

**Sulfur in soils.** See Soils—Sulfur content; Sulfocation; Sulfur as fertilizer

**Sulfuric acid**

- British sulphuric acid and fertilizer trades. Am Fert 48:62 Ap 27 '18  
 Burning brimstone in pyrites equipment. plan Am Fert 46:24-6 Je 9 '17  
 Canadian pyrites and sulphuric acid. Am Fert 49:74+ S 28 '18  
 Concentration of sulphuric acid. E. H. Armstrong. Am Fert 46:21-3 Ja 6 '17  
 Control of the chamber process of making sulphuric acid. Am Fert 47:27-9 Ag 18 '17  
 Control of the chamber process for making sulphuric acid. A. M. Fairlie. Am Fert 45:21-3 D 23 '16  
 Discussion of acid plant design. S. J. Martenet. Am Fert 45:26 Jl 8 '16  
 Efficiency in the use of sulphuric acid. J. S. Brogdon. Am Fert 45:28 D 23 '16  
 Fertilizer materials statistics. (*In* Am. fertilizer hdbk., 1917, p. 33-4) \$1 '17 Ware bros. co., 1010 Arch st., Philadelphia  
 Fertilizer materials statistics. (*In* Am. fertilizer hdbk., 1918, p. 36) \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia  
 Handling acid. N Y Prod R 44:582 Ag 8 '17  
 Japanese production and exports of sulphuric acid. Am Fert 47:54 O 27 '17  
 Japanese sulphuric acid. Am Fert 47:78 N 10 '17  
 National sulphuric acid association in England. Am Fert 49:54 Jl 6 '18  
 Production of sulphur, pyrite and sulphuric acid in 1916. Am Fert 47:46 O 27 '17  
 Production of sulphuric acid and a proposed new method of manufacture. W. H. Waggaman. U S Ag B 283:1-39 '15  
 Production of sulphuric acid; its effect on the fertilizer industry. W. D. Huntington. Am Fert 49:123-5 Ag 3 '18  
 Sulphur, pyrite and sulphuric acid. P. S. Smith. Am Fert 48:78+ Mr 2 '18  
 Sulphur, pyrite and sulphuric acid in 1915. W. C. Phalen. Am Fert 45:21-30 N 11 '16  
 Sulphur, pyrite and sulphuric acid in 1917. Am Fert 48:31 My 25 '18  
 Sulphuric acid in 1915. Am Fert 44:26 My 27 '16  
 Sulphuric acid in 1917. P. S. Smith. Am Fert 49:78+ Ag 31 '18  
 Sulphuric acid industry. A. M. Fairlie. (*In* Am. fertilizer hdbk., 1917, p. 49-57) \$1 il '17 Ware bros. co., 1010 Arch st., Philadelphia; Same. Am Fert 47:119-22+ Jl 21 '17  
 Sulphuric acid industry. A. M. Fairlie. (*In* Am. fertilizer hdbk., 1918, p. 80-92) il \$1.50 '18 Ware bros. co., 1010 Arch st., Philadelphia  
 Sulphuric acid manufacture in Russia. Am Fert 46:50 Mr 31 '17  
 Sulphuric acid production in 1917. Am Fert 48:31 F 16 '18  
 Utilizing the equipment of war after the war. R. W. Tunnell. Am Fert 49:78 O 26 '18

**Prices**

- Prices fixed on sulphuric and nitric acid. Am Fert 49:53 Jl 6 '18

**Sulla**

- Sulla (*hedysarum coronarium*) in the agriculture of southern Italy. S. Jovino. Int R Sci & Prac Ag 8,no 1:75-7 Ja '17

**Sumac**

- American sumac—a valuable tanning material and dyestuff. F. P. Veitch and J. S. Rogers. il U S Ag B 706:1-12 '18  
 Flavones of rhus. C. E. Sando and H. H. Bartlett. Am J Bot 5:112-19 Mr '18  
 Sumac—a weed profit maker. S. J. Record. Country Gent 81:16 Ja 1 '16

**Summer-houses**

- Building a lath house. C. Cristadoro. il Country Gent 81:626-7 Mr 18 '16  
 Garden shelters. R. Dean. il Country Life 34:44-7 Je '18  
 Gazebo for your garden. A. McKinney. Country Gent 81:1200 Je 10 '16  
 Summer-house which furnished its own thatch. K. E. Willis. il Country Life 30:70 My '16

**Summer schools**

- Six county work summer schools. Rural Manhood 9:245-6 Je '18

- Summer schools for teachers. Ag Gaz of Canada 5:595-8 Je '18

See also Macdonald college summer school

**Summer sores**

- Study of esponja or summer sores of equidae in Brazil. J. Descazeaux. Am Vet M Assn J 48:759-61 Mr '16

**Summer spinach.** See New Zealand spinach**Sun**

- Sunshine as a germicide. Ohio F 137:82 Ja 15 '16; Same. Prac F 112:13 Ja 1 '16

**Sun rooms**

- Farm-house sun parlor. J. L. Justice. il Ohio F 137:82 Ja 15 '16  
 New idea in glass-enclosed porches. il plan Country Life 31:40 N '16

**Sun roses**

- Helianthemum polifolium* × *chamaecistus*. H. S. Thompson. Gard Chron (Lond) 60:227 N 11 '16

**Sunday**

- It has been my experience. O Judd Farmer 62:16 Je 16 '17  
 Planning the Sunday dinner; symposium. Prac F 112:424 N 15 '16  
 Sunday in farm homes. Ohio F 139:496 Mr 31 '17  
 Sunday on the farm. F. S. Robertson. Nat Stock & F 40:1404 Mr 17 '17

**Sunday schools**

- Boys' day in Sunday schools. H. H. Smith. Rural Manhood 7:31-3 Ja '16  
 Efficient rural Sunday school. L. K. Hall. Rural Manhood 9:86-8 Mr '18

**Sundials**

- Construction of a cheap sun-dial. W. J. Heney. il Gard Chron (Lond) 61:150-1 Ap 14 '17  
 Making a sun-dial. R. J. Robinson. Country Life 31:88 F '17  
 Sundial that fits a colonial house. R. F. Riblet. il Gard M 24:218 Ja '17

**Sunflower beetles.** See Carrot beetles**Sunflower flies**

- Fruit flies of economic importance in California. H. H. P. Severin. il Cal State Comm Hort B v 7:464 Jl '18

**Sunflowers**

- Adult characters in sunflower seedlings. T. D. A. Cockerell. J Heredity 8:361-2 Ag '17  
 Annual sunflowers at Wisley, 1918. Royal Hort Soc J 42,pts 2-3:424-9 S '17  
 Experiments on crossing two varieties of sunflower. F. A. Sazyperov. Int R Sci & Prac Ag 7, no 10:1437-9 O '16  
 Growing the sunflower crop. W. K. Martin. Rural N Y 77:1399 D 21 '18  
 Hybrid sunflowers. T. D. A. Cockerell. Gard Chron (Lond) 64:126 S 28 '18  
 New forms of red sunflowers. T. D. A. Cockerell. Gard Chron (Lond) 64:186 N 9 '18  
 Note on the abnormality in the stem of *helianthus annuus*. K. Barratt. il Ann Bot 30:481-4 Jl '16  
 Red sunflower. T. D. A. Cockerell. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:72-3 Ag 3 '18  
 Somatic mutations in sunflowers. T. D. A. Cockerell. il J Heredity 8:467-70 O '17  
 Sunflower crop worth experimenting with. J Dept Ag Victoria 15:379-80 Je '17  
 Sunflower culture. W. S. Thornber. Wash Ag Ext Pub Ser 1, no 18 4p '16  
 Sunflower; its cultivation and utilization. J. W. Audas. J Dept Ag Victoria 16:620-6 O '18  
 Sunflower selection at the district agricultural station of Saratov, Russia. V. Souvov. Int R Sci & Prac Ag 8,no 4:577-9 Ap '17  
 Sunflowers as a silage crop. G. Lagrange. Jersey B 36:1749 N 7 '17  
 Sunflowers on fence lines. Country Gent 81:840 Ap 15 '16  
 Sunflowers—tell us about them. Rural N Y 77:1156 O 12 '18  
 Ubiquitous *helianthus*. E. W. Street. Gard M 23:303 Je '16



**Sunflowers as feed.** See Feeding and feeding stuffs—Sunflowers

**Sunstroke**

B. B.—nurse; wet-blanket in the treatment of sunstroke. C; H. Lerrigo. Country Gent 82: 1300 Ag 18 '17

**Superphosphates.** See Phosphates

**Superstition**

Man in the moon. L. H. Bailey. Cornell Countryman 25:75-6+ N '17

**Suppers**

Foods and food values; home supper. E. B. Rutter. J Ag (Quebec) 20:231 My 1 '17  
Supper for the ladies' aid. L. R. Stephen. Country Gent 81:1279 Je 24 '16  
Wide-awake girls plan, cook and serve a family supper. Mrs W. N. Hutt. Prog F 31: 598 Ap 29 '16

**Supply and demand**

Adjustment of production to demand. C. K. Knight. Penn State F 9:341+ Mr '16  
Increasing consumer demands. O Judd Farmer 60:11 F 19 '16  
Influence of supply on prices. A. U. Chaney. il Better Fruit 10:7-10 F '16  
Revolving the consumer's dollar backwards. G. H. Powell. Better Fruit 10:5-9 My '16  
Some problems of food control. C. L. Harlan. Breeder's Gaz 72:140 Ag 2 '17  
See also Food supply; Value

**Surgery.** See Veterinary surgery; Wounds

**Surgical dressings**

\* Are you collecting sphagnum; a sort of moss of great value for surgical dressings. G; E. Nichols. il Sci Am Sup (233 Broadway, N.Y. 10c) 86:308-10 N 16 '18

**Surinam cherries**

Pitanga; a valuable fruit of Brazil. A. D. Shamel and W. Popenoe. il J Heredity 7: - 179-85 Ap '16

**Surveying**

Do your own surveying. C; L. Hubbard. Farm Eng 5:3 Ap; 4 My; 5 Je '17  
Fall in pipe line. Rural N Y 75:1541 D 16 '16  
Farm engineering; the construction and use of a handy farm level. G. W. Pulliam. Farm Eng 3:228 Ap '16  
Farm level and how to use it. D. Scoates. il Prog F 31:176 F 5 '16  
Homemade level for grading, ditching and building work. W. F. Hewlett. Country Gent 82:1099 Je 30 '17  
How to survey and map your farm. J. F. Hobart. il plan Power 26:9 D '17; 27:20 Ja; 12+ F; 12-13 Mr; 12+ Ap; 10 My; 52 Je; 42 Jl; 26+ Ag; 34-5 S '18  
Land surveying. F. O. Nelson. Wallaces' F 42:59 Ja 12 '17  
Present systems of surveying and planning land in rural areas; Existing methods of making surveys and dividing rural lands, by H. L. Seymour. (In T. Adams. Rural planning and development, p. 45-71, 253-60) il maps '17 Canada Comm. of conservation, Ottawa

Surveying on the farm. C; L. Hubbard. Farm Eng 5:4 Jl; 6 Ag; 5 S; 8 O; 4 N; 6-7 D '17; 6:4 Ja; 4 F; 7:11-12 Mr '18

**Instruments**

See also Transit-instrument

**Surveying, Topographical.** See Topographical surveying

**Surveys.** See Agricultural surveys; Dairy farm surveys; Farm surveys; Food surveys; Forest surveys; Fruit surveys; Home economics surveys; Home surveys; Market surveys; Poultry surveys; School surveys; Seed surveys; Social surveys; Soil surveys

**Survival of the fittest.** See Natural selection

**Suspended life.** See Anabiosis

**Sussex (poultry)**

New-old-breed—the Sussex. F. H. Valentine. il Country Life 30:60 Je '16

Proper color of speckled Sussex. A. J. Falkenstein. Am P Advocate 26:202 F '18; Same. Am P J 49:330 Mr '18

Sussex breed type or the characteristics of typical Sussex. F. L. Platt. il Reliable P J 23:479-80+ Je '16

Valuable suggestions about breeding high class red Sussex. F. L. Platt. il Reliable P J 23:866-7+, 968-9 N-D '16

Valuable suggestions about improving the light Sussex. F. L. Platt. il Reliable P J 23: 1074 Ja '17

What history tells us about the ancient and modern Sussex. F. L. Platt. il Reliable P J 23:362-3+ My '16

**Swallows**

Barn swallows. E. S. Jones. il Ohio F 139:382 Mr 10 '17

Food habits of the swallows. F. E. L. Beal. il U S Ag B 619:1-28 '18

Swallows. il Am For 23:18-19 Ja '17

**Swamp land.** See Marsh lands

**Swan flowers.** See Pelican flowers

**Swans**

Mute swan. R. S. Walker. il Country Life 32: 63 Je '17

**Swearing**

Why men swear. H; Wallace. Wallaces' F 42: 966 Je 29 '17

**Swede turnips.** See Rutabagas

**Sweden**

See also subhead Sweden under special subjects, e.g. Agriculture—Sweden, Food control—Sweden

**Industries and resources**

See also Forests and forestry—Sweden

**Laws**

Loi limitant le droit d'acquérir des biens immobiliers, des mines ou des actions de certaines sociétés. Int Yearbook Ag Leg 1916: 1202-6 '17

**Sweep-rakes**

Advocates the sweeprake. Hoard's D 55:582 Ap 19 '18

Harvesting hay with the sweep-rake. A. P. Yerkes and H. B. McClure. il Farmers' B 838:1-12 '17

Sweep rakes in the hayfield. Rural N Y 76: 873 Jl 14 '17

**Sweet clover.** See Clover, Sweet

**Sweet corn.** See Corn, Sweet

**Sweet peas**

American sweet pea bulletin and schedule, 1917. 20p 25c '17 American sweet pea society. Wm. Gray, sec., Bellevue av., Newport, R.I.

Displays of sweet peas. il Gard Chron Am 20: 121 Mr '16

Fall sowing of sweet peas. Gard Chron Am 21:373 O '17

Growing sweet peas. E. Jenkins. Gard Chron Am 22:41 F '18

Growing sweet peas for exhibition. W; Gray. il Gard Chron Am 20:119-20 Mr '16

Home garden; sow sweet peas in the fall for early bloom. il Country Gent 83:29 S 7 '18

I say; sow sweet peas in the fall for early bloom. G. W. Kerr. il Gard M 26:47 S '17

Modern winter flowering sweet pea. H. M. Earl. Am Flor 46:365-6 Mr 11 '16

Novel support for sweet peas. M. G. Kains. Ohio F 141:197 F 9 '18

Reduplication series in sweet peas. R. C. Punnet. Int R Sci & Prac Ag 8,no 7:993-4 Jl '17  
San Francisco show. il Am Flor 46:1179 Je 24 '16

Some Spencers supreme. B. Reid. il Gard M 23:108 Mr '16

Sow your sweet peas in the fall. G; W. Kerr. il Gard M 24:42-3 S '16

Start sweet peas early. G; W. Kerr. il Country Gent 83:24+ F 2 '18

Success with sweet peas. R. A. Tyler. Country Gent 83:60 Mr 9 '18

Summer time sweet peas. il Am Flor 47:56 Jl 29 '16

Sweet pea culture. E. H. Jones. il J Ag (Quebec) 19:189 Mr '16

Sweet pea hybrids. B. T. P. Barker. Gard Chron (Lond) 60:156 S 30 '16

**Sweet peas—Continued**

- Sweet peas all summer. M. G. Kains. il O Judd Farmer 60:42 Mr 4 '16
- Sweet peas; and how to grow them for exhibition; with discussion. R. J. Sampson. Wis Hort Soc Rep 1917:76-80
- Sweet peas and snapdragons. G. W. Kerr. il Gard M 27:25-7 F '18
- Sweet peas and violets. Am Flor 49:200 Ag 18 '17
- Sweet peas for autumn sowing. il Am Flor 49:918 N 17 '17
- Sweet peas for cut flowers. E. J. Weaver. Rural N Y 76:551 Ap 14 '17
- Sweet peas for market. J. H. Sperry. Country Gent 81:530 Mr 4 '16
- Sweet peas of the future. D: Burpee. Am Flor 47:5 Jl 22 '16
- Sweet peas under glass. Gard Chron (Lond) 59:325 Je 17 '16
- Sweet peas up-to-date. G. W. Kerr. 100p il 10c '17 W. Atlee Burpee & co., Philadelphia, Pa. To succeed with sweet peas. G. W. Kerr. il Country Gent 81:1691 S 16 '16
- Tomatoes and sweet peas. E. I. Farrington. il Country Gent 81:2000 N 18 '16
- When and how to plant sweet peas. il Country Gent 81:640 Mr 18 '16
- Winter-flowering sweet pea trials. A. C. Beal. Am Flor 50:1200 Jl 6 '18
- Yellow sweet pea. G. M. Taylor. Gard Chron (Lond) 60:146 S 23 '16
- See also American sweet pea society*
- Diseases and pests**
- Sweet pea diseases and their control. J. J. Taubenhaus. Mass Hort Soc Trans 1916, pt 1:131-43 '16
- Sweet potato flour**
- Potato situation—the virtues of sweet potato flour. Irr Age 33:147-8 Jl '18
- Sweet-potato flour. Weekly N L 5:6 Ap 24 '18
- Sweet-potato leaf-folders**
- Sweet-potato leaf-folder (pilocrocis tripunctata Fab.). T. H: Jones. bibliog il U S Ag B 609:1-12 '17
- Sweet-potato pest. Weekly N L 4:6 Je 27 '17
- Sweet potato pox.** See Sweet potato rots
- Sweet potato root borers**
- Sweet potato root borer. W. E. Hinds. il Ala Ag Exp C 37:1-8 '18
- Sweet potato rots**
- Foot-rot of the sweet potato. L. L. Harter. il J Ag Research 1:251-74 D '13
- Pox, or pit (soil rot), of the sweet potato. J. J. Taubenhaus. bibliog il J Ag Research 13:437-50 My 27 '18
- Probable non-validity of the genera botryodiplodia, diplodiella, chaetodiplodia, and lasiodiplodia as cause of Java black rot. J. J. Taubenhaus. bibliog il Am J Bot 2:324-31 Jl '15
- Storage rots of sweet potatoes. J: A. Elliott. il plans Ark Ag Exp B 144:1-16 '18; Excerpts. Prog F 33:771 Jl 6 '18
- Sweet potato soil rot or pox, a slime mould disease. J: A. Elliott. il Del Ag Exp B 114:1-25 '16
- Sweet potato scurf**
- Soilstain, or scurf, of the sweet potato. J. J. Taubenhaus. bibliog il J Ag Research 5:995-1002 F 21 '16
- Sweet-potato scurf. L. L. Harter. il J Ag Research 5:787-92 Ja 24 '16
- Sweet potato soilstain.** See Sweet potato scurf
- Sweet potato weevils**
- Keep this bug out. G: G. Becker. il Ark Ag Exp C 35 4p n.d.
- Sweet potato root weevil. W. Newell. bibliog il Fla State Plant Bd Quar B v 2:81-100 O '17
- Weevils which affect Irish potato, sweet potato, and yam. W. D. Pierce. il J Ag Research 12:601-12 Mr 4 '18
- Sweet potatoes**
- Bedding and growing sweet potatoes. Prac F 113:141 Ap 1 '17
- Bedding sweet potatoes. R. G. Hill. Prog F 31:548 Ap 15 '16
- Consider the sweet potato. H. S. Stabler. il Country Gent 82:237 F 10 '17
- Grades for sweet potatoes. Prog F 31:256 F 19 '16
- Ground bone and culture for sweet potatoes. Rural N Y 75:320 F 26 '16
- Growing and storing sweet potatoes. E. F. Cauthen. il Prog F 32:436 Ap 7 '17
- Growing and storing sweet potatoes. A. T. Potts and J. C. Olsen. plans Tex Ag Ext B B-27:1-16 '16
- Growing sweet potatoes in Georgia. T. H. McHatten and others. il plans Ga Ag Coll (Ext) B 139:1-23 '17; Same cond. Ga State Coll Ag C 27 8p '16
- Handling small sweet potato crop. J. F. Hart. il Ga Ag Coll (Ext) C 65:1-4 '17
- Harvesting and housing sweet potatoes. A. F. Kidder. Prog F 32:902 Ag 25 '17
- Harvesting and storing sweet potatoes. il Prog F 31:1257 O 28 '16
- Hot water sweet potato bed. J. J. Rosa. O Judd Farmer 60:18 F 5 '16
- Kumara-culture. J. H. Davidson. J Ag New Zealand 17:84-6 Ag '18
- Making sweet-potato beds. Rural N Y 75:151 Ja 29 '16
- Methods of fertilizing sweet potatoes. C. E. Durst. il Ill Ag Exp B 188:269-78 '16
- More sweet potato pies. Ohio F 138:580 D 9 '16
- Notes on the anatomy of the young tuber of ipomoea batatas Lam. F. A. McCormick. bibliog il Bot Gaz 61:388-98 My '16
- Packer sweet potato plant setter. L. K. Wilkins. il Rural N Y 75:711 My 6 '16
- Potatoes, sweet potatoes, and other starchy roots as food. C. F. Langworthy. U S Ag B 468:1-23 '17
- Production of sweet potato plants. J. T. Rosa, jr. Rural N Y 76:453 Mr 24 '17
- Story of the sweet potato. il Country Gent 82:308 F 17 '17
- Sweet potato. 30p il plans '16 Ag. and industrial comr., St Louis Southwestern ry. lines, St Louis, Mo.
- Sweet potato culture. Am Flor 50:906 My 18 '18
- Sweet potato culture. T. C. Johnson and J. T. Rosa, jr. bibliog il Va Truck Exp B 19:387-415 Ap '16
- Sweet potato culture in the United States and in Sicily. Int R Sci & Prac Ag 8,no 6:366-8 Je '17
- Sweet potato curing in Texas. E. W. Cole. il Tex Ag Dept B 49:1-18+ n. d.
- Sweet potato growing. J. C. Whitten. Mo Ag Bd B v 15:54-5 Ag '17
- Sweet potatoes; symposium. Market Growers J 19:140-1+ S 15 '16
- Sweet potatoes. D. C. Mooring. Okla Ag Ext C 35:1-10 '16
- Sweet potatoes and yams. 15p il '18 Barrett co., Ag. dept., 17 Battery Place, N. Y.
- Sweet potatoes in cookery. O Judd Farmer 61:22 O 28 '16
- Sweet potatoes in the silo. Rural N Y 76:893 Jl 21 '17
- Sweet potatoes—their value and culture. D. C. Mooring. Okla Ag Ext C 49 4p '17
- Sweets instead of whites. J. H. Collins. il Country Gent 82:992 Je 9 '17
- Undiscovered sweet potato. G. W. Carver. il Ag Digest 2:914 Ap '18
- Composition**
- Behavior of sweet potatoes in the ground. H. Hasselbring. J Ag Research 12:9-17 Ja 7 '18
- Carbohydrate transformations in sweet potatoes. H. Hasselbring and L. A. Hawkins. J Ag Research 5:543-60 D 27 '15
- Effect of different oxygen pressures on the carbohydrate metabolism of the sweet potato. H. Hasselbring. J Ag Research 12:273-84 Ag 12 '18
- Physiological changes in sweet potatoes during storage. H. Hasselbring and L. A. Hawkins. bibliog J Ag Research 3:331-42 Ja '15
- Respiration experiments with sweet potatoes. H. Hasselbring and L. A. Hawkins. bibliog J Ag Research 5:509-17 D 20 '15



Sweet potatoes—Continued

Diseases and pests

- Identification of species of fusarium occurring on the sweet potato, *ipomoea batatas*. H. W. Wollenweber, bibliog il J Ag Research 2:251-86 Jl '14
- Sclerotium bataticola; the cause of a fruit-rot of peppers. W: H. Martin. il Phyt 7: 308-12 Ag '17
- Some important diseases of sweet potato. C. D. Sherbakoff. il Fla State Plant Bd Quar B v 2:179-89 Jl '18
- Sweet-potato diseases. Weekly N L 5:4 F 6; 8 My 1 '18
- Sweet-potato diseases. L. L. Harter. il Farmers' B 714:1-26 '16; Abstract. Am Flor 46: 562 Ap 1 '16; Abstract. Market Growers J 18:266 Ap 1 '16; Abstract. Prog F 31:538 Ap 15 '16
- Sweet-potato diseases. J. A. McClintock. bibliog il Va Truck Exp B 22:455-86 '17
- Sweet-potato diseases; specialists offer suggestions for control of diseases at bedding time. Weekly N L 4:4 Ap 4 '17
- Termite injury to sweet potatoes. E. W. Berger. il Fla State Plant Bd Quar B v 2: 190-1 Jl '18
- See also Sweet potato leaf-folders; Sweet potato root borers; Sweet potato rots; Sweet potato scurf; Sweet potato weevils

Marketing

- Marketing sweets in Virginia and Arkansas. Market Growers J 18:210 Mr 15 '16

Packing

- Hamper pack for sweets. il Country Gent 82:1536 O 6 '17

Statistics

- Commercial stocks of sweet potatoes and yams. U S Food Surveys 1:7-9 Jl 24 '18
- Sweet potatoes in the United States. See United States Department of agriculture Yearbooks

Storage

- Cheap sweet-potato storage. Country Gent 82: 1327 Ag 25 '17
- Effect of different oxygen pressures on the carbohydrate metabolism of the sweet potato. H. Hasselbring. J Ag Research 14:273-84 Ag 12 '18
- Fire-cure your sweet potatoes. C. E. Brehm. il Country Gent 83:28 O 12 '18
- Harvesting and storing sweet potatoes. J. C. C. Price. il Ala Ag Exp B 197:87-99 '17
- Harvesting and storing sweet potatoes in South Carolina. C. P. Hoffmann. S C Ag Ext B 29:1-13 '18 (rev.)
- How to build a sweet potato storage house. plan Prog F 33:729 Je 22 '18
- Making and using sweet potato storage houses. T. H. Holloway. Prog F 33:894 Ag 10 '18
- New Jersey methods of sweet potato storage. R. W. DeBaun. il Market Growers J 23: 67-9 Ag 15 '18
- Physiological changes in sweet potatoes during storage. H. Hasselbring and L. A. Hawkins. bibliog J Ag Research 3:331-42 Ja '15
- Potato dry kiln. T. H. Holloway. La Ag Bd 4p n. d.
- Potato dry kilns and what they will mean to the state of Louisiana. T. H. Holloway. La Ag Bd 4p n. d.
- Storage in well-built houses will help save South's sweet potato crop. Weekly N L 6:12 Ag 7 '18
- Storage of sweet potatoes. R. G. Hill. il diag N C Ag Ext C 30:1-8 '16
- Storage rots of sweet potatoes. J: A. Elliott. il plans Ark Ag Exp B 144:1-16 '18; Excerpts. Prog F 33:771 Jl 6 '18
- Storing the sweet potato crop. J. T. Rosa, jr. il Rural N Y 77:1110 S 28 '18
- Sweet potato curing house. W. F. Massey. Prog F 33:636 My 25 '18

- Sweet potato storage. il O Judd Farmer 63:7 N 3 '17
- Sweet-potato storage. Weekly N L 4:4 My 30 '17; Same. Prog F 32:693 Je 16 '17
- Sweet-potato storage. Weekly N L 4:1 Jl 25 '17
- Sweet-potato storage. F. E. Miller. il Country Gent 81:2007 N 18 '16
- Sweet-potato storage. H. C. Thompson. il Farmers' B 970:1-27 '18
- Sweet potato storage houses. G. H. Alford. Prog F 33:678 Je 1 '18
- Swift, Gustavus Franklin**  
Packers are people; brief biographical sketch. L. L. Heller. il por Field il 28:562 Ag '18
- Swifts**  
Humming-birds and swifts. A. A. Allen. il Am For 24:160-4 Mr '18
- Swimming pools**  
Suburban swimming pool. B: Goodrich. il Country Life 32:118 Je '17
- Swimming pool for everyman. E. L. D. Seymour. il Country Life 29:58 Mr '16
- Swindlers and swindling**  
Fakes for farmers. P. S. Lovejoy. Country Gent 83:13-14 My 18 '18
- Swine**  
Advantages in hog-raising in Virginia and the East greater than in the West. Va Ag Dept B 115:121-3 '17
- Agricultural situation for 1918; hogs. maps U S Ag C 84:1-24 '18
- Beef cattle and hogs. G: M. Rommel. (In Cut-over land conf. of the South, 1917, p. 112-25) \$2.50 '17 Southern pine assn., New Orleans, La.
- Boys' pig club instruction sheets nos. 1-6. W Va Ag Ext C 54, 59, 65, 69, 75, 84 '16
- Titles are: Selection and care of a pig; Feed and forage crops; Hog houses and equipment; Keeping the pig healthy; Preparing the pig for exhibition; Brood sow and her care
- Breed for fall pigs. J. L. Justice. Hoard's D 55:949 Je 28 '18
- Care of hogs in hot weather. A. O. Choate. Hoard's D 53:961 Jl 6 '17
- Care of small pigs. Kimball's D F 14:468 Jl 15 '16
- Care of the late winter or early spring litter. A. E. MacLaurin. J Ag (Quebec) 19:171 F '16
- Caring for pigs. E. H. Anderson. Prog F 31: 858 Jl 8 '16
- Caring for the spring pigs. Prac F 114:74 F 15 '18
- Castration of young pigs. F. G. Ashbrook. il Farmers' B 780:1-6 '16
- Color inheritance in mammals. S. Wright. J Heredity 9:33-8 Ja '18
- Comments on the head of the pig. C. S. Plumb. Breeder's Gaz 69:1326 Je 29 '16
- Concerning hog raising. W. A. Linklater. Western Wash Ag Exp B v 6:35-7 Je '18
- Cooperate for more hogs. Banker-F 5:6 D '17
- Cost of a sow. il Nat Stock & F 40:1316 Mr 3 '17
- Country's call for hogs. Nat Stock & F 41:868 D 8 '17
- Crops and stock on the home farm. E. Molyneux. Gard Chron (Lond) 63:171 Ap 20 '18
- Cutting down the middleman. C. R. Bashore. Rural N Y 76:367 Mr 10 '17
- Direct from farm to market. C. R. Bashore. Ohio F 141:818 Je 29 '18
- Effects of muscular exercise and the heat of the sun on the blood and body temperature of normal pigs. C. C. Palmer. bibliog J Ag Research 9:167-82 My 7 '17
- Essentials in profitable pork production. H. B. Walter. Mo Ag Bd Yearbook 1916:540-4; Same. Mo Ag Bd B v 14:21-5 Ag '16
- Exalt the humble hog. il Kimball's D F 16: 495 S 15 '18
- Extend hog raising. Weekly N L 4:7 My 16 '17
- Extension circulars. Mass Ag Ext C 17, 43 '17
- Hogs on every farm in 1917; Swine feeding and management. E. L. Quaife
- Fall litter of pigs. W: Dietrich. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 93-5) '17

**Swine—Continued**

- Fall litter of pigs. E. S. Good and T. R. Bryant. *il Ky Ag Ext C 49:1-7 '17*
- Fall pig essentials. J. M. Evvard. *il Wallaces' F 43:1287 S 13 '18*
- Fall pig is profitable. V. W. McCray. *Hoards' D 54:576 N 16 '17*
- Fall pig management. J. M. Evvard. *Breeder's Gaz 74:153 Ag 1 '18*
- Fall pig profitable. J. M. Evvard. *Breeder's Gaz 74:77 Jl 18 '18*
- Fall pigs for the northern cornbelt. L. G. Hood. *Breeder's Gaz 71:116 Ja 18 '17*
- Farmers advised to save only desirable sows for breeding use. *Coop Manager & F 8:81 D '18*
- Feeding and housing of swine. G. E. Day. (L. S. B. Pamph. 22) 18p *il plans '17 Canada Ag*
- Feeding and management of hogs. J. I. Thompson. *Cal Ag Exp C 151:1-16 '16*
- Feeding and management of hogs for market. P. R. Mills and R. F. Swain. *Purdue Ag 13:55-6 N '18*
- Feeding and management of swine. J. M. Hunter. *il plans N J Ag Exp C 90:1-43 '17*
- Feeding and marketing hogs. C. R. Bashore. *Hoards' D 53:611 Ap 27 '17*
- Feeding gilts for profit. W. S. Tomlinson. *Ohio F 141:74 Ja 19 '18*
- Few fundamentals in pork. H. B. Walker. *il Swine World 5:9+ Je '18*
- Field planning for hog farming. W. E. Farver. *Nat Stock & F 41:751 N 3 '17*
- Fill nation's pork barrel by good hog management. *Weekly N L 6:13-14 O 9 '18*
- 40-acre hog farm. W. S. Tomlinson. *il Ohio F 141:723 Je 1 '18*
- Forty years in the hog business. W. S. Tomlinson. *Ohio F 137:525 Ap 8 '16*
- From pighood to packingtown. A. W. Joy. *Breeder's Gaz 73:602 Mr 21 '18*
- Furnishing the hog lot. H. C. Campbell. *il Hoards' D 51:419 Mr 31 '16*
- General management and breeding of pigs. W. J. Colebatch. *J Dept Ag S Australia 21: 374-88, 452-61 D '17-Ja '18*
- Getting into hog-raising. T. Butler. *Prog F 31:1407 D 9 '16*
- Greatest meat producer. *il Ag Digest 2:702 N '17*
- Growing, fattening and care of swine. W. H. Tomhave. *il Prac F 112:47+ F 1 '16*
- Growing hogs for profit. H. H. Havner. *il Field 11 26:408-9 My '16*
- Help the early pigs. H. E. Browning. *Swine World 5:38 Mr '18*
- Helpful hints to hog raisers. C. M. Vestal. *Cal Ag Exp C 201:1-7 '18*
- Hired man and his hogs again. J. L. Buchanan. *Nat Stock & F 41:367 Jl 7 '17*
- His own middleman. C. R. Bashore. *Nat Stock & F 40:1276 F 24 '17*
- Hog as a hired man. H. W. Collingwood. *il Country Life 29:50-1 Mr '16*
- Hog business. *Country Gent 81:742 Ap 1 '16*
- Hog health and profits. O. C. Wysong. *Breeder's Gaz 69:20 Ja 6 '16*
- Hog is mightier than men, munitions and money. C. V. Truax. *Swine World 5:3-4 N '17*
- Hog management. R. W. Clark. *il Colo Ag Ext B 141:1-26 '18*
- Hog market. *Wallaces' F 41:135 Ja 28 '16*
- Hog production. D. R. Acklin. *il Ohio Ag Dept B v 9:9-11 My '18*
- Hog raiser's profit. H. H. Havner. *Nat Stock & F 41:1326 Mr 16 '18*
- Hog-raising hints. *Prog F 31:404 Mr 18 '16*
- Hog raising in the blue grass. F. Rice. *il Swine World 5:4 F '18*
- Hog situation in many states. *Swine World 5:4 D '17*
- Hogging down the war. *il Ag Digest 2:965 My '18*
- Hogs—a by-product of dairying. W. J. Hagar. *Hoards' D 51:231 Mr 3 '16*
- Hogs and corn. C. V. Truax. *Swine World 5: 1-2 Ja '18*
- Hogs and the war. *il Sci Am (233 Broadway, N.Y. 10c) 118:428 My 11 '18*
- Hogs as a solution of the meat shortage problem. E. M. Christen. *il Purdue Ag 12:344-6 Mr '18*
- Hogs as harvesters. *Nat Stock & F 41:540 S 1 '17*
- Hogs; breeds and feeds. F. C. Minkler. *il Rural N Y 76:1404 D 8 '17*
- Hogs in the orchard. C. H. Sapp. *Ohio F 139: 116 Ja 27 '17*
- Hogs of war. A. W. Joy. *Breeder's Gaz 72:44 Jl 12 '17*
- Hogs on the farm. *Weekly N L 4:5 Je 13 '17*
- Hogs that make good. *Wallaces' F 42:1679 D 14 '17*
- Hogs—the quick meat producers. *Prac F 113: 295 Ag 15 '17*
- Hogs to pork on partnership farm. O Judd Farmer 61:5 N 11 '16
- Hogs very scarce. O Judd Farmer 62:10 Ap 28 '17
- Hogs wanted. J Ag (Quebec) 21. sup 81 D 1 '17
- Hope farm notes; pigs. *il Rural N Y 76:942 Ag 4 '17*
- How to choose a brood sow. *Hoards' D 53:620 Ap 27 '17*
- How to raise a backyard pig. E. G. Ritzman. *N H Ag Ext C 35 4p '18*
- How to raise a prize-winning pig. L. B. Burk. *il Tex Ag Ext B B-25:1-11 '16*
- How to succeed with hogs and cattle. A. L. French. *Prog F 33:12, 38, 65, 100, 134, 168, 194, 243, 270, 320, 346, 386, 420, 458, 476 Ja 5- Ap 13 '18*
- In a pig's eye. C. E. Gapen. *il Country Gent 83:17 Ja 5 '18*
- In the days of the biggest hog. N. H. Gentry. *Breeder's Gaz 69:236 F 3 '16*
- Increased hog production. *Ag Gaz of Canada 5:145-50 F '18*
- Increasing our pork supply. *Ag Digest 2:745 D '17*
- Keep breeding sows. *Weekly N L 4:1 My 9 '17*
- Keep more hogs. J. H. McLeod. *Ark Ag Ext C 50 4p '17*
- Keep the fall pigs growing. H. R. O'Brien. *il Country Gent 83:12+ O 26 '18*
- Keep the prolific sows. J. L. Justice. *Ohio F 142:75 Jl 27 '18*
- Keeping of pigs in urban centres. *Ag Gaz of Canada 5:573-7 Je '18*
- Large-type swine and fertility. E. N. Wentworth. *Breeder's Gaz 69:722 Mr 30 '16*
- Look backward. R. L. Dean. *Nat Stock & F 40:968 D 23 '16*
- Louisiana pork industry. O. P. Geren. 16p *il '17 Louisiana co., New Orleans*
- Making money from pigs. 8p *il '16 International harvester co., Agricultural extension dept., Chicago*
- Making money with hogs. *Prog F 32:1202 N 17 '17*
- Making the fall pig profitable. J. M. Evvard. *il Kimball's D F 16:531-2 Jl 1 '18*
- Many sides to the hog question. F. Crissey. *il Country Gent 83:6-7+ Ja 12 '18*
- March pigs from birth to six months. W. B. Clark. *Swine World 5:4 My '18*
- Market hogs show increase in weight. J. M. Carroll. *Swine World 5:21 Mr '18*
- Market requirements and the profitable production of hogs. H. Barton. *il J Ag (Quebec) 19:148-50 Ja '16*
- Meat shortage. *Wallaces' F 42:1377 O 12 '17*
- Methods of a successful feeder. L. F. Drury. O Judd Farmer 64:483 My 4 '18
- Mistakes of the hog man. J. Bower. *il Hoards' D 54:914 Ja 18 '18*
- Money in stock hogs. J. A. Rickart. *Country Gent 81:1092 My 20 '16*
- More hogs are needed. C. Du Bose. *Farm Eng 6:5 F '18*
- More swine—a vital need. *Prac F 113:437 D 15 '17*
- Morphology of normal pigs' blood. C. C. Palmer. *J Ag Research 9:131-40 Ap 30 '17*
- Mortgage lifters. W. W. Shay. *il Prac F 113: 115 Mr 15 '17*
- New era for the hog producer. C. V. Truax. *Swine World 5:3-4 S '17*
- 1918 pig crop. L. Rogers. *Kimball's D F 16: 623 Ag 15 '18*
- Oiling hogs. A. O. Choate. *Hoards' D 53:807 Je 1 '17*



Swine—Continued

Our success with hogs. C. C. Conger, jr. *Prac* F 114:110 Mr 15 '18  
 Patriotic porker. L. S. Richardson. *il Kimball's D* F 15:438 Je 15 '17  
 Patriotic thoughts of the hog. F. D. Coburn. *Ohio F* 137:130-1 Ja 29 '16  
 Patriotism and pork production. C. S. Plumb. *Ohio F* 141:8 Ja 5 '18  
 Patriotism, pork and prosperity. W. N. Lovejoy. *Breeder's Gaz* 73:12 Ja 3 '18  
 Patriotism under difficulties. *Swine World* 5:3-4 D '17  
 Perfect pigs. F. H. Leech. *il Country Gent* 82:1556-7 O 13 '17  
 Pig as war bride. J. E. Dodge. *il Country Life* 34:57-8 Je '18  
 Pig-keeping in towns and villages: a practical guide. J Bd Ag 24:420-3 Jl '17  
 Pig management for boys' and girls' clubs. *Utah Ag Ext C v* 6, no 15 5p '18  
 Pigs, a profitable sideline. G. Gatlin. *il Country Gent* 81:1105 My 27 '16  
 Pigs, and still more pigs, needed. R. H. Moulton. *il Hoard's D* 55:764 My 24 '18  
 Pointers on pigs. T. D. Hammatt. *Hoard's D* 54:596, 634, 668, 704, 740, 848 N 16-D 14 '17, Ja 4 '18  
 Pork farmer at the front. C. V. Truax. *il Swine World* 5:3 Mr '18  
 Pork in 1919. M. S. McFadden. *Swine World* 5:7 Ap '18  
 Pork producers business. F. E. Drury. *Swine World* 5:2-3 F '18  
 Pork production. G. A. Brown. *il diags Mich Ag Ext Club B* 5:1-15 '16  
 Pork production. H. B. Walter. *Mo Ag Bd B v* 14:1-25 Ag '16  
 Pork production for 1918. *Weekly N L* 5:1-2 D 5 '17; Same. *Swine World* 5:11 Ja '18; Same *abr. Ag Digest* 3:789-90 Ja '18  
 Pork production is our present patriotic duty. W. F. McSparran. *il Prac F* 114:43 F 1 '18  
 Pork production on a big scale. C. W. Hunt. *il Breeder's Gaz* 72:1137 D 20 '17  
 Pork production on the farm. R. L. Muncie. *V Va Ag Dept B* 30:43-5 '17  
 Possibilities of feeder hog trade. B. T. Abbott. *il O Judd Farmer* 63:3 D 29 '17  
 Potatoes with pork. H. W. Doyle. *il Country Gent* 81:875-6 Ap 22 '16  
 Prevailing prices of purebreds. M. S. McFadden. *Swine World* 5:6 F '18  
 Producing pork economically. *il Pa Ag Ext C* 56 4p '17  
 Profitable swine production on the general farm. H. B. Harpending. *il N Y Farms & Markets Dept Ag B* 97:285-90 Jl '17  
 Putting on flesh. D. Wylie. *il Country Life* 30:47 Jl '16  
 Raising fall pigs. A. O. Choate. *il Hoard's D* 56:366 O 11 '18  
 Raising hogs by wholesale. *Country Gent* 81:157 Ja 22 '16  
 Raising hogs on alfalfa. Mrs R. A. Lyle. *Breeder's Gaz* 71:1157 Je 7 '17  
 Raising hogs on the war basis. *il Breeder's Gaz* 72:1257 D 27 '17; Same *cond. Ag Digest* 2:333 F '18  
 Raising pork in the back lot. H. O. Pate. *il Country Gent* 82:529 Mr 17 '17  
 Raising vigorous pigs. *O Judd Farmer* 60:11 Mr 25 '16  
 Razorbacks. F. D. Coburn. *Nat Stock & F* 40:402 Jl 15 '16  
 Red hog: its history and development. *il Field* 11 27:696 S '17  
 Report on hog production. *Nat Stock & F* 41:796 N 17 '17  
 Saving summer pigs. E. P. Welborn. *Breeder's Gaz* 70:310 Ag 31 '16  
 Science with practice in commercial pork production. R. W. Cassady. *il Breeder's Gaz* 70:1192-3 D 21 '16  
 Scrubs and pure-breds. V. R. Nicodemus. *Nat Stock & F* 41:244 My 26 '17  
 Select hogs with care. *Purdue Ag* 11:25 O '16  
 Self feeder and baby pork. *O Judd Farmer* 60:16 Ap 1 '16  
 Self-feeder makes money. *O Judd Farmer* 60:18 Ja 15 '16  
 Shade in the swine lot. *Prac F* 112:271 Jl 1 '16

Shortage of brood sows. *Ag Digest* 2:845 F '18  
 6,500 customers for our farm. F. McKee. *il System on the Farm* 1:15-18 Mr '17  
 Some factors in pork production. H. H. Havner. *Nat Stock & F* 41:304 Je 16 '17  
 Some runs I have known. N. H. Gentry. *Wallaces' F* 42:1728 D 21 '17  
 Some swine history. M. Ryder. *Nat Stock & F* 41:946 D 29 '17  
 Sows and market pigs. W. S. Cunningham. *Kimball's D F* 16:325 Ap 15 '18  
 Spring pigs. *Wallaces' F* 41:649 Ap 21 '16  
 Spring pigs. *Wallaces' F* 43:541 Mr 22 '18  
 Spring pigs starting nicely. G. W. Erwin. *O Judd Farmer* 64:7 Ap 6 '18  
 Success of a feeder and a breeder. W. N. Cowden. *Nat Stock & F* 41:140 Ap 28 '17  
 Success with hogs. *il Wallaces' F* 42:1199 S 7 '17  
 Successful pork production. W. J. Carmichael. *Swine World* 5:5 F '18  
 Summer management of swine. W. H. Tomhave. *Prac F* 114:201 Je 1 '18  
 Summer management of the spring pigs. H. W. King. *il Purdue Ag* 12:563-4 Je '18  
 Swine breeding and feeding. *il O Judd Farmer* 63:3 D 1 '17  
 Swine breeding and rearing. F. C. Grace. *J Dept Ag S Australia* 21:94-8 Ag '17  
 Swine day at Ames. *il Nat Stock & F* 41:702 O 20 '17  
 Swine department. See monthly numbers of *Field* illustrated  
 Swine husbandry. J. N. Rosenberg. *il Pa Ag Dept B v* 1 (Gen. B. 307):1-117 Je '18  
 Swine husbandry. R. L. Shields. *il S C Ag Ext B* 40:1-46 '18  
 Swine management. G. M. Rommel and F. G. Ashbrook. *il map Farmers' B* 874:1-38 '17  
 Swine market situation. J. Brown. *Purdue Ag* 12:65-6 N '17  
 Swine practice. C. C. McLean. *Am Vet M Assn J* 54:90-2 N '18  
 Swine situation. J Ag (Quebec) 20:147 Ja '17  
 Tale of little pigs that paid. G. H. Dacy. *Prac F* 113:205 My 15 '17  
 Three hundred pound fall pigs. J. M. Evvard. *Field* 11 28:416 Je '18  
 Timely ideas for hog raisers. *Prac F* 114:314 S 15 '18  
 To ring or not to ring. L. N. Bonham. *Breeder's Gaz* 69:492 Mr 2 '16  
 Two hundred pounds at 160 days. *il O Judd Farmer* 65:254 S 28 '18  
 Uncle Sam wants more hogs. *Banker-F* 5:2 D '17  
 War program suggested by the United States Department of agriculture for 1918 pork production; with discussion. G. M. Rommel. *Assn Am Ag Coll & Exp Pro* 1917:286-97 '18  
 Waste woodland for the breeding of pigs. S. F. Edge. *il J Bd Ag* 22:977-81 Ja '16  
 We must raise more and better hogs. W. F. Massey. *Prog F* 31:672 My 20 '16  
 What the pig will do. *il Country Gent* 82:929 My 26 '17  
 What to do every month in the management and feeding of hogs; chart. *Tenn Ag Ext chart* '18  
 Why we must raise more hogs. E. Z. Russell. *Swine World* 5:17+ Je '18  
 Why we should raise hogs. R. E. Whiteman. *Prac F* 112:317 Ag 15 '16  
 Winter care of pigs. H. A. McCollm. *il Purdue Ag* 11:26+ Ja '17  
 Wintering fall pigs successfully. *il Rural N Y* 75:1402 N 4 '16  
 Ye American pig? M. S. McFadden. *Swine World* 5:6 S '17  
 Young pigs. G. E. Day. *il J Ag (Quebec)* 21:163 My '18  
 See also Hog crates; Live stock; Pig clubs; Pork; also Iowa swine day

Branding

Pig marking system. *Wallaces' F* 41:525 Mr 31 '16  
 Pig-marking system. A. A. Jeffrey. *Country Gent* 81:449 F 26 '16  
 Pig numbering system. *Wallaces' F* 42:690 Ap 20 '17

## Swine—Continued

## Breeds

- Adaptability of breeds. E. N. Wentworth. Field 11 26:544 Je '16  
 Bacon breeds. H. T. Morgan. il Country Gent 82:1675 N 3 '17  
 Breeds of hogs. il Wallaces' F 42:1653 D 7 '17  
 Breeds of swine. F. G. Ashbrook. il Farmers' B 765:1-16 '18 (rev.)  
 Breeds of swine. G. R. Samson and R. E. Reynolds. Ore Ag Ext Coll B 209 (ser 2, no 42): 1-6 n.d.  
 Breeds of swine in Quebec. A. E. McLaurin. il J Ag (Quebec) 21:153 Ap '18  
 Duroc-Jerseys and Tamworths. T. Butler. Prog F 31:431 Mr 25 '16  
 Some new breeds of swine. H. T. Morgan. il Country Gent 82:1628 O 27 '17  
 Yorkshires and Tamworths. J. M. Evvard. Breeder's Gaz 69:1158 Je 1 '16; Same cond. J Ag (Quebec) 20:85 O '16

See also names of breeds, e.g. Berkshires (swine), Chester white swine, Duroc-Jerseys, Hampshires (swine), Poland-China swine, Tamworths (swine); also names of breeders' associations, e.g. National Berkshire congress association, National Duroc-Jersey record association

## Care of sows

- Be careful of the brood sow—it pays. Coop Manager & F 7:91 Ja '18  
 Brood sow and her litter. W. Hislop. Kimball's D F 15:592 S 1 '17  
 Brood sow and her litter. H. T. Morgan. il Kimball's D F 15:29 Ja 15 '17  
 Brood sow and her litter. H. M. Mullendore. il Purdue Ag 12:478-9 My '18  
 Brood sow and her litter. R. B. Rushing. Prac F 113:417 D 1 '17  
 Brood sow and litter. Weekly N L 4:6 Je 13 '17  
 Brood sow; feed, care and all the rest. H. T. Morgan. il Country Gent 82:678 Ap 7 '17  
 Brood sow management. W. A. Graham. Prac F 112:471 D 15 '16  
 Brood sows in winter. R. L. Hill. O Judd Farmer 62:12 F 10 '17  
 Care of brood sow. T. Z. Richey. Ohio F 137: 35 Ja 8 '16  
 Care of brood sows. Weekly N L 5:5 Ja 16 '18  
 Care of brood sows and pigs. S. Thomas. Ohio F 141:386 Mr 16 '18  
 Care of sow and litter. J. C. Hogenson and H. Oberhansly. Utah Ag Ext C v 6, no 18 4p '18  
 Care of sow and pigs. Weekly N L 5:2 Mr 20 '18  
 Care of the brood sow. H. H. Wing. Rural N Y 76:883 Jl 14 '17  
 Care of the sow and her pigs. R. Priest. Tenn Ag Ext Pub 56 4p '18  
 Care of the sow at farrowing time. L. A. Weaver. Kimball's D F 14:208 Mr 15 '16  
 Condition of sows. Nat Stock & F 42:559 S 14 '18  
 Economy in wintering brood sows. H. H. Havner. il Field 11 26:1027-8 D '16  
 Farrowing crate for sows. F. A. Patton. Wallaces' F 42:111 Ja 19 '17  
 Farrowing time. Weekly N L 5:3 Mr 13 '18; Same. Coop Manager & F 7:78 Ap '18  
 Feed and care of the brood sow. O. Kercher. il Ky Ag Ext C 40:1-8 '16  
 Feed for a sow after farrowing. Nat Stock & F 41:466 Ag 11 '17  
 Feeding brood sows. T. Butler. Prog F 32: 839 Ag 4 '17  
 Feeding sows with litters. J. H. Voorhees. Prac F 114:182 My 1 '18  
 Feeding the brood sow. Hoard's D 52:740 D 15 '16  
 Feeds for suckling sows. J. M. Evvard. Breeder's Gaz 74:116 Jl 25 '18  
 Fresh air and exercise for brood sows. C. S. Moore. Rural N Y 75:669 Ap 22 '16  
 Give brood sow good care. O Judd Farmer 60:26 F 5 '16  
 Good sows bring swine profits. C. F. Adams. il O Judd Farmer 60:24 Ja 29 '16  
 Good start for the pig. H. T. Morgan. il Country Gent 83:8+ F 16 '18

- Handling the brood sow. C. Griffen. Kimball's D F 14:76 F 1 '16  
 Hogs: care and feeding of brood sows from breeding to farrowing. A. L. French. Prog F 33:100 Ja 26 '18  
 Hogs: how to care for and feed the brood sows while suckling their pigs. A. L. French. Prog F 33:134 F 2 '18  
 How I handle sows at mating time. W. S. Tomlinson. Ohio F 141:590 Ap 27 '18  
 How to care for the brood sow. Hoard's D 53:660 My 4 '17  
 How to handle the brood sow and litter. J. W. Schwab. il Purdue Ag Ext B 65:1-8 '18  
 Management of the brood sow and her litter. J. C. Coffey. Ohio Ag Ext B v 13, no 12 7p '17-18  
 Mating sows before their litters are weaned. W. L. Robison. Ohio Ag Exp B v 3:142-3 My '18  
 Pig-eating sows. Wallaces' F 42:648 Ap 13 '17  
 Preparedness at farrowing time is money saved. Prog F 31:732 Je 3 '16  
 Preparing for spring litters. G. P. Williams. Ohio F 141:304 Mr 2 '18  
 Rations for brood sows. G. A. Brown. Breeder's Gaz 69:76 Ja 13 '16  
 Self-feeding sows and litters. Kimball's D F 14:117 F 15 '16  
 Sow and litter. Swine World 5:9 O '17  
 Sow at farrowing time. H. Ferguson. il Prac F 112:333 S 1 '16  
 Sows that eat their pigs. W. S. Tomlinson. Ohio F 137:564 Ap 15 '16  
 Spring litter. A. E. Maclaurin. il J Ag (Quebec) 20:207 Ap '17  
 Spring litters. il Field 11 28:172 Mr '18  
 Starting spring pigs right. W. F. Purdue. Kimball's D F 15:209 Mr 15 '17  
 Swine breeding. Maine Ag Dept B v 15:1-9 D '16  
 Things that save the spring pigs. W. M. Kelly. Ohio F 139:145 F 3 '17  
 What to do when the little pigs are born. Hoard's D 53:660 My 4 '17  
 Winter care of brood sows. Hoard's D 52:576 N 17 '16  
 Winter care of brood sows. L. C. Reynolds. Ohio F 137:256 F 19 '16  
 Wintering mature brood sows. W. P. Snyder. il Neb Ag Exp B 162:1-29 '17

## Costs

- Cost of hog production in terms of corn. Wallaces' F 42:1456 O 26 '17  
 Cost of raising pigs. D. T. Gray. Prog F 32:68 Ja 20 '17  
 Farm records show cost of pork production. Swine World 5:20 Ja '18  
 Figures that tell the tale. J. T. Taylor. il Nat Stock & F 40:968 D 23 '16  
 Hog and corn ratios. 11p '17 Meat division, U.S. Food administration, Washington, D.C.  
 Importance of yield in hogs. R. C. Asby. Breeder's Gaz 71:722 Ap 5 '17  
 Profitable pork production with high-priced feeds. C. N. Arnett and W. E. Joseph. Wallaces' F 42:624 Ap 6 '17  
 Report of commission appointed by the U.S. food administration to investigate the cost of producing hogs. Swine World 5:6-7 D '17  
 What do hogs pay for corn? J. I. Thompson. Breeder's Gaz 73:548 Mr 14 '18  
 What is the cost of hog production in terms of corn? Prog F 32:1175 N 10 '17

See also Swine—Prices

## Diseases and pests

- Bacillus abortus (Bang) as an etiologic factor in infectious abortion in swine. E. S. Good and W. V. Smith. J Bact 1:415-22 Jl '16  
 Beriberi and cottonseed poisoning in pigs. G. M. Rommel and E. B. Vedder. J Ag Research 5:489-93 D 13 '15  
 Cause and prevention of hairless pigs. H. Welch. il map Mont Ag Exp C 71:37-47 '17  
 Chronic arthritis in swine. S. Sekiguchi and E. E. Irons (J. Infect. Diseases, 21 no. 6 526-40p. '17). Exp Sta Record 38:381 Mr '18  
 Common parasites of swine. J. T. E. Dinwoodie. il S D Ag Ext C 8:1-16 '18



**Swine—Diseases and pests—Continued**

Control livestock diseases by cleaning up the farm. M. Jacob. Tenn Ag Ext Pub 58 4p '18  
Copperas—a feed-lot fallacy. N. B. Jones. Swine World 5:6 J1 '18  
Crude oil for lice. Kimball's D F 14:208 Mr 15 '16  
Diseases and ailments of swine. O. L. Eckman. N H Ag Ext C 41:1-6 '18  
Diseases caused by parasites. Swine World 5:23 Ja '18  
Feeding and management of hogs. J. I. Thompson. Cal Ag Exp C 151:11-14 '16  
Generalized melanosis in a pig. E. M. Pickens. Il Am Vet M Assn J 52:701-73 F '18  
Hairless pigs in the range country. L. Shaw. Breeder's Gaz 69:1112 My 25 '16  
Hairless pigs—the cause and remedy (abstracts of Wis Ag Exp B 297). E. B. Hart and H. Steenbock. Wallaces' F 43:1520 O 18 '18; Hoard's D 56:511 N 8 '18; O Judd Farmer 65:428 N 9 '18; Ohio F 142:527 N 30 '18  
Healthy hogs. N. E. McEwen. J Ag (Quebec) 21:153 Ap '18  
Hog conditioners and worm killers. J. M. Evvard. Breeder's Gaz 69:1019 My 11 '16  
Hog disease swindler in Illinois. O Judd Farmer 61:10 N 4 '16  
Hog losses from disease are lowest in 35 years. Weekly N L 5:1 My 29 '18  
Hogs and the tent caterpillar. F. M. Hayes. Il Am Vet M Assn J 54:58-61 O '18  
Hogs down in the back. Prog F 33:635 My 25 '18  
How to keep the hogs free of lice and worms. A. L. French. Prog F 33:420 Mr 30 '18  
Impetigo of the pig. L. B. Bull. Il J Dept Ag S Australia 22:110-14 S '18  
Increase pork by reducing losses. R. Graham. O Judd Farmer 65:4 S 14 '18  
Kidney worms in hogs. Va Ag Dept B 109:65-6 '16  
Lice on hogs. Prog F 31:566 Ap 22 '16  
Lice on hogs. W. L. Robison. Ohio F 137:838 Je 24 '16  
Lung worm and pneumonia evils. H. Jones. Swine World 5:26 Mr '18  
Necrobacillosis in swine. R. Graham. Il Ill Ag Exp C 222:1-12 '18  
Necrobacillosis in swine. A. T. Kinsley. Mo Ag Bd Yearbook 1916:470-4  
New swine disease; pig loss may be due to contagious abortion. O Judd Farmer 60:8 My 27 '16  
Observations of hog flu. J. J. Newlin. Wallaces' F 43:1820 D 13 '18  
Paralysis of pigs. H. Wehrbein. Il Am Vet M Assn J 49:238-44 My '16  
Parasites of hogs. Il Ia Ag Ext B 43:1-8 '16  
Parasites of swine. W. L. Hollister. Am Vet M Assn J 53:330-4 Je '18  
Preventing paralysis in swine. A. S. Alexander. Il Rural N Y 75:1164 S 2 '16  
Rinderpest in swine with experiments upon transmission from cattle and carabaos to swine and vice versa. W. H. Boynton. Il Philippine Ag R 9,no 4:288-336 '16; Abstract. Int R Sci & Prac Ag 8,no 11:1107-8 N '17  
Scours—a persistent pig enemy. C. V. Truax. Swine World 5:4 Ap '18  
Shipping diseased hogs. Wallaces' F 43:1524 O 18 '18  
So-called blind staggers of hogs. T. Butler. Prog F 31:923 J1 29 '16  
Sore mouth kills pigs. F. B. Hadley. Hoard's D 53:895 Je 22 '17  
Stop that cough! Swine World 5:18 Ap '18  
Swine fever. J Bd Ag 23:242-7 Je '16  
Swine fever. F. E. Place. J Dept Ag S Australia 20:383-4 Je '17  
Symptomatic anthrax in swine. Int R Sci & Prac Ag 7,no 1:101-2 Ja '16  
Thumps in pigs. J. H. Reed. Prac F 112:160 Ap 1 '16  
Watch the pigs; two forms of necrobacillosis. Weekly N L 5:7 Ag 8 '17  
Worms in pigs. Weekly N L 5:5 Ap 3 '18; Same. J Ag (Quebec) 22:32 Ag '18  
*See also* Hog cholera; Swine dipping vats; Trichina and trichinosis; Tuberculosis in swine

**Feeding**

Acidosis and cottonseed meal injury. C. A. Wells and P. V. Ewing. bibliog il Ga Ag Exp B 119:35-64 '16  
Advantages of hogging off corn. P. S. Richey. Il Purdue Ag 13:12 O '18  
Alfalfa and self-fed corn for hogs. B. H. Thompson. Il Kimball's D F 14:34 Ja 15 '16  
Alfalfa saves the day for the American swine grower. J. M. Evvard. Il Country Gent 82:956 Je 2 '17  
Backyard pig feeding. H. M. King. Il Ontario Ag Dept C 8:1-4 '18  
Bacon production. G. E. Day. J Ag (Quebec) 21:154 Ap '18  
Balanced ration for swine. F. C. Minkler. Rural N Y 77:1122 S 28 '18  
Balancing feed for hogs. T. Butler. Prog F 33:1127 O 19 '18  
Beriberi and cottonseed poisoning in pigs. G. M. Rommel and E. B. Vedder. J Ag Research 5:489-93 D 13 '15  
Brood sow rations. J. M. Evvard. Hoard's D 56:695 D 13 '18  
Buttermilk for swine. J. M. Evvard. Breeder's Gaz 71:628 Mr 22 '17  
Castor bean meal feed for pigs. J Bd Ag 24:1444-6 Mr '18  
Cheap hog feed for next spring. H. H. Havner. Nat Stock & F 42:492 Ag 24 '18  
Cheap protein for hogs. Country Life 31:68b Ja '17  
Cheapest feed for hogs. Prog F 33:3 Ja 5 '18  
Chufas for hogs. Prog F 31:355 Mr 11 '16  
Colorado pea-fattened hogs. J. A. Rickart. Breeder's Gaz 69:492 Mr 2 '16  
Comments on Missouri feed test. Swine World 5:16 My '18  
Concrete floors for hog feeding. W. A. Graham. Prac F 112:sup3 Mr 1 '16  
Corn, alfalfa and hogs. H. H. Havner. Il Nat Stock & F 42:868 D 21 '18  
Corn and soys for hogs. Country Gent 82:957 Je 2 '17  
Corn and velvet beans versus corn and tankage for brood sows and pigs. T. Butler. Prog F 33:927 Ag 24 '18  
Corn and young growing pigs. Kimball's D F 13:820 Ja 1 '16  
Corn-belt farming system which saves harvest labor by hogging down crops. J. A. Drake. Il map Farmers' B 614:1-16 '17  
Corn by-products for hogs. Purdue Ag 12:139-40 D '17  
Corn price hog ratio. Ag Digest 2:745 D '17  
Corn substitutes for hogs. Il Purdue Ag 12:20-1 O '17  
Cotton seed meal as a feed for hogs. J. C. Burns. Am Soc Animal Production Pro 1915-1916:15-20 '17  
Creameries and buttermilk hogs. H. T. Morgan. Country Gent 81:1789 O 7 '16  
Crops for hogs in the South. Country Gent 81:1649 S 9 '16  
Dairy by-products versus tankage for fattening swine. H. E. Dvorachek. Ark Ag Exp C 38 4p '18  
Digestibility of some Arkansas feeds for hogs. J. B. Rather. Ark Ag Exp B 133:1-16 '17  
Do soy bean meal and peanut meal produce soft-bodied hogs? D. T. Gray. Prog F 31:1202 O 14 '16  
Does it pay to hog off corn? P. S. Richey. Il Purdue Ag Ext Leaflet 102:1-6 '18  
Dry brood sows on soy bean pasture. D. T. Gray. Prog F 32:254 F 24 '17  
Economical substitutes in swine feeding. G. B. Rothwell. Il Ag Gaz of Canada 5:440-6 My '18  
Economy in wintering brood sows. H. H. Havner. Il Field 11 26:1027-8 D '16  
Economy of feeding hogs. H. W. Mumford. Breeder's Gaz 71:331 F 15 '17  
Economy of \$110 tankage for hogs. J. R. Wiley. Il Ohio F 142:424 N 2 '18  
Effects of feeding cotton seed and its products to swine. G. A. Roberts. Am Vet M Assn J 49:12-17 Ap '16  
Experiment in pig feeding. J Bd Ag 25:179-81 My '18  
Experiment in pig feeding; use of self-feeder. J. M. Hunter. Il Rural N Y 77:906 J1 20 '18

**Swine—Feeding—Continued**

- Experiments in pig-feeding carried out by the experimental sub-station of North Platte, Nebraska, United States. W. P. Snyder and E. A. Burnett. *Int R Sci & Prac Ag* 7, no 9: 1311-16 S '16
- Experiments in the disposal of irrigated crops through the use of hogs. J. A. Holden. *il U S Ag B* 488:1-25 '17
- Fall forage for hogs. *Weekly N L* 4:3 J1 25 '17; Same. *Am Coop J* 12:778 Ag '17
- Fall pig-feeding experiment. Wallaces' *F* 42: 1138 Ag 17 '17
- Fall pig rations. J. M. Evvard. *Hoard's D* 56: 703 D 13 '18
- Fatten early pigs. *Weekly N L* 5:3 S 12 '17
- Fattening hogs. *Va Ag Dept B* 122:7-8 O '17
- Fattening hogs. A. O. Choate. *Hoard's D* 56: 640 N 29 '18
- Fattening hogs. H. W. King. *Purdue Ag* 11:27 Ap '17
- Fattening hogs in Louisiana. E. L. Jordan. *Prog F* 31:865 J1 8 '16
- Fattening swine on rice by-products. H. E. Dvorachek. *Ark Ag Exp B* 123:1-24 '16
- Feeder for ear corn. *Country Gent* 81:889 Ap 22 '16
- Feeding breeding hogs. *Rural N Y* 75:532 Mr 25 '16
- Feeding cottonseed meal to fattening hogs. T. Butler. *Prog F* 33:1183 N 2 '18
- Feeding cottonseed meal to hogs. T. Butler. *Prog F* 32:579 My 12 '17
- Feeding dried pressed potatoes to swine. F. G. Ashbrook and R. E. Gongwer. *il U S Ag B* 596:1-10 '17; Abstract. *Coop Manager & F* 7: 82 Ap '18
- Feeding experiments on young pigs with skim milk supplemented by cream substitutes of varying protein content. *Int R Sci & Prac Ag* 7, no 1:108-10 Ja '16
- Feeding experiments; rations for brood sows. *N J Ag Exp Rep* 1916:120-32 '17
- Feeding pigs. *Prog F* 32:1303 D 15 '17
- Feeding pigs for proper growth. *Hoard's D* 52:474 O 27 '16
- Feeding pigs from small gardens. *Gard Chron (Lond)* 63:116 Mr 16 '18
- Feeding swine in dry lot. W. L. Robison. *Ohio Ag Exp B v* 2:385-6 D '17
- Feeding tepary beans to hogs. *Ariz Ag Exp Rep* 1916:286-8 '16
- Feeding tests with fall pigs. R. C. Ashby. *il Hoard's D* 55:686 My 10 '18
- Feeding the unborn pig through lucerne. *J Dept Ag Victoria* 15:761-2 D '17
- Feeding the young boar. Wallaces' *F* 41:232 F 11 '16
- Feeding the young pigs. J. L. Justice. *Hoard's D* 55:899 Je 14 '18
- Feeding value of acorns for hogs. *Prog F* 31: 1487 D 30 '16
- Feeding whey to hogs. J. A. Macdonald. *Rural N Y* 75:822 My 27 '16
- Feeding winter litters. W. S. Tomlinson. *Ohio F* 141:458 Mr 30 '18
- Feeds and how to use them in making big types. D. Putnam. *Swine World* 5:22 J1 '18
- Feeds for suckling sows. J. M. Evvard. *Breeder's Gaz* 74:116 J1 25 '18
- Fencing the farm hog-tight. W. E. Frudden. *il Field* 11 27:356 My '17
- Few timely lessons in pig feeding. J. Evvard. *il Hoard's D* 54:451 O 26 '17
- Finishing swine by the self-feeding method. J. M. Evvard. *il Ohio F* 137:373, 418, 458-9 Mr 11-25 '16
- Fish meal as a feed for swine. F. G. Ashbrook. *U S Ag B* 610:1-9 '17
- Fish meal as food for pigs. C. Crowther. *J Ed Ag* 23:27-33 Ap '16; Same cond. *Int R Sci & Prac Ag* 7, no 12:1801-4 D '16
- Forage crops for hogs. *Ohio F* 141:770 Je 15 '18
- Forage crops for hogs. W. J. Carmichael and J. B. Rice. *il Ill Ag Ext C* 23:1-8 '18
- Forage crops for hogs. A. O. Choate. *Hoard's D* 53:496 Ap 6 '17
- Forage crops for hogs. J. M. Evvard. *il Field* 11 27:272-3 Ap '17
- Forage crops for swine. W. L. Robison. *il Ohio Ag Exp B v* 1:201-5 J1 '16
- Forage crops for the pigs. *il Ohio F* 137:596 Ap 22 '16
- Forage crops for the pigs. W. W. Smith. *il Purdue Ag* 10:26-7+ Ap '16
- Forage for hogs. *Weekly N L* 4:3 Je 27 '17
- Forage for swine. J. J. Yoke. *W Va Ag Exp C* 28 4p '18
- Four-legged shuckers. D. O. Thompson. *il Country Gent* 81:588 Mr 11 '16
- Full feeding the fall pigs. *il Wallaces' F* 43: 1327 S 20 '18
- Grain for hogs on pasture. R. C. Ashby. *Wallaces' F* 41:1376 O 20 '16
- Grazing crops for hogs. S. H. Starr. *Ga Ag Coll (Ext)* B 146:1-16 '18
- Grazing crops for hogs—temporary. T. Butler. *Prog F* 33:194 F 16 '18
- Grinding corn for pigs. *Ohio F* 137:296 F 26 '16
- Ground wheat versus whole wheat for fattening pigs. R. K. Bliss and others. *Int R Sci & Prac Ag* 7, no 5:713-15 My '16
- Grow your own protein, advice for hog raisers. *Weekly N L* 6:1 Ag 14 '18
- Growing hogs for profit. H. H. Havner. *il Field* 11 26:408-9 My '16
- Growing hogs on grazing crops alone. T. Butler. *Prog F* 33:683 Je 8 '18
- Growing pigs in summer. W. P. Snyder. *Neb Ag Exp B* 165:1-16 '18; Abstract. *Ohio F* 142:119 Ag 10 '18
- Growing pork at a profit on high priced feed. L. A. Weaver. *Prac F* 112:471 D 15 '16
- Happy pig is a well fed pig. *Hoard's D* 53: 736 My 18 '17
- Hardening soy bean and peanut-fed hogs. D. T. Gray. *Prog F* 31:882 J1 15 '16
- Hardening the bodies of peanut-fed hogs with  $\frac{1}{2}$  corn. D. T. Gray. *Prog F* 32:1039 O 6 '17
- Have a permanent pasture for the hogs. D. T. Gray. *Prog F* 32:1204 N 17 '17
- Here are your rations. J. M. Evvard. *Wallaces' F* 41:532 Mr 31 '16
- Hog and corn figuring. M. Green. *Coop Manager & F* 7:101 Mr '18
- Hog as hired man. *Rural N Y* 77:472 Mr 23 '18
- Hog cholera transmission through infected pork. R. R. Birch. *Am Vet M Assn J* 51: 303-30 Je '17
- Hog data from Ames, Ia. O Judd Farmer 63: 6 O 27 '17
- Hog feeding at the Nebraska station, 1917-18. H. J. Gramlich. *il Swine World* 5:24 Je '18
- Hog feeding demonstration. P. S. Richey. *il Purdue Ag Ext Leaflet* 96:1-4 '18
- Hog pastures and feeds. A. P. Spencer. *Fla Ag Ext B* 7 4p '16
- Hog pastures for the southern states. L. Carrier and F. G. Ashbrook. *il Farmers' B* 951: 1-20 '18
- Hog production plans for spring. *il O Judd Farmer* 64:1 Ja 12 '18
- Hog raising in New England. *Rural N Y* 75: 1110 Ag 19 '16
- Hog rations. Wallaces' *F* 42:1224 S 7 '17
- Hogging down corn. *Coop Manager & F* 8:93 O '18
- Hogging down corn. *Prac F* 112:367 O 1 '16
- Hogging down corn. C. R. Arnold. *Ohio F* 140: 119 Ag 18 '17
- Hogging down corn. W. J. Carmichael. *Nat Stock & F* 42:292 Je 15 '18
- Hogging down corn. W. L. Robison. *Ohio Ag Exp B v* 3:229-32 Ag '18
- Hogging down corn. L. A. Weaver. *Mo Ag Ext C* 37:1-4 '17
- Hogging down soy beans. *Hoard's D* 52:209 S 8 '16
- Hogging down soy beans and cowpeas. E. S. Good and M. J. Smith. *il Ky Ag Exp B* 201: 139-49 '16
- Hogging off corn. P. E. Thompson. *il Purdue Ag Ext B* 48:1-11 '16
- Hogging-off corn profitable. L. B. Bassett. *Jersey B* 36:1807 N 14 '17
- Hogging off corn profitable. I. G. Shellabarger. *Ohio F* 138:594 D 16 '16
- Hogs and sheep in the orchard. G. G. Brown. *Better Fruit* 11:12+ Ag '16
- Hogs cannot be most economically grown on an all-corn ration. *Prog F* 33:35 Ja 12 '18



**Swine—Feeding—Continued**

- Hogs in the corn field. Wallaces' F 43:1166 Ag 16 '18
- Hogs vs. steers. J: G. Imboden. Breeder's Gaz 72:670 O 18 '17
- Hooverizing the hog's ration. il Kimball's D F 16:558 O 1 '18
- How much grain for hogs on forage. W. J. Carmichael. Wallaces' F 43:728 Ap 26 '18; Same. Swine World 5:6 My '18
- How pigs make hogs of themselves. H. R. O'Brien. il Country Gent 83:8-9+ N 9 '18
- How strictly vegetable diets influence growth and reproduction of swine. E. B. Hart. Hoard's D 56:548 N 15 '18
- How to fatten the hogs. A. L. French. Prog F 33:386 Mr 23 '18
- How to grow and use forage crops for hogs. J. R. Wiley. il Purdue Ag Ext B 66:1-3 '18
- How to make an under six-months pig weigh 400 pounds. W. W. Smith. il Nat Stock & F 40:1358 Mr 10 '17
- Importance of minerals in pig feeding. F. A. Hayes. Hoard's D 52:629 N 24 '16
- Influence of feeding with milk rich in carbohydrates (diarfarinised) and milk rich in fat (emulsion milk) of varying protein content, on the composition of young pigs. O. Wellmann. Int R Sci & Prac Ag 7,no 11:1626-9 N '16
- Influence of peanuts and rice bran on the quality of pork. L. B. Burk. Tex Ag Exp B 224:1-14 '18
- Influence of ration upon the intestinal flora of swine. L. D. Bushnell and J. J. Frey. bibliog il Kan Ag Exp Tech B 3:1-54 '17
- Influence of strictly vegetable diets on growth and reproduction of swine. E. B. Hart and E. V. McCollum. il Am Soc Animal Production Pro 1915-1916:49-53 '17
- Instructive hog feeding demonstration. R. M. Watkins. il Breeder's Gaz 72:370-1 S 13 '17
- Iowa swine feeding day. il Kimball's D F 15:792 N 1 '17
- Iowa's bit in pork making. J: M. Evvard. il Swine World 5:8+ Je '18
- Iowa's message to the hog feeder. H. R. O'Brien. il Ohio F 140:365+ O 27 '17
- Keep the hogs on pasture. Prog F 31:883 Jl 15 '16
- Lesson in pork production. C. T. Conklin. il Country Gent 82:829 My 5 '17
- Let hogs harvest corn. O Judd Farmer 63:3 S 22 '17
- Let hogs transform forage into sound and solid pork. Weekly N L 6:2 S 25 '18
- Let the hogs do the shucking. O Judd Farmer 63:1 Jl 14 '17
- Let your hogs work and grow fat. S. Jordan. il Country Gent 83:8 Ag 10 '18
- Little experiment in the feeding of pigs. C. S. Moore. J Ag (Quebec) 19:240 My '16
- Little milk works wonders in pig feeding. J: M. Evvard. Hoard's D 51:586 Ap 28 '16
- McDonough county hog expert; soy beans complete Harry Lantz's ration. O Judd Farmer 65:500 N 30 '18
- Make a summer pasture for hogs. J. C. McAmis. il Tenn Ag Ext Pub 55 4p '18
- Making little pigs into big hogs. J: M. Evvard. il Country Gent 82:1197 Jl 28 '17
- Mangels for swine. J. M. Hunter. Rural N Y 76:1188 O 13 '17
- Mineral matter for hogs. Rural N Y 76:18 Ja 6 '17
- Mineral nutrients in the feeding of swine. E. B. Forbes. il Ohio Ag Exp B v 1:61-5 F '16
- Missouri college gives results of hog feeding experiments. L. A. Weaver. il Swine World 5:23 My '18
- Missouri swine feed experiments for 1915. L. A. Weaver. Mo Ag Bd Yearbook 1916: 529-32; Same. Mo Ag Bd B v 14:9-12 Ag '16
- Molasses feed for hogs; corn and Irish potatoes compared as hog feeds. T. Butler. Prog F 33:767 Jl 6 '18
- More about feeding peanuts to hogs compared with selling the nuts. T. Butler. Prog F 33: 343 Mr 16 '18
- More money for the hogs. R. B. Rushing. Coop Manager & F 7:103 Jl '18
- No proteinless days for hogs. Swine World 6:6 S '18
- Observations on swine feeding. W. H. J. Tisdale. Ag Gaz of Canada 5:593-4 Je '18
- Oil meal vs. tankage. F. S. Hultz. Breeder's Gaz 73:110 Ja 17 '18
- One man on a hundred acres. G: H. Dacy. il Country Gent 82:959 Je 2 '17
- Overhead tank for hog feeding. il O Judd Farmer 60:24 F 5 '16
- Palm kernel cake and meal as food for pigs. C: Crowther. J Bd Ag 23:850-9 D '16
- Pasture and grain crops for hogs in the Pacific Northwest. B. Hunter. il U S Ag B 68:1-27 '14
- Pasture best in hog feeding. R. C. Ashby. Coop Manager & F 7:102 Jl '18
- Pasture for hogs. il J Ag (Quebec) 21:170 My '18
- Pasture for swine. L. G. Shellabarger. Nat Stock & F 41:1104 F 2 '18
- Pastures and forage for hogs. Fla Ag Dept Quar B v 27:25-7 Jl '17
- Pastures for pork production. H. S. Ebbinghaus. Purdue Ag 10:28 Je '16
- Pasturing hogs on alfalfa. H. W. Doyle. il Hoard's D 53:89 F 9 '17
- Peanut-fed hogs. R. K. Phillips. Country Gent 81:1813 O 7 '16
- Peanut meal and ground whole pressed peanuts for hogs. L. B. Burk. Tex Ag Exp B 201:1-9 '16
- Peanuts and pigs. Tex Ag Ext B B-17:1-18 '16
- Peanuts as hog feed. Va Ag Dept B 115:155-6 '17; Same. Weekly N L 4:6 Ja 3 '17
- Pig feeding. J Bd Ag 24:978-85 D '17
- Pig feeding. J: M. Evvard. Hoard's D 51:622 My 5 '16
- Pig feeding. J: M. Scott. Fla Ag Exp B 131: 63-9 '16
- Pig feeding experiments on the model farm of Dikopshof, Germany. A. Richardson. Int R Sci & Prac Ag 8,no 7:1022-5 Jl '17
- Pig-feeding in war time. J Bd Ag 24:1213-21 F '18
- Pig feeding in war time. J. Fleming. J Bd Ag 25:21-6 Ap '18
- Pig feeding in war time. K. J. J. Mackenzie and J. Fleming. J Bd Ag 24:721-6, 826-33 O-N '17
- Pig-feeding problems. Country Gent 81:1541 Ag 19 '16
- Pig versus the feeding standards. J: M. Evvard. Am Soc Animal Production Pro 1915-1916:36-48, 142-57 '17
- Pigs and pork. il Penn State F 9:348-9+ Mr '16
- Pigs are discriminating feeders. il Penn State F 9:367-8+ Ap '16
- Pigs, pastures and pork. H. H. Havner. il Nat Stock & F 41:1252 Mr 2 '18
- Pigs will be hogs—and why. Breeder's Gaz 72:729-30 O 25 '17
- Place of corn in hog feeding. T. Butler. Prog F 31:827 Jl 1 '16
- Plan for hograising. W. E. Taylor. Breeder's Gaz 69:304 F 10 '16
- Plant beans or peas with corn for hogs. J. C. McAmis. il Tenn Ag Exp Pub 54 4p '18
- Plant peanuts to make cheap pork. T. E. Browne. Prog F 33:319 Mr 9 '18
- Pointers on pigs. T. D. Hammatt. il Hoard's D 54:634, 668 N 23-30 '17
- Points to remember in hogging down corn. Wallaces' F 41:1200 S 15 '16
- Pork from middlings and rape. C: W. Turner, jr. Hoard's D 55:581 Ap 19 '18
- Pork from rape pasture. R. C. Ashby. il Breeder's Gaz 70:128 Jl 27 '16
- Pork production and patriotism. C. M. Vestal. il Purdue Ag 13:109-10 D '18
- Pork production in North Dakota. W. H. Peters and D. J. Geiken. il N D Ag Exp B 127:255-78 '18
- Pork production on irrigated lands in western Nebraska. J. A. Holden. il Neb Ag Exp B 159:1-31 '17
- Pork without corn. B. Dobson. Hoard's D 55: 224 Mr 1 '18
- Pork without labor. F. G. Ketner. Ohio F 142:502 N 23 '18
- Potatoes as hog feed. Weekly N L 5:7 O 3 '17

**Swine—Feeding—Continued**

- Preparation of corn for fattening steers. H. O. Allison. *il Mo Ag Exp B* 149:1-35 '17.
- Preparation of corn for hogs. F. G. King. *il Mo Ag Bd B v* 14:12-21 Ag '16; Same. *Mo Ag Bd Yearbook* 1916:532-40.
- Prepare now for fall and winter feeds. D. T. Gray. *Prog F* 33:642 My 25 '18.
- Price of the 1917 monster corn crop to control the price of hogs. Reliable P J 24:319+ D '17.
- Prime pork from peas. L. L. Shoemaker. *Country Gent* 81:1471 Ag 5 '16.
- Producing pork economically. *il Pa Ag Ext C* 56 4p '17.
- Producing porkers in seven months. J. M. Carroll. *Swine World* 5:23 Mr '18.
- Profit of \$7,000 from pork hogs. J. M. Carroll. *Swine World* 5:3 O '17.
- Profitable pastures for pork production. W. R. Butler. *il Field* 11 26:594-5+ J1 '16.
- Profitable pigs in corn-belt pastures. J. M. Evvard. *il Country Gent* 81:1322+ J1 8 '16.
- Profitable pork production with high-priced feeds. C. N. Arnett and W. E. Joseph. *Wallaces' F* 42:624 Ap 6 '17; *Excerpt. Ag Digest* 2:489 Je '17.
- Proportions of supplements to corn for fattening swine. W. L. Robison. *il Ohio Ag Exp B* 316:1-57 '17.
- Protein feeds important. *Swine World* 5:18 J1 '18.
- Protein supplements and pork production. *Breeder's Gaz* 71:48 J1 12 '17.
- Providing early for winter hog feeds. *Ohio F* 142:166 Ag 24 '18.
- Raising a prize porker. F. G. King. *Breeder's Gaz* 71:1017 My 17 '17.
- Raising hogs economically in Virginia. M. Ryder. *Hoard's D* 52:171 S 1 '16.
- Rape for hog pasturage. C. B. Williams. *N C Ag Ext C* 21:1-4 '16.
- Rape for hog pasture. C. M. Baker. *il Hoard's D* 55:730 My 17 '18.
- Ration experiments with swine. A. D. Faville. *Int R Sci & Prac Ag* 7, no 10:1491-4 O '16.
- Rations for fattening pigs. *Ag Gaz of New South Wales* 27:54 Ja '16.
- Recent Iowa hog experiments. *il Wallaces' F* 43:1739 N 29 '18.
- Report of Sioux City stock yards cattle and hog feeding demonstration. *Coop Manager & F* 7:38-9 D '17.
- Results from rotated hog pastures. W. E. Taylor. *Breeder's Gaz* 69:557 Mr 9 '16.
- Results of a hog feeding test. H. J. Gramlich. *Breeder's Gaz* 73:108 Ja 17 '18.
- Review of feeding experiments at Ames. *Breeder's Gaz* 73:709 Ap 4 '18.
- Rooting out the hired man. J. E. Pickett. *il Country Gent* 82:1729 N 10 '17.
- Rotation of hog pastures. H. Fergus. *il Prac F* 112:219 My 15 '16.
- Self-balanced rations by individual pigs. R. C. Ashby. *il Am Soc Animal Production Pro* 1915-1916:197-209 '17.
- Self-feeding breeding pigs. J. M. Evvard. *O Judd Farmer* 62:11 F 17 '17.
- Self-feeding hogs. A. F. Sayre. *il Country Gent* 81:1296 J1 1 '16.
- Self feeding hogs in Ohio. V. E. Householder. *Swine World* 5:17 Ja '18.
- Self-feeding paid. *Wallaces' F* 41:271 F 18 '16.
- Self-feeding pigs on bluegrass. J. M. Evvard. *Breeder's Gaz* 71:774 Ap 12 '17.
- Self-huskers and self-feeders. *il Ohio F* 142:164 Ag 24 '18.
- Seven keys to hog feeding. H. R. O'Brien. *il Country Gent* 82:1759-60 N 17 '17.
- Seven little litter mates. W. R. Butler. *il Country Gent* 81:1180 Je 10 '16.
- Several hog-feeding inquiries. *Prog F* 33:35 Ja 12 '18.
- Silage for swine. J. M. Evvard. *Country Gent* 81:1240 Je 17 '16.
- Sixty-day hog feeding experiment conducted at the Nebraska experiment station. *Neb Ag Bd B* 245:344-8 '18.
- Soft corn and tankage for hogs. P. S. Richey. *Breeder's Gaz* 73:704 Ap 4 '18.
- Soft corn to save hogs. R. J. Crawford. *Breeder's Gaz* 73:156 Ja 24 '18.
- Soft hog carcasses. E. Kennedy. *Country Gent* 82:1534 O 6 '17.
- Soft pork from rice bran. H. E. Dvorachek and H. A. Sandhouse. *Ark Ag Exp B* 142:1-8 '18.
- Some experiments and practical demonstrations in hog feeding at the Delta branch experiment station. G. B. Walker. *il Miss Ag Exp B* 177:1-16 '16.
- Some pig-feeding inquiries. *Prog F* 32:1279 D 8 '17.
- Some points on pork-production. J. Brown. *J Ag New Zealand* 17:206-8 O '18.
- Sorghum grains versus corn for fattening swine. H. E. Dvorachek and H. A. Sandhouse. *Ark Ag Exp C* 34 4p n.d.
- Soy beans for hogs. W. E. Farver. *il Nat Stock & F* 41:676 O 13 '17.
- Soybeans with corn. J. C. Beavers. *Breeder's Gaz* 69:1160 Je 1 '16.
- Specific effects of different rations on the growth of pigs. E. B. Forbes and others. *Int R Sci & Prac Ag* 7, no 9:1316-19 S '16.
- Spring pig rations. *Wallaces' F* 41:1026 J1 28 '16.
- Story of three pigs. L. B. Burk. *il Breeder's Gaz* 69:366 F 17 '16.
- Substitute for corn in winter rations for fattening swine. B. E. Carmichael. *il Ohio Ag Exp B v* 1:3-9 Ja '16.
- Substitutes for corn in the swine ration. G. R. Eastwood. *il Ohio F* 138:489-90 N 18 '16.
- Substituting for \$2.25 corn. T. J. Delohery. *Country Gent* 82:1745 N 10 '17.
- Successful swine rations for the cornbelt. J. M. Evvard and W. H. Pew. *il Ia Ag Exp C* 26:1-15 '16.
- Summer feeding of hogs. R. A. Chitty. *il Breeder's Gaz* 72:244 Ag 23 '17.
- Summer forage for hogs. J. L. Justice. *Hoard's D* 55:393 Mr 22 '18.
- Summer hog feed. *Wallaces' F* 41:705 My 5 '16.
- Supplementing garbage for pigs. R. W. Duck. *Breeder's Gaz* 72:315 S 6 '17.
- Supplements in hogging down corn. *Wallaces' F* 43:1186 Ag 23 '18.
- Supplements to corn for fattening swine. W. L. Robison. *il Ohio Ag Exp B v* 2:317-22 O '17.
- Supplying water to hogs in winter. *Breeder's Gaz* 73:374 F 21 '18.
- Swine fattening experiment. *Pa Ag Exp B* 147:3-6 '17.
- Swine feeding. A. D. Faville. *Wyo Ag Exp B* 114:1-8 '17.
- Swine feeding and care. K. J. Seulke. *il Field* 11 26:12+ Ja '16.
- Tankage for cannibal sows. *Nat Stock & F* 42:202 My 18 '18.
- This plan made a crop worth 60% more. F. Berner. *System on the Farm* 2:167 My '18.
- Those freak hams. C. S. Cornman. *Prog F* 31:650 My 13 '16.
- Top of the market. G. E. Taylor. *Country Gent* 81:1541 Ag 19 '16.
- Trials with alfalfa as a hog feed; some pasture crops for hogs. W. H. Peters and D. J. Geiken. *N D Ag Exp C* 13:1-8 My '16.
- Trouble from rape. H. H. Havner. *Nat Stock & F* 42:516 Ag 31 '18.
- Use of middlings and rape for hogs. C. W. Turner. *il Swine World* 5:29 Mr '18.
- Using forage in pig feeding. W. L. Robison. *il Ohio Ag Exp B v* 3:72-6 Mr '18.
- Value of hogging down corn. *Swine World* 5:6 O '17.
- Value of pasturage in pig raising and as a means of reducing the cost of the production of pork. H. S. Elliot. *Fla Ag Dept Quar B v* 26:5-8 O '16.
- Value of pasture in pork production. H. H. Havner. *Nat Stock & F* 41:1208 F 23 '18.
- Vegetable and animal proteins compared as feeds for pigs. T. Butler. *Prog F* 33:787 J1 13 '18.
- War pork on soy beans. F. A. Hayes. *Hoard's D* 56:713 D 13 '18.
- War rations for hogs. *il Wallaces' F* 42:1415 O 19 '17.
- War-time hog rations. *Ag Gaz of Canada* 5:479-81 My '18.
- What does it cost to produce pork. L. A. Weaver. *il Swine World* 5:28-9 Je '18.



**Swine—Feeding—Continued**

What you can do for your little pigs. Hoard's D 53:698 My 11 '17  
 Winter feed for breeding gilts. L. A. Weaver. Wallaces' F 42:1591 N 23 '17  
 Winter succulence for hogs. Country Gent 81:263 F 5 '16  
 Work with feeding hogs. D. T. Gray. N C Ag Exp Rep 1917:33-43  
 Yes and no of self-feeding. J. M. Evvard. Country Gent 81:1159 Je 3 '16  
*See also* Feeding and feeding stuffs—Garbage; Swine self-feeders

**Fitting for show**

Fitting hogs for show. Wallaces' F 41:1095 Ag 18 '16  
 Fitting hogs for the showing. J. E. Dodge. il Field II 27:935 D '17  
 Fitting swine for show. A. J. Lovejoy. il Field II 27:24-6 Ja '17  
 Get ready for swine shows. il Ohio F 138:86 Jl 29 '16  
 Preparing and exhibiting pure bred swine. J. E. Meharry. Swine World 5:22-3 Je '18

**Judging**

Credit to winners beneath champions. Swine World 6:28 O '18

**Marketing**

All aboard for 1918 sale season. Swine World 5:4-5 Ja '18  
 High hog market. V. A. Place. Country Gent 81:389 F 19 '16  
 Marketing hogs coöperatively. M. Andersen, jr. Prog F 31:482 Ap 1 '16  
 Marketing hogs co-operatively. W. H. Smith. Ag Gaz of Canada 4:1068-9 D '17  
 Marketing pure-bred hogs. L. J. Haynes. il Wallaces' F 42:715 Ap 27 '17  
 My most successful sale catalog. J. L. Barber. il System on the Farm 2:175-6 My '18  
 Pig (sales) order, 1918. J Bd Ag 25:883-6 O '18  
 Scavenger hogs—grain hogs. Wallaces' F 41:309 F 25 '16  
 When piggy goes to market. J. M. Carroll. Swine World 5:5 Jl '18  
 When to market hogs. J. M. Carroll. Country Gent 81:903 Ap 22 '16

**Price lists**

High prices at Hood farm sale. Field II 26:334 Ap '16

**Prices**

Affinity markets; hogs and corn. F. H. Higgins. Ohio F 140:113 Ag 18 '17  
 Ask guarantee of hog prices. O Judd Farmer 63:3 O 20 '17  
 Balancing hogs against corn. C. E. Gapen. il Country Gent 82:1836 N 24 '17  
 Don't give up the porker. H. R. O'Brien. il Country Gent 82:1518-19 O 6 '17  
 Factors in hog prices. L. J. Horlacher. Breeder's Gaz 73:156 Ja 24 '18  
 Fixing hog prices. E. W. Ferguson, jr. Wallaces' F 42:1349 O 5 '17  
 Fixing the price of pork. H. R. O'Brien. il Country Gent 83:5 N 30 '18  
 Food administration to continue assurance of \$15.50 for fall hogs. Weekly N L 6:3 O 9 '18  
 Hog prices. Wallaces' F 43:1602 N 1 '18  
 Hog prices fixed. T. E. Wilson. Nat Wool Grower 8:46 N '18  
 Hog receipts and prices. Wallaces' F 43:909, 932, 1250, 1292 Je 7-14, S 6-13 '18  
 Hogs and corn in war times; civil war ratios and corn prices. Prog F 32:1310 D 15 '17  
 How I made 600% a year from one sire. W. S. Corsa. il System on the Farm 3:140-2 O '18  
 Last two weeks at the hog market. J. M. Carroll. Swine World 6:27 O '18  
 Monthly hog profits and losses of past ten years; chart. Appears in Wallaces' farmer each month, usually in the first issue

\* November hog price. (In Official statement no. 7, p. 11-13) '18 U.S. Food administration, Washington, D.C.  
 November hog prices. W. M. McFadden. Swine World 6:5-6 N '18

On the hog market. J. M. Carroll. Swine World 5:14 My '18

Packers to pay minimum of \$17.50 for November hogs, result of conference. Weekly N L 6:6-7 N 6 '18; Same. Swine World 6:6 N '18; Same. Nat Stock & F 42:708 N 2 '18; Same. O Judd Farmer 65:397 N 2 '18; Same. Prog F 33:1228 N 9 '18

\* Price of hogs and corn. (In Official statement no. 5, p. 3-4) '18 U.S. Food administration, Washington, D.C.

Prices of hogs. J. P. Cotton. 2p '17 Meat division, U.S. Food administration, Washington, D.C.; Same. Hoard's D 54:659 N 30 '17

Producer and the packer an object lesson. Nat Wool Grower 8:30 N '18

Producers urge food administration to establish hog prices. Ag Digest 2:701 N '17

Report of live stock conference. Coop Manager & F 8:85 D '18

Shall we sell or feed our corn? J. Begg. Nat Stock & F 41:86 Ap 14 '17

Sixty years of hog prices. Wallaces' F 42:1726-7 D 21 '17

Strategy of the hog market. Wallaces' F 42:946 Je 22 '17

Table of yearly average price cwt. of hogs and hog feeds, 1890 to September 30, 1916, Toronto market. P. E. Light. (In Bacon hog and the British market, p 10-14) '16 Canada Ag

Thirty-six years of hog profits and losses. Wallaces' F 42:1153 Ag 24 '17

Twelve factors that have a part in regulating hog prices. F. H. Higgins. System on the Farm 1:119-22 My '17

What are the corn and hog states? Wallaces' F 43:1513 O 18 '18

What the market runs indicate. Ag Digest 2:760 D '17

When shall a farmer sell his hogs? P. L. Vogt. Ohio F 138:171 Ag 26 '16

Why of hog prices. J. R. Wiley. Ohio F 142:526 N 30 '18

**Slaughtering**

*See* Slaughtering

**Statistics**

Estimated number and value on farms, January 1, 1914-1917, by states. Monthly Crop Rep 3:7 Ja '17

Number and value on farms in the United States, prices, etc. See United States Department of agriculture Yearbooks

Statistics on hog herds. Swine World 5:34+ Je '18

Swine: estimated number and value on farms January 1, 1915-1918, by states. Monthly Crop Rep 4:15 F '18

Swine-supply estimates. Monthly Crop Rep 3:87 S '17

**Study and teaching**

Lessons on pork production for elementary rural schools. E. A. Miller. il U S Ag B 646:1-25 '18

**Transportation**

Ask change in hog shipping; to abolish veterinarian's certificate for interstate shipment. O Judd Farmer 64:4 Ja 12 '18

Hog losses in transit. Country Gent 81:509 Mr 4 '16

Inspecting hogs for interstate shipment. Breeder's Gaz 69:962 My 4 '16

Shipping diseased hogs. Wallaces' F 43:1524 O 18 '18

Shipping hogs in summer. L. B. Burke. Prog F 32:862 Ag 11 '17

*See also* Hog crates

**Arkansas**

How we raise 'em in Arkansas. W. M. Bruce. il Swine World 5:5 D '17

**Canada**

Bacon hog and the British market. J. Bright and H. S. Arkell. 14p '16 Canada Ag  
 Report of division of animal husbandry; swine. (In Experimental farms, 1916. v. 1, p. 560-98) il 45c '17 Canada Ag

## Swine—Continued

## Corn belt

Pork production on a corn belt farm. R. W. Cassady. *il Breeder's Gaz* 69:1155 Je 1 '16

## Delaware

Pigs pay in Delaware. F. M. Rand. *Prac F* 112:121 Mr 15 '16

## Denmark

Present position and future prospects of swine-breeding in Denmark. P. A. Mörkeberg. *J Dept Ag Ireland* 17,no 1:40-56 '16

## Florida

Pork production in Florida. J. M. Scott. *Fla Ag Exp B* 141:34-56 '17 (B. 113 and 131 rev.)

## Georgia

Eliminating the Georgia razorback. J. A. Downing. *il Breeder's Gaz* 74:224 Ag 15 '18  
Welcome, Mr Boll weevil; Georgia turns to hog production. J. E. Downing. *il Country Gent* 83:11 My 25 '18

## Great Britain

Open-air pig-keeping in Gloucestershire. F. Peter. *J Bd Ag* 23:1232-6 Mr '17  
Pork production by a Cornish small holder. J. W. Lawry. *J Bd Ag* 23:1236-8 Mr '17

## Idaho

Double profits from a single farm; Overbrook farm. C. J. Lisle. *il Country Life* 29:46-7 Ja '16

## Illinois

Briley's ranch on Crooked creek. O Judd Farmer 62:3 Ap 14 '17  
Handling 900 brood sows in McLean county, Ill. *il O Judd Farmer* 63:3 Jl 7 '17  
Illinois pork production conference. O Judd Farmer 63:3 N 24 '17  
Pork methods of Illinois feeder. T: J. Delohery. *il Swine World* 5:3-4 My '18  
Two Illinois brothers and their specialties; swine and corn. O Judd Farmer 60:6 Mr 18 '16

## Mississippi

Growing hogs in Mississippi. E. M. Ranck. *Miss Ag Ext B* 1:1-16 '16  
Hog law needed in south Mississippi. E. B. Ferris. *Prog F* 31:24 Ja 1 '16

## Nebraska

Pork production in Nebraska. E. A. Burnett. *Neb Ag Exp C* 4:1-7 '17

## New Jersey

Swine industry in New Jersey with suggestions relative to the control of hog cholera. *il N J Ag Dept B* 1:1-48 '16

## New York

Pork production in New York. K. J. Seulke. *il Cornell Countryman* 14:287-90 Ja '17  
Swine husbandry in relation to New York state farmers. K. J. Seulke. *N Y Ag Dept B* 94:61-9 Ap '17  
Swine production in New York. H. A. Hopper. *il Cornell Reading Course* 126:1-36 '17  
Swine production in New York under what conditions? L. W. Bole. *Cornell Countryman* 15:133-4 D '17

## New Zealand

Pig position in New Zealand. *J Ag New Zealand* 17:205-6 O '18

## North Dakota

Pork production in North Dakota. W. H. Peters and D. J. Geiken. *il N D Ag Exp B* 127:255-78 '18

## Northern states

Hogs in the Northwest. E. L. Potter. *Breeder's Gaz* 69:772 Ap 6 '16  
Raising winter pigs in the North. W. D. Albright. *Breeder's Gaz* 70:349 S 7 '16

## Ohio

Ennis Stevens—successful swine feeder. C. T. Conklin. *Ohio F* 142:478 N 16 '18

## Pennsylvania

Hog pastures for Pennsylvania. H. H. Havner. *il Pa Ag Ext C* 73 4p '18  
Pork production in Pennsylvania. *il Pa Ag Ext B v* 5:1-7 Ja '18  
Swine production in Pennsylvania. W. H. Tomhave. *il Prac F* 112:3+ Ja 1 '16

## Philippine Islands

Swine in the Philippine Islands. J. H. Tibbs. *il Swine World* 6:10-11 N '18

## South Carolina

Producing pork in South Carolina. V. W. Lewis. *Swine World* 6:17 O '18

## South Dakota

Producing profitable pork in South Dakota. J. M. Carroll. *Swine World* 5:18 My '18

## Southeastern states

Systems of hog farming in the southeastern states. E. S. Haskell. *il map Farmers' B* 985:1-38 '18

## Southern states

Cotton and hogs in the South. B. R. Taylor. *Breeder's Gaz* 69:869 Ap 20 '16  
Pork production in the Virginias. W. D. Zinn. *Nat Stock & F* 40:1014 Ja 6 '17  
Razorback swine and the South. J. M. Evvard. *Breeder's Gaz* 71:922 My 3 '17  
South as the coming stock land of America. J. E. Pickett. *il Country Gent* 83:13+ N 2 '18  
Southern farmers need more pure-bred hogs. T. Butler. *Prog F* 33:1159 O 26 '18  
Starting the pigs in the South. A. J. Huffman. *Swine World* 5:12 Ap '18  
Why the South should raise more hogs. *Prog F* 32:1143 N 3 '17

## Swine breeders' associations

Community organization for promoting the production of swine. C. G. Starr. *il Ind Ag Exp C* 54:1-11 '16  
Coöperative swine breeding association; suggested constitution and by-laws. F. G. Ashbrook. *Prog F* 31:706 My 27 '16  
Local swine breeders' associations. Wallaces' *F* 41:77 Ja 21 '16

See also names of societies, e.g. Canadian swine breeders' association, Indiana swine breeders' association, National swine growers' association

Swine breeders' conference, Ames, Iowa  
Hog breeders' conference. Wallaces' *F* 43:235 F 8 '18

## Swine breeding

Age as a factor—animal breeding. F. B. Mumford. *Mo Ag Bd B v* 14:6-9 Ag '16; Same. *Breeder's Gaz* 69:76 Ja 13 '16  
Bacon hog breeding competitions. F. N. Savoie. *Ag Gaz of Canada* 4:301-3 Ap '17  
Berkshires reign at New Brunswick. *Field* 11 26:224-5+ Mr '16  
Better bred stock. Hoard's *D* 51:560 Ap 21 '16  
Blooded stock U.S. hope in food crisis. H. W. Gossard. *Coop Manager & F* 7:81 Je '18  
Breed your sows now. *Coop Manager & F* 6:84 Je '17  
Breed your sows now. *Weekly N L* 4:2 My 16 '17  
Breeding crate for swine. Wallaces' *F* 43:1643 N 8 '18  
Breeding hogs. A. O. Choate. Hoard's *D* 55:917 Je 21 '18  
Color inheritance in swine. B. O. Severson. *il J Heredity* 8:379-81 Ag '17; Same. *Int R Sci & Prac Ag* 9,no 1:80-3 Ja '18  
Comments on the head of the pig. C. S. Plumb. *Breeder's Gaz* 69:1326 Je 29 '16  
Cross-bred hog. D. D. Casement. *Breeder's Gaz* 72:110 Jl 26 '17  
Cross-bred hogs. D. Prowant. *Nat Stock & F* 41:796 N 17 '17  
Cross-bred hogs as feeders. *Country Gent* 81:972 My 6 '16  
Crossbreds or purebreds for pork? O. Lloyd-Jones. *Breeder's Gaz* 70:12 Jl 6 '16  
Cross-bred hogs. A. J. Legg. *Nat Stock & F* 41:946 D 29 '17



**Swine breeding—Continued**

- Crossbreeding the wild hog. J. L. Lush. Breeder's Gaz 72:370 S 13 '17  
Establishing a swine herd. H. Fergus. il Prac F 112:237 Je 1 '16  
Expense of keeping the boar. D. T. Gray. Prog F 32:586 My 12 '17  
Experiences in swine breeding. N. H. Gentry. Breeder's Gaz 69:175 Ja 27 '16  
Facts about inbreeding swine. F. A. Hays. Breeder's Gaz 73:484 Mr 7 '18  
Feeder and breeder. F. M. Springer. Swine World 5:3 Ja '18  
Feeding and management of hogs. J. I. Thompson. Cal Ag Exp C 151:4-9 '16  
Gilts and old sows as pig-raisers. Breeder's Gaz 70:592 O 5 '16  
Great son of Lord Premier's Successor. Field II 26:428 My '16  
Hogs: selecting the breeding stock. A. L. French. Prog F 33:38 Ja 12 '18  
Inheritance of fertility in swine. E: N. Wentworth and C. E. Aubel. bibhog J Ag Research 5:1145-60 Mr 20 '16; Abstract. Am Soc Animal Production Pro 1915-1916:33-5 '17  
Keep an extra sow and her litter. Ontario Ag Dept C 6:1-8 '17  
Keep the best breed sows. E. W. Gage. Prac F 112:258 Je 15 '16  
Life story of Peter Mouw. R. Davis. il Swine World 5:6-7+ Je '18  
Long-bodied brood sows. E: N. Wentworth. Breeder's Gaz 70:470 S 21 '16  
Managing a herd of hogs in the breeding season on a cornbelt farm. F. E. Drury. Breeder's Gaz 69:821 Ap 13 '16  
Mating swine. A. O. Choate. Hoard's D 56:604 N 22 '18  
Mature vs. immature sows. Hoard's D 52:608 N 17 '16  
Naming the baby. W. M. McFadden. Swine World 6:15-16 O '18  
\$1,250 for under-year Berkshire boar. il Field II 26:687 Ag '16  
Period of usefulness of brood sows. N. H. Gentry. Breeder's Gaz 72:8 JI 5 '17  
Pigs that cost less. H. T. Morgan. il Country Gent 81:622 Mr 18 '16  
Present position and future prospects of swine-breeding in Denmark. P. A. Mörkeberg. J Dept Ag Ireland 17:no 1:40-56 '16  
Production of fall pigs. I. W. Arthur. Ga Ag Coll (Ext) C 59 4p '17  
Prospects for swine breeding. G. E. Day. (In Report, Live stock branch. 1916, p. 70-3) '17  
Ontario ag. dept., Toronto, Canada  
Question (?) of type. H. Jones. Swine World 5:3-4 JI '18  
Seasonal distribution of swine breeding. R. Pearl. Sci Monthly (Science Press, Garrison, N.Y. 30c) 7:244-51 S '18  
Selecting brood sows. W. H. Tomhave. Prac F 112:409 N 1 '16  
Sheep and pig breeding in the Argentine Republic at the present day. G. Martinoli. Int R Sci & Prac Ag 8,no 9:1205-13 S '17  
Simple hog-breeding crate. J. H. Zeller. Farmers' B 966:1-4 '18  
Size of the litter. J. C. Coffey. Ohio F 141:427 Mr 23 '18  
Studying individuality of breeding swine. M. Koenigs. Hoard's D 50:825 Ja 14 '16  
Suggestions for hog raisers. Prog F 31:1433 D 9 '16  
Summer care of boar. Weekly N L 4:4 Je 27 '17  
Swine breeding. Maine Ag Dept B v 15:1-9 D '16  
Swine breeding. J. C. Lambird. Prac F 113:117 Mr 15 '17  
Type and fertility in swine. E: N. Wentworth. Country Gent 81:1612 S 2 '16  
Value of good sires in the production of hogs. J. K. Wright. il Mo Ag Bd B v 14:67-71 S '16  
What is a normal farrow? W. J. Carmichael. Swine World 5:32 Je '18  
What is the worth of the sire? H. W. Mumford. Swine World 5:7 JI '18

See also Swine—Breeds: Swine—Care of sows; also names of breeds, subhead Price lists, e.g. Berkshires—Price lists

**Record books**

- Pedigree records of swine. L. C. Gibbon. Rural N Y 75:1220 S 16 '16  
Record keeping system for swine. C: A. Rough. il Breeder's Gaz 70:721 O 19 '16  
Simple swine-breeding records. System on the Farm 3:106+ S '18  
Value of the papers. M. S. McFadden. Swine World 5:4 O '17  
**Swine dipping vats**  
Dipping vat for hogs. J: C. Burns. Breeder's Gaz 69:723 Mr 30 '16  
Dipping vats for hogs; plans and dimensions. A. P. Spencer. Fla Ag Ext B 4 4p '16  
**Swine houses**  
A-shaped hog house. il Field II 26:751 S '16  
A-shaped hog house. il Tenn Ag Ext Pub 68 4p '18  
Adaptable hog wallow. G. W. Iverson. O Judd Farmer 62:22 F 3 '17  
Another hog house. L. O. Clever. plans Nat Stock & F 41:1253 Mr 2 '18  
Better buildings. A. B. Putebaugh. plan System on the Farm 3:102 S '18  
Cold-weather pig. J: M. Evvard. il Country Gent 82:1280 Ag 18 '17  
Community hog houses. J. B. Davidson and others. il plans Ia Ag Exp B 166:407-58 '16  
Community swine houses. J: M. Evvard. plans Kimball's D F 16:860+ N 15 '18  
Construction of movable hog houses. il Wallaces' F 42:1492, 1588 N 2, 23 '17  
Different types of hog houses. J: M. Evvard. il Hoard's D 55:463 Ap 5 '18  
8-foot-A hog house. O. Kercher. diag Ky Ag Ext C 45:1-4 '16  
Farrowing pen. G. R. Samson and R. E. Reynolds. diag Ore Ag Ext Coll B 211(ser 2, no 44): 1-3 n.d.  
Fattening hogs in winter. F. H. Andrix. Nat Stock & F 41:1072 Ja 26 '18  
Feeding and housing of swine. G. E. Day. (L. S. B. Pamph. 22) 18p il plans '17 Canada Ag  
Fifteen sow farrowing pen. il plan Field II 27:277 Ap '17  
Floors for hog houses. A. D. Burke. Nat Stock & F 41:1033 Ja 19 '18  
Four good types of hog houses. il Am Coop J 13:261 F '18  
Getting sunlight into the hoghouse. il Am Coop J 12:60 S '16  
Good hog house. S. R. De Cou. il Wallaces' F 41:526 Mr 31 '16  
Good portable hoghouse. Ohio F 137:626 Ap 29 '16  
Hog house construction. J: S. Glass. il plans Farm Eng 7:15-19 Ap '18  
Hog house for convenience and health. il Wallaces' F 41:701 My 5 '16  
Hog houses for South Dakota. R. L. Patty. il plans S D Ag Ext C 7:1-32 '18  
Hog housing hints. O. Davis. il Field II 27:680-1 S '17  
Houses for hogs. Rural N Y 77:708 My 18 '18  
Housing fifteen hundred hogs. il Field II 28:639-41 S '18  
Housing the hogs. A. L. French. Prog F 33:476 Ap 13 '18  
Housing to save pigs. B. A. Mackinnon. Breeder's Gaz 73:813 Ap 18 '18  
Iowa gable roof house. il plans Field II 27:630 Ag '17  
Iowa sunlit hog house. J. M. Evvard. Swine World 5:20 Ja '18  
Iowa sunlit hog house. W. C. Kaiser. il Kimball's D F 14:796 D 15 '16  
Making most of modern equipment. J: G. Vaughan. il O Judd Farmer 60:5 F 19 '16  
Modern piggery buildings. il plans Ag Gaz of New South Wales 27:555-60 Ag '16  
Movable hog houses. J. M. Evvard and J. B. Davidson. il Mo Ag Bd B v 14:9-54 My '16  
Movable hog houses. J. D. McVean and R. E. Hutton. plans U S Ag C 102:1-8 '18  
Plan for large hog-house. plan Ohio F 137:162 F 5 '16  
Planning a hog house. il plan Farm Eng 6:20 F '18  
Plans for a sunny hog house. F. M. White. plan O Judd Farmer 65:524 D 7 '18

**Swine houses—Continued**

- Portable hog house. J Ag (Quebec) 19:242 My '16
- Practical hoghouse. il Farm Eng 5:8 J1 '17
- Practical hog house. H. S. Lee. il O Judd Farmer 60:17 Ja 8 '16
- Practical winter hog house. plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2262: 44 S 21 '18
- Saw-tooth hog house. R. C. Miller. plan Country Gent 82:1083 Je 30 '17
- Something new in hog cots. G. C. Kreglow. Ohio F 141:218 F 16 '18
- Steam heated farrowing pen. J: S. Glass. Farm Eng 6:5 F '18
- Sunlight hog house. H. R. Richardson. il plan Country Gent 82:421 Mr 3 '17
- Swine houses. K. J. T. Ekblaw. 22p il plans '16 Nat. lumber mfrs. assn., Chicago
- Two plants that save labor. B. W. Stretch; J. McKee. il System on the Farm 1:112-3 My '17
- Two very necessary farm buildings; corn crib and piggery. W. E. Frudden. il plans Building Age (243 W. 39th st., N.Y. 20c) 39:351-3 J1 '17
- Up-to-date farrowing house. Breeder's Gaz 69:306 F 10 '16
- Ventilation in the hog house. Wallaces' F 41: 314 F 25 '16
- Warming hogs with sunlight. L. Jolley. il System on the Farm 2:13 Ja '18
- Winter hog house. H. Shearer. plan Farm Eng 3:242 Ap '16

**Swine houses, Concrete**

- Concrete for the hog house. H. C. Campbell. il plan Hoard's D 55:88 F 8 '18

**Swine industry and trade**

- Dairying industry; conference of factory managers. J Dept Ag S Australia 20:945-54 J1 '17
- Dignity of the swine business. W. M. McFadden. Mo Ag Bd Yearbook 1916:523-6
- Extend hog raising; advantages possessed by sections outside of corn belt where the industry might be extended. Coop Manager & F 6:49 Je '17
- Factors and developments in the swine industry in Texas. Z. E. Black. il Breeder's Gaz 70:161-2 Ag 3 '16
- Fall trade in hogs. R. N. Watt. J Ag (Quebec) 19:172 F '16
- Future of eastern swine growing. F: C. Minkler. Rural N Y 77:498 Mr 30 '18
- Last two weeks at the hog market. J. M. Carroll. Swine World 6:11 S '18
- Market classes of swine. Ohio F 137:335 Mr 4 '16
- National recognition of swine husbandry. N. H. Gentry. Breeder's Gaz 73:60 Ja 10 '18
- Shipping pure-bred hogs to South America. S. A. Harpending. il Breeder's Gaz 69:487 Mr 2 '16
- Swine. (In Geography of the world's agriculture, p. 130-4) maps '17 U S Ag
- What of the future; today holds the swine breeders' opportunities. H. Jones. Swine World 6:8-9 S '18

**Swine marketing contests**

- Hog marketing contest. Wallaces' F 42:1757 D 28 '17

**Swine self-feeders**

- Construction of self-feeder. Ohio F 137:378 Mr 11 '16
- Construction of self-feeders for swine. F. E. Drury. il plans Breeder's Gaz 73:1200-1 Je 6 '18
- Evolution of the self-feeder for swine. F. E. Drury. il Breeder's Gaz 71:447-8 Mr 1 '17
- Experience with self-feeder for hogs. V. E. Householder. Ohio F 140:554 D 15 '17
- Fattening pigs. Weekly N L 5:8 Ag 22 '17
- How to build a self-feeder. W. G. Kaiser. Country Gent 81:1264 Je 24 '16
- Problems of feeding and management. J: M. Evvard. Swine World 6:17 S '18
- Progress of the self-feeder. il Nat Stock & F 40:256 Je 3 '16
- Self-feeder. Ark Ag Ext C 51 4p '18
- Self-feeder. Nat Stock & F 40:1118 Ja 27 '17
- Self-feeder for hogs. Ohio F 139:228 F 17 '17

- Self-feeder for hogs. F. G. Ashbrook and R. E. Gongwer. il Farmers' B 906:1-12 '17
- Self-feeder for hogs. L. S. Corbett and J. H. Bodwell. il plans Maine Ag Ext B 117:1-18 '18
- Self-feeder for hogs. D. Scoates. Prog F 31: 540 Ap 15 '16
- Self-feeder for swine. G. R. Samson and R. E. Reynolds. diags Ore Ag Ext Coll B 210(ser 2, no 43):1-3 n.d.
- Self-feeder in pork production. W. J. Carmichael. il Ill Ag Exp C 218:1-8 '18
- Self-feeders for fattening swine with directions for constructing a self-feeder. L. A. Weaver. il Mo Ag Exp B 144:1-22 '17
- Self-feeders for hogs. A. E. McLaurin. il J Ag (Quebec) 21:152 Ap '18
- Self feeders for swine. T. R. Bryant. il Ky Ag Ext C 44 4p '16
- Self-feeders for swine. C. P. Thompson. il plans Kan Ag Ext C 8:1-13 '17
- Self-feeding questions. Wallaces' F 41:712 My 5 '16
- Self-feeding sows and litters. Kimball's D F 14:117 F 15 '16
- Two self-feeder experiences. W. K. Torbert; D. G. Carter. il Ohio F 139:398 Mr 17 '17
- When hogs help themselves. J. R. Wiley. il Ohio F 142:138 Ag 17 '18

**Swine shows**

- Barrow and the pure bred breeder. M. S. McFadden. Swine World 5:11 D '17
- Durocs at Iowa. Swine World 5:10 O '17
- Durocs at Nebraska. Swine World 5:16 O '17
- Few hogs but fine quality at Illinois state fair. il O Judd Farmer 61:5 O 7 '16
- Herds of swine at the International. Breeder's Gaz 70:1115 D 14 '16
- How I increased my yearly sales from \$25 to \$100,000 in 5 years. F. F. Silver. Swine World 5:12 Je '18
- Illinois Poland China show. M. S. McFadden. il Swine World 6:12-16 S '18
- Illinois state fair, 1918. Breeder's Gaz 74:308 Ag 29 '18; Wallaces' F 43:1222 Ag 30 '18
- Indiana Poland China show. M. S. McFadden. il Swine World 6:40 O '18
- Iowa state fair, 1918. Wallaces' F 43:1228, 1260 Ag 30-S 6 '18
- Kansas free fair at Topeka a great success. Swine World 6:24 O '18
- Live stock awards at 1916 Iowa state fair. il Ia Ag Bd Yearbook 1916:203-15
- Minnesota state fair hog show. R. Davis. Swine World 6:21-2 O '18
- Missouri state fair, 1918. il Wallaces' F 43:1197 Ag 23 '18
- Nebraska has a real hog show. R. Davis. Swine World 6:25-6 O '18
- Nebraska state fair, 1918. Wallaces' F 43:1297 S 13 '18
- Poland China show at the Missouri state fair, 1918. il Swine World 6:28-9 S '18
- Poland Chinas and Durocs at Wisconsin. M. S. McFadden. Swine World 6:42 O '18
- Poland Chinas at Des Moines, 1918. M. S. McFadden. il Swine World 6:24-5 S '18
- Preparing and exhibiting pure bred swine. J. E. Meharry. Swine World 5:22-3 Je '18
- Prizes on porkers at the International. Breeder's Gaz 70:1120 D 14 '16
- State fairs of 1918. E. C. Stone. Swine World 6:18-19 O '18
- Strong Berkshire classes at Inter-state fair, Trenton, N.J. F: C. Minkler. il Field 11 26:939 N '16
- Swine congress proves popular. O Judd Farmer 62:19 F 24 '17
- Swine show at Iowa state fair. Breeder's Gaz 72:328 S 6 '17
- See also National swine show; also names of state fairs
- Swine world (periodical)**
- Volume six—number one; 5th anniversary of founding of Swine world. H. Jones. Swine World 6:5 Ag '18
- Swings.** See Porch swings
- Swiss beekeepers, Organization of the.** See Organization of the Swiss beekeepers



**Swiss chard**

Success with Swiss chard. S. Rowles. Market Growers J 18:172 Mr 1 '16

Swiss chard. E. Irving. Nat Stock & F 41: 176 My 15 '17

Swiss chard in the greenhouse. Country Gent 81:266 F 5 '16

**Swiss cheese.** See Cheese

**Swiss peasants' secretariat.** See Secretariat of Swiss peasants

**Swiss peasants' union**

Swiss peasants' union and the Swiss peasants' secretariat during 1915. Int R Ag Econ 66:40-50 Je '16

Switzerland; Peasants' union and Peasants' secretariat in 1916. Int R Ag Econ 78:13-20 Je '17

**Switches, Electric.** See Electric switches

**Switzerland.** See subhead Switzerland under special subjects, e.g. Agriculture—Switzerland, Dairying—Switzerland

**Sycamore**

American sycamores are possible hybrids. A. Henry. J Heredity 8:553 D '17

Distinguishing characters of North American sycamore woods. W. D. Brush. il Bot Gaz 64:480-96 D '17

Multiple button-balls. R. W. Shufeldt. il J Heredity 8:550-2 D '17

Remarkable buttonballs. R. W. Shufeldt. il J Heredity 8:310-11 JI '17

Sycamore or buttonwood tree flower. R. W. Shufeldt. il Am For 23:146 Mr '17

**Diseases and pests**

See also Sycamore lace-bug

**Sycamore-fig wasps**

Sycamore fig in Egypt. T: W. Brown and F. G. Walsingham. il J Heredity 8:2-12 Ja '17

**Sycamore figs**

Sycamore fig in Egypt. T: W. Brown and F. G. Walsingham. il J Heredity 8:2-12 Ja '17

**Sycamore lace-bug**

Sycamore lace-bug. O. Wade. il map Okla Ag. Exp B 116:1-16 '17

**Symbiosis**

Is symbiosis possible between legume bacteria and non-legume plants? T: J. Burrill and R. Hansen. bibliog il Ill Ag Exp B 202:115-181 '17

Review of mycology. P. Vuillemin. Sci Am Sup (233 Broadway, N. Y. 10c) 86:223-4 O 5 '18

Significance of mycorrhizæ in the life of trees. E. R. Hodson. Soc Am For Pro 11:353-5 JI '16

**Symphalangism.** See Anchylosis

**Symptomatic anthrax.** See Anthrax, Symptomatic

**Synanthedon pictipes.** See Peach tree borers, Lesser

**Synchronism**

Synchronous rhythmic movements of fall webworm larvæ. L. M. Peairs. Science (Science Press, Garrison, N.Y. 15c) n s 45:501-2 My 25 '17

**Syndicats de mécanique agricole**

Mechanical power users' associations in agriculture: utilizing motor cars after the war. Int R Ag Econ 62:28-36 F '16

**Syneta albidia.** See Fruit tree leaf syneta

**Syntomaspis druparum.** See Apple-seed chalcid flies

**Syphilis**

On a species of treponema found in rabbits. H. Zinsser and J. G. Hopkins. il J Bact 1: 489-92 S '16

**Syracuse university**

New York state college of forestry

New York state college of forestry building. il Am For 23:363 Je '17

**Syria**

**Description and travel**

On the botany and physical geography of the Holy Land. J. G. Baker. il Gard Chron (Lond) 62:245-6, 260 D 22-29 '17

**Syringa.** See Mock orange

**Syrphidae**

Economic bearing of hover-flies. D: Miller. il J Ag New Zealand 17:129-35 S '18

Economic syrphidae in California. W. M. Davidson. J Econ Entom 9:454-7 O '16

Syrphidae of Maine. C. L. Metcalf. il Maine Ag Exp B 253:193-264 '16; 263:153-76 '17

Same (pt. 2). Maine Ag Exp Rep 1917:153-76

**Syrups.** See Sirups

**T**

**Tabanidae**

Improved method of rearing tabanid larvæ. W. Marchand. J Econ Entom 10:469-72 O '17

**Table decoration**

Hints on table decoration. Gard Chron Am 21:279 JI '17

Some hints on table decorations. il Gard Chron Am 21:407 N '17

**Table etiquette**

Service of meals. G. V. Gray. il Farm Eng 3: 142 Ja '16

**Tables**

Gate-leg tables. il Country Life 30:54 Ag '16

Some new tables. il Country Life 32:106 S '17

Tripod tables and stands. W. A. Dyer. il Country Life 33:74+ Ap '18

**Tables, Mathematical.** See Logarithms

**Tagasaste**

Tagasaste and the gacias growing in the botanic gardens. E. N. Ward. Ag Gaz of New South Wales 29:283-4 Ap '18

**Tagua palm.** See Vegetable ivory

**Tales of the Tuscarawas;** story. B. B. Kaiser. Ohio F 141:439, 472 Mr 23-30 '18

**Tamarack**

Miscellaneous conifers of the Rocky Mountain region; generic characteristics of larches. G: B. Sudworth. il U S Ag B 680:2-11 '18

**Tamarisk**

Tamarisks for southwestern farmers. J. J. Thorner. Ariz Ag Exp Timely Hints 121:1-8 '16

Tamarix. C. A. Scott. il Country Gent 81: 1123 My 27 '16

**Tamworths (swine)**

Tamworth. C. H. Yates. il Field II 27:776 O '17

Why I breed Tamworth swine. W. W. Morton. il Field II 28:829 N '18

**Tanagers**

Care and rearing of tanagers. A. F. Harlow. Country Life 31:114 Mr '17

Scarlet tanager. E. S. Jones. Ohio F 137:108 Ja 22 '16

**Tank heaters.** See Water heaters

**Tankage.** See Feeding and feeding stuffs—Tankage

**Tanks, Concrete.** See Water tanks, Concrete

**Tannin**

American sumac: a valuable tanning material and dyestuff. F. P. Veitch and J. S. Rogers. il U S Ag B 706:1-12 '18

Indigenous tans and vegetable dyestuffs of New Zealand. B. C. Aston. J Ag New Zealand 17:136-9 S '18

Influence of resin and tannin on the balance of nitrogen in the soil. A. Koch and A. Oelsner. Int R Sci & Prac Ag 7,no 7:936-7 JI '16

Influence of the tannin content of the host plant on endothia parasitica and related species. M. T. Cook and G. W. Wilson. N J Ag Exp B 291:1-47 '16

Tannin contents of some Queensland barks. J. C. Brännich and A. T. Jefferis. Int R Sci & Prac Ag 7,no 5:687-8 My '16

**Tanning**

Curing Angora rabbit fur. R. S. Wheeler. Country Gent 81:298 F 5 '18

How to tan a calf hide. Wallaces' F 43:684 Ap 19 '18

Indian method of tanning skins. C. O. Ormsbee. Rural N Y 77:897 J1 20 '18

Tanning cow hide for leather. Wallaces' F 41:315 F 25 '16

Tanning fur hides on the farm. Wallaces' F 41:1566 D 1 '16

\* Tanning materials of Latin America. T. H. Norton. (Special agents ser.—no. 165) 32p il map 5c '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

See also Curing

**Tanning materials****Analysis**

Methods of analysis. Assn Offic Ag Chem J 1, no 4, pt 2:53-7 F '16

**Tape-grass.** See Vallisneria

**Tapeworms**

Bothriocephalid tapeworm from the dog in North America, with notes on cestode parasites of dogs. M. C. Hall and M. Wigdor. bibliog il Am Vet M Assn J 53:355-62 Je '18

Cysticercus ovis, the cause of tapeworm cysts in mutton. B. H. Ransom. bibliog il J Ag Research 1:15-58 O '13

Morphology of adult and larval cestodes from poultry. J. E. Gutberlet. (Reprinted from Transactions of the American microscopical society, v. 35. Ja '16, p. 23-44) bibliog il '16 Zoological laboratory, Univ. of Illinois, Urbana

New and economically important tapeworm multiceps gaigeri from the dog. M. C. Hall. bibliog il Am Vet M Assn J 50:214-23 N '16

Synoptical key to the adult taenioid cestodes of the dog, cat, and some related carnivores. M. C. Hall. Am Vet M Assn J 50:356-60 D '16

Transmission and prevention of cestode infection in chickens. J. E. Gutberlet. bibliog Am Vet M Assn J 49:218-37 My '16

**Tar**

See also Plants, Effect of tar fumes on

**Tariff**

German agricultural problems. H. A. Wallace. Wallaces' F 41:1504 N 17 '16

Législation douanière. Int Yearbook Ag Leg 1916:515-51 '17

Report of tariff commission committee of National fertilizer association. Am Fert 45:113 J1 22 '16

See also Wool tariff

**Taro.** See Dasheens

**Tarsonemus pallidus.** See Cyclamen mites

**Tartaric acid**

Optical method for the determination of malic and tartaric acids in the same solutions. J. J. Willaman. Am Chemical Soc J (Charles L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr.) 40:693-704 Ap '18

**Tate, William Knox**

Sketch. por Rural Manhood 8:161 Ap '17

**Taxaceae.** See Yew

**Taxation**

Assessing feeder cattle. Ohio F 137:762 Je 3 '16

Austria and Hungary; agrarian taxes in Bosnia and Herzegovina. Int R Ag Econ 75:75-85 Mr '17

Burden of taxation and what to do about it. C. Poe. Prog F 31:477 Ap 1 '16

Classification amendment. Ohio F 142:446 N 2 '18

Classification of property for taxation. H. P. Miller; G. H. Colton. Ohio F 142:370 O 19 '18

Double taxation. A. A. Giffin. Ohio F 137:316 F 26 '16

Enormous cost of government. J. J. Hill. Hoard's D 51:1005 J1 21 '16

Excess-profits tax pares the potatoes. S. O. Rice. Country Gent 83:14 O 26 '18

Government taxes. Wallaces' F 42:868 Je 1 '17

Income and excess profit tax and capitalization. E. A. Pratt. Coop Manager & F 7:90-1+ Je '18

Inequalities of taxation. Ohio F 138:2 J1 1 '16

Législation des impôts de consommation; Législation de l'impôt immobilier; Législation de l'impôt sur le revenu et la production; Législation sur les taxes de timbre, d'enregistrement de succession et analogues.

Int Yearbook Ag Leg 1916:457-514 '17

Platform of taxation reform. C. Poe. Prog F 33:645 My 25 '18

Taxation for preparedness. B. W. Currie. Country Gent 81:1283-4 J1 1 '16

Taxation under the township system. G. A. Works. Cornell Countryman 15:403-4 Ap '18

Where the tax money of Iowa is collected and spent. Wallaces' F 41:1369 O 20 '16

See also Forest taxation; Income tax; Inheritance tax; Land—Taxation; Poll tax; Single tax

**Taxineae.** See Conifers

**Taxodium.** See Yew

**Taxonomy.** See Botany—Classification

**Taxus.** See Yew

**Tea**

China—production, exports, prices and freights, 1915-1916. Doc Leaflets 1, no 5:71-80 N '17

Chinese tea plant; cultivation in the British Isles. A. Henry. Gard Chron (Lond) 62:67 Ag 18 '17

Coffee and tea. (In Geography of the world's agriculture, p. 93-6) maps '17 U S Ag

Drop in for a cup of tea! il Country Gent 82:297 F 10 '17

Iced tea is a summer drink. Prog F 31:1037 Ag 26 '16

See also Beverages

**Analysis**

Analysis of tea grown in Russia. Int R Sci & Prac Ag 7, no 1:77 Ja '16

Report on tea and coffee, 1916. J. M. Bartlett. Assn Offic Ag Chem J 1, no 4, pt 1:552-6 F '16

Report on tea and coffee, 1917. J. M. Bartlett. Assn Offic Ag Chem J 3:21-4 My '17

Tea. Assn Offic Ag Chem J 2, no 3, pt 2:335-7 N '16

**Diseases and pests**

Black rot disease of tea. T. Petch. Int R Sci & Prac Ag 9, no 1:119-20 Ja '18

Brown blight of tea in India. W. MacRae and R. D. Anstead. Int R Sci & Prac Ag 7, no 5:757 My '16

Investigations on helopeltis, a capsid parasite of tea. S. Leeftmans. Int R Sci & Prac Ag 8, no 6:955-8 Je '17

**Statistics**

International trade; wholesale prices. See United States Department of agriculture Yearbooks

**Tea rooms and tea houses**

How Wenham gets together. M. H. Northend. il plan Country Life 33:48-9 Ja '18

Organizing the wayside tea house. C. H. Claudy. il Country Life 30:54-5 Je '16

Unique college exhibit. A. B. Milam. J Home Econ 8:238-40 My '16

**Tea wagons.** See Tray wagons

**Teacherages.** See Teachers' homes

**Teachers**

Are your teachers alive? E. C. Branson. Banker-F 5:14 Mr '18

Beginning and developing a rural school. A. Stoltzfus. Texas Univ (Austin) B 1729:1-60 My 20 '17

Celibacy of teachers. J Heredity 8:259-60 Je '17

First aid to the country teacher—a suggestion as to vitalizing the country schools thru our present teachers. J. D. Eggleston. (In Pro., Nat. educ. assn., 1916, p. 58-63)

\$2 '16 D. W. Springer, sec., Ann Arbor, Mich.



**Teachers—Continued**

- Five qualifications a teacher should possess. Prog F 31:819 Je 24 '16
- Girl who must earn her own living: teaching school. Prog F 31:263 F 19 '16
- Grants for teaching in agriculture. Ag Gaz of Canada 5:509-11 My '18
- How not to train rural teachers. E: Hyatt. (In Pro., Nat. educ. assn., 1916, p. 1025-8) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Rural school teacher in fiction. S. Laird. J Ag (Quebec) 20:159 Ja '17
- Scarcity of teachers. S. Laird. J Ag (Quebec) 22:70 N '18
- Some opportunities that come to country school masters. G. C. Myers. Education (120 Boylston st., Boston 35c) 37:518-25, 630-5 Ap, Je '17
- Suggestions as to vitalizing the country school thru our present teachers. J. D. Eggleston. (In Pro., Nat. educ. assn., 1916, p. 58-63) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.
- Suggestions for agricultural teachers. Ag Gaz of Canada 5:85 Ja '18
- Teacher and community well-being. G. H. Von Tungeln. J Home Econ 8:279-87 Je '16
- Teachers of rural sociology in various institutions in the United States. J: Phelan. Rural Manhood 8:461-2 D '17
- Teacher's relation to the farmers' institute. R. L. Fleming. Ohio F 140:510 D 1 '17
- See also Teachers' homes

**Training**

- Agricultural training courses for employed teachers; with a suggested reading course in agriculture based on Farmers' bulletins. E. R. Jackson. U S Ag B 7:1-17 '13
- Declaration of principles of the second annual national conference for training rural teachers. (Rural school letter, 1915-16, no 2) 5p (Mim) '16 U. S. Bureau of education, Washington, D. C.
- How teachers of agriculture are trained in the United States. C. D. Jarvis. Ag Gaz of Canada 5:622-3 Je '18
- \* Instruction for teachers of agriculture under the Smith-Hughes' vocational education law. G. M. Wilson. School and Soc (Science Press, Garrison, N.Y. 10c) 7:520-3 My 4 '18
- Need of training teachers for extension education work. A. Loomis. J Home Econ 8: 78-81 F '16
- New system of training for rural teachers. S. Laird. J Ag (Quebec) 20:119 D '16
- New training for rural teachers in Quebec. S. Laird. J Ag (Quebec) 19:157 Ja '16
- Observation and practice in courses for training rural teachers. C. J. Anderson and W. Edsall. School Review (Univ. of Chicago Press, Chicago 20c) 25:16-25 Ja '17
- Preparation of teachers as contemplated in the Nelson amendment. A. R. Hill. Assn Am Ag Coll & Exp Pro 1915:96-102
- Rural-teacher preparation in county training schools and high schools. H. W. Foght. (B. 1917, 31) 71p U.S. Bur. of educ., Washington, D.C.
- Rural teachers for the rural schools. E. C. Lindemann. il Hoard's D 52:575 N 17 '16
- Smith-Hughes act; the training of vocational teachers in home economics. J. T. Berry. Assn Am Ag Coll & Exp Pro 1917:103-16 '18
- Smith-Hughes act; training of vocational teachers in agriculture. L. S. Hawkins. Assn Am Ag Coll & Exp Pro 1917:84-90 '18
- Smith-Hughes act; training of vocational teachers in trades and industries. L. H. Carris. Assn Am Ag Coll & Exp Pro 1917:91-103 '18
- Summer courses in agriculture for teachers. il Ag Gaz of Canada 4:887-900 O '17
- Summer schools for teachers. Ag Gaz of Canada 4:601-5; 5:595-8; 977-81 J1 '17, Je, O '18
- Summer school for teachers, 1916. il Ag Gaz of Canada 3:925-32 O '16
- Training of high school teachers in an agricultural college. G. M. Wilson. J Home Econ 8:180-6 Ap '16

- Training of rural teachers. C. L. Phelps. Elementary School J (Univ. of Chicago Press, Chicago 20c) 17:622-7 My '17
- Training of teachers for agricultural instruction in the provinces. Ag Gaz of Canada 3: 916-24 O '16
- Training of teachers for the country schools of Wisconsin. A. Reynolds. 72p '17 Wis. State supt. of pub. instruction, Madison
- Vocational teachers for secondary schools. C. D. Jarvis. (B. 1917, no. 38) 85p '17 U. S. Bur. of educ., Washington, D.C.
- Wisconsin county training schools for teachers in rural schools. W. E. Larson. (B. 17) 40p il '16 U.S. Bur. of educ., Washington, D.C.

**Teachers, Interchange of**

- Closer commercial relation. Better Fruit 11:25 Mr '17

**Teachers college, Columbia university**

- \* Service of Teachers college to rural education. M. Carney. Teachers Coll Record (525 W. 120th st, N.Y. 40c) 19:147-55 Mr '18

**Teachers' cottages. See Teachers' homes**

**Teachers' homes**

- Bankers: campaign for a cottage for your country teacher. J. C. Preston. Banker-F 3:6 Ag '16
- City comforts for country teachers; the Alberta, Minnesota, consolidated rural school. G: E. Vincent. il Review of Reviews (30 Irving place, N.Y. 25c) 55:403-8 Ap '17
- Cottage for the teacher. G. V. Gray. il Country Gent 81:485 F 26 '16
- Houses for rural teachers. il O Judd Farmer 60:34 F 19 '16
- Teacherage. J: S. Pardee. il plan Country Life 29:24 Mr '16
- Teachers' cottages. G. A. Bricker. Nat Stock & F 42:850 D 21 '18
- Teachers' cottages and rural home economics. J. Preston. il J Home Econ 8:109-12 Mr '16

**Teak**

- Teak trade of Siam. C. C. Hansen. Int R Sci & Prac Ag 9,no 2:197-8 F '18

**Teamsters**

- Training an army teamster. L. Ogilvy. Breeder's Gaz 73:259 F 7 '18

**Teeth**

- Clean mouth. C: H. Lerrigo. il Country Gent 81:2210 D 23 '16
- Start the toothbrush drill. M. H. Talbott. Country Gent 81:1349 J1 8 '16
- Teeth and their care. J. Vanderleck. il J Ag (Quebec) 21:111 Ja '18

**Teeth (animals)**

- Care of horses' teeth. C. W. Brodhead. il N Y Ag Dept Rep 1916,pt 2:183-6 '17
- From N Y Ag Dept B 76
- Some points on the surgical anatomy of the anterior part of the head, including a preliminary study of the teeth and sinuses of the horse. H. S. Murphey. bibliog il la Ag Coll Offic Pub v 14,no 36:56-156 '16

**Telephone**

- Farm telephone companies organize. Wallaces' F 41:730 My 12 '16
- Farmers' mutual telephones. Ohio F 137:292 F 26 '16
- Important to farmers' telephone companies. Wallaces' F 41:396 Mr 10 '16
- Mutual telephone companies. B. H. Hibbard and A. Hobson. map Wis Ag Exp B 282:35-44 '17
- Saskatchewan rural telephone debentures. H. J. Birkett. Canadian Municipal J (Coristine bldg., Montreal \$1.25 per yr) 13:95 Mr '17
- Telephone. J. F. Christy. Ohio F 137:513 Ap 1 '16
- Telephone company constitution. Wallaces' F 41:688 Ap 28 '16
- Telephone on the farm. A. E. Waller. il Prac F 112:245 Je 15 '16
- Why not a desk telephone? R. E. Rogers. Power F 25:50 D '16

**Tempe cotton exchange**

- Cotton growers' association which has solved the pure seed problem. T. H. Kearney. U S Seed Rep 1:8 Ja '18

**Temperament**

Feebly inhibited: nomadism, or the wandering impulse, by C. B. Davenport. Review. *J Heredity* 7:169-72 Ap '16

**Temperature**

Does the temperature coefficient of permeability indicate that it is chemical in nature? W. J. V. Osterhout. *Bot Gaz* 63:317-20 Ap '17

Fats and oils in cookery; Cooking temperatures. A. W. Williams and C. E. Gray. III Univ (Urbana) B v 14:1-19 Jl 23 '17

Influence of temperature on chemical reaction in general. F. Barry. bibliog *Am J Bot* 1: 203-25 My '14

Influence of temperature on the growth of endothia parasitica. N. E. Stevens. *Am J Bot* 4:112-18 F '17

New interpretation of the relationships of temperature and humidity to insect development. W. D. Pierce. *J Ag Research* 5: 1183-91 Mr 20 '16

Standardization of temperatures for cooking batters and doughs. E. Stanley and M. Wallace. *J Home Econ* 8:429-38 Ag '16

Temperature changes due to terrestrial radiation and relation of the latter to plant growth. G. Roster. *Int R Sci & Prac Ag* 7,no 7:934-5 Jl '16

See also Plants, Effect of temperature on; Soil temperature

**Temperature, Animal and human**

Effects of muscular exercise and the heat of the sun on the blood and body temperature of normal pigs. C. C. Palmer. bibliog *J Ag Research* 9:167-82 My 7 '17

**Temperature, Physiological effects of**

Germicidal action of freezing temperatures upon bacteria. C. M. Hilliard and M. A. Davis. bibliog *J Bact* 3:423-31 Jl '18

**Tenancy. See Farm tenancy****Tennessee**

See also subhead Tennessee under special subjects, e.g. Agriculture—Tennessee, Dairying—Tennessee

**Agriculture, Department of**

Biennial report of the Department of agriculture, 1915-1916. *Tenn Ag Dept* 61p '16

**Tennessee state fair**

Jerseys at the Tennessee state fair. *Jersey B* 37:1541 S 25 '18

State fair, Nashville, Tenn. Sept. 17-22. *Prog F* 32:1611 S 29 '17; *Breeder's Gaz* 72:612 O 11 '17

Tennessee state fair at Nashville, 1916. *Breeder's Gaz* 70:597 O 5 '16

**Tennessee university****College of agriculture**

Teaching Tennessee; successful work by agricultural college; views. *Country Gent* 81: 1295 Jl 1 '16

**Tennis**

Dissecting the strategy of tennis. H: R. Isley and B. Kline. *il Country Life* 32:56-8 Je '17

Our coming crop of tennis stars. H. Reed. *il Country Life* 30:32-3 Jl '16

**Tennis courts**

Clay tennis court. S. J. Keister. *il Country Life* 31:68b N '16

**Tent caterpillars**

Apple-tree tent caterpillar. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:20-5 '16

Apple-tree tent caterpillar. A. L. Quaintance. *il Farmers' B* 662:1-12 '18

Controlling tent caterpillars. A. C. Weed. *Rural N Y* 75:230 F 12 '16

Forest tent-caterpillar. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:25-8 '16

Historical account of the forest tent caterpillar and of the fall webworm in North America. A. B. Baird (*In* Report, Entomological soc. of Ontario, 1916, p. 73-87) map '17 Ontario ag. dept., Toronto

Hogs and the tent caterpillar. F. M. Hayes. *il Am Vet M Assn J* 54:58-61 O '18

Methods of control. *il Green's Fruit Grower* 36:22 Mr '16

That tent in the tree. *il Am For* 23:171 Mr '17

**Tenure of land. See Land tenure****Teosinte**

Pearl millet and teosinte for the North. F. B. Morrison. *Breeder's Gaz* 69:335 F 10 '16

Teosinte. W. J. Spillman. *N Y Ag Dept B* 87:2961-2 S '16

**Diseases and pests**

Aphis immunity of teosinte-corn hybrids. W. Gernert. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:390-2 O 19 '17

**Tepary beans. See Beans**

Tepee camp. E. I. Farrington. *il Country Life* 32:63 S '17

**Teratology. See Abnormalities (plants)****Terminal grain weighmasters**

Terminal grain weighmasters and committee on grain weighing of the National scalemen's association hold joint conference. *Coop Manager & F* 8:38-40 N '18

**Terminology. See Names; also Agriculture—**

Terminology; Forests and forestry—Terminology; Horses—Terminology; Lime—Terminology; Lumber trade—Terminology; Wool—Terminology

**Termites**

Combating the attacks of termites or white ants. *Scientific Am* (233 Broadway, N.Y. 10c) 115:529 D 9 '16

Household and camp insects; white ants. E. P. Felt. *il N Y State Museum* (Albany) B 194:72-3 F '17

Menace of white ants. *il Country Gent* 82:189 F 3 '17

Termite injury to sweet potatoes. E. W. Berger. *il Fla State Plant Bd Quar B v* 2: 190-1 Jl '18

Termites, or white ants, in the United States: their damage, and methods of prevention. T: E. Snyder. *il U S Ag B* 333:1-32 '16

White ants as pests in the United States and methods of preventing their damage. T. E. Snyder. *il Farmers' B* 759:1-20 '16

**Terraces. See Terracing****Terracing**

Drainage and terracing experiences. *Prog F* 32:1091 O 20 '17

Helpful hints on terracing. J. C. Olsen. *il Prog F* 32:238 F 23 '18

How to get rich lands; terracing as a means of saving soil fertility. B. L. Moss. *Prog F* 32:282 Mr 3 '17

How to make terraces. B. L. Moss. *Prog F* 31:1335 N 18 '16

Mangum, or broad graded ridge terrace. H. M. Lynde. *il Prog F* 32:1090 O 20 '17

Masterpieces of primitive engineering. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:225 Mr 16 '18

Prevention and control of erosion in North Carolina, with special reference to terracing. F. R. Baker. *il map N C Ag Exp B* 236:1-27 '16; Same. *N C Ag Exp Rep* 1916

Prevention of the erosion of the farm lands by terracing. C. E. Ramser. *il U S Ag B* 512:1-40 '17

So-called terracing in the South. W. F. Massey. *Rural N Y* 77:226 F 16 '18

Soil-saving terraces. *il Wallaces' F* 42:1639 D 7 '17

Terracing farm lands. C. E. Ramser. *il Farmers' B* 997:1-40 '18

Terracing in Texas. J. C. Olsen. *il Tex Ag Ext B* B-23:1-32 '16

Terracing the hills to make them fertile. *Am Coop J* 13:399 My '18

Terracing to prevent soil washing. E. W. Lehmann. *il Am Soc Ag Eng Trans* 11:78-87 '18; Same. *Power F* 27:50-1 My '18

**Terrapin scale**

*Hyperaspis binotata*, a predatory enemy of the terrapin scale. F. L. Simanton. bibliog *il map J Ag Research* 6:197-204 My 1 '16

Terrapin scale: an important insect enemy of peach orchards. F. L. Simanton. bibliog *il map U S Ag B* 351:1-96 '16



**Terriers**

- Sealyham terrier. W. A. Dyer. *il Country Life* 34:64-5 Je '18  
 Terriers of Scotland. W. A. Dyer. *il Country Life* 33:61-4 Mr '18  
*See also* Airedale terriers; Bull terriers; Irish terriers

**Terry, Theodore Brainard, 1843-1916**

- Death of T. B. Terry. *Rural N Y* 75:152 Ja 29 '16; *Wallaces' F* 41:158 F 4 '16  
 Sketch. R. S. Terry. *por Prac F* 112:209 My 15 '16  
 Tribute. H. Losee. *Rural N Y* 75:549 Ap 1 '16

**Test of patriotism; story. H. Daring. Ohio F**

141:542 Ap 13 '18

**Testing**

*See also* Litmus paper; Saccharometers

**Testing machines**

- Apparatus for measuring the wear of concrete roads. A. T. Goldbeck. *il J Ag Research* 5:951-4 F 14 '16

**Tetanus**

- Lockjaw. F. E. Place. *J Dept Ag S Australia* 21:117-18 S '17  
 Tetanus during lactation in a mare. E. V. Veld. *Am Vet M Assn J* 50:66 O '16  
 Treatment of tetanus. N. S. Mayo. *Am Vet M Assn J* 51:771-8 S '17

**Tetanus antitoxin**

- Antitetanic serum in articular rheumatism. W. H. Dalrymple. *Am Vet M Assn J* 51:692-4 Ag '17  
 Antitetanic serum and magnesium sulphate in treating tetanus. H. Theobald. *Am Vet M Assn J* 48:460-7 Ja '16  
 Destruction of tetanus antitoxin by chemical agents. W. N. Berg and R. A. Kelsner. *bibliog J Ag Research* 13:471-95 Je 3 '18  
 Modification of the hygienic laboratory method for the production of tetanus toxin. H. L. Wilcox. *J Bact* 1:333-8 My '16  
 Treatment of tetanus with tetanus antitoxin. H. Bergh. *Am Vet M Assn J* 49:86-93 Ap '16

**Tetracarbonimid**

- Nitrogenous soil constituent: tetracarbonimid. E. C. Shorey and E. H. Walters. *bibliog J Ag Research* 3:175-8 N '14

**Texas**

*See also* subhead Texas under special subjects, e.g. Agriculture—Texas, Dairying—Texas

**Agriculture, Commissioner of**

- 9th annual report. Sept. 10, 1916. *Texas Ag Dept Rep* 63p '16

**Forestry, Department of**

- First annual report of the state forester. *Tex Ag Coll B v* 3:1-16 F 1 '17  
 2d annual report. J. H. Foster. *Tex Ag Coll B v* 3:1-7 N 15 '17

**Industries and resources**

*See also* Forests and forestry—Texas

**Law**

- Statutes of Texas as they apply to farmers. C. M. Cureton. *Tex Ag Dept B* 52:61-9 '16

**Warehouse and marketing department**

- Honest bale of cotton. C. T. Crowell. *il Country Gent* 81:1959-60 N 11 '16

**Texas agricultural and mechanical college**

- Lone Star college; views. J. K. Ashburn. *Country Gent* 81:1549 Ag 19 '16

**Extension service**

- Annual report, 1917. *Tex Ag Ext B B-45:1-39* '18

**Texas agricultural experiment station**

- Progress report, substation no. 1, Beeville, Texas, 1910-1914. E. E. Binford. *il Tex Ag Exp B* 214:1-27 '17  
 Progress report, substation no. 2, Troup, Texas, 1901-1914. W. S. Hotchkiss. *il Tex Ag Exp B* 209:1-33 '17  
 Progress report of substation no. 3, Angleton, Texas, 1909-1914. N. E. Winters. *il Tex Ag Exp B* 197:1-20 '16

- Progress report, substation no. 5, Temple, Texas, 1910-1914. *il Tex Ag Exp B* 215:1-23 '17

- Progress report, Texas substation no. 6, Denton, Texas, 1909-1914. V. L. Cory. *il Tex Ag Exp B* 199:1-18 '16

- Progress report, substation no. 7, Spur, Texas, 1909-1914. R. E. Dickson. *il Tex Ag Exp B* 218:1-33 '17

- Progress report, substation no. 8, Lubbock, Texas, 1909-1914. R. E. Karper. *il Tex Ag Exp B* 219:1-41 '17

- Progress report, substation no. 9, Pecos, Texas, 1910-1914. *il Tex Ag Exp B* 221:1-21 '17

- Progress report of substation no. 12, Chillum, Texas, 1905-1914. R. W. Edwards. *il Tex Ag Exp B* 202:1-30 '16

**Texas fever**

- Bacterial vaccines for the cure of splenic tick fever in cattle. R. L. Rhea and G. W. Mackie. *Am Vet M Assn J* 49:361-5 Je '16

*See also* Spotted-fever ticks

**Texas honey producers' association**

- Benefits from co-operative association. E. G. LeStourgeon. *Gleanings* 45:933-5 D '17  
 Meeting, San Antonio, July 15, 1916. *Gleanings* 44:715 Ag 15 '16

**Texas nurserymen's association**

- List of nurserymen, florists and dealers and proceedings of the 15th annual meeting, Waco, Texas, Sept. 28-29, 1915. E. L. Ayers. *Tex Ag Dept B n s* 22:1-51 n.d.

**Texas palmettos. See Palmetto**

**Texas sheep and goat raisers' association**

- 1st annual meeting at Sonora. J. M. Jones. *Am Sheep B & W* 36:404-5 Jl '16

**Texas state fair**

- Fair at Dallas, Texas, Oct. 13. *Breeder's Gaz* 72:892 N 15 '17  
 Texas state fair. Kimball's D F 14:725 N 15 '16

**Texas university**

- University and the people of Texas. R. E. Vinson. *Tex Ag Dept B* 52:22-5 '16

**Text-books**

- \* Agricultural text-books for our public schools. H. Ness. *Science (Science Press, Garrison, N.Y. 15c) n s* 48:484-6 N 15 '18  
 Need of a central emporium for school books. S. Laird. *J Ag (Quebec)* 21:2 Jl '17  
 School text book question. S. Laird. *J Ag (Quebec)* 20:202-3 Ap '17  
 Standards for high school textbooks in home economics. A. K. Hanna. *J Home Econ* 8:349-52 Jl '16

**Textile chemistry. See Textile industry and fabrics**

**Textile design**

- War's reaction in decorative art. R. T. De Quélin. *il Country Life* 34:54-5 Je '18

**Textile fabrics. See Textile industry and fabrics**

**Textile Industry and fabrics**

- Analytical study of some varieties of white goods. M. Farnum. *J Home Econ* 10:33-8 Ja '18  
 Cotton or wool uniforms. *Nat Wool Grower* 7:51 Mr '17  
 Discrimination in buying. C. G. Baker. *J Home Econ* 8:251-5 My '16  
 English production of paper textiles. H. C. Claiborne. (*Commerce Reports* no. 154) p 20 (Jl 3) '17 U.S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Flax and linen industry in Japan. W. R. Langdon. (*Commerce Reports* no. 83) p 120-1 (Ap 10) '17 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Germany's exploitation of new material. *Ag J of India* 12:325-6 Ap '17  
 History of the manufacture of clothing; some primitive conditions. A. E. Hill. *J Ag (Quebec)* 20:155 Ja '17  
 Household chemical tests for textile fabrics. J. G. Mackinnon. *J Home Econ* 8:36-7 Ja '16  
 Household conservation; textiles. *il Ia Ag Ext Emergency Leaflet* 5:1-4 '17

**Textile industry and fabrics—Continued**

- How to test fabrics. Mrs W. N. Hutt. Prog F 31:1424 D 9 '16
- Impending fabric legislation ineffective. Am Sheep B & W 36:11-13 Ja '16
- Industrial retting of textile plants by microbiological action. G. Rossi. bibliog Int R Sci & Prac Ag 7, no 8:1067-75 Ag '16
- Novelty versus quality. C. G. Baker. J Home Econ 8:191-5 Ap '16
- Russian flax industry. W. C. Huntington. (Commerce Reports no. 83) p 118-19 (Ap 10) '17 U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Some ideas about textiles. O Judd Farmer 60:18 Je 3 '16
- Some points in choosing textiles. C. M. Gibbs. il Ill Univ (Urbana) B v 14:1-18, Ag 13 '17; Reprint. Ore Ag Ext B 188:1-15 '17
- Teaching of textiles in elementary schools. K. F. Steiger. J Home Econ 8:297-301 Je '16
- Textiles—their care and use. N. S. Knowles and others. il Ia Ag Ext Home Econ B 4: 1-23 '17-'18
- Textiles; what every homemaker should know. M. Weller. il Minn Ag Ext Spec B 15:1-20 '17
- Why we are cheated in buying materials. F. Hawk. Ohio F 137:84 Ja 15 '16
- See also Cotton; Cotton fabrics; Fibers; Gingham; Linen; Milk silk; Mohair; Nettle fiber; Paper textiles; Weaving; Wool; Woolen and worsted manufacture

**Bibliography**

- \* Economics of textiles and clothing. L. M. Clatworthy and S. J. Swenson, comps. Wash State Coll Lib (Pullman) B 6:1-41 Ag '18 (25c)

**Laws**

- Commerce des plantes textiles et du tabac. Int Yearbook Ag Leg 1916:261-7 '17

**Statistics**

- Census of manufactures: 1914; wool manufactures including wool shoddy, wool pulling, and wool scouring. C. A. Freeman. map 48p '18 U. S. Bureau of the census, Washington, D. C.

**Study and teaching**

- Value of textile chemistry to the home economics student. R. O'Brien. J Home Econ 9: 171-4 Ap '17

**Thalictrum**

- Thalictrum for borders. il Country Gent 81: 897 Ap 22 '16

**Thanksgiving**

- Thanksgiving. W. I. Chamberlain. Nat Stock & F 40:862 N 25 '16
- Thanksgiving this year. Ohio F 142:490 N 16 '18

**Thanksgiving dinners**

- Few hints for the Thanksgiving dinner. E. Updegraff. Prog F 31:1316 N 11 '16
- Thanksgiving feast. R. Lampman. Rural N Y 75:1401 N 4 '16
- Thanksgiving in ye olden time. M. E. Kramer. O Judd Farmer 61:22 N 25 '16
- With the coming of Thanksgiving. L. U. Adams. Country Gent 81:2060 N 25 '16

**Thanksgiving stories**

- Aunt Mollie's Thanksgiving surprise. B. A. Dana. il O Judd Farmer 63:4 N 24 '17
- Balanced ration; Thanksgiving. Rural N Y 76:1320, 1350 N 17-24 '17
- Unexpected Thanksgiving. H. Richmond. Nat Stock & F 41:824-5 N 24 '17

- That rich bottom land; story. F. Tilden. il Country Gent 82:1682-3+ N 3 '17

**Theater, Community**

- List of festivals and folk dances which may be obtained from the Department of public discussion and social service of the North Dakota agricultural college. Social Service R (Woodward bldg., Washington, D. C. 10c) 4:9 D '16
- Plays for the rural community. B. Sobel. Purdue Ag Ext Leaflet 84:1-4 '17

- Play's the thing. J. M. Drew. Rural N Y 76: 1324 N 17 '17

- Rural dramatic extension. R. Lord. Cornell Countryman 15:197-8, 271+ Ja-F '18

See also Pendleton roundup

**Thermometers**

- Origin of the thermometer. B. M. Parker. O Judd Farmer 60:33 Ap 1 '16
- Thermometer in the dairy. R. W. Latta. Jersey B 36:1267 Ag 15 '17

See also Calorimeters and calorimetry; Temperature, Animal and human

- Thief over-night; a soldier's Christmas story. C. B. Staff. Am Coop J 13:150-1 D '17

**Thielavia**

- Host plants of thielavia basicola. J. Johnson. bibliog il J Ag Research 7:289-300 N 6 '16; Summary. Int R Sci & Prac Ag 8, no 3:476-8 Mr '17

**Thiosulfuric acid**

- Reduction of arsenic acid to arsenious acid by thiosulphuric acid. R. M. Chapin. J Ag Research 1:515-17 Mr '14

**Thismia**

- Sporangia of thismia americana. N. E. Pfeiffer. bibliog il Bot Gaz 66:354-63 O '18

**Thistles**

- Thwarting the thistle. E. L. D. Seymour. Country Life 31:16 Ja '17

- Weeds and their identification. E. Atkinson. il J Ag New Zealand 12:175-87 Mr '16

See also Californian thistles; Canada thistles; Russian thistles; Sow thistles; Yellow star thistles

- Thorn apple. See Jimson weed

**Thoroughbred (word)**

- Use of "thoroughbred." Wallaces' F 41:214 F 11 '16

**Thrashers**

- Brown thrasher. E. S. Jones. il Ohio F 139: 298 F 24 '17

**Thraustotheca**

- Development of thraustotheca, a peculiar water-mould. W. H. Weston. bibliog il Ann Bot 32:155-73 Ja '18

- Three-cornered alfalfa hoppers. See Alfalfa hoppers, Three-cornered

**Three-lined fig-tree borers**

- Three-lined fig-tree borer. J. R. Horton. il J Ag Research 11:371-82 N 19 '17

**Thremmatology. See Breeding****Threshermen's associations**

- Annual association meetings. See monthly numbers of Power farming

**Threshermen's conference, Aberdeen, S. D.**

- 1,200 threshermen organize for grain conservation—certificate plan adopted. Coop Manager & F 7:46 Ag '18

**Threshing**

- About the cracking of grain. L. K. Brown. Power F 26:25 My '17

- Billions of bushels to thresh; the new small threshing will play a big part in handling this year's grain. P. S. Rose. il Country Gent 82:3-4 Ag 3 '18

- Clean threshing a war time food necessity. D. S. Burch. il Power F 27:9 My '18

- Clean threshing saves millions of bushels. Power F 27:39 D '18

- Eliminating waste in threshing. Hoard's D 55: 700 My 10 '18

- How I save grain in threshing. H. H. Gard. il Power F 27:18 Jl '18

- Mistaken idea. Power F 26:21 Ag '17

- Mobilizing threshermen to save wheat. 5p typew n.d. U. S. Food administration, Washington, D. C.; Same. Coop Manager & F 7:45 Je '18; Same. Irr Age 33:80-1 My '18; Same. Power F 27:22 Je '18; Same cond. Ohio F 141:767 Je 15 '18

- Organisation of threshing. H. L. French. J Bd Ag 25:89-90 Ap '18

- Save grain in threshing. R. H. Moulton. il Hoard's D 55:1013 Jl 12 '18

- Save more grain in threshing. J. R. Stone. il Power F 27:18 Je '18



**Threshing—Continued**

- Stack first—then thresh. R. A. Moore. Wis Ag Ext C 85 4p '17  
Threshing then and now. J. W. Hills. Breeder's Gaz 70:536 S 28 '16  
Threshing viewed as a business proposition. G. F. Connor. Power F 25:12 Mr '16  
What about your threshing? F. M. White. il O Judd Farmer 64:649 Je 22 '18

*See also* Threshing, Cooperative; Threshing machines; also Threshermen's conference, Aberdeen, S.D.

**Threshing, Cooperative**

- By-laws of a co-operative threshing outfit. Wallaces' F 43:1309 S 13 '18  
Co-operative thrashing in Kansas; electricity becomes a servant. M. B. Taylor. il Rural N Y 75:1199 S 16 '16  
Dividing up cost of threshing partnership. I. W. Dickerson. Wallaces' F 43:1644 N 8 '18  
Experience with threshing ring. G. B. Crane; F. L. Stover. Ohio F 140:211 S 15 '17  
Farmers' cooperative threshing outfits. P. L. Vogt. il Nat Stock & F 40:420 Jl 22 '16  
Successful threshing club. W. C. Sommer. Am Coop J 11:1204 Ag '16  
Successful threshing ring. V. G. Applegate. Nat Stock & F 41:764 N 10 '17  
Threshing ring at work. V. A. Place. Ohio F 139:802 Je 23 '17  
Threshing rings most helpful. W. E. Wiecking. O Judd Farmer 63:6 Ag 25 '17

**Threshing machines**

- Billions of bushels to thresh; the new small thresher will play a big part in handling this year's grain. P. S. Rose. il Country Gent 83:3-4 Ag 3 '18  
Convenient tractor drawbar. D. R. A. Drummond. Power F 26:12 Ja '17  
Co-operative farm implement societies; threshing machinery. T. Wibberley. il J Bd Ag 23:52-8 Ap '16  
Dust explosions and fires in grain separators in the Pacific Northwest. D. J. Price and E. B. McCormick. il U S Ag B 379:1-22 '16; Same cond. Rural N Y 75:1152 S 2 '16; Abstract. Int R Sci & Prac Ag 7,no 11:1653-7 N '16  
Efficient operation of thrashing machines. H. R. Tolley. Farmers' B 99:1-15 '18  
Electricity and thresher explosions. D. J. Price and W. G. Goodenow. il Power F 26:49 Je '17  
Electricity applied to the threshing and drying of cereals, in Italy. A. Tarchetti. Int R Sci & Prac Ag 8,no 12:1269-70 D '17  
Evolution of the threshing machine. E. V. Laughlin. il Farm Eng 3:198 Mr '16  
Fire protection for threshers. Wallaces' F 41:945 Jl 7 '16  
In the sack, or in the stack? il Power F 25:50 Mr '16  
Legislation affecting threshermen. Power F 26:35 Jl '17  
Modern threshing machine. E. F. Cauthen. il Prog F 31:283 F 26 '16  
Preventing threshing explosions. Power F 25:30 Jl '16  
Prevention of and protection from smut dust explosions and fires in grain separators. G. E. Thornton. Wash Ag Ext Ser 1,no 46:1-8 '18  
Prevention of separator explosions. D. J. Price and W. G. Goodenow. Farm Eng 5:5 Jl '17  
Putting it up to the thresherman. R. T. Mally. il Power F 26:12 Jl '17  
Rastrick's thrashing machine. A. Lee. Engineer (33 Norfolk st, Strand, London, W. C. 2) 125:214, 349 Mr 8, 22 '18  
Save the threshing loss. J. C. Mohler. Power F 26:7 Jl '17  
Small grain separator. J. L. Justice. il Hoard's D 56:3 Jl 26 '18  
Smut dust explosions. D. J. Price and W. G. Goodenow. il Farm Eng 5:3-4 Je '17  
Thresher for poultry grains. F. E. Brimmer. Country Gent 82:1893 D 1 '17  
Thresher protection. Green's Fruit Grower 36:14 Ag '16  
Threshers: construction and operation. G. H. Alford. Prog F 33:272 Mr 2 '18

Threshing by electricity. il Illustrated World (Drexel av. and 58th st., Chicago 15c) 26:536 D '16

- Using the modern grain separator. G. F. Conner. Power F 25:9+ Ja; 12 F '16  
Vasino paddy cleaning machine, fitted to a threshing machine. A. Tarchetti. Int R Sci & Prac Ag 7,no 7:1009-10 Jl '16  
Why not harvest and thresh at one operation? J. R. Stone. il Power F 27:9 F '18

*See also* Fanning-mills; Grain head threshers

**Thrift**

- County agent's campaign for thrift by country boys and girls. C. G. McBride. il Banker-F 3:13 Ap '16  
Dividing the dollar. N. K. Jones. Mo Ag Bd B v 16:1-15 Jl '18  
Economy and economy. Wallaces' F 43:6 Ja 4 '18  
Household thrift. C. F. Stoddard. J Home Econ 10:181-2 Ap '18  
Milan municipal council and the question of thrift. Int R Ag Econ 62:78-90 F '16  
Miscellaneous information relating to insurance and thrift in various countries. *See monthly numbers of International review of agricultural economics*  
Penny wise—pound foolish; service and quality make for ninety-nine per cent economy. W. C. Smith. Farm Eng 4:95 D '16  
Production and thrift. Ag Gaz of Canada 3:494-500 Je '16  
Some causes for hard times. Rural N Y 77:82 Ja 19 '18  
Stingy woman. il Country Gent 81:239 Ja 29 '16  
Thrift and the rural community. H. R. Bonner and M. P. Shawkey. Rural Manhood 8:440-2 D '17  
Thrift by household accounting. E. A. Winslow. J Home Econ 8:532-5 O '16  
Thrift clubs in Mississippi. G. T. Howerton. Miss Ag Coll B 13 8p O '16  
Thrift in its relation to conservation. M. H. Stuart. (In Pro., Nat. educ. assn., 1916, p. 215-20) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.  
Thrift in its relation to country life. R. H. Wilson. (In Pro., Nat. educ. assn., 1916, p. 201-5) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.  
Thrift on mountain farms. B. S. Van Vleet. Rural N Y 77:74 Ja 19 '18

*See also* Domestic finance; Investments; Saving and savings

**Thrips.** *See* Citrus thrips; Pear thrips; Sugar-beet thrips

**Thrushes**

- Food habits of the thrushes of the United States. F. E. L. Beal. il U S Ag B 280:1-23 '15  
Food of West Virginia birds; the thrushes. E. A. Brooks. W Va Ag Dept B 15:70-4 '16  
Thrushes. A. A. Allen. il Am For 23:625-8 O '17  
Welcome the thrushes, robins and bluebirds. Gard M 23:272 My '16

*See also* Veeries

**Thylle.** *See* Tyloses

**Thymol**

- Commercial production of thymol from horse-mint. S. C. Hood. U S Ag B 372:1-12 '16; Same cond. Am Flor 46:1020 My 27 '16

**Tick fever.** *See* Texas fever

**Ticks, Cattle.** *See* Cattle ticks

**Tides**

- Vegetation and tide levels. G. D. Fuller. Bot Gaz 62:78-80 Jl '16

**Tiger beetles**

- Color and color-pattern mechanism of tiger beetles. V. E. Shelford. (Ill. biol. monographs, v. 3, no. 4) 135p bibliog il (Ap) '17 Univ. of Illinois, Urbana

**Tile, Concrete**

- Making concrete tile on the farm. Prog F 32:1096 O 20 '17

**Tile, Drain.** See Drain tile

# **Tile construction**

Tile building enthusiast. *il* Hoard's D 53:434 Mr 30 '17

# **Tiles**

New tiles from old Carthage. *il* Country Life 30:90 J1 '16

# **Tillage**

Advantages of good plowing. M. K. Boyer. *Am P Advocate* 24:388 Mr '16

Advantages of tractor plowing. C. A. Bacon. *Power F* 26:22 D '17

Aids to effective tillage. A. A. Case. *il* Field 26:212-13 Mr '16

Avoiding steep hills in plowing. F. Kavanaugh. *Power F* 26:38 N '17

Barley in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 222:1-32 '15

Better implements and better methods of cultivation. W. F. Massey. *Prog F* 31:616 My 6 '16

Better methods of preparation and cultivation. W. F. Massey. *Prog F* 31:800 Je 24 '16

Breaking and plowing. L. Ogilvy. *Breeder's Gaz* 72:1077 D 13 '17

Breaking up grass land. J Bd Ag 24:1065-70 Ja '18

Breaking up of grass land. *Gard Chron* (Lond) 62:190 N 10 '17

Breaking up of grass land for the harvest of 1918. A. Lee. J Bd Ag 24:349-53 Je '17

Concerning tillage. R. T. Burdick. bibliog *il* Vt Ag Exp B 198:50-83; Same. (*In* Vt Ag Exp Report, 1915-1916) '16

Conducting a plowing match. C. O. Reed. *il* Breeder's Gaz 69:1293 Je 22 '16

Converting pasture to arable cultivation: means of overcoming some of the difficulties. A. Amos. J Bd Ag 23:1073-6 F '17

Corn culture in the southeastern states. C. H. Kyle. *il* Farmers' B 729:13-19 '16

Crop production in the great plains area; relation of cultural methods to yields. E. C. Chilcott and others. map U S Ag B 268:1-28 '15

Crops on virgin soil. *Gard Chron* (Lond) 62:16 J1 14 '17

Cultivate shallow this year. A. C. Page. *O Judd Farmer* 62:4 F 24 '17

Cultivation. G: A. Smith. *Tex Ag Ext B C-5* 4p '18

Cultivation and cover crops. W. M. Mertz. *Cal State Comm Hort B v* 5:178-83 My '16

Cultivation counts. R. A. Moore. *Wis Ag Ext C* 84 4p '17

Cultivation; destruction of weeds and saving moisture. T. Butler. *il* Prog F 31:678 My 20 '16

Cultivation in the fall. J Ag (Quebec) 20:89 O '16

Cultivation of the soil. J. Murray. (*In* Report, Ontario ag. and exp. union, 1916, p. 79-87) '17 Ontario ag. dept., Toronto

Cultivation; tillage operations and implements. A. McTaggart. *il* J Ag New Zealand 12:19-29 Ja '16

Cultivators and crop cultivation. F. R. Jones. *Prog F* 32:618 My 19 '17

Culture of the apple orchard. F. I. Odell. *Country Gent* 82:967 Je 2 '17

Culture of young orchards. J. P. Stewart. *il* Country Gent 82:999 Je 9 '17

Custom plowing experience. *Power F* 26:13 N '17

Deep cultivation and food supply. F. G. Drew. *Gard Chron* (Lond) 59:1, 17, 37 Ja 1-15 '16

Deep seed bed preserves corn roots. A. T. Morison. *Hoard's D* 54:694 D 7 '17

Disking the orchard. R. Olney. *il* Country Gent 82:260 F 10 '17

Effect of different times of plowing small-grain stubble in eastern Colorado. O. J. Grace. U S Ag B 253:1-15 '15

Electric plowing. Abstracts. A. Delamarre (*Rev. Gén. Elect.* 1:691-700 My 5 '17). *Exp Sta Record* 39:88 J1 '18; *Int R Sci & Prac* Ag 8,no 12:1262-5 D '17

Energy required in cultivation. M. Ringelmann. *Int R Sci & Prac* Ag 9,no 5:597-8 My '18

Experiments in crop production on fallow land at San Antonio. C. R. Letteer. U S Ag B 151:1-10 '14

Experiments in steam-ploughing. Sirdar Jogendra Singh. *Ag J of India* 13:47-53 Ja '18

Fall plowing. W. L. Chamberlain. *Nat Stock & F* 40:668 S 30 '16

Fall ploughings. J. Fixter. *J Ag* (Quebec) 21:55 O '17

Fallow competitions. H. A. Mullett. *J Dept Ag Victoria* 16:370-5 Je '18

Farm practice in the cultivation of cotton. H. R. Cates. *il* U S Ag B 511:1-62 '17

Farm surfaces for tractors. *il* Wallaces' F 43:82 Ja 18 '18

Get busy weeding and cultivating. *il* Country Gent 82:965 Je 2 '17

Get your plowing done this fall. *il* Power F 25:15 O '16

Grass land and ploughed land. R. G. Stapledon. bibliog J Bd Ag 17:supl-39 My '17

How to avoid the weed danger. *Power F* 25:25+ Mr '16

How to do a good job of tractor plowing. R. Olney. *il* Power F 25:8 F '16

How to get rich lands; cultivation: its relation to soil fertility. T. Butler. *Prog F* 32:1258 D 1 '17

How to get rich lands; plowing: its effects on soil fertility. T. Butler. *Prog F* 32:1030 O 6 '17

How to get rich lands; plowing: its relation to soil fertility. T. Butler. *Prog F* 32:1237 N 24 '17

How to get rich lands; tillage or cultivation. T. Butler. *Prog F* 32:1069 O 13 '17

How to plow a field. *Farm Eng* 5:10 N '17

Increase of yield of the soil in the Alpine regions of Salzburg, Austria. E. Hamza. *Int R Sci & Prac* Ag 7,no 7:1018-21 J1 '16

Lucerne-cultivation. A. McTaggart. *il* J Ag New Zealand 12:202-4 Mr '16

Mechanics of digging. *Gard Chron* (Lond) 59:184 Ap 1 '16

Mole-ploughs worked by horses. plans J Bd Ag 25:36-40 Ap '18

Motor tractors: utility for tillage purposes. *Ag J of India* 13:710-16 O '18

Notes on motor cultivation. J. McLaren. *Ag J of India* 13:537-41 J1 '18

Oats in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 218:1-42 '15

On increased food production. J. A. Paice. *Gard Chron* (Lond) 62:215 D 1 '17

Peak loads on a mechanical power farm. E. R. Wiggins. *il* Power F 26:9 Ap '17

Ploughing and harrowing with a tractor. M. Ringelmann. *Int R Sci & Prac* Ag 9,no 2:226-7 F '18

Ploughing match rules. *Ag Gaz of Canada* 3:827 S '16

Ploughing of grass and cultivation of the land. J Bd Ag 24:888-90 N '17

Plow land in the fall. Kimball's D F 16:520 S '15 '18

Plowing. A. Agee. *Nat Stock & F* 42:798 D 7 '18

Plowing and harrowing. L. W. Lighty. *Nat Stock & F* 42:42 Ap 6 '18

Plowing sod land. *Country Gent* 81:690 Mr 25 '16

Plowing with a tractor. Wallaces' F 42:768 My 4 '17

Plowing with a tractor. R. Olney. *il* Country Gent 81:1409 J1 22 '16

Plowing with a tractor. E. R. Wiggins. *il* Country Gent 81:1727 S 23 '16

Plows and horses. R. H. Fisher; J. H. Rittenhouse. *Nat Stock & F* 42:210 My 18 '18

Power preparedness and spring plowing. R. Olney. *il* Power F 26:9 Ja '17

Power required for plowing. G. W. Iverson. *O Judd Farmer* 62:12 My 19 '17

Preparation of the soil should be thorough. J. L. Justice. *Hoard's D* 53:513 Ap 13 '17

Preparedness in crop production. M. Rosby. *il* Country Gent 81:877 Ap 22 '16

Preparing sod land for planting. *Rural N Y* 76:830 Je 30 '17

Profits in early spring tillage. *Ag Digest* 1:383 Ap '17



**Tillage —Continued**

- Proper tractor plowing speeds. E. R. Wiggins. il Country Gent 83:42 F 9 '18  
 Quality of plowing and the draft of plows. R. Olney. il Power F 27:9 Ja '18  
 Report of work of horticultural sub-station; orchard culture tests. il Mont Ag Exp B 114: 105-16 '16  
 Rotations and tillage methods in western Nebraska. W. P. Snyder and W. M. Osborn. Neb Ag Exp B 155:1-48 '16  
 Save time and labor. Weekly N L 5:3 Ap 24 '18  
 Saving in plowing and planting. C. O. Ormsbee. Market Growers J 22:71 Ja 15 '18  
 Saving time in tractor plowing. E. W. Mervine. Wallaces' F 41:491 Mr 24 '16  
 Seedbed as it should and can be prepared. R. Olney. il Power F 26:22 S '17  
 Seed bed in one trip over the field. A. E. Richter. il Country Gent 82:1079 Je 30 '17  
 Seed bed preparation. Hoard's D 55:520 Ap 12 '18  
 Shall we plow stubble ground? Power F 25:12 Ag '16  
 Sod mulch vs. tillage for apple orchards. W. D. Auchter. il N Y Ag Dept B 79,pt 1: 803-10 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:803-10 '17  
 Soil milling machine. J. S. Owens. il Penn State F 10:8-9 Ja '17  
 Soil moisture and tillage. R. S. Dunham. Farm Eng 7:6 Ap '18  
 Soil preparation, or the cultivation of crops before they are planted. B. L. Moss. il Prog F 31:645 My 13 '16  
 Spring cultivation; conditions of plant growth. R. Summerby. il J Ag (Quebec) 19:190 Mr '16  
 Spring plowing. A. E. Grantham. Prac F 112: 132 Mr 15 '16  
 Spring wheat in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 214:1-43 '15  
 Study of the plow bottom and its action upon the furrow slice. E. A. White. il J Ag Research 12:149-82 Ja 28 '18  
 Subsoiling, deep tilling, and soil dynamiting in the great plains. E. C. Chilcott and J. S. Cole. biblog map J Ag Research 14:481-521 S 9 '18  
 Suggestions to dairy farmers on the breaking and cropping of grass land. J Bd Ag 24:1228-31 F '18  
 Talk about level culture: experience with corn and potatoes. G. W. Rogers. Rural N Y 77:641 My 4 '18  
 Thirty years of surface cultivation. O Judd Farmer 60:3 My 6 '16  
 Thorough tillage needed for next big wheat yield. Weekly N L 6:13 S 11 '18  
 Tillage and rotation experiments at Nephi. Utah. P. V. Cardon. U S Ag B 157:1-45 '15  
 Tillage (Ireland) general order, 1918. J Dept Ag Ireland 18,no 2:216-24 '18  
 Tillage in the orchard. W. H. Chandler. il N Y Ag Dept B 79,pt 1:776-84 Ja '16; Same. N Y Ag Dept Rep 1916,pt 2:776-84 '17  
 Tillage of a commercial orchard. T. E. Rodda. il J Ag New Zealand 12:106-9 F '16  
 What hoeing and weeding does. P. E. Triem. Gard M 25:286 Je '17  
 Why we plow: deep and shallow plowing. B. L. Moss. Prog F 31:561 Ap 22 '16  
 Work on the San Antonio experiment farm in 1916. C. R. Letteer. (W. I. A.—16) 22p il '17 U S Ag  
*See also* Agriculture; Corn—Cultivation; Cultivators; Dry farming; Harrows; Irrigation farming; Plows; Soils

**Cost**

- \* Cost of plowing with tractor outfits. G. A. Benjamin. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:616-17 Je 19 '18

**Tillamook county (Ore.) creamery association**  
 Extracts from annual report. N Y Prod R 45:786 Mr 27 '18

Federated cooperative cheese manufacturing and marketing association. H. Macpherson and W. H. Kerr. U S Ag Yearbook 1916: 145-57; Same. Separate 699; Same. N Y Prod R 44:522, 562, 598 Jl 25-Ag 8 '17

**Timber**

- Determining the quality of standing timber. S. Berry. J For 15:438-41 Ap '17  
 Dry rot from the architect's point of view. H. Hutt. il J Bd Ag 25:166-76 My '18  
 Dry rot in timber. G. P. Darnell-Smith. Ag Gaz of New South Wales 28:463-6 Jl '17  
 Effect of moisture reabsorption on compressive strength of air-dried timber. I. H. Cowdrey. Am Soc Mechanical Eng J (29 W. 39th st, N.Y. 35c) 40:363-7 My '18  
 Farm woodlot timber: its uses and principal markets. G. N. Lamb. il Purdue Ag Ext B 51:1-24 '16  
 Heavy timber mill construction buildings. C. E. Paul. 66p il '16 Nat. lumber mfrs. assn., Chicago  
 Home timber trade in 1916. Gard Chron (Lond) 61:33 Ja 27 '17  
 How to sell farm timber. P. S. Lovejoy. il Country Gent 82:1962-3+ D 15 '17  
 Industries using North Carolina farm timber. G. N. Lamb and H. B. Krausz. N C Ag Ext C 73:1-19 '18  
 Limited timber resources of Ireland. (Commerce Reports no. 230) p 6-8 (O 1) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Making the fir fly. J. A. Preston. il Am For 24:261-5 My '18  
 Marketing farm woodland products in Georgia. G. N. Lamb. il map Ga Ag Coll (Ext) B 129:1-32 '17  
 Message from the chief forester of the United States; woodlots. H. S. Graves. Prog F 31: 673 My 20 '16  
 Plan of co-operation between woodland owners and the state forester. (Forestry leaflet no. 18) 2p n.d. Md. State bd. of forestry, Baltimore  
 Seasoning of wood. H. S. Betts. il U S Ag B 552:1-28 '17  
 Selling woodlot products on Michigan farms. E. H. Frothingham. 49p il maps '16 Public domain commission, Lansing, Mich.  
 Some observations on the growth of timber. C. S. Moore. il J Ag (Quebec) 20:159 Ja '17  
 South American timber resources and their relation to the world's timber resources. R. Zon. il Bul Pan Am Union (17th and B sts., N. W., Washington, D.C. 25c) 43:753-60 D '16  
 Timber decay and its growing importance to the engineer and architect; with discussion. C. J. Humphrey. il Western Society of Engineers J (1735 Monadnock blk., Chicago 50c) 22:61-86 F '17  
 Timber of Russia. For Quar 14:319-23 Je '16  
 Timber resources of South Africa. (Commerce Reports no. 229) p 1215-16 (S 30) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Valuation of damages to immature timber. W. N. Sparhawk. J For 16:176-91 F '18  
 Woodlot goes to war. P. S. Lathrop. il Country Gent 83:11-12+ N 9 '18  
*See also* Dry rot; Forests and forestry; Greenheart; Lumber; Lumbering; Trees; Wood; also names of timber-trees, e.g. Oak, Pine

**Costs**

Cost of growing timber. For Quar 14:759-64 D '16

**Marketing**

- Coöperation in timber marketing. G. Pinchot. Prog F 31:673 My 20 '16  
 Marketing farm woodlot products in Maine. G. N. Lamb. Maine Ag Ext B 113:1-38 '17  
 Marketing of farm timber. Va Ag Dept B 109: 159 '16  
 Pointers on marketing woodlot products. S. L. Wolfe. il U S Ag Yearbook 1915:121-30  
 Suggestions for marketing small timber. B. MacKaye. (B. 4) 32p il map '18 Wisconsin conservation commission, Madison

**Timber—Continued****Mensuration**

- Instructions for the scaling and measurement of national forest timber. 94p '16 U.S. Forest service. Washington, D.C.  
 Measuring woodland products. J. B. Berry. il Ga Ag Coll (Ext) B 142:1-16 '18  
*See also* Forest mensuration

**Storage**

- Timber storage conditions in the eastern and southern states with reference to decay problems. C. J. Humphrey. il U S Ag B 510: 1-42 '17

**Testing**

- Rocky Mountain mine timbers. N. D. Betts. U S Ag B 77:1-34 '14  
 Strength tests of structural timbers treated by commercial wood-preserving processes. H. S. Betts and J. A. Newlin. U S Ag B 286:1-14 '15  
 Tests of Rocky Mountain woods for telephone poles. N. D. Betts and A. L. Heim. maps U S Ag B 67:1-28 '14

Timber appraisal. *See* Forest valuation

**Timber-line**

- Battle along the timberline. E. Mills. il Country Life 31:25-8 D '16

Timber measurement. *See* Timber—Mensuration

**Timothy**

- Breeding of timothy. C. H. Myers. il N Y Ag Dept B 87:2723-36 S '16  
 Experiment at transplanting timothy. G: Arnold. Rural N Y 75:379 Mr 4 '16  
 Fertilizers for timothy. E. O. Fippin. N Y Ag Dept B 87:2771-9 S '16  
 Flowering habits of timothy. M. W. Evans. il Am Soc Agron J 8:299-309 S '16  
 History and characteristics of timothy. J. Van Wagenen, jr. N Y Ag Dept B 87:2720-2 S '16  
 Louisiana lespedeza hay versus western timothy hay. W. H. Dalrymple. La Ag Bd 7p n.d.  
 Nitrate for timothy. T. W. Harvey. Country Gent 81:112 Ja 15 '16  
 Production of timothy hay. E. G. Montgomery. il N Y Farms & Markets Dept Ag B 97:243-3 Jl '17  
 Seeding timothy without a grain crop. E: Van Alstyne. il N Y Ag Dept B 87:2765-70 S '16  
 Selection experiments with timothy grass at Svalöf (Sweden). H. Witte. Int R Sci & Prac Ag 7, no 3:360-3 Mr '16  
 Silage from clover and timothy. E. Norman. Hoard's D 55:272 Mr 8 '18  
 Soils for timothy in New York. E. O. Fippin. N Y Ag Dept B 87:2737-44 S '16  
 Studies of the timothy plant. H. J. Waters. Int R Sci & Prac Ag 7, no 10:1448-50 O '16  
 Timothy. M. W. Evans. il maps Farmers' B 990:1-28 '18  
 Timothy as a cover crop. G. D. Bartlett, jr. il Country Gent 81:570 Mr 11 '16  
 Timothy as a winter cover crop. C. W. Adams. Country Gent 81:1837 O 14 '16  
 Timothy fertilization and culture. N. Schmitz. il Md Ag Exp B 202:159-78 '17; Same. Md Ag Exp Rep 1916-1917 '17  
 Timothy, the hay for Pennsylvania. C. R. Texter. il Penn State F 9:456 N '16  
 Top-dressing timothy. Country Gent 81:570 Mr 11 '16  
 Top-dressing timothy. F. M. Lutts. Country Gent 81:510 Mr 4 '16

**Diseases and pests**

- Diseases of timothy. C: Gregory. il N Y Ag Dept B 87:2757-64 S '16  
 Infection experiments with timothy rust. E. C. Stakman and L. Jensen. bibliog J Ag Research 5:211-16 N 1 '15  
 Infection of timothy by puccinia graminis. E. C. Stakman and F. J. Piemeisel. bibliog J Ag Research 6:813-16 Ag 21 '16  
*See also* Timothy smut

**Seed**

- Clover and timothy receipts and shipments for Chicago, Milwaukee and Toledo markets. *See* monthly numbers of United States seed reporter  
 Growing timothy for seed. J: Marsh. Ohio F 142:70 Jl 27 '18  
 Timothy, clover and alfalfa seed prices. U S Seed Rep 2:7 O '18  
 Timothy seed outlook. U S Seed Rep 2:5 Ag '18; Same. Coop Manager & F 8:80 S '18

**Statistics**

- Clover and timothy seed: wholesale price, 1912-1916. U S Ag Yearbook 1916:624; Same. Separate 720:14  
 Monthly average timothy seed prices for a five-year period, 1913-17. U S Seed Rep 2:7 Ag '18

**Timothy hay**

- Feed value of timothy hay compared with alfalfa and clover. H. R. Cokeley. Ohio F 140:267 S 29 '17

**Timothy smut**

- Leaf smut of timothy. G: A. Osner. bibliog il Cornell Ag Exp B 381:189-230 '16; Same. Cornell Ag Exp Rep 1917:189-230 '18; Abstract. Purdue Ag 10:19 My '16

**Tin**

- Conservation of tin. J Home Econ 10:466-7 O '18

**Tin cans**

- Canned spuds from Aroostook county, Maine, to France; thousands of cans produced in record time. il Metal Worker (243 W. 39th st. N.Y. 10c) 89:855-6 Je 28 '18  
 Don't be afraid of tin cans. M. R. Warren. il Country Gent 83:30 Je 8 '18  
 Relative value of different weights of tin coating on canned food containers; report of an investigation by a technical committee representing the National canners association, the American sheet and tin plate company, and the American can company. 666p '17 Nat. canners assn., Washington, D.C.  
 Substitutes for tin cans. Int R Sci & Prac Ag 9, no 2:248-9 F '18  
 Substitutes for tin cans. 4p '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.; Same abridged. Hoard's D 53:963 Jl 6 '17  
 Tin can. C. A. Lyford. J Home Econ 9:373-4 Ag '17  
 Your local cannery is up against it because of war conditions. W: H. Dean. Country Gent 82:914 My 19 '17

**Tin in food**

- Report on heavy metals in foods, 1916; with discussion. E. L. P. Treuthardt. Assn Office Ag Chem J 1, no 4, pt 1:585-9 F '16  
 Report of heavy metals in foods, 1917. E. L. P. Treuthardt. Assn Office Ag Chem J 3: 47-52 My '17

**Tires**

- Width of wagon tires recommended for loads of varying magnitudes on earth and gravel roads. E. B. McCormick. U S Ag C 72:1-6 '17; Summary. Power F 26:40 Ap '17

**Tires (automobile)**

- Auto tire service. Nat Stock & F 40:72 Ap 15 '16  
 Automobile tire repair. P. T. Hines. Country Gent 82:1151 Jl 14 '17  
 Care and repair of auto tires. il Power F 25: 56 Mr; 22 Ap; 38 My; 14 Jl; 49 Ag; 46 S; 33 O; 41 N; 34 D '16; 26:41 F '17  
 Dollar for dollar in tires. P. T. Hines. Country Gent 81:2219 D 30 '16  
 Getting guaranteed mileage—and more. il Prac F 112:229+ Je 1 '16  
 How to save tire money. P. T. Hines. Prog F 33:591 My 11 '18  
 Leaky inner tubes. E: Henry. Country Gent 82:614 Mr 24 '17  
 More miles to the tire. A. Johnston. Country Life 31:92 F '17  
 Saving tire expense. R. E. Rogers. Power F 26:22 Ja '17  
 Tire troubles. Fruit-Grower 27:312 Je 1 '16



**Tithes**

Report of the tithe, copyhold, commons and survey branch of the Board for the year 1917. J Bd Ag 25:309-16 Je '18

**Titles (land).** See Land titles

**Toads**

Do the Fowler's toad and the American toad interbreed? R: Deckert. Science (Science Press, Garrison, N.Y. 15c) n s 45:113-14 F 2 '17

**Tobacco**

Behaviour of tobacco variations, in Java. H. Jensen. Int R Sci & Prac Ag 8,no 5:720-2 My '17

Canadian tobaccos and their possibilities. F. Charlan. Ag Gaz of Canada 4:10-13 Ja '17  
Child laborers in the shade grown tobacco industry in Connecticut. M. C. Welles. (Pamph. no. 11) 6p n. d. Consumers' league of Conn., 36 Pearl st., Hartford

Controlled pollination in nicotiana. T: H. Goodspeed and P. Davidson. Cal Univ Pub Botany v 5,no 13 429-34p '18 (10c)

Culture of flue-cured tobacco. E. H. Mathewson. il U S Ag B 16:1-36 '13

Data collected during a visit to Besoeiki (Java) for the purpose of studying tobacco-growing. Int R Sci & Prac Ag 7,no 2:229 F '16

Effect of environmental conditions upon the number of leaves and the character of the inflorescence of tobacco plants. H. A. Allard. il Am J Bot 3:493-501 N '16

Effect of some alkali salts upon fire-holding capacity of tobacco. H: R. Kraybill. bibliog Bot Gaz 64:42-56 Jl '17

Experiments being conducted at the Harrow tobacco station. D. D. Digges. Ag Gaz of Canada 3:684-7 Ag '16

Growing tobacco. il Va Ag Dept B 115:87-93 '17

Harvesting tobacco by priming or picking the leaves as compared with cutting the stalks. E. G. Moss. il N C Ag Exp B 238:1-11 '17  
How to grow more and better tobacco. H. L. Wirth. 48p il n.d. American agricultural chemical co., 405-409 Provident bank bldg., Cincinnati, O.

Improved stalk cutter; harvesting the tobacco crop. A. D. Shamel. il Rural N Y 77:955 Ag 10 '18

Insurance of tobacco plantations against hail in Bosnia and Herzegovina. Int R Ag Econ 73:56-8 Ja '17

Lime on bright tobacco. C. B. Williams. Country Gent 82:679 Ap 7 '17

Management of tobacco soils. J. Johnson. il Wis Ag Exp B 277:1-29 '17

Method of drying of Kentucky tobacco. M. Benincasa. Int R Sci & Prac Ag 7,no 3:377 Mr '16

Narcotic plants and stimulants of the ancient Americans. W. E. Safford. il Smithsonian Inst Rep (Washington, D.C.) 1916:389-93

Potash for tobacco. Country Gent 81:690 Mr 25 '16

Potash not especially needed for plant beds. Prog F 31:76 Ja 15 '16

Preliminary study of the marketing of Burley tobacco in central Kentucky. C: D. Bohannan and D. P. Campbell. il map Ky Ag Exp B 202:157-244 '16

Production of bright tobacco. J. N. Harper. (B. 18) 10p il n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.

Production of cigar-leaf tobacco in Pennsylvania. W: Frear and E. K. Hibshman. il Farmers' B 416:1-20 '18

Production of tobacco in Ohio. H. E. Tweed. il Ohio F 139:473-4 Mr 31 '17

Research studies on the curing of leaf tobacco. W. W. Garner and others. U S Ag B 79:1-40 '14

Shade-grown tobacco. G. D. Bartlett. il Country Gent 81:1300 Jl 1 '16

State control of tobacco growing in Montenegro. Int R Sci & Prac Ag 7,no 1:78 Ja '16

Steam sterilization of seed beds for tobacco and other crops. E. G. Beinhart. il Farmers' B 996:1-15 '18

Studies of tobacco soils in Canada. H. A. Freeman. Ag Gaz of Canada 3:595-7 Jl '16  
Subsoiling tobacco lands. G: D. Bartlett. il Modern City (43 Franklin bldg., Baltimore 35c) 1:32-3 My '17

Subsoiling with dynamite; effects on Connecticut tobacco lands. G: D. Bartlett. il Farm Eng 4:4 Jl '16

Timothy as a winter cover crop. C. W. Adams. Country Gent 81:1837 O 14 '16

Tobacco. (In Geography of the world's agriculture, p. 61-5) maps '17 U S Ag

Tobacco crop. (In Report, 1916, p. 35-40) '17 S. C. Commissioner of agriculture, commerce and fisheries, Columbia

Tobacco culture. W. W. Garner. il Farmers' B 571:1-17 '17 (rev.)

Tobacco culture in North Carolina. E. H. Mathewson and E. G. Moss. il N C Ag Exp B 237:1-40 '17; Same. N C Ag Exp Rep 1917: 1-40

Tobacco growing in Ireland. G. N. Keller. J Dept Ag Ireland 17,no 3:461-6 '17

Tobacco growing in Russia. Int R Sci & Prac Ag 8,no 6:877-9 Je '17

Tobacco growing in the Illyrian region. A. Baldacci. Int R Sci & Prac Ag 7,no 12:1784-7 D '16

Tobacco raising in Japan. W: R. Langdon. (Commerce Reports no. 85) p 152-3 (Ap 11) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

Tobacco with little nicotine. Country Gent 82: 1107 Jl 7 '17

Types of tobacco recommended for different soils. F. Charlan. J Ag (Quebec) 20:157 Ja '17

Valuable information for tobacco growers. A. B. Thornhill. Prog F 32:568 My 5 '17

What industry owes to science. Engineer (33 Norfolk st., Strand, London, W.C. 2) 123: 540 Je 15 '17

White Burley tobacco. I. S. Cook and C. H. Scherffius. il W Va Ag Exp B 152:1-20 '16

Work in tobacco selection at the experimental station of Djember, residence of Besoeiki, Java, from 1912 to 1915. A. Sprecher. Int R Sci & Prac Ag 7,no 9:1265-71 S '16

See also Cigars; Fungi, Effect of tobacco smoke on

**Composition**

Grain of the tobacco leaf. C: S. Ridgway. bibliog il J Ag Research 7:269-88 N 6 '16

**Diseases and pests**

Blue mould in tobacco plants. J Dept Ag Victoria 14:601-3 O '16

Diseases of tobacco plants. G. P. Darnell-Smith. il Ag Gaz of New South Wales 29:82-8 F '18

Distribution of the virus of the mosaic disease in capsules, filaments, anthers, and pistils of affected tobacco plants. H. A. Allard. il J Ag Research 5:251-6 N 8 '15

Effect of dilution upon the infectivity of the virus of the mosaic disease of tobacco. H. A. Allard. J Ag Research 3:295-9 Ja '15

Effects of various salts, acids, germicides, etc., upon the infectivity of the virus causing the mosaic disease of tobacco. H. A. Allard. J Ag Research 13:619-37 Je 17 '18

Fall steaming of tobacco plant beds to prevent root rot. A. D. Selby and others. il Ohio Ag Exp B v 1:331-2 N '16

Further studies of the mosaic disease of tobacco. H. A. Allard. il J Ag Research 10:615-32 S 17 '17

Mosaic disease of tobacco. H. A. Allard. il U S Ag B 40:1-33 '14

Mosaic disease of tobacco. G. H. Chapman. il Mass Ag Exp B 175:73-117 '17

Mosaic disease of tobacco. H. R. Kraybill. Bot Gaz 63:245 Mr '17

Properties of the virus of the mosaic disease of tobacco. H. A. Allard. bibliog il J Ag Research 6:649-74 Jl 24 '16

Resistance in tobacco to the root-rot disease. J. Johnson. il Phyt 6:167-81 Ap '16

Specific mosaic disease in nicotiana viscosum distinct from the mosaic disease of tobacco. H. A. Allard. il J Ag Research 7:481-6 D 11 '16

**Tobacco—Diseases and pests—Continued**

- Sterilization of tobacco seed beds. C. W. Adams. Country Gent 81:2048 N 25 '16  
 Tobacco insect investigations. il Porto Rico Insular Exp Rep 1916-1917:107-19 '17  
 Tobacco splitworm. A. C. Morgan and S. E. Crumb. U S Ag B 59:1-7 '14

See also Tobacco beetles; Tobacco budworms; Tobacco hornworms; Tobacco wild-fire; Tobacco wilt; Tobacco wireworms

**Law**

- Tobacco law, act 2613. A. M. Burton. Philippine Ag R 10, no 1:5-7 '17

**Marketing**

- Co-operative sale of tobacco in Russia. Int R Ag Econ 82:14-16 O '17  
 Preliminary study of the marketing of Burley tobacco in central Kentucky. C: D. Bohannan and D. P. Campbell. il map Ky Ag Exp B 202:157-244 '16

**Seed**

- Importance of good tobacco seed. Va Ag Dept B 108:10-11 Ja '16  
 Sterilization of tobacco seed beds. G. H. Chapman. Mass Ag Ext B 18 6p '18

**Varieties**

- New varieties of Italian tobacco, resistant to *thielavia basicola*. M. Benincasa. Int R Sci & Prac Ag 7, no 12:1787-9 D '16

**Tobacco beetles**

- Destruction of the tobacco beetle (*lasioderma serricorne*). D. B. Mackie. Int R Sci & Prac Ag 7, no 6:912 Je '16  
 Effect of Röntgen rays on the tobacco, or cigarette, beetle. G. A. Runner. J Ag Research 6:383-8 Je 12 '16

- Lasioderma serricorne*, a coleopteron injurious to tobacco and other plant products, at Deli, Sumatra. L. P. de Bussy. Int R Sci & Prac Ag 8, no 12:1303-4 D '17

- Some causes of the failure of the Manila cigar on the United States market and a remedy. D. B. Mackie. il Philippine Ag R 10, no 3:223-52 '17

- Tobacco beetle and how to prevent damage by it. G. A. Runner. il Farmers' B 846:1-22 '17

**Tobacco budworms**

- Tobacco budworm and its control. A. C. Morgan and F. L. McDonough. il Farmers' B 819:1-11 '17

**Tobacco curing barns**

- Tobacco curing barns. E. G. Moss. diags plan N C Ag Ext C 18:1-9 '16

**Tobacco false budworm. See Corn earworms****Tobacco hornworms**

- Tobacco hornworm insecticide; recommendations for use of powdered arsenate of lead in dark-tobacco district. A. C. Morgan. Farmers' B 867:1-10 '17

**Tobacco industry**

- Report on Philippine tobacco investigation in the United States. J. J. Rafferty. 29p '17  
 Philippine Islands bur. of internal revenue, Manila

- Tobacco production and trade at Amoy, China. C. E. Gauss. (Commerce Reports no. 273) p 712-13 (N 21) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Regulation**

- Commerce des plantes textiles et du tabac. Int Yearbook Ag Leg 1916:261-7 '17

**Statistics**

- Leaf tobacco held by manufacturers and dealers. Monthly Crop Rep 4:141 N '18  
 Stocks of leaf tobacco and the American production, import, export, and consumption of tobacco and tobacco products, 1917. (Census B. 136) 44p map 10c '18 Supt. of doc., Washington, D.C.  
 Tobacco estimates by types and districts. Monthly Crop Rep 3:64 Jl '17

Tobacco in the United States and other countries, including imports and exports. See United States Department of agriculture Yearbooks

Tobacco warehouses in Kentucky reporting monthly by counties, 1916-1917. Ky Ag Dept Rep 1916-1917:sup,313-15 '18

**Tobacco leaf miners. See Potato tuber moths****Tobacco splitworms. See Potato tuber moths****Tobacco spray**

- Black leaf 40 field test for nicotine baths. (B 4-N) 7p il '16 Kentucky tobacco product co., Louisville, Ky.

- Effects of nicotine as an insecticide. N. E. McIndoo. bibliog il J Ag Research 7:89-122 O 16 '16

- How to make your tobacco spray for aphids. Va Ag Dept B 109:99-100 '16

- How to test for the presence of nicotine on sprayed plants. V. I. Saftro. J Econ Entom 10:459-61 O '17

- Investigations as to the supply and use of tobacco products for insecticidal purposes. G. N. Keller. J Dept Ag Ireland 18, no 2: 180-6 '18

- Neglected factor in the use of nicotine sulphate as a spray. W: Moore and S: A. Graham. J Ag Research 10:47-50 Jl 2 '17

- Nicotine for horticultural purposes. Royal Hort Soc J 42, pts 2-3:430-1 S '17

- Nicotine products tried in Germany against cochylis and eudemis. Int R Sci & Prac Ag 7, no 8:1222-3 Ag '16

- Nicotine spray an effective ovicide for codling moth eggs. J Econ Entom 11:149-50 F '18

- Nicotine sulphate as a poison for insects. A. L. Lovett. J Econ Entom 10:333-7 Je '17

- Nicotine sulphate for codlin moth control. (Reprint from annual report) 11p '16 Horticultural dept., Yakima county, Wash.

- Nicotine sulphate for codling moth. F. E. De Sellem. Fruit-Grower 27:52 Ja 15 '16

- Relationship between the wetting power and efficiency of nicotine-sulphate and fish-oil-soap sprays. L. B. Smith. J Ag Research 7:389-99 N 27 '16

- Report on nicotin. R. C. Roark. Assn Offic Ag Chem J 3:183-4 My '17

- Will nicotine kill borers? E. H. Favor. Fruit-Grower 27:20 Ja 1 '16

**Tobacco wildfire**

- Tobacco wildfire. F: A. Wolf. il N C Ag Ext C 61:1-4 '18

- Tobacco wildfire. F: A. Wolf and A. C. Foster. bibliog J Ag Research 12:449-58 F 18 '18

**Tobacco wilt**

- Control of tobacco wilt in the flue-cured district. W. W. Garner and others. bibliog il U S Ag B 562:1-20 '17

- Tobacco-wilt control. Weekly N L 5:2 O 10 '17

**Tobacco wireworms**

- So-called tobacco wireworm (*Crambus caliginosellus* Clem.) in Virginia. G: A. Runner. il U S Ag B 78:1-30 '14

**Toluene**

- Preservation of plant juices for analysis of sugar content. D. O. Spriestersbach. Am Chem Soc J (Box 505, Washington, D.C. \$6 per yr.) 40:431-6 F '18

**Tomato and bean bugs. See Green soldier bugs****Tomato blight**

- Phytophthora infestans on tomatoes. F. D. Kern and C. R. Orton. il Phyt 6:284-7 Je '16

- Tomato blight a serious menace to tomato industry. F. D. Heald. il Better Fruit 10:37+ Mr; 36-7 Ap '16

**Tomato blossom end rot**

- Transmission of resistance and susceptibility to blossom-end rot in tomatoes. H. P. Stuckey. il Ga Ag Exp B 121:83-91 '16

**Tomato buckeye rot**

- Buckeye rot of tomato fruit. C. D. Sherbakoff. il Phyt 7:119-29 Ap '17

**Tomato fruitworm. See Corn earworms**



**Tomato products**

See also Tomato pulp

**Analysis**

Microscopical studies on tomato products. B. J. Howard and C. H. Stephenson. U S Ag B 581:1-24 '17

On the interpretation of the results of analysis of tomato preserve. P. Guarnieri. Int R Sci & Prac Ag 8,no 7:1051-2 Jl '17

**Bacteriology**

Direct or Breed method for counting bacteria in tomato catsup, pulp or paste. C. Vincent. J Bact 3:183-5 Mr '18

**Tomato psylla**

Notes on the tomato psylla. H. Compere. il Cal State Comm Hort B v 5:189-91 My '16

**Tomato pulp**

Possibilities of exporting tomato pulp. Ag Gaz of New South Wales 27:431-2 Je '16

**Tomato rosette.** See Tomato blight

**Tomato western blight.** See Tomato blight

**Tomato wilt**

Studies on resistance of tomatoes to bacterial wilt. E. E. Standford. N C Ag Exp Rep 1917: 92-3

Study of wilt resistance in the seedbed. C. W. Edgerton. il Phyt 8:5-14 Ja '18

Tomato wilt. Weekly N L 5:5 S 5 '17

Tomato wilt investigations in southern Illinois. C. E. Durst. Market Growers J 18:40 Ja 15 '16

Wilt-resistant tomato. E. F. Stoddard. Market Growers J 22:350 My 1 '18

**Tomato yellow blight.** See Tomato blight

**Tomatoes**

Advice on growing tomatoes. Wallaces' F 41: 238 F 11 '16

Appetizing tomato recipes. M. Allen. O Judd Farmer 61:20 Ag 12 '16

Canning and preserving tomatoes. Mrs F. W. Stillman. Rural N Y 77:1028 Ag 31 '18

Canning tomatoes. S. R. Guseman. il W Va Ag Ext C 203:1-8 '18 (Reprint)

Canning tomatoes for sale. Ohio F 138:74 Jl 22 '16

Canning tomatoes in California. A. L. Dahl. il Scientific Am (233 Broadway, N.Y. 10c) 117:133 Ag 25 '17

Caring for spring tomatoes. C. W. Waid. Market Growers J 22:189 Mr 1 '18

Cold packing canned tomatoes. C. O. Warford. Rural N Y 75:1091 Ag 19 '16

Cross-breeding for increased production; tomatoes and cucumbers. Gard Chron (Lond) 62:257 D 29 '17

Delectable tomato. E. H. Favor. il Fruit-Grower 28:329 Ag 1 '17

Early tomatoes. A. E. Junkin. il Nat Stock & F 40:1160 F 3 '17

Early tomatoes; symposium. Market Growers J 18:56+ Ja 15 '16

Early tomatoes in New Jersey. C. H. Brown. Market Growers J 18:247 Ap 1 '16

Effects of cross- and self-fertilization in tomatoes. H. K. Hayes and D. F. Jones. il Conn State Ag Exp Rep 1916, pt 5:305-18 '17

Experience with tomatoes. A. C. Weed. Rural N Y 77:199 F 9 '18

Experiences with early tomatoes; symposium. Market Growers J 22:100-14 F 1 '18

Experiences with tomatoes; symposium. Market Growers J 20:166+ F 15 '17

Field tomatoes. Am Flor 49:84 Jl 28 '17

Four acres of tomatoes. A. E. Wilkinson. il Country Gent 83:24 My 25 '18

Green tomatoes. A. M. Johnson. Country Gent 82:1365 S 1 '17

Greenhouse tomato growing; with discussion. J. D. Nairn. (In Report, Ontario vegetable growers' assn., 1916, p. 64-9) '17 Ontario ag. dept., Toronto, Canada

Greenhouse tomatoes in Oregon. A. G. Bouquet. Market Growers J 19:46 Jl 15 '16

Growing and protection of tomatoes. Market Growers J 18:91 F 1 '16

Growing early and late tomatoes. W. F. Massey. Prog F 31:316 Mr 4 '16

Growing early tomato plants. Prac F 113:49 F 1 '17

Growing early tomatoes. Prac F 112:82 F 15 '16

Growing early tomatoes. W. F. Massey. Prog F 33:120 F 2 '18

Growing tomato plants; paper bands vs. clay pots. Market Growers J 18:218 Mr 15 '16

Growing tomatoes in Georgia. T. H. McHatton and others. Ga Ag Coll (Ext) E 145:1-11 '18

Growing tomatoes in northern Minnesota. G. Michael. Minn Hort 44:99 Mr '16

Growing tomatoes on stakes. S. N. Green. il Ohio Ag Exp B v 2:91-5 Mr '17

Home canning; tomatoes. A. M. Johnson. il Country Gent 82:1131 Jl 7 '17

Home garden; supports and mulches for tomato plants. Country Gent 83:28 Je 8 '18

How Mr Mansfield grows tomatoes. Mrs J. Stager. il Minn Hort 44:156-7 Ap '16

How to grow the tomato and 115 ways to prepare it for the table. G. W. Carver. Tuskegee Exp B 36:1-39 '18

Indoor tomatoes. R. W. Thatcher. Gard Chron (Lond) 63:153 Ap 13 '18

Lessons on tomatoes for rural schools. E. A. Miller. il U S Ag B 392:1-18 '16

Methods with tomatoes. W. F. Massey. Ohio F 142:10 Jl 6 '18

More money from tomatoes. S. B. Haskell and O. M. Kile. (Soil improvement com. Pamph. 26) 16p il n.d. Nat. fertilizer assn., Chicago

New Jersey methods of tomato culture. J. C. Hendrickson. Market Growers J 22:85-6 F 1 '18

Out of a can of tomatoes. il Country Gent 81: 137 Ja 15 '16

Packing tomatoes. J. T. Rosa, jr. il Country Gent 81:1576 Ag 26 '16

Pink tomatoes. Wallaces' F 41:132 Ja 28 '16

Pollinating tomatoes. Am Flor 48:1342 Jl 7 '17

Pollinating tomatoes. C. W. Waid. Market Growers J 18:255 Ap 1 '16

Profit in early tomatoes. A. W. Galligher. Green's Fruit Grower 37:16 Ap '17

Pruned tomatoes are profitable. A. W. Galligher. Green's Fruit Grower 36:3 Je '16

Reciprocal breeding in tomatoes. B. D. Halsted. J Heredity 9:169-73 Ap '18

Spring tomato crop. Am Flor 46:254 F 19 '16

Staking tomato plants. Rural N Y 76:817 Je 23 '17

Staking tomatoes. Am Flor 46:116 Je 10 '16

Starting the plants. A. E. Wilkinson. Country Gent 81:512 Mr 4 '16

Supporting racks for tomatoes. W. J. Wright. il Country Gent 81:1201 Je 10 '16

Tomato as a farm crop for the canning factory. C. G. Woodbury and H. J. Reed. il Ind Ag Exp C 59:1-28 '17

Tomato crop very early—growers worried. R. W. De Baun. Rural N Y 77:807 Je 22 '18

Tomato culture. W. H. Taylor. il J Ag New Zealand 15:136-44, 211-14, 278-83 S-N '17

Tomato culture (C. 34). J. W. Wellington. N Y State Ag Exp Rep 1915:652-4 '16

Tomato culture in Nevada. Nev Ag Ext Leaflet 2 n.d.

Tomato culture in western Washington. J. L. Stahl. Western Wash Ag Exp B v 5:162-4 F '18

Tomato growing for market and for cannery. M. Neptune. Market Growers J 20:100 F 1 '17

Tomato growing in Arkansas. J. R. Cooper. Ark Ag Exp C 40 4p '18

Tomato growing in California. S. S. Rogers. Cal Ag Exp C 147:1-12 F '16

Tomato growing in Michigan. C. W. Waid. il Mich Ag Exp Spec B 89:1-18 '18

Tomato growing in southern Indiana. J. A. Hall. Purdue Ag 13:14+ O '18

Tomato-growing without water. S. F. Anderson. il J Ag New Zealand 14:47-8 Ja '17

Tomato in 1916 and 1917. R. W. DeBaun. Country Gent 82:460 Mr 3 '17

Tomato is one of our most profitable crops. il Country Gent 83:21 F 23 '18

Tomatoes. Market Growers J 20:121+ F 1 '17

Tomatoes. G. O. Greene. il Kan Ag Ext B 18: 1-24 '18

**Tomatoes—Continued**

- Tomatoes a good main crop. T. F. Jager. *il* Prac F 112:167+ Ap 15 '16
- Tomatoes and sweet peas. E. I. Farrington. *il* Country Gent 81:2000 N 18 '16
- Tomatoes as a field crop. W. F. Purdue. Nat Stock & F 41:1204 F 23 '18
- Tomatoes as market-garden crop. Mass Ag Bd B 5:149-50 '18 (3d ed. rev.)
- Tomatoes—cultivation, staking and pruning. *il* Country Gent 81:1376 J1 15 '16
- Tomatoes, early and late. W. F. Massey. Ohio F 139:823 Je 30 '17
- Tomatoes for winter use. Rural N Y 75:1163 S 2 '16
- Tomatoes in the North. F. L. Clark. *il* Country Gent 81:525 Mr 4 '16
- Tomatoes old and new. Prac F 112:358 O 1 '16
- Tomatoes on benches. Am Flor 46:860 My 6 '16
- Tomatoes, peppers, eggplant. *il* Country Gent 82:842 My 5 '17
- Tomatoes: picking and marketing. C. E. Brehm. Country Gent 81:1118 My 27 '16
- Tomatoes: preparing the soil. C. E. Brehm. *il* Country Gent 81:572 Mr 11 '16
- Tomatoes: pruning and staking. C. E. Brehm. *il* Country Gent 81:744 Ap 1 '16
- Tomatoes under glass. Am Flor 50:382 Mr 9 '18
- Tomatoes under glass. Gard Chron Am 20:65 F '16
- Tomatoes under glass. R. W. De Baun. Rural N Y 75:192 F 5 '16
- Turning surplus tomatoes to profit. J. Middleton. Market Growers J 18:126 F 15 '16
- \* Useful tomato. F. Spring. *il* Good House-keeping (119 W. 40th st, N.Y. 20c) 67:60 S '18
- Vegetation and reproduction with special reference to the tomato. E. J. Kraus and H. R. Kraybill. bibliog *il* Ore Ag Exp B 149:1-90 '18
- What to do with green tomatoes. Ohio F 138:340 O 7 '16
- By-products**
- Utilization of waste tomato seeds and skins. R. Rabak. bibliog U S Ag B 632:1-15 '17
- Composition**
- Presence of copper in tomatoes and tomato preserves. G. Liberi and others. Int R Sci & Prac Ag 7:no 5:662-4 My '16
- Costs**
- Getting a fair price for cannery tomatoes. E. L. Chase. Market Growers J 22:310+ Ap 15 '18
- Diseases and pests**
- Blight of tomatoes. Weekly N L 5:8 Mr 27 '18
- Bordeaux-mixture stains removed. M. G. Kains. Country Gent 81:1161 Je 3 '16
- Breeding tomatoes resistant to fusarium. J. B. S. Norton. Market Growers J 21:272 D 15 '17
- Control of tomato leaf-spot. (C., T., & F. C. D. C. 4) 4p *il* '18 U.S. Bur. of plant industry, Washington, D.C.
- Delayed ripening of tomatoes caused by spraying with Bordeaux mixture. C. W. Edgerton. *il* La Ag Exp B 164:1-16 '18
- Disease-resistant varieties of tomatoes. S. N. Green and J. G. Humbert. *il* Ohio Ag Exp B v 3:43-8 F '18
- Diseases of tomatoes. M. T. Cook. (*In* Pro. N.J. state hort. soc., 1916, p. 74-5) '17 H. G. Taylor, sec., Riverton, N.J.; Same. Market Growers J 20:452 Je 15 '17
- Diseases of tomatoes. M. T. Cook and W. H. Martin. *il* N J Ag Exp C 71:1-8 '17
- Dissemination of septoria lycopersici Speg. by insects and pickers. W. H. Martin. bibliog Phyt 8:365-72 J1 '18
- Insects destructive to tomatoes. Fla Ag Dept Quar B v 27:33-6 Ap '17
- Internal action of chemicals on resistance of tomatoes to leaf diseases. J. B. S. Norton. Md Ag Exp B 192:17-30 '16; Same. Md Ag Exp Rep 1915-1916:17-30 '16
- Leaf blight of the tomato. M. T. Cook and W. H. Martin. *il* N J Ag Exp C 96 4p '18
- Leaf-spot disease of tomato. E. Levin. bibliog *il* Mich Ag Exp Tech B 25:1-51 '16; Same. Mich Ag Bd Rep 1916:632-87; Same. cond. (Popular ed.) Mich Ag Exp Spec B 81:1-15 '17; Same. Mich Ag Bd Rep 1917:485-96
- Leaf spot of tomatoes. Gard Chron (Lond) 60:208 O 28 '16
- Melanconium parasitic on the tomato. W. H. Tisdale. *il* Phyt 6:390-4 O '16
- Mosaic disease of tomatoes and petunias. H. A. Allard. *il* Phyt 6:328-35 Ag '16
- New spray for leaf-spot of tomatoes. Market Growers J 21:94 S 1 '17
- Origin and spread of tomato fruit rots in transit. J. Rosenbaum. *il* Phyt 8:572-80 N '18
- Parasitic saccharomycete of the tomato. A. Schneider. Phyt 6:395-9; 7:52-3 O '16, F '17
- Phoma destructiva, the cause of a fruit rot of the tomato. C. O. Jamieson. bibliog *il* J Ag Research 4:1-20 Ap '15
- Pink and green potato plant louse. J. S. Houser. *il* Ohio Ag Exp B v 2:261-7 Ag '17
- Potato and tomato diseases. N. J. Giddings. *il* W Va Ag Exp B 165:1-24 '17
- Rhizoctonia disease of tomatoes. Better Fruit 11:13 Je '17
- Spraying and dusting tomatoes. F. D. Fromme and H. E. Thomas. *il* Va Ag Exp B 213:1-14 '16
- Spraying for tomato diseases. *il* Ohio Ag Exp B v 3:180-1 Je '18
- Tomato decay. Weekly N L 5:4 N 21 '17
- Tomato diseases. H. W. Barre and J. L. Seal. S C Ag Exp C 29 2p '17
- Tomato diseases. C. D. Sherbakoff. *il* Fla Ag Exp B 146:119-32 '18
- Tomato diseases in Ohio. J. G. Humbert. *il* Ohio Ag Exp B 321:159-96 '18
- Tomato-fruit disease; current investigations. R. Walters. *il* J Ag New Zealand 12:198-201 Mr '16
- Tomato insects. *il* Purdue Ag 11:41-3 Ap '17
- Tomato leaf spot. Weekly N L 5:2 Ag 8 '17
- Tomato spraying experiments at Salem, New Jersey. W. H. Martin. N J Ag Exp Rep 1916:575-83 '17
- Troublesome disease of winter tomatoes. J. E. Howitt and R. E. Stone. Phyt 6:162-6 Ap '16
- Two interesting diseases of greenhouse tomatoes. M. T. Cook and C. A. Schwarze. *il* Phyt 6:364-6 Ag '16
- Two tomato diseases. E. S. Reynolds. *il* Phyt 8:535-42 O '18
- Why tomatoes fail; and some methods of prevention. J. J. Taubenhaus. *il* Country Gent 83:41 Ap 20 '18
- See also* Tomato blight; Tomato blossom end rot; Tomato buckeye rot; Tomato psylla; Tomato wilt
- Harvesting**
- Temporary road saves labor. H. A. Rhodes. Market Growers J 22:152 F 15 '18
- Marketing**
- Marketing home canned tomatoes. L. C. Seal. Market Growers J 22:126-7 F 15 '18
- Rail shipments and distribution of fresh tomatoes, 1914. W. A. Sherman and others. map U S Ag B 290:1-12 '15
- Tomatoes: getting the best prices. C. E. Brehm. *il* Country Gent 81:452 F 26 '16
- Prices**
- Prices of can-house tomatoes. R. W. DeBaun. Market Growers J 22:139 F 15 '18
- Seed**
- Saving tomato seed. S. Goodley, jr. Country Gent 81:792 Ap 8 '16
- Tomato seed. M. Floyd. Country Gent 81:844 Ap 15 '16
- Transportation**
- Origin and spread of tomato fruit rots in transit. J. Rosenbaum. *il* Phyt 8:572-80 N '18
- Shipping tomatoes. W. R. Dewar. (*In* Report, Ontario vegetable growers' assn., 1917, p. 47-50) '18 Ontario ag. dept., Toronto



**Tomatoes—Continued**

**Varieties**

- Disease-resistant varieties of tomatoes. S. N. Green and J. G. Humbert. *il* Ohio Ag Exp B v 3:43-8 F '18  
Experiments in crossing varieties of tomato in the United States. D. F. Jones. *Int R Sci & Prac* Ag 8, no 12:1203-11 D '17  
Tomato varieties. *Prog F* 33:376 Mr 23 '18  
Tomatoes for the canning factory. S. N. Green. Ohio Ag Exp B v 3:121-4 Ap '18  
Varieties of tomatoes; with discussion. H. F. Hall. (*In* Pro. N.J. state hort. soc., 1916, p. 63-73) '17 H. G. Taylor, sec., Riverton, N.J.

**Tompion, Thomas, 1639?-1713**

- Tompion and his clocks. W. A. Dyer. *il* Country Life 32:74 Je '17

**Tooele valley, Utah**

- Indicator significance of vegetation. T. H. Kearney and others. *il* map J Ag Research 1:365-418 F '14

**Tools**

- Care of tools. L. M. Roehl. *il* Hoard's D 52:930 Ja 19 '17  
Carving independence with tools. J. R. McMahon. *il* Country Gent 81:1792-3 O 7 '16  
Keeping tools sharp. R. H. Smith. Country Gent 82:1845 N 24 '17  
Minor articles of farm equipment. H. N. Humphrey and A. P. Yerkes. *Farmers' B* 316:1-15 '17  
Nail and staple box. L. M. Roehl. Hoard's D 53:68 F 2 '17  
Some tools the tractioneer needs. D. R. A. Drummond. *Power F* 27:44 Ap '18  
To make farm tools last longer. J. R. Stone. *Power F* 26:30 N '17  
Tool kit. N. Y. Prod R 44:774 S 12 '17  
Use of hand tools on the farm. H. T. Benham. *il* Power F 25:14+ D '16  
*See also* Drilling and boring machinery; Farm machinery; Garden tools; Pruning tools; Workshops; also names of special tools, e.g. Chisels, Files and rasps, Hammers, Lever, Planes, Saws, Screw drivers, Square, Vice, Wrenches

**Top grafting. See Grafting**

**Topographical drawing**

- Mechanical drawing for the farm and agricultural school. G. F. Krogh. bibliog *il* plans maps Minnesota Univ Ag Dept (Minneapolis) General Ser B 43:53-71 J1 '16 (25c)

**Topographical surveying**

- New topographic survey methods. J. H. Bonner and F. R. Bonner. *il* For Quar 14:433-40 S '16

**Torch-lilies**

- Growing tritomas for market. J. H. Sperry. *il* Country Gent 82:692 Ap 7 '17  
Plant notes; kniphofia northiae, Baker. H. J. Elwes. *Gard Chron* (Lond) 64:32 J1 27 '18  
Red-hot poker plant. G. W. Kerr. *il* Country Gent 82:222 F 3 '17

**Tornadoes**

- Defines a tornado. *Weekly N L* 5:8 Ja 23 '18

**Torrens system**

- Got his Torrens deed for \$20. *Prog F* 31:29 Ja 1 '16  
How the American Torrens system operates. D. Viele. *Record & Guide* (119 W. 40th st., N.Y. 20c) 99:427-8 Mr 31 '17  
How to have land titles guaranteed by the state. *Prog F* 31:1501 D 30 '16  
Sketch of the Torrens system of land title registration, and its application in other countries and especially in the state of New York. J. J. Hopper and W. Fairchild. 3d ed 59p '17 W. Fairchild, Special deputy register and official examiner of titles of New York county, N.Y.

- Torrens land transfer act of Nebraska. T. A. Browne. (Nebraska history and political science ser. B 10) 60p bibliog *il* map '16 Nebraska legislative reference bureau, Lincoln

- Torrens system. Wallaces' F 41:729 My 12 '16  
Torrens system. J. F. Kern. Wallaces' F 41:166, 528 F 4, Mr 31 '16

- Torrens system of land title registration. 10p '16 Philadelphia Dept. of public works  
Torrens system of title registration. J. M. Drew. (*In* Minnesota farmers' institute annual, 1916, p 128-36) *il* '16 Extension division, University Farm, St Paul

**Bibliography**

- Torrens system; single tax. 3p '17 Public library, Detroit, Mich.  
Tortrix fumiferana. See Spruce budworms  
Touch-me-not. See Impatiens  
Tourists. See Travelers  
Tours, Educational. See Educational tours  
Towels  
Roller-towel danger. M. H. Talbott. Country Gent 81:1493 Ag 5 '16

**Towers**

- Tower in the farm group. A. Hopkins. *il* Country Life 30:27 O '16

**Towers, Cooling. See Cooling towers**

**Towers, Observation. See Observation towers**

**Townley, A. C.**

- Great upheaval; the man behind the movement. B. W. Currie. Country Gent 82:760-1 Ap 21 '17

**Toxins and antitoxins. See Antigens and antibodies; Serum therapy; also names of antitoxins, e.g. Diphtheria antitoxin, Tetanus antitoxin**

**Toxoptera. See Plant lice**

**Toys**

- Toys for every child. E. F. Lynch. *il* Country Gent 81:1173 Je 3 '16  
*See also* Children's amusements

**Trachea basilinea. See Rustic shoulder-knot moth**

**Tracheids**

- Ray tracheids in quercus alba. S: J. Record. *il* Bot Gaz 64:437 N '17  
Significance of resinous tracheids. S: J. Record. Bot Gaz 66:61-7 J1 '18

**Trachykele. See Cedar borers**

**Tractor club of America**

- Suggestion to bring together all who are interested in power farming. G: T. Strite. Country Gent 82:1932 D 8 '17

**Tractor engines. See Automobile engines**

**Tractor industry**

- Directory of some of the leading tractors available for western farmers. *il* O Judd Farmer 63:16-17 J1 21 '17  
Government report on tractors. Wallaces' F 41:1014 J1 28 '16  
Is the tractor industry asleep? B. W. Currie. Country Gent 82:1559 O 13 '17  
Should tractors be sold for cash? R. T. Mally. *Power F* 25:45 Mr '16  
Status of the tractor industry. Ag Digest 1:33 My '16  
Tractor; beginnings of a great industry. B. W. Currie. Country Gent 81:620-1, 729-30+, 782-3+, 830-1, 882-3, 926-7 Mr 18, Ap 1-29 '16  
Tractor marches onward. E. R. Wiggins. *il* Field 11 23:152-3 Mr '18  
Tractor owner needs service. F. M. White. O Judd Farmer 65:427 N 9 '18  
Tractor progress. C. M. Eason. *il* Hoard's D 54:830 Ja 4 '18

**Directories**

- Tractor manufacturers in the United States. 2p mim n.d. U.S. Office of farm management, Washington, D.C.

**Statistics**

- Tractor production. *il* Power F 27:53 D '18

**Tractor operation**

- Knowledge in tractor operation. E. R. Wiggins. Country Gent 81:1373 J1 15 '16  
Problems of tractor operation. Country Gent 81:261 F 5 '16

**Study and teaching**

- Courses of instruction in power farming. Power F 27:34 N '18

- Tractor operation—Study and teaching—Cont.**  
 Farm boys learn tractioneering. *il O Judd Farmer* 63:1 J1 21 '17  
 Help to tractor owners; schools to increase tractor efficiency. T. F. Willoughby. *il Farm Eng* 6:9 F '18  
 Instruction in tractor operation: revised list. Power F 27:42 F '18  
 Learning how with tractors. *il Wallaces' F* 41:1018 J1 28 '16  
 Ohio's first tractor school. *il Ohio Ag Dept* Office B v 9:4-9 F '18  
 Ohio's tractor school. *Nat Stock & F* 41:1199 F 23 '18  
 Service to tractor owners. P. S. Rose. *il Country Gent* 83:10-11 Mr 16 '18  
 Short courses in power farming. Power F 27:31-2 D '18  
 Short courses in tractioneering. D. R. A. Drummond. Power F 27:22 F '18  
 Tractor schools meet popular demand. F. M. White. *il O Judd Farmer* 65:476 N 23 '18  
 Why power farming short courses are needed. J. J. Wright. *il Power F* 27:13+ N '18  
 Wisconsin tractor school is great success. Hoard's D 55:189 F 22 '18
- Tractor operators**  
 Army of farm tractor operators needed. Power F 26:8 Je '17  
 Business of being a tractioneer. H. A. von Nieda. *il Power F* 27:8 Ja '18  
 Registration and application blanks for tractor operators. Power F 26:22 Ag '17  
 Tractor operators for agricultural army. Power F 26:9 J1 '17  
 Tractor operators reserve; help available information. Power F 27:24 Ja; 20 F; 36-7 Mr; 49 Ap; 32+ My; 36 Je; 36 J1; 39 Ag; 43 S; 33 O; 43 N; 20 D '18
- Tractor shows and demonstrations**  
 At a tractor demonstration. I. C. Ellis. Breeder's Gaz 71:1118 My 31 '17  
 Big national farm tractor show. *il Am Coop J* 13:6-8 S '17  
 Co-operative farmers' report on tractor demonstrations. *Am Coop J* 12:19 S '16  
 Demonstration of tractors and ploughs in Scotland. Engineer (33 Norfolk st, Strand, London, W.C. 2) 125:223-4 Mr 15 '18  
 Farm tractor spells doom of mule in Dixie. R. Olney. *il Power F* 25:7-8 Ag '16  
 Farmers' tractor demonstration. J. J. James. Hoard's D 54:456 O 26 '17  
 Fifty tractors in national demonstration at Salina, Kansas. D. Beecroft. *il Automotive Industries* (231 W. 39th st, N.Y. 10c) 39:175-8+ Ag 1 '18  
 Fremont—the tractor's Mecca. Field *il* 27:682 S '17  
 Fremont's big show. B. W. Currie. *il Country Gent* 81:679-80, 1717-18 S 16-23 '16  
 French tractor trials. J. Bd Ag 23:951-4 Ja '17  
 Give the tractor a real tryout! B. W. Currie. *Country Gent* 82:1439-40 S 22 '17  
 Grand tractor circuit ends. Power F 25:17 O '16  
 Great tractor show. F. M. White. *O Judd Farmer* 64:15 Mr 2 '18  
 Ground tests as tractor shows. *il Power F* 25:14 Ag '16  
 Indiana tractor show. A. H. Gilbert. *il Purdue Ag* 11:19-21 N '16  
 Iowa tractor demonstration. *il Wallaces' F* 41:1116-17 Ag 25 '16  
 Iowa's coming tractor show. Wallaces' F 41:842 Je 9 '16  
 Kansas City tractor show. Wallaces' F 43:346 F 22 '18  
 Key to the tractor buyer's confidence. L. W. Ellis. *il Power F* 25:9 J1 '16  
 Lessons from the tractor demonstrations. H. C. Ramsower. *il Ohio F* 138:245-6 S 16 '16  
 Machine cultivation tests at Noisy-Le-Grand, France. M. Ringelmann. *Int R Sci & Prac Ag* 9,no 1:94-7 Ja '18  
 Machine cultivation trials at Mettray, France. H. Sagnier. *Int R Sci & Prac Ag* 8,no 10:1395-6 O '17  
 Moving picture of the demonstrations. F. M. Loomis. *il Farm Eng* 4:65 O '16
- National power-farming demonstration. G. Foster. Field *il* 28:666+ S '18  
 National tractor demonstration at Fremont, Neb. Power F 26:49 Ag '17; Prac F 113:273 Ag 1 '17; Breeder's Gaz 72:213 Ag 16 '17; Wallaces' F 42:1130-2 Ag 17 '17; Hoard's D 54:147+ Ag 31 '17  
 National tractor demonstrations. J. B. Bartholomew. Hoard's D 51:967 J1 14 '16  
 National truck, tractor and equipment exposition, Chicago, September 14-21. Kimball's D F 16:668 S 1 '18  
 Nebraska tractor tests, 1917; with discussion. L. W. Chase. *Am Soc Ag Eng Trans* 11:132-58 '18  
 New chapter in farm tractor development. R. Olney. *il Power F* 26:7-9 S '17  
 New Jersey tractor demonstration. Prac F 113:333 O 1 '17  
 1918 tractor show. Breeder's Gaz 74:193 Ag 8 '18  
 Ohio tractor demonstration. G. P. Williams. *il Nat Stock & F* 41:558 S 8 '17  
 Pennsylvania tractor demonstration. Nat Stock & F 42:613 O 5 '18  
 Power farming demonstration will be held at Pullman, Washington, May 29-31. Better Fruit 12:15 My '18  
 Power-farming demonstrations. Power F 25:19 S '16  
 Power farming; forthcoming National tractor demonstration. S. W. Charles. *Farm Eng* 6:6 Ja '18  
 Report of committee on tractor demonstrations. *Am Soc Ag Eng Trans* 10,no 1:75-7 '17  
 Rules for tractor demonstration at Salina, Kansas. map Motor Age (59 E. Madison st, Chicago 15c) 34:18-19 J1 11 '18  
 Rules of California tractor demonstration, April 17, 18 and 19. Automotive Industries (231 W. 39th st, N.Y. 10c) 38:658 Mr 28 '18  
 Second National tractor show. Power F 26:58 Mr '17  
 Seen at National tractor demonstration; what tractor people did at Salina, Kansas. F. M. White. *il O Judd Farmer* 65:124 Ag 17 '18  
 Seen at the National tractor show. G. H. Alford. *il Prog F* 33:950 Ag 31 '18  
 Severe tractor test at Toronto. P. M. Heldt. Automobile (231 W. 39th st, N.Y. 10c) 37:532-3 S 27 '17  
 Shall we have more public tractor shows? R. Olney. *il Power F* 25:9 S '16  
 Summer tractor shows. B. W. Currie. *il Country Gent* 81:1373 J1 15 '16  
 Tractor demonstration at Cedar Rapids, Iowa. *Am Coop J* 12:113-14 O '16  
 Tractor demonstration at Fremont. V. R. Dale. *il Farm Eng* 5:4-5 S '17  
 Tractor demonstration at Fremont. F. M. Loomis. *Farm Eng* 5:3 S '17  
 Tractor demonstration at Hutchinson, Kansas, July 24-28, 1916. T. L. Daniels. *Am Coop J* 11:1202 Ag '16  
 Tractor demonstration at Salina (Kansas) a big success. *il Wallaces' F* 43:1139 Ag 9 '18  
 Tractor demonstration results. H. C. Ramsower. *Nat Stock & F* 42:633 O 12 '18  
 Tractor demonstrations. *il Hoard's D* 52:311 S 29 '16  
 Tractor demonstrations. Power F 25:34 Je; 17 J1 '16  
 Tractor demonstrations for 1916. Power F 25:30 Ja '16  
 Tractor display next week. *O Judd Farmer* 63:6 Ag 4 '17  
 Tractor facts and fancies. B. W. Currie. *il Country Gent* 82:580-1 Mr 24 '17  
 Tractor show. Fruit-Grower 28:169 Mr 1 '17  
 Tractor tests at Salina (Kansas) begin. D. Beecroft. *il Motor Age* (59 E. Madison st, Chicago 15c) 34:5-9 Ag 1 '18  
 Tractor trials in Scotland in 1917. *Int R Sci & Prac Ag* 9,no 2:224-6 F '18  
 Tractors demonstrated to 50,000. *il O Judd Farmer* 61:3 S 9 '16
- Tractors fall below scheduled plowing performances in Pennsylvania. Automotive Industries (231 W. 39th st, N.Y. 10c) 39:644-5 O 10 '18



**Tractor shows and demonstrations—Continued**

- Tractors find admirers at Peoria. F. M. White. il O Judd Farmer 65:309 O 12 '18  
 Value of tractor demonstration. J. B. Bartholomew. Wallaces' F 41:1014 J1 28 '16  
 What can I learn at the tractor shows? il map Power F 25:7-8+ J1 '16
- Tractor tillers**  
 Seed bed in one trip over the field. A. E. Richter. il Country Gent 82:1079 Je 30 '17
- Tractors**  
 Adaptability of the tractor to the smaller farms. J. P. Fairbanks. Western Wash Ag Exp B v 5:138-40 D '17  
 Adaptability of tractor. Farm Eng 3:278 Je '16  
 Adaptability of tractor power; photographs. Hoard's D 53:913 Je 29 '17  
 Adapting the tractor to power farming. R. Olney. il Power F 27:11-12 N '18  
 Agricultural tractor; points for New Zealand farmers. W. C. Robinson. J Ag New Zealand 16:198-202 Ap '18  
 Agricultural tractor; some factors governing the design of a small tractor. A. E. I. Chorlton. Int R Sci & Prac Ag 9,no 5:599-601 My '18  
 Agricultural tractors. H. G. Read. Engineer (33 Norfolk st. Strand, London. W. C. 2) 125:193 Mr 1 '18  
 Aids to effective tillage. A. A. Case. il Field 11 26:212-13 Mr '16  
 \* America: first in farm-tractors. il Literary Digest (354 4th av. N.Y. 10c) 59:23 N 23 '18  
 American agricultural tractors. J Ag New Zealand 16:271-4 My '18  
 American offensive in America. R. A. Andree. Power F 27:56 Je '18  
 American tractors for France. il Kimball's D F 16:207 Mr 15 '18  
 American tractors reclaim France. W. H. Dean. il Country Gent 83:3-4 F 23; 5+ Mr 9; 17+ Mr 16 '18  
 Annual work of a tractor in France. M. Ringelmann. Int R Sci & Prac Ag 8,no 11: 1123-5 N '17  
 Are you going to buy a tractor? P. T. Hines. il Prog F 33:122 F 2 '18  
 Attractive tractor. J. C. Howell. Country Gent 81:960 My 6 '16  
 Average cost of operating a tractor on a northwestern grain farm. C. P. Webster. Country Gent 82:894 My 19 '17  
 \* Avery 5-10 orchard and farm tractor. P. M. Heldt. il Automotive Industries (231 W. 39th st. N.Y. 10c) 39:720-1 O 24 '18  
 Avoid overloading the tractor. G. W. Iverson. il O Judd Farmer 63:6 J1 21 '17  
 Beeman garden tractor. il Motor Age (59 E. Madison st. Chicago 15c) 34:36 Ag 22 '18  
 Belting the tractor. F. N. G. Kranich. Country Gent 83:53 Ja 19 '18  
 Better farm machinery. P. S. Rose. il Country Gent 83:12-13 F 23 '18  
 Bill Jones' power problem. P. T. Hines. Country Gent 82:1660 O 27 '17  
 British agricultural tractors and haulers. Engineer (33 Norfolk st. Strand, London. W. C. 2) 124:512-13, 533-5, 553-6, 562; 125:4-6, 10, 45-6, 65-7, 93-6, 98, 116-18 D 14 '17, Ja 4, 18- F 8 '18  
 Burning kerosene in farm tractor. E. R. Wiggins. Power F 26:14 O '17  
 Buy a tractor and raise better horses. il Power F 26:8 Ap '17  
 Case two plow tractors. il plan Automobile (231 W. 39th st. N.Y. 10c) 37:708-11 O 25 '17  
 Choice of the type of agricultural tractor suited to French conditions. A. De Poncins. Int R Sci & Prac Ag 8,no 12:1265-7 D '17  
 Clearing land a big job for the tractor. A. L. Dahl. il Power F 26:9 O '17  
 Cold weather tips for tractor owners. Hoard's D 54:827 Ja 4 '18  
 Coming through. B. W. Currie. Country Gent 83:22 N 16 '18  
 Compaction of soils due to the use of tractors. L. F. Seaton. Am Soc Ag Eng Trans 10,no 1:68-71 '17  
 Cooling the farm gas tractor. C. V. Hull. il Power F 27:34 D '18

- Corn belt farm boy in France. il O Judd Farmer 63:3 N 10 '17  
 Corn planting and cultivating. il O Judd Farmer 63:5 J1 21 '17  
 County agent's opinion of the tractor. F. H. Demaree. Power F 25:7 D '16  
 Course of study in farm tractors. Farm Eng 3:136+, 164+, 195-6, 226+, 253-4, 273 Ja-Je '16  
 Cow, the car and the tractor. H. A. Von Nieda. il Power F 27:16 D '18  
 Cultivation trials in ricefields with a Moline tractor in Italy. A. Tarcheth. Int R Sci & Prac Ag 9,no 3:342-3 Mr '18  
 Cutting cornstalks with a tractor. E. R. Wiggins. il Country Gent 82:1932 D 8 '17  
 Deaf mute succeeds with tractor. Mrs M. Rose. il Power F 27:16 Ag '18  
 Demmler worm drive transmission for farm tractors. il Automotive Industries (231 W. 39th st. N.Y. 10c) 38:1127 Je 13 '18  
 Department's tractor service. C. G. Bailey. Ag Gaz of Canada 5:491-4 My '18  
 Determining the size of the tractor. L. W. Chase. il Farm Eng 7:3-5 Mr '18  
 Development of the agricultural motor. H. Wyatt. Quarterly Review (249 W. 13th st. N.Y. \$2) 227:194-202 Ja '17  
 Difficulties in using tractors. H. C. Taylor. Breeder's Gaz 73:1036 My 16 '18  
 Does a small tractor pack the soil? F. G. Hodson. Power F 25:52 Ag '16  
 Don't overload tractor. F. M. White. il O Judd Farmer 64:9 Mr 16 '18  
 Doubling up with the iron horse. F. L. Clark. il Country Gent 81:82 Ja 8 '16  
 Drudgery emancipation; tractor a labor saver. R. U. Blasingame. Penn State F 11:269 F '18  
 Economic study of the farm tractor in the corn belt. A. P. Yerkes and L. M. Church. Farmers' B 719-1-24 '16; Same cond. O Judd Farmer 60:9 My 20 '16; Same cond. Hoard's D 51:734 My 26 '16; Same cond. Irr Age 31: 123 Je '16; Same cond. Green's Fruit Grower 36:2 J1 '16; Same cond. Better Fruit 11:10 N '16  
 Economics of the farm tractors. E. R. Wiggins. Am Soc Ag Eng Trans 9:79-92 '16; Same cond. Power F 25:16+ F '16; Discussion. A. P. Yerkes. Am Soc Ag Eng Trans 9:93-103 '16  
 Economies with trucks and tractors. System on the Farm 1:350; 2:24, 218; 3:20, 202 N '17, Ja, Je-J1, N '18  
 Effect of the war on power farming. il Power F 26:7-8 Ag '17  
 Effect of tractor on farm rental. I. W. Dickerson. Wallaces' F 43:164 N 8 '18  
 Efficiency in tractor power. Country Gent 81: 741 Ap 1 '16  
 Efficiency of the farm tractor. B. J. Ruetenik. il Hoard's D 52:5 J1 28 '16  
 Endurance for the tractor motor. G. W. Iverson. il O Judd Farmer 62:3 Ja 13 '17  
 Ever-increasing number of farm tractors must be used to meet this demand. V. A. Place. il Nat Stock & F 41:966 Ja 5 '18  
 Exit the horse, enter the motor, in farming for big profits. Current Opinion (63 W. 36th st., N.Y. 25c) 62:219 Mr '17  
 Experience with the tractor. il Wallaces' F 41:1011 J1 28 '16  
 Experience with tractors. J. F. Dyer. Breeder's Gaz 69:307-8 F 10 '16  
 Experience with tractors in five states; symposium. il Ohio F 138:97 Ag 5 '18  
 Experiments in steam-ploughing. Sirdar Jogendra Singh. Ag J of India 13:47-53 Ja '18  
 Fall work for the tractor. D. G. Carter. il Kimball's D F 15:550 Ag 15 '17  
 Farm boys learn tractioneering. il O Judd Farmer 63:7 J1 21 '17  
 Farm experience with the tractor. A. P. Yerkes and H. H. Mowry. U S Ag B 174:1-44 '15  
 Farm horses and tractors. R. A. Hayne. Nat Stock & F 40:816 N 11 '16  
 Farm power problem. E. A. White. Breeder's Gaz 74:156 Ag 1 '18  
 Farm surfaces for tractors. il Wallaces' F 43: 82 Ja 18 '18

**Tractors—Continued**

- Farm tractor. W. I. Chamberlain. *il* Nat Stock & F 40:960 D 23 '16
- Farm tractor. C. K. Shedd. *il* Hoard's D 53: 932 Je 29 '17
- Farm tractor and horse production. E. L. Watson. *il* Power F 26:8 Ja '17
- Farm tractor and the renter. R. T. Mally. *il* Power F 25:8 S '16
- Farm tractor coming east. Cornell Countryman 25:79 N '17
- Farm tractor in Indiana. C. D. Kinsman. *il* Purdue Ag 10:16-18 Mr '16
- Farm tractor in Quebec. J. A. Starrak. *J* Ag (Quebec) 22:5 J1 '18
- Farm tractor solves food problem. H. L. Horning. *il* Power F 26:20 S '17
- Farm tractors. *J* Bd Ag 24:878-9 N '17
- Farm tractors—a national necessity. *il* Horseless Age (95 Madison av, N.Y. 10c) 43:42-3 Ap 1 '18
- Farm tractors are dealer opportunities; condensed specifications. Horseless Age (95 Madison av, N.Y. 10c) 44:46-8 My 1 '18
- Farm tractors dependable. *il* Am Coop J 14: 41 O '18
- Farm tractors for Georgia. L. C. Hart and E. G. Welch. *il* map Ga Ag Coll (Ext) C 75: 1-7 '18
- Farm tractors for southern farmers. T. Butler. *Prog* F 31:249 F 19 '16
- Farm tractors, war and women. *il* Touchstone (118 E. 30th st, N. Y. 35c) 2:606-11 Mr '18
- Farmhand of the hour. *il* Field 11 27:780 O '17
- Farming must be motorized. P. S. Rose. *il* Country Gent 83:3-4 F 9 '18
- Farming with a gas tractor in Indiana. F. M. Henderson. *il* Power F 25:7-8 S '16
- Farming with a home-made tractor. E. J. Olson. *il* Power F 25:38 Ja '16
- Farming with tractors. *il* Wallaces' F 41:727 My 12 '16
- Farming without horses. H. I. Wood. *il* Farm Eng 3:170 F '16
- Farms more cheaply with a gas tractor. W. J. Spencer. *il* Power F 26:20 N '17
- Feeding the world. B. W. Currie. *il* map Country Gent 82:924-5 My 26 '17
- Food commission loans tractor. Wallaces' F 42:1012 J1 13 '17
- Forty-two practical and economical operations for the tractor on the farm. F. M. Loomis. *il* Farm Eng 5:3-6 Ag '17
- Four-year tractor administration. C: L. Dry. *Power* F 26:12 F '17
- Four years of farming with a tractor. E. Salmon. *il* Power F 25:8 Mr '16
- \* French light agricultural tractor. *il* plan Engineer (33 Norfolk st, Strand, London, W.C. 2) 125:300-1 Ap 5 '18
- French vineyard tractor. W. F. Bradley. *plan* Automotive Industries (231 W. 39th st, N. Y. 10c) 38:589-91 Mr 21 '18
- Future of the tractor in the cotton belt. *Prog* F 33:962 Ag 31 '18
- Gaiting a farm to a tractor. J. R. Mattern. *il* Country Gent 83:4 D 21 '18
- Gas tractor in eastern farming. A. P. Yerkes and L. M. Church. *il* Farmers' B 1004:1-27 '18
- Gasoline horse in the West. E: C. Crossman. *il* Scientific Am (233 Broadway, N.Y. 10c) 118:17 Ja 5 '18
- Gears break easy in cold weather. D. R. A. Drummond. *Power* F 27:38 F '18
- General-purpose farm tractor A. Phillips. *il* Power F 25:8 Ja '16
- Give us the straight of the tractor. P. T. Hines. *il* Power F 27:9 Mr '18
- Giving the tractor a square deal. H. A. Von Nieda. *Power* F 27:38 Ap '18
- Harvesting with a tractor. E. R. Wiggins. *il* Country Gent 82:1257 Ag 11 '17
- Hauling bundles with a tractor. *il* Country Gent 81:1480 Ag 5 '16
- Have you a tractor on your farm? R. E. Burleigh. *Green's Fruit Grower* 37:2 J1 '17
- Hitching the tractor to the food problem. R. Olney. *il* Power F 26:7 Je '17
- Hoosier farm tractor. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 38:132-3 Ja 10 '18
- Hoosier power farmer's experience. G: L. Hutchinson. *Power* F 26:42 Je '17
- Horse and the tractor. C. M. McConnell. *Ohio* F 140:266 S 29 '17
- Horse still dominant on the farm. F. M. Loomis. *Farm Eng* 5:10 J1 '17
- Horseless farm. *il* Kimball's D F 16:493 Je 15 '18
- Horsepower of tractors and horses. E. C. Sauve. *Breeder's Gaz* 70:935 N 16 '16
- Horses and tractors. W. E. Duckwall. *Breeder's Gaz* 73:604 Mr 21 '18
- Horses and tractors. G: F. Henning, jr. *Breeder's Gaz* 73:552 Mr 14 '18
- How a tractor increased one farm's value. H. K. Cole. *System* on the Farm 2:166 My '18
- How an Iowa farmer uses his tractor. G: W. Iverson. *il* O Judd Farmer 61:13 J1 29 '16
- How Bill overhauled his tractor. G. P. Pearce. *il* Country Gent 82:417 Mr 3 '17
- How farm tractors are loaned by the commission. (*in* B. 3, p. 1-6) (Je 9) '17 New York State food supply commission, Albany
- How I eliminated horses. W. A. Marker. *il* System on the Farm 3:175-7 N '18
- How I found the right tractor. G: Koepenhoffer. *il* System on the Farm 1:338-9 N '17
- How I make a drainage outlet. G: Koepenhoffer. *System* on the Farm 3:179 N '18
- How I save money with a tractor. J. F. Matthieson. *Power* F 25:28 J1 '16
- How many bottoms? P. T. Hines. *Country Gent* 82:850 My 5 '17
- How the tractor really works. P. S. Rose. *il* Country Gent 83:6-7 Je 1; 5 Je 8; 15 J1 6 '18
- How to determine whether to use truck or tractor. *System* on the Farm 2:64+ F '18
- How to do a good job of tractor plowing. R. Olney. *il* Power F 25:8 F '16
- How to get greater power farming efficiency. W. B. Jones. *il* Power F 27:9-11+ J1 '18
- How to look for tractor trouble. *Power* F 26: 32 F '17
- How we made eight farms pay by buying a tractor together. R. Heaney. *il* System on the Farm 2:207-9 Je '18
- Idea for housing the tractor. P. T. Hines. *plan* Power F 27:41 Ap '18
- Increased need of power farming. G. W. McCuen. *il* Ohio F 141:3 Ja 5 '18; *Excerpt. Ag Digest* 2:846 F '18
- Interview with Ohio's governor. F. A. Koenig. *Kimball's D F* 16:291 Ap 15 '18
- Iron men for the farm. P. S. Rose. *il* Country Gent 82:1863-4 D 1 '17
- Is the dairy farmer interested? *il* Hoard's D 53:912 Je 29 '17
- Is the packing effect of a tractor harmful? *il* Power F 26:12-13+ Ap '17
- Is the tractor adapted to orchard work? A. L. Dahl. *il* Power F 27:7 Ap '18
- Is the tractor to be a horse substitute? E. T. Adams. *il* Power F 25:12+ My '16
- Is the tractor tractable? F. F. Rockwell. *il* Country Life 33:66-7 N '17
- Is tractor work better? I. W. Dickerson. *Wallaces' F* 43:126 Ja 25 '18
- Itinerant tractor service. O Judd Farmer 64: 10 F 16 '18
- Keep the farm tractor at work. *Power* F 27: 34 O '18
- Keep the tractor busy. B. J. Ruetenik. *il* Hoard's D 53:915 Je 29 '17
- Keep the tractor busy in winter. E. R. Wiggins. *il* Power F 26:7 D '17
- Labour on tractors. *J* Bd Ag 25:734-6 S '18
- Larger engine in Happy farmer tractor. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:106-8 J1 18 '18
- Late fall work for the tractor. R. Olney. *il* Country Gent 81:2039 N 25 '16
- Let every tractor work. D. R. A. Drummond. *il* Power F 26:7 J1 '17
- Let the tractor do your work. E. R. Wiggins. *il* Country Gent 81:1860-1 O 21 '16
- Letters from farmer tractor owners on the tractor as an economical, labor-saving machine. *il* Am Coop J 14:107 D '18
- Life of a tractor. Wallaces' F 43:1009 J1 5 '18
- Limit of tractor economy. *Farm Eng* 4:31 Ag '16



**Tractors —Continued**

- Limitations of horses and tractors. *il Ag Digest* 2:585 Ag '17
- Lubricating oils for kerosene-burning tractors; with discussion. D. L. Arnold. *il Am Soc Ag Eng Trans* 11:114-31 '18
- Machine substitute for the plow; Hession rotary tiller. *il O Judd Farmer* 60:7 My 27 '16
- Making machinery count on the farm. F. M. White. *il Field* 11 27:536-7 J1 '17
- Making the tractor ready for spring. C. V. Hull. *Power F* 27:50+ Ja '18
- Making the tractor work. *il Kimball's D F* 16: 344 My 1 '18
- Making war munitions on the farm. *il Am Coop J* 13:429 J1 '18
- Man and a tractor do many men's work. *il Country Gent* 83:sup Ap 20 '18
- Marketing wool with a tractor. W. O. Shultz. *il System on the Farm* 1:236 Ag '17
- Mechanical cultivation in France. C. Danthin. *il Int R Sci & Prac Ag* 8,no 8:1158-66 Ag '17
- Methods and costs of land leveling with tractors. F. N. Cronholm. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49: 590-1 Je 12 '18
- Miracle of motor power. *il Am Fruit Grower* 38:10 N '18
- Mississippi plantation that needs tractors. J. F. Hobart. *il Power F* 27:11 S '18
- Mixing common sense with tractor operation. H. N. Fullenweider. *il Power F* 26:9 Je '17
- More tractor evidence. *il Kimball's D F* 16: 498 Je 15 '18
- More tractor experience. *Ohio F* 138:118 Ag 12 '16
- More tractors in the corn belt. P. S. Rose. *il Country Gent* 83:7 S 7 '18
- Motoculteur, built by the Société la motoculteur française. V. Fremier. *il Int R Sci & Prac Ag* 9,no 1:98-101 Ja '18
- Motor tractor scheme. *J Bd Ag* 24:758-9 O '17
- Motor tractors: utility for tillage purposes. *Ag J of India* 13:710-16 O '18
- Mowing hay with a tractor. E. R. Wiggins. *il Country Gent* 82:1135 J1 14 '17
- My first experience with a tractor. W. H. Underwood. *Power F* 25:16 S '16
- Nebraska's power farming experience. F. L. Cushing. *il Power F* 25:9 O '16
- New tractors. P. T. Hines. *il Country Gent* 82:1026 Je 16 '17
- Newer uses for the farm tractor; pictures. *O Judd Farmer* 63:3 J1 21 '17
- Nine years with a tractor. C. Dillon. *il Country Gent* 83:24 Mr 23 '18
- Not enthusiastic about tractors. Wallaces' *F* 43:1820 D 13 '18
- Notes on motor cultivation. J. McLaren. *Ag J of India* 13:537-41 J1 '18
- On buying a tractor. *Nat Stock & F* 41:1282 Mr 9 '18
- \* On the trail of the tractor. J. R. Eustis. *il Independent* (119 W. 40th st, N.Y. 10c) 95: 388-9 S 21 '18
- Out-of-the-way jobs for the tractor. A. L. Dahl. *il Sci Am* (233 Broadway, N. Y. 10c) 119:290 O 12 '18
- Overhauling the tractor. R. Olney. *Country Gent* 82:145 Ja 27 '17
- Packing the soil. *Country Gent* 81:261 F 5 '16
- Petrol tractor on the farm. *il Engineer* (33 Norfolk st, Strand, London, W. C. 2) 124:298-9 O 5 '17
- Plenty of work for tractor. A. Moore. *Power F* 26:26 My '17
- Ploughing and harrowing with a tractor; Harvesting with a tractor. M. Ringelmann. *plan Int R Sci & Prac Ag* 9,no 2:226-7, 227-8 F '18
- Plowing with a tractor. Wallaces' *F* 42:768 My 4 '17
- Plowing with a tractor. R. Olney. *il Country Gent* 81:1409 J1 22 '16
- Ploughing with a tractor. M. Ringelmann. *Int R Sci & Prac Ag* 8,no 6:913-16 Je '17
- Plowing with a tractor. E. R. Wiggins. *il Country Gent* 81:1727 S 23 '16
- Plowing with light farm tractors. O. Jones. *il Prac F* 113:265 Ag 1 '17
- Points on tractor selection. *O Judd Farmer* 61:2 Ag 19 '16
- Possibilities of the farm tractor. G. R. Kester. *Penn State F* 10:11-12 Ja '17
- Power attachments for automobiles. K. J. T. Ekblaw. *Nat Stock & F* 42:20 Mr 30 '18
- Power farmer's experience. H. A. Grimwood. *Power F* 26:38 Ja '17
- Power farming. *il Farm Eng* 4:19-24 Ag '16
- Power farming. F. M. Loomis. *il Farm Eng* 5:5 Ja '17
- Power farming America's vast prairies. C. V. Hull. *il Power F* 25:7-8 O '16
- Power farming and the farm boy problem. R. Olney. *Power F* 26:8 F '17
- Power farming in Idaho. J. C. Wooley. *il Idaho Ag Exp B* 111:1-11 '18
- Power farming; size of the tractor and displacement of horses. F. M. Loomis. *Farm Eng* 7:5 Ap '18
- Power farms of the future. C. W. Bowne. *Power F* 27:55 Je '18
- Power for plowing. A. P. Yerkes. *Country Gent* 81:935 Ap 29 '16
- Power harvesting. F. M. Loomis. *Farm Eng* 5:3 J1 '17
- Power required for plowing. G. W. Iverson. *O Judd Farmer* 62:12 My 19 '17
- Power used by fruit growers. *O Judd Farmer* 60:19 Ja 22 '16
- Proper comparisons. X. W. Putnam. *Nat Stock & F* 40:912 D 9 '16
- Proper tractor plowing speeds. E. R. Wiggins. *il Country Gent* 83:42 F 9 '18
- Putting the steam tractor in trim. J. R. Stone. *Power F* 27:38 Mr '18
- Putting the tractor in order. G. W. Iverson. *O Judd Farmer* 62:16 Mr 17 '17
- Quality tractors first. P. S. Rose. *il Country Gent* 83:11-12 F 16 '18
- Replacing men with tractors; experiences from six states. *il System on the Farm* 1: 154-8 Je '17
- Retired farmer goes back—with a tractor. I. R. Witter. *il Power F* 26:7 F '17
- Rice farmer uses a gas tractor. F. W. Burnett. *il Power F* 26:34 N '17
- Road-making tractors. E. W. Gage. *il Country Gent* 83:46 Mr 2 '18
- Save the corn crop with a tractor. E. L. Watson. *il Power F* 26:22 N '17
- Saving labor in land cultivation; tractors for garden use. F. E. Goodwin. *il Gard M* 26: 21-2 Ag '17
- Saving work and time. A. S. Atkinson. *Farm Eng* 5:5 My '17
- Scotland favors light farm tractors. Automotive Industries (231 W. 39th st, N.Y. 10c) 38:26-8+ Ja 3 '18
- Seeding with a tractor. *il Country Gent* 81: 1075 My 20 '16
- Sensible tractor talk. L. F. Bedford. *Rural N Y* 77:1238 N 2 '18
- Service to tractor owners. P. S. Rose. *il Country Gent* 83:10-11 Mr 16 '18
- Settling the man and horse problems. T. J. Ports. *il System on the Farm* 1:214 Ag '17
- Shelter for the tractor. D. G. Carter. *il plan Kimball's D F* 15:588 S 1 '17
- Sidelights on the tractor business. R. T. Mally. *Power F* 25:14 O '16
- Signs of progress in the farm tractor field. R. Olney. *il Power F* 27:9-11 O '18
- Simplicity of the tractor. K. J. T. Ekblaw. *Nat Stock & F* 41:1264 Mr 2 '18
- Simultaneous harvesting and breaking-up of stubble with a tractor. M. Ringelmann. *plans Int R Sci & Prac Ag* 8,no 10:1399-1401 O '17
- Sixty tractor records show ten farmers reduced hired help and sixteen replaced horses; depreciation estimated as largest cost item. *Motor Age* (59 E. Madison st, Chicago 10c) 34:23 J1 25 '18
- Size and efficiency of machine as related to the number of acres under cultivation. *Prog F* 31:770 Je 10 '16
- Small farm tractor. L. E. Hazen. *il Cornell Countryman* 14:295-8 Ja '17
- Small tractor. B. J. Ruetenik. *Breeder's Gaz* 69:307 F 10 '16
- Small tractor solves labor problems on small farms. F. M. Loomis. *Farm Eng* 5:6 Je '17

**Tractors—Continued**

- Small tractors. F. Byers. *il* Hoard's D 51:377 Mr 24 '16
- Small tractor's use. J. L. Ahart. *Country Gent* 82:960 Je 2 '17
- Smallest tractor ever built. A. Marple. *il* Farm Eng 4:96 D '16
- Soil pressure of tractors. G. P. Pearce. *Country Gent* 82:1639 N 3 '17
- Soil resistance and the tractor. F. M. Loomis. *Motor Age* (59 E. Madison st, Chicago 15c) 34:20 Jl 18 '18
- Solving a nursery power problem. W. S. Black. *il* Power F 25:15 D '16
- Some important factors in orchard tractor management. J. B. Davidson. *Cal State Comm Hort B v* 7:64-6 Ja '18
- Some tractor experiences. Ohio F 141:4 Ja 5 '18
- Some tractor troubles. E. R. Wiggins. *Country Gent* 83:38 Ja 5 '18
- Southern farmers find tractors profitable. P. T. Hines. *il* Power F 27:9 Ap '18
- Sparing the men by working the tractor. *il* Prac F 114:185-6 My 15 '18
- Starting with batteries. G. P. Pearce. *Country Gent* 83:49 F 2 '18
- Steam tractioneering. F. N. G. Kranich. *il* Country Gent 83:63 F 16 '18
- Steel mule that drives like a horse. J. M. Bird. *il* Scientific Am (233 Broadway, N.Y. 10c) 119:109 F 2 '18
- \* Steering and controlling devices for the four-wheeled tractor. *Sci Am* (233 Broadway, N.Y. 10c) 119:358 N 2 '18
- Stuck in the mud. R. Olney. *Country Gent* 81:1441 Jl 29 '16
- Successful small tractor. G. T. Davis. *Breeder's Gaz* 70:28 Jl 6 '16
- Successful tractor users in several states. *il* Am Coop J 11:1008-9 Je '16
- Teachings from experience. *il* O Judd Farmer 63:4 Jl 21 '17
- Tendency of farm tractor design; with discussion. C. M. Eason. *Am Soc Ag Eng Trans* 9:59-78 '16; Same cond. *Power F* 259:9+ F; 42 Mr '16
- Test of mechanical cultivators in the department of the Indre, France. J. Dissoubray. *Int R Sci & Prac Ag S* no 3:432-4 Mr '17
- Testing the belt power of a tractor. E. C. Gee. *il* Power F 25:9 Je '16
- Three hundred days a year. *il* Kimball's D F 16:534 Jl 1 '18
- Three tractors and an eastern farm. P. Shirley. *il* Country Gent 83:9-10 Ap 13 '18
- To make power farming a success. F. L. Tinkle. *Power F* 27:44 My '18
- Tractor—a farm management viewpoint. A. P. Yerkes. *il* Power F 26:12 O '17
- Tractor a paying investment. G. W. Iverson. *O Judd Farmer* 61:14 S 9 '16
- Tractor a requirement for the orchard. C. M. Walker. *Better Fruit* 11:7 Jl '16
- \* Tractor activities in Illinois. P. M. Heldt. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:869-72 N 21 '18
- \* Tractor activities in northern Ohio. P. M. Heldt. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:619-21 O 10 '18
- \* Tractor activities in the Twin cities. P. M. Heldt. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:702-5 O 24 '18
- Tractor adjustment. E. R. Wiggins. *Country Gent* 81:1512 Ag 12 '16
- Tractor aids draft horse raising. *il* O Judd Farmer 61:3 Jl 29 '16
- Tractor and farm management. A. P. Yerkes. *Power F* 25:7-8 Mr; 44 Ap; 15 My '16
- Tractor and horses combined. W. J. Shaver. *Power F* 26:15 F '17
- Tractor and small farm. D. P. Power. *Rural N Y* 75:1557 D 23 '16
- Tractor and the U-boat. W. H. Dean. *il* Country Gent 83:3-4 Je 15; 9-10 Je 22 '18
- Tractor and three engines. L. Johnstone. *il* O Judd Farmer 60:4 Ja 22 '16
- Tractor as a pusher. B. J. Ruetenik. *Country Gent* 82:960 Je 2 '17
- Tractor at work. I. G. Shellabarger. *Hoard's D* 55:321 Mr 15 '18
- Tractor carburation. E. R. Wiggins. *Country Gent* 81:1585 Ag 26 '16
- Tractor cultivators. K. J. T. Ekblaw. *Nat Stock & F* 41:1166 F 16 '18
- Tractor days in a year. E. R. Wiggins. *il* Country Gent 82:101 Ja 20 '17
- Tractor dealers must give service. T. Newsum. *Prog F* 33:378 Mr 23 '18
- \* Tractor development in France. W. F. Bradley. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:786-9 N 7 '18
- \* Tractor development in Iowa. P. M. Heldt. *il* Automotive Industries (231 W. 39th st, N.Y. 10c) 39:663-5 O 17 '18
- Tractor—does it pay? D. G. Carter. *il* Kimball's D F 15:484 Jl 15 '17
- Tractor expedition to France. H. Morgenthau, jr. *il* Jersey B 37:307 F 27 '18; Same. *Power F* 27:46 Mr '18; Same. *Wallaces' F* 43:391 Mr 1 '18
- Tractor experience. *Fruit-Grower* 27:328 Je 15 '16
- Tractor experience. Ohio F 141:66 Ja 12 '18
- Tractor experience. I. G. Shellabarger. *Nat Stock & F* 41:997 Ja 12 '18
- Tractor experience in Illinois. *Farm Eng* 3:271 Je '16
- Tractor experience in Illinois; a study of the farm tractor under corn-belt conditions. A. P. Yerkes and L. M. Church. *Farmers' B* 963:1-29 '18; Excerpt. *Power F* 27:29 Jl '18
- Tractor experiences. *Prog F* 32:136 F 3 '17
- Tractor experiences in Kansas. C. W. McCampbell. *Breeder's Gaz* 70:237 Ag 17 '16
- Tractor facts and fancies. B. W. Currie. *il* Country Gent 82:635-6 Mr 31 '17
- Tractor farming. L. M. Frederick. *Farm Eng* 6:8 F '18
- Tractor field book. 180p *il* '18 *Farm implement news*, Masonic Temple, Chicago
- Tractor for belt work. A. P. Yerkes. *Country Gent* 81:261 F 5 '16
- Tractor for plowing. G. B. Gunlogson. *il* Country Gent 83:48 Ja 26 '18
- Tractor for rush spring work. R. Olney. *il* Country Gent 82:718 Ap 14 '17
- Tractor has come to stay; list of the machines. *Prog F* 31:1095 S 16 '16
- Tractor has justified itself. W. A. Semmons. *il* Kimball's D F 16:34 Ja 15 '18
- Tractor in haying. R. Olney. *il* Country Gent 81:1309 Jl 1 '16
- Tractor in road making. E. R. Wiggins. *il* Country Gent 81:2190 D 23 '16
- Tractor in the orchard; photographs. *Country Gent* 82:1734 N 10 '17
- Tractor—its uses and abuses. R. C. Brewsbaugh. *il* Am Coop J 11:1006 Je '16
- \* Tractor makers protest curtailment; 30 manufacturers form American tractor association. *Automotive Industries* (231 W. 39th st, N.Y. 10c) 39:657-9 O 17 '18
- Tractor of the future. F. M. Loomis. *Farm Eng* 3:221-2 Ap '16
- Tractor on a hundred-acre farm. S. M. Trimble. *il* Prac F 112:455 D 15 '16
- Tractor on a Jersey dairy. J. R. McMahon. *il* Country Gent 81:1745-6 S 30 '16
- Tractor on a small farm. J. R. Kuntz. *il* Country Gent 81:791 Ap 8 '16
- Tractor on a stony farm. *Country Gent* 81:1861 O 21 '16
- Tractor on the corn belt farm. *il* Wallaces' F 42:1055 Jl 27 '17
- Tractor on the farm. *il* Country Gent 82:1196 Jl 28 '17
- Tractor on the farm. D. McDonald, jr. *Country Gent* 81:1617; 82:389 S 2 '16, F 24 '17
- Tractor on the farm. E. R. Wiggins. *il* Country Gent 81:1548; 82:1393 Ag 19 '16, S 8 '17
- \* Tractor operation data. *Sci Am* (233 Broadway, N.Y. 10c) 119:358 N 2 '18
- Tractor power for the corn belt. *il* Wallaces' F 41:1016-17 Jl 28 '16
- \* Tractor power plant improvements. *Sci Am* (233 Broadway, N.Y. 10c) 119:396 N 16 '18
- Tractor pulls stumps. E. R. Wiggins. *il* Country Gent 83:48 F 2 '18
- Tractor relief to pure-bred mares. *O Judd Farmer* 61:11 Jl 29 '16
- Tractor relieved his mules. C. S. Conger, jr. *Power F* 26:32 Ja '17



**Tractors—Continued**

Tractor saves half expense. O Judd Farmer 62:20 F 17 '17  
 Tractor situation. H. W. Riley. il Cornell Countryman 15:325-7 Mr '18  
 Tractor status of Nebraska. L. F. Seaton. Am Soc Ag Eng Trans 10,no 1:71-5 '17  
 Tractor to do the heavy work. il Power F 25:22 N '16  
 Tractor troubles and remedies. J: S. Glass. Ia Ag Ext 6p n.d.  
 Tractor upkeep. D. McDonald, jr. Country Gent 82:198 F 3 '17  
 Tractor versus sugar mule. A. Wilkinson. Country Gent 81:2001 N 18 '16  
 Tractor will affect horse breeding. il O Judd Farmer 63:8 J1 21 '17  
 Tractorize your home. W. B. Hankins. Green's Am Fruit Grower 38:6 J1 '18  
 Tractors a modern necessity. Am Fruit Grower 38:4 O '18  
 Tractors and horses. I. W. Dickerson and J. L. Edmonds. Breeder's Gaz 69:1210 Je 8 '16  
 Tractors and the food supply. il Ag Digest 2:890 Mr '18  
 Tractor's big job this year. J. B. Bartholomew. il Banker-F 5:12 Ap '18  
 Tractors excel horses in road making. A. L. Dahl. il Power F 27:13 D '18  
 Tractor's first day. I. W. Dickerson. il Wallaces' F 43:650 Ap 12 '18  
 Tractors for cash. P. S. Rose. il Country Gent 83:13-14 Mr 2 '18  
 Tractors for orchard work. Rural N Y 76:315 Mr 3 '17  
 Tractors for southern farmers. G. H. Alford. Prog F 33:166 F 9 '18  
 Tractors for threshing. Wallaces' F 41:216 F 11 '16  
 Tractors for truckers. J. T. Rosa, jr. il Rural N Y 76:1463 D 29 '17  
 Tractors gaining popularity in the corn belt. Power F 27:56 J1 '18  
 Tractors in the grain field. J. R. Kuntz. il Country Gent 82:1113 J1 7 '17  
 Tractors in the spring drive. F. M. White. il O Judd Farmer 64:2+ F 16 '18  
 Tractor's influence on crop production. A. P. Yerkes. Power F 27:7-8 My '18; Excerpts. Ag Digest 3:32 J1 '18  
 Tractors on dairy farms. il Kimball's D F 16:218 Mr 15 '18  
 Tractors on small eastern farms. P. S. Rose. il Country Gent 83:15+ J1 13 '18  
 Tractor's place. il Fruit-Grower 28:323 J1 15 '17  
 Tractor's place in food production. J. S. Rodney. Power F 27:30 Mr '18  
 Tractor's place in the hayfield. R. Olney. Power F 26:18 Je '17  
 Tractor's place in the rice fields. A. L. Dahl. il Power F 27:13 J1 '18  
 Tractors reduce costs in road building. E. A. Sorenson. il Power F 27:9 Mr '18  
 Tractor's relation to the farm and its machinery. F. N. G. Kranich. Am Soc Ag Eng Trans 10,no 2:101-8 '17; Abstract. Int R Sci & Prac Ag 9,no 1:92-4 Ja '18  
 Tractors to increase farm resources. C. M. Eason. Power F 26:22+ Je '17  
 Tractors used for heavy hauling. il Power F 25:18 O '16  
 Tractors vs. horses on the farm. W. Dinsmore. Breeder's Gaz 73:320 F 14 '18  
 Tractors will solve the labor problem. W. A. Semmons. Kimball's D F 16:6 Ja 1 '18  
 Treat your tractor right. D. McDonald, jr. Country Gent 82:48 Ja 13 '17  
 Trouble in starting tractor. F. M. White. O Judd Farmer 64:467 Ap 27 '18  
 Truck and tractor farming. H. W. Fegley. il Fruit-Grower 27:257-8 Ap 15 '16  
 Trucks, tractors and trailers. See monthly numbers of Field illustrated  
 Trundaar—a new farm tractor. il Horseless Age (95 Madison av, N.Y. 10c) 42:32-3 D 15 '17  
 Trying out a tractor. E. R. Wiggins. Country Gent 82:28 Ja 6 '17  
 2 tractors save 6 horses. C. E. Holloway. il Prac F 114:302 S 15 '18  
 Uncle Sam's tractor man. J. R. McMahon. il Country Gent 83:12-13 N 2 '18

Use and care of tractors. H. W. Riley. N Y State Fruit Growers' Assn Pro 1918:200-10  
 \* Use of farm tractors in France and England. P. H. Cram. (Commerce Reports no. 254) p 392-3 (O 29) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.  
 Uses of light tractors. C. E. Bronner. Breeder's Gaz 73:1201 Je 6 '18  
 Uses tractor on plowed ground. il O Judd Farmer 61:5 J1 29 '16  
 Uses we find for the tractor; our experience pool. Prac F 114:222 Je 15 '18  
 Using the tractor in winter. Farm Eng 5:13 D '17  
 Using tractors in orchards is profitable. A. L. Dahl. il Green's Am Fruit Grower 38:3-4 Je '18  
 Utility of motor tractors for tillage purposes. A. Amos. Engineer (33 Norfolk st, Strand, London. W. C. 2) 125:130-1 F 8 '18  
 War-time need of tractors. J. B. Bartholomew. Farm Eng 7:5-6 Mr '18  
 What a tractor plow did in a small field. C. A. Bacon. il Power F 25:7-8 F '16  
 What big ranchers think of the tractor. P. S. Rose. il Country Gent 83:5-6 J1 27 '18  
 What does the tractor do for you? E. R. Wiggins. il Country Gent 82:1310 Ag 25 '17  
 What is the matter with my tractor? J: S. Holmes. il Power F 25:9 O '16  
 What size of tractor? A. P. Yerkes. Country Gent 81:393 F 19 '16  
 What tractor shall I buy? P. T. Hines. Country Gent 82:1652 O 27 '17  
 What tractors are reliable. Farm Eng 7:24 Ap '18  
 When an engine fails to start. P. T. Hines. Country Gent 82:942 My 26 '17  
 When men can't be had. A. C. Page. il O Judd Farmer 64:13 F 16 '18  
 Why a tractor pays—the investment side. R. T. Mally. Power F 25:9 My '16  
 Why Brown failed. D. McDonald, jr. Country Gent 82:535 Mr 17 '17  
 Why it pays to house the farm tractor. C: W. Turner, jr. il plan Power F 27:10 S '18  
 Why this tractor gave trouble. D. R. A. Drummond. Power F 26:14 J1 '17  
 Why use anti-friction bearings on the tractor? H. N. Trumbull. il Power F 25:34 S '16  
 Will a tractor reduce overhead? P. T. Hines. Power F 27:15 Ja '18  
 Win the war; tractor is the big factor. F. H. Higgins. map Farm Eng 5:6 S '17  
 With a power farmer in Montana. C: F. Wynegar. il Power F 25:17 My '16  
 Woman tames the tractor. il Prac F 114:202 Je 1 '18  
 Work for the tractor other than plowing; photographs. Kimball's D F 16:108 F 15 '18  
 Working a tractor efficiently. il Wallaces' F 42:1239 S 14 '17  
 Year's experience with a tractor. L. E. Scott. il Hoard's D 55:1045 J1 19 '18  
 See also Farm engines; Farm machinery; Tractor operators; Tractor shows and demonstrations; Tractor tillers; also Tractor club of America

**Cost of operation**

Comparing tractors and horses. L. M. Frederick. Farm Eng 5:8 Ap '17  
 Cost of fuel used by tractors for ploughing, in Canada. C: A. Atwood. Int R Sci & Prac Ag 9,no 1:97-8 Ja '18  
 Cost of tractor plowing. I. W. Dickerson. Country Gent 81:1662 S 9 '16  
 How I keep tractor costs. J. C. Knollen. System on the Farm 3:46-7 Ag '18  
 Lowering costs by substituting tractors for horses. H. V. Stanley. il System on the Farm 1:287-91 O '17  
 My savings with a tractor. O. F. Weske. System on the Farm 1:228-9 Ag '17  
 Tillage at 68 cents an acre. H. Sconce. O Judd Farmer 60:5 Ja 22 '16  
 Tractor costs in the cornbelt. S. R. Winters. Breeder's Gaz 74:299 Ag 29 '18  
 Tractor much cheaper than horse. E. E. Dickey. Power F 26:13 O '17  
 Tractor vs. horse. F. L. Morrison. Farm Eng 5:6 Mr '17

**Tractors—Cost of operation—Continued**

- Valuable tractor cost data. E. S. Compson. O Judd Farmer 65:72 J1 27 '18  
What a tractor record book shows. il O Judd Farmer 61:10 J1 29 '16

**Design**

- Development in tractor design; with discussion. E. R. Greer. Am Soc Ag Eng Trans 10,no 2:130-7 '17  
Distinctive agricultural tractor design. il Sci Am (233 Broadway, N.Y. 10c) 118:458 My 18 '18

**Engines**

See Automobile engines

**Gearing**

- Exposed tractor gears should not be oiled. W. B. Jones. Power F 27:47 Ag '18

**Hitching and haulage**

- Engine hitches and side draft. C. O. Reed. O Judd Farmer 60:15 Ap 15 '16  
Hard problem in tractor plowing. R. Olney. il Power F 25:16 J1 '16  
Heavy hauling with tractor. Farm Eng 7:22-3 Ap '18  
Hitches for field use. Farm Eng 3:244 Ap '16  
Hitching drills to tractor. Country Gent 81:2171 D 16 '16  
How to do spring work with the tractor; practical methods, hitches, etc. il Power F 26:7-9+ Mr '17  
How to hitch a wagon train behind a tractor. J. R. Stone. il Power F 27:9-10 N '18  
How to hitch the plow to the tractor. E. L. Watson. Power F 27:10-11 Ag '18  
Peak loads on a mechanical power farm. E. R. Wiggins. il Power F 26:9 Ap '17  
Plow and the tractor; correct hitching makes for good work in the field. F. N. G. Kranich. Country Gent 83:8+ Ap 20 '18  
Position of tractor-plow hitch. Country Gent 81:1075 My 20 '16  
Side draft in tractor plowing. R. Olney. Country Gent 81:935 Ap 29 '16  
Some tractor grader hitches. C. V. Hull. il Power F 26:39 Ja '17  
Tractor and binder hitches. G. W. Iverson. O Judd Farmer 62:3 Je 16 '17  
Tractor-header hitch. Power F 25:52 J1 '16  
Tractor hitch. P. S. Rose. il Country Gent 82:2023 D 22 '17  
Tractor hitch for disk harrows. I. W. Dickerson. Wallaces' F 43:498 Mr 15 '18  
Tractor hitches for tillage tools. il O Judd Farmer 61:8 J1 29 '16

**Rating**

- Committee report and discussion on tractor ratings. W. F. MacGregor. Am Soc Ag Eng Trans 10,no 2:140-6 '17  
How much will this tractor pull? R. Olney. il Power F 25:7-8 My '16  
Standard drawbar rating for gas tractors. R. Olney. Power F 25:9+ Ag '16  
Standardization of gas tractor ratings. R. Olney. Am Soc Ag Eng Trans 10,no 2:137-40 '17; Same. il Power F 26:13 F '17

**Standardization**

- Report of sub-committee on tractor standards. J. F. M. Patitz. Am Soc Ag Eng Trans 11:197-205 '18  
Tractor standardization. K. J. T. Ekblaw. Nat Stock & F 41:1372 Mr 23 '18  
Urgent standardization for tractors. il Ag Digest 1:397 Ap '17

**Statistics**

- Number of gas tractors in commission on farms. Monthly Crop Rep 3:33 Ap '17

**Testing**

See Tractor shows and demonstrations

**Wheels**

- Novel tread for the tractor. il Scientific Am (233 Broadway, N.Y. 10c) 118:260 Mr 23 '18

**Tractors, Care of**

- Care of a tractor. Wallaces' F 41:1017 J1 28 '16

- Care of a tractor. A. O. Heston. Farm Eng 3:271 Je '16  
Caring for the tractor by schedule. R. Olney. il Country Gent 82:850 My 5 '17  
Cooling the tractor. E. R. Wiggins. il Country Gent 81:1836 O 14 '16  
How to care for the tractor in winter. R. Olney. Power F 25:38 D '16  
It pays to take good care of the tractor. il Power F 25:12 D '16  
Lubrication, life of tractor engine. D. L. Arnold. O Judd Farmer 61:6 J1 29 '16  
Making the tractor ready for spring use. C. V. Hull. Power F 26:8+ D '17  
My dream job on Billiken ranch. H. A. von Nieda. Power F 26:16 D '17  
Tractor lubrication. E. R. Wiggins. Country Gent 81:1698 S 16 '16  
Your tractor and mine. P. T. Hines. Prog F 33:954 Ag 31 '18

**Tractors, Electric**

- Electric plowing; abstracts. A. Delamarre (Rev. Gen. Elect. 1:691-700 My 5 '17). Exp Sta Record 39:88 J1 '18; Int R Sci & Prac Ag 8,no 12:1262-5 D '17  
Experiments in the use of electric power for field work on the farm. J. H. Davidson and F. E. Boyd. il Gen. Electrical Review (Schenectady, N.Y. 20c) 21:130-3 F '18

**Trade catalogs. See Catalogs, Trade****Trade-marks**

- That Philadelphia brand; text of New York Appellate division's opinions in Phenix cheese co. action. N Y Prod R 43:940 Ap 4 '17  
Trade-marks are remembered when the name is forgotten. il System on the Farm 1:329-30 N '17

**Trade unions**

- Trade unionism in the business of buttermaking. N Y Prod R 44:182+ My 30 '17  
Trade unions and co-operative and mutual societies. Int R Ag Econ 63:1-8 Mr '16  
Union labor. Wallaces' F 43:1686 N 15 '18  
World war and union labor. Ag Digest 2:960 My '18

**Trailing arbutus**

- Trailing arbutus easily grown in pots. Rural N Y 75:887 Je 17 '16

**Transit-instrument**

- Surveying on the farm. C. L. Hubbard. il Farm Eng 6:4 F; 7:11-12 Mr '18

**Translocation**

- Immobility of iron in the plant. P. L. Gile and J. O. Carrero. bibliog J Ag Research 7:83-7 O 9 '16  
On the mechanism of translocation in plant tissues; an hypothesis with special reference to sugar conduction in sieve-tubes. S. Mangham. bibliog Ann Bot 31:293-311 Ap '17  
Penetration of foreign substances introduced into trees. W. H. Rankin. Phyt 7:5-13 F '17  
Translocation of mineral constituents of seeds and tubers of certain plants during growth. G. D. Buckner. J Ag Research 5:449-58 D 13 '15

**Transmission (biology). See Heredity****Transpiration. See Plants—Transpiration****Transpirometers**

- Automatic transpiration scale of large capacity for use with freely exposed plants. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 5:117-32 O 18 '15

**Transplanting**

- A. B. C. of transplanting. Am Flor 46:808 Ap 29 '16  
Effect of different methods of transplanting coffee. T. B. McClelland. il Porto Rico Ag Exp B 22:1-11 '17  
Experiences in midsummer transplanting. Gard M 27:263 J1 '18  
Experiments in transplanting sugar beets. F. J. Pritchard and L. E. Longley. il Am Soc Agron J 8:106-10 Mr '16  
Fall heeling-in for spring planting. L. W. C. Tuthill. il Gard M 24:102-3 O '16  
Growing plants for sale. G. W. Kerr. Country Gent 81:174 Ja 22 '16



**Transplanting—Continued**

- Hints on transplanting. Gard Chron Am 20: 403 S '16
- Home garden; transplanting and thinning for big crops. Country Gent 83:34 My 11 '18
- How to succeed with fall planting. A. Lurie. Gard M 28:83 O '18
- Labor-saving methods in transplanting. R. W. DeBaun. il Market Growers J 22:268-9 Ap 1 '18
- Transplanting alfalfa. N. E. Hansen. il S D Ag Exp B 167:424-45 '16
- Transplanting in the control of wild rice in Italy. B. Marcarelli. Int R Sci & Prac Ag 9,no 2:187-8 F '18
- Transplanting out of season. C. L. Meller. il Gard M 25:322 Jl '17
- Transplanting roses in summer. L. Lennox. Gard M 25:294 Je '17
- Transplanting vegetables to economize on space. H. W. Doyle. il Gard M 25:282-3 Je '17
- Vegetable planting; a spotting machine. il Rural N Y 77:319 Mr 2 '18
- See also* Flats (horticulture); Tree planting

**Transportation**

- Cashing in on containers. H. A. Roberts. il Country Gent 83:8-10 Je 15 '18
- Check the transportation waste. M. L. Williams. il Rural N Y 77:1037-8 S 7 '18
- Commercial terms used by buyers and commercial houses in handling fruit, truck and other farm products. Prog F 31:223 F 12 '16
- Delay in delivery of agricultural requisites and produce. J Bd Ag 22:1260-2; 23:86-7 Mr-Ap '16
- \* Effect of restricted railroad transportation on the price of staple commodities. (In Official statement no. 2, p. 8+) '18 U.S. Food administration, Washington, D.C.
- Facing the facts in transportation. Ag Digest 2:740 D '17
- Great American waste; most of it comes in careless shipping and retailing. L. D. H. Weld. Country Gent 82:1281 Ag 18 '17
- Improved transportation service for perishable products, by G. C. White; Car-lot distribution, by J. S. Crutchfield; Transportation of perishable commodities—need of co-operation by shippers with carriers, by E. F. McPike. (In Pan American scientific congress Pro., 1915, v. 3, p. 400-22, 425-30, 439-49) '17
- Insurance conditions in reference to the transport of cereals. G. Rocca. Int R Ag Econ 67:45-55 Jl '16
- Interstate commerce commission decision no. 7969; National poultry, butter & egg association v. Baltimore & Ohio Southwestern railroad company et al. 34-70p '18 U. S. Govt. ptg. office, Washington, D. C.
- Merchant marine and the farmer. A. C. Laut. Forum (286 5th av., N.Y. 25c) 56:735-42 D '16
- Movement of perishable traffic. G. D. Dixon. (In Nat. league of commission merchants. 1317 convention, p. 82-90) n.d. 90 W. Broadway, N.Y.
- New freight system to conserve our foods. J. Anderson. il Scientific Am (233 Broadway, N.Y. 10c) 117:109 Ag 18 '17
- Opposition to increased rates. N Y Prod R 43: 1014 Ap 18 '17
- Perishable foods. Weekly N L 4:6 Je 13 '17
- Railroad freight rates and the farmer. S. O. Dunn. 21p '17 S: O. Dunn, 608 S. Dearborn st., Chicago
- Address delivered before the Illinois agricultural assn., Peoria, Ill., July 6, 1917
- Relation of the railroad to the farmer. G. A. Cullen. Mass Ag Bd Yearbook 1917,pt 2:99-111 '18; Same. Mass Ag Bd C 82:1-15 '18
- River steamboating sixty years ago. W. A. Graham. Ohio F 141:502 Ap 6 '18
- Scientific marketing and transportation. T. C. Powell. Railway Age (Woolworth bldg., N.Y. 15c) 64:134-5 Ja 11 '18
- Solving the transportation problem. Power F 27:48 Ja '18
- Tabloiding of primary products. R. Crowe. J Dept Ag Victoria 16:449-53 Ag '18

- Transportation. H: Wallace. Wallaces' F 42: 290 F 16 '17
- Transportation by water, river traffic and public roads in California. Cal Ag Bd Rep 1917:234-16 '18
- Transportation of perishable commodities. M. E. Pennington. Railway Age (Woolworth bldg., N.Y. 15c) 64:119-24 Ja 11 '18
- What U. S. Bureau of markets does for fruit-growers. R. L. Ringer. Better Fruit 13:7+ O '18
- See also* Automobiles; Demurrage; Express companies; Express rates; Freight car service; Freight inspection; Live stock shipping associations; Market trains; Marketing; Motor trucks; Packing for shipment; Parcel post; Postal service; Railroads; Rural motor express; Shipment of goods; Shipping; Waterways—United States; also National shippers' conference; also subhead Transportation under special subjects, e.g. Bees—Transportation, Eggs—Transportation, Swine—Transportation

**Bibliography**

- Transportation of perishable products. (In Pan American scientific congress Pro., 1915, v. 3, p. 423-5, 449-51) '17

**Laws**

- Mesures concernant le transport des produits végétaux, du bétail et des produits animaux. Int Yearbook Ag Leg 1916:426-47 '17

**Statistics**

- Crop production and railroad tonnage compared. Monthly Crop Rep 4:76 Jl '18

**Trap nesting**

- All kinds of trap nests. J. S. Griffing. il Country Gent 82:209 F 3 '17
- Benefits of trapnesting. J. S. Williamson. Am P Advocate 25:372 Ap '17
- Better yield with less fowls. M. K. Boyer. Am P Advocate 24:334 Mr '16
- Does it pay to trap-nest good fowls? E. F. Bartlett. Reliable P J 24:744 N '17
- Exhibit at American poultry association meeting, Chicago. F. L. Sewell. il Reliable P J 25:682 O '18
- Finding the hens that pay. Prog F 32:11 Ja 6 '17
- Half year or full year egg records? C. B. Allaire. Reliable P J 23:1141 Ja '17
- Selecting the layers. M. K. Boyer. Am P Advocate 26:488 Jl '18
- Simple trap nest for poultry. Wallaces' F 42: 23 Ja 5 '17
- Simple trap test recommended by our government. A. R. Lee. il Reliable P J 24:1112 F '18
- Trap-nest records—also about breeding for egg production. W: C. Monahan. Reliable P J 24:53 Mr '17
- Trap nest records compared. il Fruit-Grower 27:427 S 15 '16
- Trap-nesting. H. S. Griffing. il Country Gent 82:164 Ja 27 '17
- Trap-nesting pullets. L. H. Cobb. plans Ohio F 142:381 O 19 '18
- Trap-nesting unnecessary. W. H. Jenkins. Nat Stock & F 41:487 Ag 18 '17
- Trap nests and egg production. Prac F 112: 233 Je 1 '16
- Trap nests will help win the war. W. C. Brown. Am P Advocate 26:12 D '17
- Trapping the egg layer. H. McAuley. Farm Eng 3:159 F '16
- Value of trap nests to the poultryman. C. E. Trump. Am P J 47:345 F '16
- Weeding out the poor producers. Mr and Mrs G: R. Shoup. Western Wash Ag Exp B v 5: 39-41 Je '17
- Which shall we keep, half year or full year egg records? D. P. Upham. Reliable P J 24:52-3 Mr '17
- Why you should use the trap nest. J: F. Wenk. Prac F 113:388 N 15 '17
- Trapping**
- Baits and scents for the trapper. C: H. Chesley. Prac F 113:350 O 15 '17

**Trapping—Continued**

- Brief for the salaried trapper; opposed to bounty system. S. H. Hill. *Am Sheep B & W* 36:197 Ap '16
- Fur money in your back yard. J. D. Judd. *O Judd Farmer* 65:380 O 26 '18
- Fur trapping for farmers. *Prac F* 112:388 O 15 '16
- General trapping methods. R: K. Wood. Kimball's *D F* 16:607 O 15 '18
- Getting ready for the trap line. C: H. Chesley. *Prac F* 113:317 S 15 '17
- Getting ready for trapping. C: H. Chesley. *O Judd Farmer* 61:26 N 18 '16
- How to trap. *Prac F* 112:468 D 15 '16
- How to trap a fox. C. O. Ormsbee. *Rural N Y* 77:155 F 2 '18
- How to trap mink and coon. A. R. Harding. *Nat Stock & F* 41:998 Ja 12 '18
- How to trap raccoon. *O Judd Farmer* 64:17 Ja 12 '18
- Laws relating to fur-bearing animals. 1915. D. E. Lantz. *Farmers' B* 706:1-24 '16
- Laws relating to fur-bearing animals. 1916. D. E. Lantz. *Farmers' B* 783:1-28 '16
- Making water sets. C: H. Chesley. *Prac F* 113:386 N 15 '17
- Methods of trapping and poisoning coyotes. F. Beck. *Am Sheep B & W* 36:134 Mr '16
- Miscellaneous hints for the trapper. G: J. Thiessen. *Ohio F* 138:479 N 11 '16
- Muskrat trapping. A. R. Harding. *il Kimball's D F* 15:191 Mr 15 '17
- Muskrat trapping explained. G: J. Thiessen. *Ohio F* 138:500 N 18 '16
- Odd jobs for women; the woman trapper. E. A. Cosse. *il Rural N Y* 75:124 Ja 22 '16
- Paying market for mole skins. Wallaces' *F* 42:1215 S 7 '17
- Prospects for the fur season. G. J. Thiessen. *Ohio F* 138:366 O 14 '16
- Sets for practical trappers. Kimball's *D F* 15:893 D 15 '17
- Skunk and civet trapping. G: J. Thiessen. *Farm Eng* 5:12 N '17
- Small furs are in demand. J. D. Judd. *O Judd Farmer* 65:319 O 12 '18
- Successful trapping methods. C: H. Chesley. *Prac F* 113:429 D 15 '17
- Successful trapping tricks. F. E. Brimmer. *O Judd Farmer* 62:30 Ja 20 '17
- Taking of wild rabbits. R. Sharpe. *il J Bd Ag* 25:281-98 Je '18 (to be cont)
- Talks to the young trapper. G: J. Thiessen. *il Country Gent* 82:1801, 1844, 1936, 2026 N 17-24, D 8, 22 '17; 83:48 Ja 12; 32 Ja 26 '18
- Tested methods of taking the raccoon and 'possum. G: J. Thiessen. *Ohio F* 138:526 N 25 '16
- Timely trapping pointers. J. D. Judd. Kimball's *D F* 16:880 N 15 '18
- To trap and skin muskrats. *il O Judd Farmer* 63:4 D 8 '17
- Trapping and handling furs. Hoard's *D* 56:634 N 29 '18
- Trapping common fur bearers. R. K. Wood. *O Judd Farmer* 64:9 Ja 19 '18
- Trapping farm furs. A. R. Harding. *il Kimball's D F* 15:19 Ja 15 '17
- Trapping for fur bearers. C: H. Chesley. *Country Gent* 82:377 F 24 '17
- Trapping for fur money. G. J. Thiessen. *il O Judd Farmer* 65:508 N 30 '18
- Trapping for profit. Wallaces' *F* 42:1526 N 9 '17
- Trapping fur bearers. *il Breeder's Gaz* 72:1265 D 27 '17
- Trapping hints for farm boys. *Rural N Y* 75:21, 58 Ja 1-8 '16
- Trapping is profitable. J. D. Judd. Kimball's *D F* 16:842 N 1 '18
- Trapping moles and utilizing their skins. T. H. Scheffer. *il map Farmers' B* 832:1-13 '17
- Trapping moles for market. G: F. Sykes. *il Ore Ag Ext B* 158:1-4 '17
- Trapping muskrat. G: J. Thiessen. *Ohio F* 142:380 O 19 '18
- Trapping skunk. G: J. Thiessen. *Ohio F* 142:442 N 2 '18
- Trapping skunk and raccoon. C: H. Chesley. *O Judd Farmer* 61:25 N 25 '16
- Trapping small fur animals. G: J. Thiessen. *Ohio F* 142:333 O 5 '18
- Trapping small fur bearers. G: J. Thiessen. *Farm Eng* 5:13 O '17
- Trapping the fox and wolf. C: H. Chesley. *O Judd Farmer* 61:21 D 9 '16
- Trapping the mink and the weasel. G: J. Thiessen. *Farm Eng* 4:84 N '16
- Trapping the muskrat. C: H. Chesley. *O Judd Farmer* 61:17 D 30 '16
- Trapping the raccoon. C. O. Ormsbee. *il Country Gent* 83:35 N 9 '18
- Trapping the red fox. A. R. Harding. *Nat Stock & F* 41:1028 Ja 19 '18
- Trapping the timber wolf. C. O. Ormsbee. *il Country Gent* 83:2 N 2 '18
- Uncle Sam's trappers. Wallaces' *F* 43:1823 D 13 '18
- War needs call for much fur. J. D. Judd. *O Judd Farmer* 65:354 O 19 '18
- See also Bounties
- Traps.** See Flytraps; Mouse-traps; Rabbit traps; Rat-traps; Sparrow traps
- Traumatic pericarditis.** See Pericarditis
- Travelers**
- Touting the tourist. M. Daniels. *il Am For* 24:77-84 F '18
- Travelin' back; story.** W. F. McSparran. *Ohio F* 141:572 Ap 20 '18
- Traveling dairy schools.** See Dairy schools
- Traveling libraries**
- After supper on the farm. J. Wedin. *Hoard's D* 56:675 D 6 '18
- Feeding the book hungry; extension libraries. W. A. Dyer. *il Country Gent* 81:767 Ap 1 '16
- Iowa free traveling library. *il Wallaces' F* 41:1465 N 10 '16
- Tray wagons**
- Home built tea wagon. C. A. Browne. *il O Judd Farmer* 61:21 Ag 26 '16
- Our green Bridget. A. R. Dresser. *il Country Gent* 81:1314 Jl 1 '16
- Tree asters.** See Olearias
- Tree climbing crab.** See Purse crabs
- Tree frogs.** See Frogs
- Tree hoppers.** See Membracidae
- Tree planting**
- About fall planting. H. E. VanDeman. *Green's Fruit Grower* 36:17 S '16
- Advice to forest planters in the plains region. S. D. Smith. *Farmers' B* 888:1-23 '17
- Apple tree planting with dynamite. H. M. Magie. *il Am Fruit Grower* 38:5 N '18
- Blasting and tree planting. F. W. Wilson. *il Am For* 22:276 My '16
- Blasting for tree holes. *Green's Am Fruit Grower* 38:12 Ag '18
- Controlling snow by tree planting. W. C. Palmer. *il Am For* 24:38-40 Ja '18
- Cost of orchard planting. F. I. Odell. *Country Gent* 81:1199 Je 10 '16
- Do you plant trees in fall or spring? discussion. *Md Ag Soc Rep* 1916, v 1:124-31 '17
- Experience in planting trees. C: F. Higgs. *Green's Fruit Grower* 36:3 Mr '16
- Fall planting of orchards. J. P. Stewart. *il Green's Am Fruit Grower* 37:3-4 O '17
- Farm woodlots. Hoard's *D* 51:145 F 18 '16
- Good winter sport. J. C. Graham. *Am For* 24:585 O '18
- Growing trees on farm and forest. W. D. Ludwig. *il Country Life* 32:104 My '17
- Hints on buying trees. M. K. Boyer. *Am P Advocate* 26:132 Ja '18
- How deep shall a tree be planted? C. O. Ormsbee. *Fruit-Grower* 27:461 O 15 '16
- How to plant trees. C. N. Crotsenburg. *il Fruit-Grower* 28:160 Mr 1 '17
- How to plant trees. J. C. Whitten. *Fruit-Grower* 28:24 Ja 1 '17
- Live trees for Christmas. *il Country Life* 31:36-7 D '16
- Moving large trees. *Am Flor* 45:1312-13 Ja 8 '16
- Moving large trees in winter. *Gard Chron Am* 20:31 Ja '16
- Moving trees in summer. E. Meyer. *Am Flor* 49:254 Ag 18 '17



**Tree planting—Continued**

- North Dakota farmstead, its arrangement and adornment. H. O. Werner. *il N D Ag Exp C* 10:1-62 '16
- Notes on white-pine four-year transplants. S. N. Spring. *J For* 15:761-2 O '17
- One hundred per cent. success in tree and shrub planting. *il Gard M* 27:130 Ap '18
- Pennsylvania water-works reforest catchment areas. *il Eng News-Record* (10th av. at 36th st., N. Y. 15c) 78:297 My 10 '17
- Planning the orchard. J. S. Underwood. *Green's Fruit Grower* 36:2 D '16
- Planting fruit trees. *J Dept Ag S Australia* 21:88-90 Ag '17
- Planting fruit trees. J. C. Whitten. *Fruit-Grower* 27:493 N 15 '16
- Planting of fruit trees. *Gard Chron* (Lond) 59:158 Mr 18 '16
- Planting shade trees on arterial highways. M. O. Nelson. *Minn Hort* 46:428-30 N '18
- Planting the orchard. J. C. Whitten. *Green's Fruit Grower* 37:10 My '17
- Planting the tree, shrub or vine. C. A. Green. *Green's Fruit Grower* 36:6 Je '16
- Planting time and care of trees. *Gard Chron Am* 20:402 S '16
- Planting trees as protection against drifting snow. *il Railway Age* (Woolworth bldg., N.Y. 15c) 64:706 Mr 22 '18
- Planting trees for poultry. F. A. Kuhn. *Ohio F* 141:112 Ja 26 '18
- Planting trees with dynamite. *Ohio F* 140:482 N 24 '17
- Planting trees with dynamite. N. D. Rand. *il Country Gent* 83:9 Ag 17 '18
- Pruning transplanted trees. O Judd Farmer *60:10 Mr 18 '16*
- Rapid method of tree planting. H. Gough. *Better Fruit* 12:17 Mr '18
- Report of Cloquet forest experiment station. W. H. Kenety. *il Minn Ag Exp B* 169:34-40 '17
- Safety first in tree planting. P. Spaulding and C. Hartley. *il map Am For* 22:664-8 N '16
- Seven counties to plant trees. *Green's Fruit Grower* 36:31 F '16
- Street and highway planting. B: Y. Morrison. (B. 4) 140p *il n.d. California State bd. of forestry, Sacramento*
- Successful tree planting. M. Coverdale. *Hoard's D* 51:432 Mr 31 '16
- Transplanting big trees. *Gard M* 25:44 F '17
- Transplanting evergreens and wild roses. E. D. Curtis. *Rural N Y* 75:7 Ja 1 '16
- Transplanting large trees. *il Rural N Y* 77:348 Mr 2 '18
- Transplanting large trees. F. H. Sweet. *Green's Fruit Grower* 36:13 S '16
- Transplanting trees and shrubs. I. J. Mathews. *Ohio F* 138:547 D 2 '16
- Transplanting trees by the use of dynamite. T: E. Chase. *Maine Ag Dept B v* 17:27-35 S '18
- Transplanting trees, their treatment in connection therewith. A. Smith. *Gard Chron Am* 21:267-9 Jl '17
- Transportation of trees. W. S. Thornber. *Better Fruit* 11:26 Mr '17
- Tree holes or tree beds? *Green's Am Fruit Grower* 38:26 Mr '18
- Tree-planting competition. *il plans J Dept Ag Victoria* 14:413-22 Jl '16
- Tree planting for city, town and country. E. Wallis. *il J Dept Ag Victoria* 14:219-32 Ap '16
- Tree-planting for farmers. W. H. Taylor. *J Ag New Zealand* 14:378-88 My '17
- Tree planting in eastern Washington. O. M. Morris. *Wash Ag Exp Pop B* 108:1-4 '17
- Tree planting in Kansas. C: A. Scott and W. Burn. *il Kan Ag Ext B* 11:1-29 '16
- Tree planting needed in Texas. J. H. Foster and H. B. Kraus. *il Tex Ag Coll B v* 3:1-32 Ja 10 '17
- Tree planting on highways near Rochester, N.Y. *Green's Fruit Grower* 36:2 Ja '16
- Tree planting with dynamite. J. M. Field. *Prog F* 31:9 Ja 1 '16
- Trees for Kansas. C: A. Scott. *il maps Kansas Ag Exp C* 55:1-19 '16

- Trees planted by new machine replace railway snow fences. H. Smith. *il plan Engineering News* (10th av. at 36th st., N.Y. 15c) 77:432-3 Mr 15 '17
- Turning a desert into fertile soil. R. H. Moulton. *il Am For* 23:549-50 S '17
- Use of large trees for planting. F. H. Ballou. *Rural N Y* 77:515 Ap 6 '18
- Wasting planting space. H. Haupt, jr. *Rural N Y* 75:398 Mr 4 '16
- Why plant fruit trees this fall? M. G. Kains. *Gard M* 28:81 O '18
- Why transplanted trees die. E. E. Miller. *Nat Stock & F* 41:1289 Mr 9 '18
- Windbreaks by the mile. T. A. Hoverstad. *il Minn Hort* 45:326-31 Ag '17
- Wrong way to plant trees in blasted holes. F. N. Supplee. *Green's Am Fruit Grower* 37:9 O '17

See also Forest planting; Fruit culture; Nursery stock; Roadside planting; Windbreaks

**Tree surgery. See Trees, Care of**

**Trees**

- Action of non-nitrogenous reserve substances in trees. E. Antevs. *Int R Sci & Prac Ag* 8,no 4:572-4 Ap '17
- Art of tree sculpture. *Gard Chron Am* 22:78 Mr '18
- Artists' trees and garden specimens. S. White. *il Country Life* 31:29 N '16
- Average growth of various species in different regions; table. *Farmers' B* 711:5-8 '16
- Battle along the timberline. E. Mills. *il Country Life* 31:25-8 D '16
- Beautifying the farm home. R. B. Cruickshank. *il Ohio Ag Ext B v* 12,no 7 26p '16-17
- Biggest trees; photographs. *Country Life* 29:32-3 Ap '16
- Care and companionship of trees. *Gard Chron Am* 21:241 Je '17
- Causes of tree form. *For Quar* 14:748-51 D '16
- Causes of tree form. *For Quar* 14:500-2 S '16
- Damage by spurs. J. L. Richards. *il Am For* 22:228-33 Ap '16
- Discussion of lawn trees. J. A. Smith. *Rural N Y* 75:190 F 5 '16
- Early spring-flowering trees and shrubs. E. H. Wilson. *il Gard M* 23:19-23 F '16
- Economic desirability of tree planting in grasslands. N. Spiridonov. *Int R Sci & Prac Ag* 7,no 9:1283-4 S '16
- Economic value of shade trees. W: W. Colton. *il Am For* 22:107-9 F '16
- Factors determining the occurrence of silver-leaf on trees. L. Petri. *Int R Sci & Prac Ag* 8,no 8:1196-7 Ag '17
- Food-producing trees. J. R. Smith. *il Am For* 23:223-33 Ap '17
- Freak of nature; lilia americana. *il Gard Chron Am* 22:46 F '18
- Growth of trees in sphagnum. G: B. Rigg. *Bot Gaz* 65:359-62 Ap '18
- Hardy ornamental fruiting trees and shrubs. J: Dunbar. *Gard Chron Am* 21:341-2 S '17
- How to tell the age of trees. *il Am For* 22:554 S '16; Same. *Field* 11:27:450 Je '17
- How trees grow in size. *For Quar* 14:325-6 Je '16
- Hybrid trees. W. H. Lamb. *il J Heredity* 7:311-19 Jl '16
- Indian medicines made from trees. H. Maxwell. *il Am For* 24:205-11 Ap '18
- Intermittent annual growth of woody plants. A. B. Stout. *il Scientific Am Sup* (233 Broadway, N.Y. 10c) 82:396-7 D 16 '16
- Interned hitching post. K. Huntington. *il Country Life* 33:102 D '17
- Killing off large trees. *Rural N Y* 76:1317 N 17 '17
- Laws of tall-tree growth investigated mathematically. R. D. Bohannan. *J For* 15:532-51 My '17
- Laws of tree growth. *For Quar* 14:114-17 Mr '16
- Malnutrition in trees. A. Smith. *Gard Chron Am* 20:399 S '16
- Mannan content of the gymnosperms. A. W. Schorger. *J For* 15:197-202 F '17
- Nation's wishing tree. *Am For* 22:493 Ag '16

## Trees—Continued

- New Chinese trees and shrubs for the Pacific slope and other favored regions. E. H. Wilson. *il Gard M* 22:197-200 Ja '16
- Notes on North American trees. C. S. Sargent. *Bot Gaz* 65:423-59; 66:229-58 My '18
- Oldest trees in the world. *il Literary Digest* (354 4th av., N. Y. 10c) 54:243-4 F '17
- Ornamental and shade trees. *il Am For* 22:360-1 Je '16
- Ornamental shade trees and their care. H. D. House. *il Am For* 23:414-18 Jl '17
- Penetration of foreign substances introduced into trees. W. H. Rankin. *Phyt* 7:5-13 F '17
- Quaint bit of sentiment. G. T. K. Norton. *il Am For* 23:668 N '17
- Renewing the shelterbelt; with combinations of species for planting. G. B. Macdonald. *la Ag Exp C* 27:1-16 '16
- Reproduction in trees. *Gard Chron Am* 20:152-3 Mr '16
- Selecting trees for shelter, shade and show. H. R. Francis. *il Am For* 24:41-5 Ja '18
- Shade trees; characteristics, adaptation, diseases and care. G. E. Stone. *il Mass Ag Exp B* 170:123-264 '16; Same. *R I Ag Bd* 143p n.d.
- Shade trees for home planting. W. N. Hutt. *Prog F* 33:1173 O 26 '18
- Shade trees that bear nuts. J. R. Smith. *il Country Gent* 81:44 Ja 8 '16
- Some historically interesting trees. *il Am For* 23:352 Je '17
- Some interesting trees of singular growth. *il Am For* 23:430 Jl '17
- Street and highway planting. B: Y. Morrison. (B. 4) 149p *il n.d. California State bd. of forestry, Sacramento*
- Trees and shrubs in modern gardening. *Am Flor* 47:390 S 9 '16
- Trees and soil sterility. *Gard Chron (Lond)* 63:56 F 9 '18
- Trees in medicine. J. Foote. *il Am For* 22:648-53 N '16; Same. *Scientific Am Sup* (233 Broadway, N. Y. 10c) 83:26-7 Ja 13 '17
- Trees in winter. *il J Ag (Quebec)* 21:135 Mr '18
- Trees in winter. B. Adams. *Am For* 23:32-3 Ja '17
- Trees, shrubs and plants for farm and home planting. C. P. Halligan. *il Mich Ag Exp B* 281:1-52 '18
- Trees—what, where, when and how to plant. C. H. Shattuck and I. W. Cook. *il map Idaho Ag Exp B* 105:1-66 '18
- Two kings among trees. W. Miller. *il Country Life* 30:64 My '16
- Tyloses: their occurrence and practical significance in some American woods. E. Gerry. *bibliog il J Ag Research* 1:445-70 Mr '14
- Use of trees. F. Steele. *il Country Life* 32:19-28 Ag '17
- What to plant and how to care for hardy plants, shrubs and trees. C: A. Green. *il Green's Fruit Grower* 37:1 Ja '17
- Wonders of a tree. J. S. Underwood. *Green's Fruit Grower* 36:30 Ja '16
- See also* Bark as food; Forest ecology; Forest planting; Forest products; Forests and forestry; Fruit; Fruit culture; Fruit trees; Grafting; Greenheart; Hedges; Landscape gardening; Lumber; Lumbering; Nurseries (horticulture); Nuts; Pruning; Shrubs; Timber; Tree planting; Windbreaks; Wood; also Arnold arboretum; also names of trees, e.g. Acacias, Alder, Almond, Ash, Aspen, Avocado trees, Birch, Boxwood, Carob, Catalpa, Cedar, Cherry trees, Chinese wood-oil trees, Christmas trees, Cinchona, Cinnamon trees, Citrus trifoliata, Conifers, Cypress, Cyrtandra, Deodar, Dogwood, Douglas fir, Elm, Evergreens, Fir, Ginkgo, Gum arabic trees, Hazel-nut, Hemlock, Hickory, Horse chestnut, Huisache, Juniper, Kokio, Larch, Lignum nephriticum, Lignum vitae, Ligustrum lucidum, Linden, Locust trees, Magnolia, Mahogany, Manzanillo, Maple, Nettle trees, Nolana loderi, Oak, Ohio lehua, Oleasters, Palm, Palmetto, Para rubber trees, Pecan, Pine, Piñon, Plane trees, Plum trees, Pop-

lar, Princess trees, Redwood, Saman, Sandalwood, Sequoia, Silver bell trees, Soapberry trees, Spruce, Strychnos, Sugar palm, Sycamore, Tamarisk, Teak, Tulip poplar, Viburnums, Walnut, Willow, Yew

## Bibliography

- Shade trees and gardening. 10p '17 Detroit public library, Detroit, Mich.
- Diseases and pests**
- Basic problems in forest pathology. E. P. Meinecke. *J For* 15:215-24 F '17
- Biology of the alder flea-beetle. W. C. Woods. *bibliog il Maine Ag Exp B* 265:249-84 '17; Same. *Maine Ag Exp Rep* 1917:249-84
- Black zones formed by wood-destroying fungi. A. S. Rhoads. *(Syracuse Univ. Pub. 17, no. 28:61 '17).* *Exp Sta Record* 38, no 6:555 '18
- Commercial fruit growing. *Country Gent* 82:1326 Ag 25 '17
- Damage to fruit trees from mice. G. T. Powell. *Rural N Y* 76:514 Ap 7 '17
- Disease control and forest management. F. H. Millen. *J For* 15:974-7 D '17
- Diseases of forest and shade trees. D. C. Babcock. *il Ohio Ag Exp B v* 1:291-6, 333-90 O-N '16
- Do ants kill trees about their colonies? R. C. Hawley and S. J. Record. *il Am For* 22:685-6 N '16
- Endothia parasitica and related species. C. L. Shear and others. *bibliog il maps U S Ag B* 380:1-82 '17
- Flat-headed borers affecting forest trees in the United States. H. E. Burke. *U S Ag B* 437:1-8 '17 (10c Supt. of doc.)
- Forest biology. P. S. Lovejoy. *J For* 15:203-14 F '17
- Forest disease surveys. J. R. Weir and E. E. Hubert. *il map U S Ag B* 658:1-23 '18
- Forest insect investigation in Stanley park, Vancouver, British Columbia. R. N. Chrystal. *il Ag Gaz of Canada* 3:794-8 S '16
- Forest-insect problem in Stanley park. R. N. Chrystal. (*In Pro.*, *Entom. Soc. of British Columbia*, 1916, p. 63-6) *il '16*
- Forest longicorn beetles and their parasites. W. W. Froggatt. *il Ag Gaz of New South Wales* 27:561-7 Ag '16
- Forest pathology in forest regulation. E. P. Meinecke. *U S Ag B* 275:1-62 '16
- Fungus diseases of trees. R. B. Maxwell. *il Am For* 22:161-3 Mr '16
- Identity of peridermium fusiforme with peridermium cerebrum. G. G. Hedgcock and W. H. Long. *il J Ag Research* 2:247-50 Je '14
- Insect enemies of trees and how to combat them. E. P. Felt. *Country Life* 29:70+ Mr '16
- Investigations of the rotting of slash in Arkansas. W. H. Long. *U S Ag B* 496:1-14 '17
- Lightning injury to citrus trees in Florida. H. E. Stevens. *il Phyt* 8:283-5 Je '18
- Manual of dangerous insects likely to be introduced in the United States through importations. W. D. Pierce. 256p *il '18 U S Ag Montana forest tree fungi—polyporaceae.* J. R. Weir. *il Mycol* 9:129-37 My '17
- Notes on forest tree rusts. J. R. Weir and E. E. Hubert. *Phyt* 8:114-18 Mr '18
- Notes on the altitudinal range of forest fungi. J. R. Weir. *Mycol* 10:4-14 Ja '18
- Notes on the overwintering of forest tree rusts. J. R. Weir and E. E. Hubert. *Phyt* 8:55-9 F '18
- Notes on wood-destroying fungi which grow on both coniferous and deciduous trees. J. R. Weir. *Phyt* 7:379-80 O '17
- Observations on forest tree rusts. J. R. Weir and E. E. Hubert. *il Am J Bot* 4:327-35 Je '17
- Observations on rhizina inflata. J. R. Weir. *bibliog il J Ag Research* 4:93-6 Ap '15
- On the mycorrhizas of forest trees. W. B. McDougall. *bibliog il Am J Bot* 1:51-74 F '14
- Orchard winter injuries. J. E. Richardson, jr. *il Fruit-Grower* 27:277 My 1 '16
- Overpruning and its relation to sunscald. C. O. Ormsbee. *Fruit-Grower* 28:279 Je 1 '17
- Oyster-shell scale and the scurfy scale. A. L. Quaintance and E. R. Sasser. *bibliog il Farmers' B* 723:1-16 '16



**Trees—Diseases and pests—Continued**

- Pack rat as an enemy of natural reproduction on the Angeles national forest. E: N. Munns. J For 15:417-23 Ap '17
- Perennial mycelium of gymnosporangium bladdaleanum. J. S. Boyce. Phyt 8:161-2 Ap '18
- Peril of our shade trees. E. P. Felt. il Country Life 29:42-3 Mr '16
- Poisoning tree parasites with cyanide of potassium. M. M. Metcalf. Science (Science Press, Garrison, N. Y. 15c) n s 47:344 Ap 5 '18
- Protect trees from rodents. J. S. Underwood. Green's Fruit Grower 36:3 N '16
- Protecting trees from mice. C. B. Sprague. Better Fruit 11:17 N '16
- Protecting trees from rabbits. J. Smith. Fruit-Grower 28:283 Je 1 '17
- Protecting trees from rabbits, etc. H. Clarke. Gard M 22:232 Ja '16
- Protection of trees from rodents. F. H. Ballou. il Ohio F 138:565 D 9 '16
- Pycnial stages of important forest tree rusts. J. R. Weir and E. E. Hubert. il Phyt 7: 135-9 Ap '17
- Recent cultures of forest tree rusts. J. R. Weir and E. E. Hubert. Phyt 7:106-9 Ap '17
- Recent troubles with our forest trees. F. W. Rane. Mass Hort Soc Trans 1917, pt 1:57-69 '17
- Rodent injury to trees. W. W. Magill. il Purdue Ag 12:78 N '17
- Safety first in tree planting. P. Spaulding and C. Hartley. il map Am For 22:664-8 N '16
- Scolytid beetles observed in Oregon. W. J. Chamberlin. Int R Sci & Prac Ag 9,no 1: 121-3 Ja '18
- Shade tree and forest insects in Manitoba. J. M. Swaine. Ag Gaz of Canada 4:755-62 S '17
- Shade trees, characteristics, adaptation, diseases and care. G: E. Stone. il Mass Ag Exp B 170:188-208 '16; Same. R I Ag Bd p 70-90 n.d.
- Significance of mycorrhizae in the life of trees. E. R. Hodson. Soc Am For Pro 11: 353-5 Jl '16
- Silver leaf disease. Gard Chron (Lond) 59: 316 Je 10 '16
- Some features of interest in connection with our studies of forest and shade tree insects. J. M. Swaine. (In Report, Entomological soc. of Ontario, 1916, p. 95-106) il '17 Ontario ag. dept., Toronto
- Some important tree caterpillars. W. A. Radspinner. Purdue Ag 12:566 Je '18
- Some new or little known hosts for wood-destroying fungi. A. S. Rhoads. Phyt 7:46-8; 8:164-7 F '17, Ap '18
- Spray protection from mice. M. A. Blake. Rural N Y 76:981 Ag 18 '17
- Spruce cones with queer seeds. E. M. Patch. il Country Life 34:78 S '18
- Studies on the relation of forest insects and other factors to forest regeneration. J. M. Swaine. Ag Gaz of Canada 5:860-1 S '18
- Three undescribed heart-rots of hardwood trees, especially of oak. W. H. Long. il J Ag Research 1:109-28 N '13
- Tree crickets as carriers of leptosphaeria coniothrium (Fckl.) Sacc. and other fungi. W. O. Gloyer and E. B. Fulton. bibliog il N Y State Ag Exp Tech B 50:1-22 '16
- Tussock moth and other important shade tree insects. E. M. Schlack. Ill State Hort Soc Trans 1917:248-56 '18
- Two new forest tree rusts from the Northwest. H. S. Jackson. Phyt 7:352-5 O '17
- While we prune the orchard. E. M. Patch. il Gard M 28:108-10 N '18
- Widely-spread silver-leaf disease of plums, cherries and kindred fruits. P. S. Hayward. Gard Chron (Lond) 64:148 O 12 '18
- See also Fruit—Diseases and pests; Insects, Injurious and beneficial; Oak—Diseases and pests; Spraying and dusting; Spruce—Diseases and pests; also names of diseases and pests, e.g. Bagworms, Cam-bium miners, Canker worms, Cottony maple scale, Eight-spotted foresters (insects), Leaf rollers, Leaf weevils, Leopard moths,

Membracidae, Pine blister rust, Porcupines, Promethea moth, Tent caterpillars, Twig blight, White-marked tussock moths

**Killing**

See Trees, Killing of

**Laws**

County forestry laws; California. (In Street and highway planting, p. 110-40) n.d. California State bd. of forestry, Sacramento

**Nomenclature**

English names of some trees. W. W. Ashe. Soc Am For Pro 11:233-9 Ap '16

**Ringing**

See Trees, Ringing of

**Roots**

Growth of forest tree roots. W. B. McDou-gall. bibliog Am J Bot 3:384-92 Jl '16

Law as to encroaching tree-roots. Gard Chron (Lond) 59:6 Ja 1 '16

Pruning fruit tree roots. Scientific Am Sup (233 Broadway, N.Y. 10c) 84:379 D 15 '17

Where tree roots go to. A. C. Weed. Rural N Y 76:641 My 5 '17

**Seeds**

Care and treatment of tree seed. Rural N Y 77:1259, 1286 N 9-16 '18

Choosing the best tree seeds; the influence of parental character and environment upon the progeny of Douglas fir. C: J. Krabel. il J Heredity 8:483-92 N '17

Collecting tree seeds. A. D. Webster. Gard Chron (Lond) 63:85-6 Mr 2 '18

Ecological investigations upon the germination and early growth of forest trees. R: H. Boerker. bibliog il University Studies (Ne-braska Univ., Lincoln) v 16,nos 1, 2:1-89 Ja-Apr '16

Effect of depth of covering seed upon the germination and quality of stock. S. B. Show. J For 15:619-23 My '17

Forest tree nurseries for private estates. A. Smith. Gard Chron Am 22:271-2 N '18

Importance of source of seed in forestation. N. B. Eckbo. Soc Am For Pro 11:240-3 Ap '16

Investigation of tree seeds in relation to the place of origin of the parent trees and their descent; and experiments on the preservation of the principal forest tree seeds. H. Shirasawa. Int R Sci & Prac Ag 7,no 6:841 Je '16

Natural reproduction from seed stored in the forest floor. J. V. Hofmann. bibliog il J Ag Research 11:1-26 O 1 '17; Abstract. J For 15:974-7 D '17

Relation of germination in the greenhouse and nursery. S. B. Show. J For 16:319-28 Mr '18

Relation of stimuli to the cone production of, western hemlock. R. Watson. J For 16:168-75 F '18

Report of Cloquet forest experiment station. W. H. Kenety. il Minn Ag Exp B 169: 11-34 '17

Testing of forest seeds. J. W. Toumey. Soc Am For Proc 11:91-3 Ja '16

Tree and shrub seeds. Gard Chron Am 20:315 Jl '16

Use and chemical composition of the seeds of hydnocarpus venenata, h. alcalae, and pangium edule. C. H. Brill. Int R Sci & Prac Ag 8,no 12:1230-3 D '17

**Study and teaching**

Studies of leaf and tree. R. W. Shufeldt. il Am For 24:29-35, 95-102, 151-9 Ja-Mr '18

\* Study of shade trees for grades seven and eight. F. Ragland. il Nature Study R (Ith-aca, N.Y. 15c) 14:110-20 Mr '18

Teaching dendrology in the Hawaiian Islands. V. MacCaughy. For Quar 14:46-9 Mr '16

**Translocation**

See Translocation

## Trees—Continued

**Australia**

- Forestry handbook, pt 2. Some of the principal commercial trees of New South Wales. J. H. Maiden. 224p il '17 Forestry commr. 25 O'Connell st, Sydney, New South Wales  
Contents; Phases of forestry; Classification; Trees described in forest flora of New South Wales and the critical revision of the genus eucalyptus; Grouping of the timbers dealt with; Eucalyptus, including Ironbarks, Red gum series, Anomalous group, Stringybarks, Blackbutt series, Pale boxes, Myrtles; Wattles (Acacia); Cedar group; Pines; Silky oaks; She oaks; Teak group; Miscellaneous  
Notes on the principal timbers of Queensland. (Forestry B. 2) 20p '17 Queensland Dept. of public lands, Brisbane  
Structure and identification of Queensland woods. N. W. Jolly. (Forestry B. 1) 14p il '17 Queensland Dept. of public lands, Brisbane  
Silvicultural notes on forest trees of Queensland. (Forestry B. 3) 27p il '17 Queensland Dept. of public lands, Brisbane

**Bohemia**

- Influence of the perennial lupin on the development of forest trees:—trials in Bohemia. N. Nawratil. Int R Sci & Prac Ag 8,no 7:1008-9 Jl '17

**California**

- Californian arboretum. D. H. Campbell. il Scientific Monthly (Science Press, Garrison, N.Y. 30c) 4:289-300 Ap '17  
Landscape improvement of rural school grounds; with supplementary lists of ornamental plants. J. W. Gregg and others. (B. 20) 52p il plans '17 Cal. State bd. of educ., Sacramento

**Canada**

- Forest trees of Canada. R. G. Lewis. Int R Sci & Prac Ag 7,no 9:1234-41 S '16

**China**

- China's trees and ours strikingly alike. il J Heredity 9:272-81 O '18

**Colorado**

- Trees for non-irrigated regions in eastern Colorado. W. J. Morrill. il Colo Ag Ext B 123:1-20 '17

**England**

- Need for reafforestation discussed by Royal English arboricultural society. Gard Chron (Lond) 64:122 S 21 '18  
Trees at Tortworth court. H. J. Elwes. Gard Chron (Lond) 62:115 S 22 '17

**Georgia**

- Georgia forest trees. 68p il 25c '17 Ga. State forest school, Athens

**Hawaiian Islands**

- Economic woods of Hawaii. V. MacCaughey. For Quar 14:696-716 D '16  
Hawaiian lehua. V. MacCaughey. il Am For 24:409-18 Jl '18

**Idaho**

- Forest and shade trees and basket willows recommended for planting in Idaho. C. H. Shattuck. Idaho Ag Exp C 4:1-4 '17  
Tested forest trees for planting in Idaho. F. G. Miller. Idaho Ag Exp C 5 4p '18

**India**

- Adamsonia digitata in India. T. W. Briscoe. il Gard Chron (Lond) 62:22 Jl 21 '17  
Some observations on the occurrence of infertility under trees. Jatindra Nath Sen. il Ag J of India 12:390-405 Jl '17

**Indiana**

- Native trees found on the state forest reserve. (In 16th annual report, p. 102-213) il '16 Ind. State bd. of forestry, Indianapolis

**Iowa**

- Tree growth in the vicinity of Grinnell, Iowa. H. S. Conrad. J For 16:100-6 Ja '18

**Kansas**

- Trees for Kansas. C. A. Scott. il maps Kansas Ag Exp C 55:1-19 '16

**Kentucky**

- Check list of the trees in Kentucky. (In Biennial report, 1917, p. 31-4) Ky. State forester, Frankfort

**Maine**

- Forest trees of Maine and how to know them. 72p il '17 Maine forestry dept., Augusta  
Shade trees, hardy shrubs, roses, perennials and other ornamental plants recommended for Maine. C. L. Wilkins and S. H. Eaton. il Maine Ag Dept B v 15:13-21 S '16

**Massachusetts**

- Commercial forest trees of Massachusetts: how you may know them; a pocket manual. D. A. Clarke. 4th ed 66p il '16 Massachusetts state forester, Boston

**Minnesota**

- Fruits, trees, and shrubs recommended for northern Minnesota. T. M. McCall. Minn Ag Exp Rep (Crookston ser., v. 10, no. 1, p. 88-91) '17

**New England**

- Studies in tolerance of New England forest trees; discontinuous light in forests. G. P. Burns bibliog il Vt Ag Exp B 193:1-23 '16; Same. (In Vt Ag Exp Report, 1915-1916) '16

**New Jersey**

- 13th annual report 1916. 66p il Shade tree comm., Newark, N.J.  
Two famous trees of New Jersey. A. Gaskill. il Am For 24:356 Je '18

**New York**

- Trees of Flushing. C. H. Murch. il Country Life 33:88 N '17

**New Zealand**

- Tree-planting for farmers. W. H. Taylor. J Ag New Zealand 14:378-88 My '17

**North Carolina**

- Roadside trees in North Carolina. J. S. Holmes. Good Roads (150 Nassau st, N.Y. 10c) n s 15:190+ Ap 6 '18

**North Dakota**

- North Dakota farmstead; list and description of trees. H. O. Werner. il N D Ag Exp C 10:3-20 '16

**Panama**

- Our present knowledge of the forest formations of the isthmus of Panama. H. Pittier. J For 16:76-84 Ja '18

**Philippine Islands**

- Commercial woods of the Philippines: their preparation and uses. E. E. Schneider. (B. 14) 274p il '16 Philippine Islands bur. of forestry, Manila

**Porto Rico**

- Forests of Porto Rico. L. S. Murphy. bibliog il map U S Ag B 354:56-97 '16

**United States**

- Advice to forest planters in the plains region. S. D. Smith. Farmers' B 883:1-23 '17  
China's trees and ours strikingly alike. il J Heredity 9:272-81 O '18  
Distinctive American plants. E. H. Costich. il Gard Chron Am 21:141-2 Ap '17  
Largest and best shade trees in the United States. Gard M 24:118b N '16  
Southern trees. J. S. Holmes. Prog F 31:880 Jl 15 '16  
Tree growth and climate in the United States. K. W. Woodward. J For 15:521-31 My '17



Trees—Continued

Vermont

Trees of Vermont (descriptions, with glossary and index). G. P. Burns and C. H. Otis. *il* Vt Ag Exp B 194:1-244 '16; Same. (*In* Vt Ag Exp Report, 1915-1916) '16  
A revision of bulletin 73 of the Vermont agricultural experiment station, issued in 1899, and of bulletin 16, vol. XIV, n. s., of the University of Michigan, issued in 1913

Virginia

Farm forestry in Virginia. R: C. Jones. (B. 12) 60p bibliog '17 Va. State forester, Univ. of Va., Charlottesville

Wisconsin

Trees and shrubs recommended. *Wis Hort Soc* Rep 48:10-14 '18

Trees (in cities)

- \* Cleveland's shade tree ordinance. A. D. Taylor. plan Am City (Tribune bldg, N. Y. 35c) 19:130-1 Ag '18
  - Community spirit saved the trees. G. T. K. Norton. *il* Am For 23:292 My '17
  - Efficiency in city forestry. J. H. Rich. Am City (Tribune bldg., N.Y. 35c) 17:269 S '17
  - Four centuries of trees in Newark. n. p. *il* '17
  - Shade tree comm., Newark, N.J.
  - Interesting London trees. A. D. Webster. *Gard Chron* (Lond) 64:203 N 23 '18
  - Know your city trees. 19p *il* '16 Shade tree comm., Newark, N. J.
  - London trees. A. D. Webster. *Gard Chron* (Lond) 63:251 Je 22 '18
  - Municipal planting of shade trees. *il* Am For 22:419-20 Jl '16
  - Preserved by pruning. A. T. Hastings, jr. *il* Am City (Tribune bldg., N.Y. 35c) 16:373-4 Ap '17
  - Selecting trees for planting. *il* Am For 22: 543-4 S '16
  - Street and park trees for Wisconsin communities. M. A. Castle. (B. 2) 54p bibliog *il* '16 Wis. conservation comm., Madison
  - Street tree system for New York city. *il* map N Y State Coll For B v 16, no 8:1-89 '16
  - Street trees for New York city. *Gard Chron* Am 20:31 Ja '16
  - Tree census. A. O. Smith. Am For 22:622-3 O '16
  - \* Tree planting in city streets. *il* House Beautiful (41 Mt Vernon st, Boston 25c) 44:262 O '18
  - Tree planting in city streets. L: U. Strassburger. *il* House Beautiful (41 Mt. Vernon st, Boston 25c) 41:224-5 Mr '17
- See also Tree planting, Municipal

Trees, Care of

- Banking the young trees. R. E. Rogers. *il* Ohio F 138:622 D 23 '16
- Bracing a crotch. *il* Purdue Ag 11:44 F '17
- Bridge grafting wounded trees. H. Findlay. *il* Country Gent 82:1842 N 24 '17
- Care of winter-injured trees. *Better Fruit* 10: 18 Je '16
- Care of young trees. W: Hotaling. *il* N Y Ag Dept B 79, pt 1:816-23 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:816-23 '17
- Doctoring winter-injured trees. F. C. Sears. *il* Country Gent 83:9 Ap 27 '18
- Effect of various dressings on pruning wounds of fruit trees (B. 396). G. H. Howe. N Y State Ag Exp Rep 1915:506-17 '16
- First aid to wounded trees. J. J. Levison. Scientific Am Sup (233 Broadway, N.Y. 10c) 83:331 My 26 '17
- Gas tar—wound dressing for fruit trees. C. B. Savage. *il* Rural N Y 75:367 Mr 4 '16
- Guard and grating for trees on Albany business streets. plan Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:17 Ja 2 '18
- How far to go in cavity filling. J. J. Levison. *il* Am For 23:100-1 F '17
- Improved form of nursery seed bed frame. D. B. Brewster. *For Quar* 14:183-7 Je '16
- Intricacies of tree surgery. *il* Gard Chron Am 20:240-1 My '16
- Making of a tree surgeon. M. L. Davey. *Gard Chron* Am 21:303 Ag '17

- Paint large pruning cuts. J. B. Hundley. *Better Fruit* 11:14 Jl '16
- Painting tree wounds. H. G. Cook. *Country Gent* 81:988 My 6 '16
- Peril of our shade trees. E. P. Felt. *il* Country Life 29:42-3 Mr '16
- Physical injuries to trees. B. D. Van Buren. N Y Ag Dept B 79, pt 1:967-8 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:967-8 '17
- Planting time and care of trees. *Gard Chron* Am 20:402 S '16
- Preventing wood rot in pecan trees. S. M. McMurran. *il* Farmers' B 995:1-8 '18
- Protect trees from rodents. E. L. Kirkpatrick. *Ohio F* 149:534 D 8 '17
- Protecting trees against animals. M. G. Kains. *il* Gard M 25:52 F '17
- Protection of fruit trees from mice. J Ag (Quebec) 21:101 Ja '18
- Pruning shade trees. H. F. Major. *il* Mo Ag Exp C 81:1-6 '16
- Reinforcing trees. H. J. Neale. *il* Am For 22: 42-3 Ja '16
- Renovating old orchards. F. C. Sears. *il* Mass Ag Bd B 2 (5th ed):80-90 '16
- Repairing damages in the orchard. W. S. Teator. *il* Rural N Y 77:318 Mr 2 '18
- Repairing trees on the home grounds. *il* Country Gent 81:2082 D 2 '16
- Resurrection of devastated France; fruit trees saved by surgery. *Current History Magazine*, N Y Times (Times Square, N.Y. 25c) 6, pt 2:347-50 Ag '17
- Saving the broken limbs. H. Findlay. *il* Country Gent 82:160 Ja 27 '17
- Saving the girdled fruit trees. W. C. Gillespie. *il* Pa Ag Ext C 54:1-8 '17
- Shade tree guide. A. Gaskill. 22p *il* '18 N. J. Bd. of conservation and development, Trenton
- Shade trees; characteristics, adaptation, diseases and care. G: E. Stone. *il* Mass Ag Exp B 170:159-88 '16; Same. R I Ag Bd p 41-70 n.d.
- Simple methods of preventing and treating injured bark. J. J. Levison. *il* Am For 22: 741-2 D '16
- Straightening crooked trees. *Gard Chron* Am 21:279 Jl '17
- Sun-scald of fruit trees a type of winter injury. A. J. Mix. bibliog *il* Cornell Ag Exp B 382:237-84 '16
- Surgery for injured trees. J. J. Levison. *il* Scientific Am Sup (233 Broadway, N.Y. 10c) 83:376 My 5 '17
- Taking care of shade trees. *il* Am For 22: 485-6 Ag '16
- To insure welfare of newly planted shrubs and trees. C: A. Green. *Green's Fruit Grower* 37:1 Je '17
- Tree faker. H. W. Merkel. *il* Am For 22:294-6 My '16
- Tree surgery. *il* Rural N Y 76:934 Ag 4 '17
- Tree surgery a patented device. *Gard Chron* Am 20:75 F '16
- Tree surgery—good and bad. H. D. House. *il* Country Life 32:28-32 Ag '17
- Tree surgery investigated. M. C. Ebel. *Gard Chron* Am 21:163-6 Ap '17
- What about tree surgery? J. H. McFarland. *il* Am For 23:531-5 S '17
- What we can do for our trees in winter. J. J. Levison. Am For 22:680 N '16
- Winter in the orchard. C. C. Wiggins. *il* Country Gent 83:22 N 2 '18
- Winter protection for your fruit trees. M. D. Underwood. Am Fruit Grower 38:21 D '18
- Wood decay and copper screen. *Country Gent* 82:254 F 10 '17
- Woods are calling. B. Adams. Am For 22:359 Je '16

Trees, Dwarf

- Dwarf trees. A. A. Hansen. *il* Country Gent 82:139 Ja 27 '17
  - Japanese dwarf trees. J. H. Sperry. *Country Gent* 81:1766 S 30 '16
  - Making of Japanese dwarf trees. C. Elliott. *Gard Chron* (Lond) 62:11 Jl 14 '17
  - Natural dwarfing. A. A. Hansen. *il* J Heredity 8:160-2 Ap '17
- See also Fruit trees, Dwarf

**Trees, Effect of climate on**

Climatic records in the trunks of trees. A. E. Douglass. *il Am For* 23:732-5 D '17  
Density of stand and rate of growth of Arizona yellow pine as influenced by climatic conditions. F. Shreve. *J For* 15:695-707 O '17

**Trees, Effect of frost on**

Relative frost resistance of eucalyptus in southern California. E. N. Munns. *J For* 16:412-28 Ap '18

**Trees, Effect of light on**

Leaf-structure as related to environment. H. C. Hanson. *bibliog il Am J Bot* 4:533-60 N '17  
Problems in light as a factor of forest growth. R. Zon. *J For* 15:225-32 F '17  
Role of light in natural and artificial reforestation. C. G. Bates. *J For* 15:233-9 F '17  
Studies in tolerance of New England forest trees. G. P. Burns. *bibliog il Vt Ag Exp B* 193:1-23 '16; Same. (*In Vt Ag Exp Report*, 1915-1916) '16

**Trees, Effect of temperature on**

\* Coefficient of expansion of living tree trunks. C. C. Trowbridge and M. Weil. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:348-59 O 4 '18  
Influence of low temperature on fruit growing in New York state; with discussion. W. H. Chandler. *N Y State Fruit Growers' Assn Pro* 1918:186-94

**Trees, Fossil**

Early type of the abietineae (?) from the cretaceous of New Zealand. M. C. Stopes. *bibliog il Ann Bot* 30:111-25 Ja '16  
Fossil wood of sequoia from the tertiary of Japan. Kono Yasui. *il Ann Bot* 31:101-6 Ja '17  
Wood older than the hills. A. Koehler. *il Am For* 22:92-3 F '16

**Trees, Killing of**

Poisoning green timber with sodium arsenite. C. W. Burrows. *Ag Gaz of New South Wales* 29:113-14 F '18

**Trees, Measurement of. See Forest mensuration****Trees, Planting of. See Tree planting****Trees, Ringing of**

Effect of ringing on the transfer of materials in cornus controversa. S. Hibino (J. Col; Sci. Imp. Univ. Tokyo. 39, Art. 5 40p. '17). *Exp Sta Record* 38:128 F '18  
Further observations on the effects of pruning, root pruning, ringing and stripping on the formation of fruit buds on dwarf apple trees. A. W. Drinkard, jr. *il Va Ag Exp Tech B* 17:137-46 '17; Same. *Va Ag Exp Rep* 1915-1916:137-46 '17  
Studies on methods of protecting ringing wounds on apple trees to promote their healing. A. W. Drinkard, jr. and A. A. Ingham. *il Va Ag Exp Tech B* 17:147-60 '17; Same. *Va Ag Exp Rep* 1915-1916:147-60 '17

**Trees, Tropical. See Tropical plants****Trellises**

Space-saving device for fruit. G. Brown. *Gard M* 23:320 Je '16

**Trematodes**

Studies on North American polystomidae, aspidogastriidae, and paramphistomidae. H. W. Stunkard. (Ill. biol. monographs, v. 3, no. 3) 114p *bibliog il (Ja)* '17 Univ. of Illinois, Urbana

See also Flukes

**Trembles. See Forage poisoning****Tremex columba. See Pigeon tremex****Trenching machinery. See Excavating machinery****Trenton Interstate fair**

Interstate fair at Trenton, N.J., 1916. *Breeder's Gaz* 70:606 O 5 '16  
Quality wins at Trenton. *il Field* 11 28:830-1+ N '18  
Strong Berkshire classes at Trenton. F. C. Minkler. *il Field* 11 26:939 N '16  
Trenton inter-state fair. H. G. Gulliver. *il Field* 11 27:864-5+ N '17  
Trenton, N.J., show, 1917. *Breeder's Gaz* 72:558 O 4 '17

**Treponema pallidum. See Syphilis****Trespassing**

Another fight with trespassers. G. W. Davis. *Rural N Y* 76:1393 D 8 '17  
Billings beats the Bolsheviks; story. L. A. Knight. *il Country Gent* 83:1+ S 28 '18  
Can this be in America. *Rural N Y* 76:1333 N 17 '17  
Farmer and the hunter. *Rural N Y* 75:1362 O 28 '16  
No trespassing. G. Wood. *il Country Life* 31:118 Ap '17  
No trespassing; why the farmer has a legitimate kick against hunters. W. H. Dean. *il Country Gent* 82:1681 N 3 '17  
Trespass signs and farm protection. *Rural N Y* 76:1126 S 29 '17

**Laws**

Inclosures and trespasses. *W Va Ag Dept B* 32:1-5 '17

**Treubia insignis. See Liverworts****Tri-state country grain shippers' association**

1st annual convention, Minneapolis, July 9. *Coop Manager & F* 7:40-4 Ag '18

**Tri-state fair. See Memphis tri-state fair****Tri-state milk commission. See Governors' tri-state milk commission****Tri-state wool growers' association**

Annual meeting, Wheeling, W.Va., Feb. 14-15. *Nat Stock & F* 41:1198 F 23 '18; *Ohio F* 141:331 Mr 2 '18  
Annual meeting, Wheeling, W. Va., Feb. 14-15, 1917. B. O. Severson. *Am Sheep B & W* 37:137 Mr '17  
Convention, Wheeling, W. Va., Feb. 14-15, 1917. *Nat Stock & F* 40:1292 F 24 '17  
Wool growers' conference to discuss fixing of prices on wool. C. S. Plumb. *Ohio F* 141:698 My 25 '18

**Trials, Field. See Field experiments****Tricalcium phosphate**

Effect of nitrifying bacteria on the solubility of tricalcium phosphate. W. P. Kelley. *J Ag Research* 12:671-83 Mr 11 '18

**Trichina and trichinosis**

Effects of refrigeration upon the larvæ of trichinella spiralis. B. H. Ransom. *bibliog J Ag Research* 5:819-54 Ja 31 '16  
Experiments in the transmission of trichinae. H. B. Raffensperger. *bibliog Am Vet M Assn J* 53:363-7 Je '18

**Trillium**

Notes on the Californian species of trillium L.; a report of the general results of field and garden studies, 1911-1916. T. H. Goodspeed and R. P. Brandt. *Cal Univ Pub Botany v 7*, no 1 1-24p, 1-4pl '16 (25c)  
Notes on the Californian species of trillium L.; seasonal changes in trillium species with special reference to the reproductive tissues. R. P. Brandt. *bibliog Cal Univ Pub Botany v 7*, no 3 39-68p, 7-10pl '16 (30c)  
Notes on the Californian species of trillium L.; teratological variations of trillium sessile var. giganteum H. & A. T. H. Goodspeed. *bibliog Cal Univ Pub Botany v 7*, no 4 69-100p, 11-17pl '17 (30c)  
Notes on the Californian species of trillium L.; the nature and occurrence of undeveloped flowers. T. H. Goodspeed and R. P. Brandt. *il Cal Univ Pub Botany v 7*, no 2 25-38p, 5-6pl '16 (15c)  
Study of the life history of trillium cernuum L. M. Heatley. *il Bot Gaz* 61:425-9 My '16

**Tripe**

Save the tripe. M. H. Talbott. *Country Gent* 81:1740 S 23 '16

**Triphleps insidiosus**

Triphleps insidiosus as the probable transmitter of corn-ear rot. J. A. Hyslop. *J Econ Entom* 9:435-8 Ag '16

**Tripod tables. See Tables****Tritoma. See Torch-lilies****Troop, James**

Sketch. M. L. Fisher. *Purdue Ag* 10:18 Ap '16



**Tropical fruit**

- New or noteworthy tropical fruits in the Philippines. P. T. Wester. *il Philippine Ag R 10*, no 1:8-23 '17  
Subtropical cookery. K. S. Lawson. *Country Gent* 81:955 Ap 29 '16  
Subtropical fruits for California. D: L. Crawford. *Cal State Comm Hort B v* 5:20-4 Ja '16

*See also* Bananas; Breadfruit; Litchi; Mangoes; Papayas; Passion fruit; Pine-apple guava; Pineapples; Plantain; Sapote, White; Surinam cherries

**Tropical plants**

- Periodicity in tropical trees. W: Crocker. *Bot Gaz* 62:244-5 S '16  
Systematic investigations of tropical American plants. (Contributions from the U.S. Nat. herbarium v. 18) 7pts '14-'17 U.S. National museum, Washington, D.C.; Supt. of doc. (for prices see note)

Includes: pt 1, Classification of the genus annona with descriptions of new and imperfectly known species, by W. E. Safford 45c; pt 2, New or noteworthy plants from Colombia and Central America, by H: Pittier 20c; pt 3, Studies of tropical American phanerograms, by P. C. Standley. 10c; pt 4, New or noteworthy plants from Colombia and Central America, by H: Pittier 25c; pt 5, Preliminary revision of the genus inga, by H: Pittier 25c; pt 6, New or noteworthy plants from Colombia and Central America, by H: Pittier 10c; pt 6, Grasses of the West Indies, by A. S. Hitchcock and A. Chase 30c

- Tropical plants. W. T. Ross. (*In Report*, Horticultural societies of Ontario, 1917, p. 63-7) '18 Ontario ag. dept., Toronto

*See also* Cyrtandra

**Tropics.** *See* Tropical fruits; Tropical plants; also subhead Tropical zone under Agriculture and Forests and forestry

**Trotting.** *See* Horse racing

- Trouble maker; story. H. Richmond. *O Judd Farmer* 64:560 My 25 '18

**Troughs, Watering.** *See* Drinking troughs

**Trout**

- Food of the rainbow trout in alpine lakes. *Int R Sci & Prac Ag* 7,no 4:561-3 Ap '16  
Golden days with the brown trout. W. H. Miller. *il Country Life* 34:68-9 Je '18  
Interview with a successful trout. R. T. Morris. *il Country Life* 32:53-5 My '17  
Last day of the season. G: M. Johnson. *Country Life* 32:122 My '17  
Modern fishing for trout. L. Plumley. *Country Life* 32:144 My '17  
Trout-farm and its curious processes. *il Current Opinion* (63 W. 36th st., N.Y. 25c) 62: 134-5 F '17  
Trout farming. H. V. Davis. *il Country Gent* 81:128-9 Ja 15 '16  
Trouty vagaries. L. Plumley. *Country Life* 29:82 F '16

**Truck farming**

- Brussels sprouts from the gulf coast. J. W. Wilkinson. *il Country Gent* 82:1838 N 24 '17  
Business truck farm; exact costs and returns. C. E. Brehm. *il Country Gent* 81: 1182-3 Je 10 '16  
Development and localization of truck crops in the United States. F. J. Blair. maps U S Ag Yearbook 1916:435-65; Same. Separate 702  
Fertilizer facts for truck gardeners. J. W. Henceroth. *Am Fert* 46:44+ Mr 3 '17  
Killing with lettuce. J: R. McMahon. *il Country Gent* 81:1997 N 18 '16  
Localization of truck crops in California. R. G. Risser. *Market Growers J* 23:163 N 1 '18  
Orchard and truck farm work for September. L. A. Niven. *Prog F* 33:1026 S 21 '18  
Orchard and truck farm work for November. L. A. Niven. *Prog F* 33:1188 N 2 '18  
Potato and truck crop growers' association. Wallaces' F 41:12 Ja 7 '16

- Profits from diversified trucking. A. Feller.

- Country Gent* 82:530 Mr 17 '17  
Remarkable season for truck farmers. *Rural N Y* 75:31 Ja 8 '16  
Shall I go into truck growing? *il Country Gent* 82:216 F 3 '17  
Solving the vegetable riddle. J: R. McMahon. *il Country Gent* 83:10-11 F 9 '18  
South Jersey trucking season 1916. *Rural N Y* 76:187 F 10 '17  
Story of a day; how it was spent on a Florida farm. D. L. Hartman. *Rural N Y* 77:439-40 Mr 23 '18  
Successful south Jersey truck farm. R. E. Allen. *il Prac F* 112:341 S 15 '16  
Systems of renting truck farms in southwestern New Jersey. H. A. Turner. *U S Ag B* 411:1-20 '16  
Tractors for truckers. J. T. Rosa, jr. *il Rural N Y* 76:1463 D 29 '17  
Troubles of the truckers. F. A. Waugh. *il Country Gent* 83:1+ J1 27 '18  
Truck crop organization in Monmouth county. New Jersey. *N J Ag Exp Rep* 1916:99-110 '17  
Truck growing on Muscatine Island. E. L. Kirkpatrick. *Market Growers J* 23:28 J1 15 '18  
Value of experimental work for truck farmers; with discussion. T. C. Johnson. *Mass Ag Bd B* 5:34-51 '18 (3d ed. rev.)  
War strategy and strawberries; the Norfolk (Va.) district crop slumped this season to one-eighth its normal size. F. A. Waugh. *il Country Gent* 83:8-9 Ag 3 '18  
When does the cost of spraying truck crops become prohibitive? V. I. Saftro. *J Econ Entom* 10:521-3 D '17  
Where king cotton has no place. J. R. Cavanaugh. *il Fruit-Grower* 28:250 My 1 '17  
Work for July with orchard and truck crops. L. A. Niven. *Prog F* 33:792 J1 13 '18

*See also* Cold frames; Hotbeds; Market gardening; Vegetable gardening, Commercial

**Statistics**

- Condition of winter truck crops. *Monthly Crop Rep* 3:118 D '17  
Truck growers' associations. *See* Vegetable growers' associations

**Trucks, Motor.** *See* Motor trucks

**True army worms.** *See* Army worms

- Truepenny; story. R. N. Wall. *il Country Gent* 83:10-11 Ag 10 '18

**Truffles**

- French truffles. *Am Flor* 46:1368 J1 15 '16  
Possibilities of the truffle industry in America. F. J. Seaver. *il Country Life* 32:114 My '17  
Revision of the tuberales of California. H. M. Gilkey. *bibliog Cal Univ Pub Botany v* 6, no 11 275-356p, 26-30pl '16 (80c)

**Trusses**

- Small hay barn. E. V. Laughlin. *Farm Eng* 5: 8 F '17  
Stresses in a Shawver barn truss. G: W. Iverson. *Am Soc Ag Eng Trans* 10,no 2: 15-22 '17  
Trusses for farm structures. E. V. Laughlin. *Farm Eng* 5:4 Ja '17

**Trypeta ludens.** *See* Mexican orange maggots

**Tuberales.** *See* Truffles

**Tuberculin test**

- Advantages of the tuberculin test. Hoard's D 50:832 Ja 14 '16  
Analysis of tuberculin tests and post mortem results—accessories to the tuberculin test. E. R. Rogers. *Am Vet M Assn J* 53:501-10 J1 '18  
Combined and follow-up systems of tuberculin testing; with discussion. G. H. Hart and J. Traum. *bibliog Am Vet M Assn J* 50: 189-214 N '16  
Comparison of the three tests for tuberculosis. Hoard's D 56:44 Ag 2 '18  
Details to be observed in making a tuberculin test. C: Linch. *Am Vet M Assn J* 52:56-63 O '17

**Tuberculin test—Continued**

- Directions for making the tuberculin test. Hoard's D 52:917 Ja 19 '17
- Effect of tuberculin test on milk yield. J. J. Hooper. Jersey B 37:975 Je 19 '18
- Harmless tuberculin. E. G. Hastings. Country Gent 81:1434 Jl 29 '16
- Interpretation and limitation of tuberculin test. E. G. Hastings. Hoard's D 55:428 Mr 29 '18
- Intradermal palpebral tuberculin test. Am Vet M Assn J 50:57-61 O '16
- Intrapalpebral tuberculin test; discussion. il Am Vet M Assn J 49:351-60 Je '16
- Making the tuberculin test. Wallaces' F 42:1019 Jl 13 '17
- New methods of tuberculin testing. J. Traum. Am Vet M Assn J 52:347-50 D '17
- Problems in building up a tuberculous-free herd. J. F. Devine. Hoard's D 51:617 My 5 '16
- Reasons for testing cattle. O. H. Eliason. Hoard's D 52:139 Ag 25 '16
- Some facts about the tuberculin test. W. M. Pendergast. Am Vet M Assn J 53:771-4 S '18
- Some studies of the tuberculin test. M. H. Reynolds. Am Vet M Assn J 53:14-28 Ap '18
- Success and failure of the tuberculin test in certified dairies; with discussion. C. L. Roadhouse. Am Vet M Assn J 48:420-9 Ja '16
- Tentative plan for establishing accredited tuberculin tested herds. Hoard's D 51:361 Mr 17 '16
- Testing cattle for tuberculosis. Wallaces' F 41:140 Ja 28 '16
- Tuberculin test. il Hoard's D 52:638 N 24 '16
- Tuberculin test and retest; with discussion. C. J. Marshall and H. W. Turner. Am Vet M Assn J 52:308-37 D '17
- Tuberculin testing. A. T. Kinsley. Am Vet M Assn J 51:532-7 Jl '17
- Tuberculin testing in California. C. Keane. Kimball's D F 15:312 My 1 '17
- Tuberculosis and the tuberculin test. Hoard's D 51:189-90 F 25 '16
- Tuberculosis of cattle and the tuberculin test. D. H. Jones. (In Report, Ontario ag. & exp. union, 1917, p. 14-17) '18 Ontario ag. dept., Toronto
- What a tuberculin card indicates. Hoard's D 51:623 My 5 '16
- When tuberculin fails. E. G. Hastings. Country Gent 81:1169 Je 3 '16
- Why use tuberculin? E. G. Hastings. Country Gent 81:1333 Jl 8 '16
- Tuberculosis**
- Appeal to the veterinarians to help in the fight against tuberculosis. R. C. Newton. Am Vet M Assn J 49:810-16 S '16
- Enzymes of the tubercle bacillus. H. J. Corper and H. C. Sweany. J Bact 3:129-51 Mr '18
- Isolation and cultivation of bacterium tuberculosis on a synthetic culture medium. C. A. Magoon. bibliog Wash Ag Exp B 132:1-9 '16
- New culture medium for the tubercle bacillus. W. W. Williams and W. Burdick. J Bact 1:411-14 Jl '16
- Pasteurization in safeguarding milk infected with tubercle bacilli. J. Traum and G. H. Hart. Am Vet M Assn J 49:678-98 Ag '16
- Tuberculosis. E. Mellen. O Judd Farmer 63:13 Jl 28; 17 Ag 4; 13 Ag 11 '17
- Tuberculosis again. Nat Stock & F 40:305 Je 17 '16
- Hospitals and sanatoriums**
- Sanatorium at Oakdale. il Wallaces' F 42:1303 S 28 '17
- Tuberculosis in animals**
- Agricultural appropriation bill. McLaughlin and others. Congressional Record (Washington, D.C.) 56:1419-46 Ja 28 '18
- Agriculture. E. H. Wason. Congressional Record (Washington, D.C.) 56:1655-6 Ja 31 '18
- Control and eradication of tuberculosis of animals. Congressional Record (Washington, D.C.) 56:1330-40 Ja 25 '18
- Description of tuberculosis for boys. Wallaces' F 41:1310 O 6 '16
- Eradication of tuberculosis from cattle and swine. J. A. Kiernan. Int Assn Dairy & Milk Inspect Rep 1917:205-19
- Losses from tuberculosis. C. H. Stange. Kimball's D F 15:785 N 1 '17
- Report of committee appointed by the Queensland committee on tuberculosis, with special reference to cattle and pigs. 13p '17 Queensland committee, Commonwealth advisory council of science and industry, Brisbane State sanitary requirements governing admission of live stock in reference to tuberculosis and laws and regulations with reference to the control and eradication of tuberculosis in live stock. Congressional Record (Washington, D.C.) 56:1334-7 Ja 25 '18
- To stamp out tuberculosis; U.S. will pay part value of animals killed. O Judd Farmer 65:381 O 26 '18
- Tuberculosis. R. A. Craig and C. H. Clink. il Ind Ag Exp C 60:1-8 '17
- Tuberculosis in carnivorous animals. W. R. Blair. Am Vet M Assn J 51:750-67 S '17
- Tuberculosis in farm animals. C. L. McArthur. il Ark Ag Exp B 136:1-15 '17
- Tuberculosis infection in stock. J. L. Justice. Ohio F 139:400 Mr 17 '17
- Tuberculosis in cattle**
- Advantages of testing pure bred herds. S. H. Ward. Am Vet M Assn J 52:156-60 N '17
- Advantages of testing purebred herds for tuberculosis. N. E. McEwen. J Ag (Quebec) 21:89 D '17
- Bankers' opportunity to help eradicate tuberculosis. H. L. Russell. maps Hoard's D 52:619 N 24 '16
- Bovine tuberculosis. (In Report, 1916, p. 35-43) il '17 Oregon state live stock sanitary board, Salem
- Bovine tuberculosis. C. M. Haring. Cal Ag Exp C 155:1-19 '16
- Bovine tuberculosis. J. G. Wills and C. Lynch. il N Y Ag Dept B 82:1882-1956 Ap '16; Same. N Y Ag Dept Rep 1916, pt 3: 1882-1956 '17
- Bovine tuberculosis and its control. N. E. McEwen. J Ag (Quebec) 19:262 Je '16
- Bovine tuberculosis in Washington. R. J. Donohue. Western Wash Ag Exp B v 6:2-5 Ap '18
- Bovine tuberculosis laws in Wisconsin. E. G. Hastings. Hoard's D 55:421 Mr 29 '18
- Channels of infection and localization in tuberculosis. C. H. Higgins. Am Vet M Assn J 52:299-308 D '17
- Cleaning up tuberculosis in large herd. T. Franklin. Hoard's D 53:470 Ap 6 '17
- Common or public nuisance—the tubercular milk cow. J. F. Winchester. Am Vet M Assn J 50:223-6 N '16
- Control of animal diseases. J. H. McNeil. N J Ag Dept B 12:518-30 '18
- Control of bovine tuberculosis. O. H. Eliason. Kimball's D F 16:205 Mr 15 '18
- Control of bovine tuberculosis. C. C. Hayden. il Ohio F 141:69- Ja 19 '18
- Control of tuberculosis. Hoard's D 52:638 N 24 '16
- Control of tuberculosis. E. S. Archibald. Ag Gaz of Canada 5:1128-30 D '18
- Control of tuberculosis and infectious abortion. V. A. Moore. N Y Ag Dept B 94:25-33 Ap '17
- Control of tuberculosis in the provinces. Ag Gaz of Canada 5:1144-8 D '18
- Diagnosis of tuberculosis by complement fixation, with special reference to bovine tuberculosis. A. Eichhorn and A. Blumberg. bibliog J Ag Research 8:1-20 Ja 2 '17; Excerpts. Int R Sci & Prac Ag 8, no 5:758-60 My '17
- Dorsey gets penitentiary sentence for selling tuberculous cattle. O Judd Farmer 64:13 Mr 2 '18
- Eradicating bovine tuberculosis. W. H. Pew. Breeder's Gaz 71:963 My 10 '17
- Eradicating tuberculosis. Country Life 23:11 N '17
- Eradicating tuberculosis by prevention. C. Way. il Kimball's D F 15:634- S 15 '17



**Tuberculosis in cattle—Continued**

Eradicating tuberculosis from dairy herds. L. S. Gillette. Hoard's D 55:50 F 1 '18  
 Eradication of bovine tuberculosis in Wisconsin. C. P. Norgord. Hoard's D 52:836 Ja 5 '17  
 Experience with tuberculosis. T. D. Rittgers. Wallaces' F 42:376 F 23 '17  
 Few facts regarding tuberculin and the tuberculin test. N. E. McEwen. J Ag (Quebec) 21:121 F '18  
 Field system of eradicating tuberculosis. E. D. Upton. Hoard's D 55:560 Ap 19 '18  
 Fight for healthy cows. E. G. Hastings. Country Gent 81:962 My 6 '16  
 Fooling with tuberculosis. Kimball's D F 15:746 O 15 '17  
 Foot and mouth disease, mastitis and tuberculosis and the milk consumer. H. Young and others. Creamery 4:27-8 Ja '16  
 Freeing cattle of tuberculosis. J. R. Mohler. O Judd Farmer 65:207 S 14 '18  
 Genital tuberculosis of cattle. W. L. Williams. il Am Vet M Assn J 53:28-63 Ap '18  
 Handling tuberculous breeding cattle. L. S. Gillette. Breeder's Gaz 73:914 My 2 '18  
 Health of the herd. C. P. Norgord. Wis Dairy-men's Assn Rep 1913-1916:208-12 '17  
 High priced feeds causing tuberculosis? J. M. W. Kitchen. Jersey B 26:1907 D 5 '17  
 Home for tubercular cattle. Kimball's D F 16:647 Ag 15 '18  
 Important changes in cattle tubercular laws. Hoard's D 54:93 Ag 17 '17  
 Keeping the herd free of tuberculosis. T. Butler. Prog F 33:1372-3 D 14 '18  
 Making cattle environs free from infection eliminated by tuberculous cattle. J. Traum. Am Vet M Assn J 52:289-99 D '17  
 Managing a tuberculous herd. W. H. •Pew. il Ia Ag Exp B 172:79-90 '17  
 Note on the prevalence of bovine tuberculosis in the Punjab. G. Taylor. Ag J of India 13:488-90 Jl '18  
 Ophthalmic test for diagnosing tuberculosis in cattle. A. M. Bergman. Am Vet M Assn J 48:750-2 Mr '16  
 Pasteurization and bovine tuberculosis. G. L. Ogle. Purdue Ag 10:33 My '16  
 Pasteurization of skim milk and whey; with discussion. A. L. Brockway. N Y Ag Dept B 80:1513-27 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1513-27 '17  
 Problems in building up a tuberculous-free herd. J. F. Devine. Hoard's D 51:617 My 5 '16  
 Quarantine farm for tubercular cattle. C. W. Turner, jr. Jersey B 37:807 My 22 '18  
 Questions the tuberculous bill. E. G. Hastings. Wallaces' F 42:588 Mr 30 '17  
 Regulations relating to tuberculosis. Ag Gaz of Canada 4:460-1 Je '17  
 Report of committee on bovine diseases—their relation to the milk supply and to the public health. H. E. States; Need of some identification mark for cows reacting to the tuberculin test. S. G. Sharwell. Int Assn Dairy & Milk Inspec Rep 1917:89-93, 182-4  
 Report of the committee on veterinary inspections and protection against tuberculosis, of the American association of medical milk commissions, 1916-1917. E. C. Fleischer. Am Vet M Assn J 52:268-88 D '17  
 Report of the International commission on the control of bovine tuberculosis. J. G. Rutherford. Am Vet M Assn J 52:227-8 N '17  
 Safeguard show cattle. Jersey B 37:1096 Jl 10 '18  
 Some problems involved in controlling tuberculous cattle. A. D. Melvin. Int Assn Dairy & Milk Inspec Rep 1915:117-27  
 Stable ventilation and tuberculosis. E. G. Hastings. Hoard's D 53:472 Ap 6 '17  
 Susceptibility of Indian milch cattle to tuberculosis. W. Glen Liston and M. B. Soparkar. Ag J of India 13:485-8 Jl '18  
 To eradicate tuberculosis. Wallaces' F 42:440 Mr 9 '17  
 Too much tubercle bacillus. G. Day. Country Gent 81:1932 N 4 '16

Tubercle bacilli in milk. J. Vanderleek. J Ag (Quebec) 22:11 Jl '18  
 Tubercular breeding herds. il Wallaces' F 42:1375 O 12 '17  
 Tuberculin test and retest; with discussion. C. J. Marshall and H. W. Turner. Am Vet M Assn J 52:308-37 D '17  
 Tuberculosis. (In 6th annual report, 1917, p 8-20) (Pub. Doc. no. 98) '18 Mass. Dept. of animal industry, Boston  
 Tuberculosis and its control. J. F. Devine. Hoard's D 51:232 Mr 3 '16  
 Tuberculosis and our live stock industry. J. A. Kiernan. Am Vet M Assn J 54:107-26 N '18  
 Tuberculosis eradication; summary of animals tested in various states. Hoard's D 55:1049 Jl 19 '18  
 Tuberculosis eradication work. W: T. Creasy. Jersey B 36:58 Ja 10 '17  
 Tuberculosis free herds. Wallaces' F 43:39 Ja 11 '18  
 Tuberculosis in cattle. F. J. Curtin. Field Il 28:318 My '18  
 Tuberculosis in the dairy herd and its influence upon the human family. J. I. Gibson. Iowa Bulletin of State Inst (Des Moines) 18:246-51 Jl '16  
 Tuberculosis of cattle and the tuberculin test. D. H. Jones. (In Report, Ontario ag. & exp. union, 1917, p. 14-17) '18 Ontario ag. dept., Toronto  
 Tuberculosis situation and remedial measures. C. P. Norgord. Hoard's D 53:525 Ap 13 '17  
 Tuberculosis—what is it and what causes it? il Hoard's D 52:598 N 17 '16  
 Unsuspected tuberculosis in an Indiana herd. R. A. Bausman. Hoard's D 52:911 Ja 19 '17  
 See also Tuberculin test

**Government inspection**

Accredited and once tested Jersey herds. Jersey B 37:1721 O 16 '18  
 Accredited herd system for tuberculosis control. Ag Gaz of Canada 5:1172-4 D '18  
 Accredited herds. Nat Stock & F 41:1203 F 23 '18  
 Accredited herds. J. H. Mohler. Nat Stock & F 42:557 S 14 '18  
 Accredited herds in Vermont. F. S. Brigham. Kimball's D F 16:111 F 15 '18  
 Accredited tuberculosis-free herds of purebred cattle in the South. Prog F 33:1023 S 21 '18  
 Accrediting pure bred herds of cattle. Jersey B 37:2024 D 4 '18  
 Disease control in Michigan. H. H. Halladay. Kimball's D F 16:155 Mr 1 '18  
 Eradication of tuberculosis. Ohio F 142:296 S 28 '18  
 Federal legislation for the eradication of tuberculosis. H. R. Smith. Wallaces' F 43:1646 N 8 '18  
 Government accredited herds. Kimball's D F 16:45 Ja 15 '18  
 Government aid in tuberculosis eradication. Wallaces' F 43:1274 S 6 '18  
 Money for tuberculosis work. Breeder's Gaz 73:981 My 9 '18  
 Officially accredited herds. Kimball's D F 16:625 O 15 '18  
 Owners get indemnity for tubercular cattle killed. Weekly N L 6:1 O 16 '18  
 Plan for eradicating tuberculosis from Wisconsin herds. O. E. Remey. Hoard's D 51:504 Ap 14 '16  
 Proposed regulations for establishing accredited herds. Breeder's Gaz 72:1269 D 27 '17; Same. Hoard's D 54:816 D 28 '17; Same. Prog F 32:1347 D 29 '17  
 Re-testing cattle for tuberculosis. S. H. Ward and others. il Hoard's D 56:403 O 18 '18  
 Sixty Wisconsin herds are accredited. Hoard's D 56:50 Ag 2 '18  
 Special recognition for Minnesota tuberculosis-free pure-bred herds. M. H. Reynolds. Hoard's D 51:843 Je 16 '16  
 State accredited herd system. H. R. Smith. Breeder's Gaz 72:107 Jl 26 '17

**Tuberculosis in cattle**—Govt. inspection—*Cont.*  
Tuberculin testing. F; Torrance. *Ag Gaz* of  
Canada 5:1132-3 D '18  
Tuberculosis legislation. H. R. Smith. *Kim-  
ball's D F* 16:870 N 15 '18  
Wisconsin accredited herds transferred. C. P.  
Norgord. *il Hoard's D* 56:132 *Ag* 23 '18  
Wisconsin tubercular quarantine farm for  
dairy cattle. C; W. Turner, jr. *Hoard's D*  
55:763 *My* 24 '18

#### Tuberculosis in dogs

Tubercular myocarditis in the dog. A. A.  
Leibold. *bibliog Am Vet M Assn J* 49:404-6  
Je '16

#### Tuberculosis in poultry

Guard against tuberculosis. O Judd *Farmer*  
64:9 *Ap* 6 '18  
How to fight tuberculosis of poultry. *il Wis*  
*Ag Ext C* 99:1-8 '18  
Tuberculosis of poultry. *Rural N Y* 76:133 *Ja*  
27 '17  
Tuberculosis of poultry. H. Welch. *il Mont*  
*Ag Exp C* 57:209-19 '16  
Tuberculosis of poultry in Ontario. D. H.  
Jones. *il Ontario Ag Dept B* 255:1-8 '17

#### Tuberculosis in swine

Avian tuberculosis in swine. L. E. Day. *Am*  
*Vet M Assn J* 54:92-6 N '18  
Swine tuberculosis. *Am Vet M Assn J* 49:5-8  
*Ap* '16  
Tuberculosis in hogs and who pays for it.  
N. E. McEwen. *J Ag (Quebec)* 20:127 D '16  
Tuberculosis of hogs. *Va Ag Dept B* 126:178-  
81 '18  
Tuberculosis of hogs. J; R. Mohler and H; J.  
Washburn. *il Farmers' B* 781:1-19 '17; *Ab-  
stract. Hoard's D* 53:615 *Ap* 27 '18

#### Tuberose

Tuberose in pots. *Country Gent* 81:515 *Mr* 4  
'16

**Tucker grass.** See Quack grass

#### Tule

Potash from tule and the fertilizer value of  
certain marsh plants. P. L. Hibbard. *Cal*  
*Ag Exp B* 288:187-92 '17

#### Tulip poplar

Tulip poplar (*Liriodendron tulipifera*); a forest  
tree of important commercial value for Ohio.  
A. E. Taylor. *il Ohio Ag Exp B v* 2:51-8 F  
'17  
Tulip tree. H. W. Weisgerber. *il Ohio F* 142:  
172 *Ag* 24 '18

**Tulip trees.** See Tulip poplar

#### Tulips

Color scheming for the Darwin tulips. S. R.  
Duffy. *il Gard M* 24:92-4 O '16  
Cottage tulips breaking. E. S. Johnson; C. J.  
Hunt. *Gard M* 27:206 *My* '18  
Forcing Darwin tulips. *Gard Chron Am* 21:331  
S '17  
Good tulips for fall planting. *Wallaces' F* 41:  
904 *Je* 23 '16  
History of the Dutch tulips. *Gard Chron Am*  
22:149 *My* '18  
Tulip species. W. R. Dykes. *Gard Chron*  
(*Lond*) 63:41 F 2 '18  
Tulips. D. Clark. (*In Ontario horticultural*  
*societies, 11th annual report, 1916, p. 110-16*)  
'17 Ontario ag. dept., Toronto, Canada  
Vaughan's tulips at Western Springs, Ill. *il*  
*Am Flor* 48:1313 *JI* 7 '17  
What is a Darwin? L. Barron. *il Country*  
*Life* 31:32 N '16

#### Diseases and pests

On the breakage of tulips. *Int R Sci & Prac*  
*Ag* 7,no 1:151-3 *Ja* '16

#### Varieties

Darwin tulips—best twenty-five varieties.  
W. T. Macoun. (*In Report, Horticultural*  
*societies of Ontario, 1917, p. 81-2*) '18 On-  
tario ag. dept., Toronto

#### Turners

Mammary tumors in the bitch. *il Am Vet M*  
*Assn J* 52:784-8 *Mr* '18

#### Tuna fish

Tuna fish makes a fine chicken substitute.  
M. H. Talbott. *Country Gent* 81:1852 O 14  
'16

#### Tunis

Regency of Tunis; revictualling account and  
its operation. *Int R Ag Econ* 66:113-18 *Je* '16  
See also subhead Tunis under Agricultural  
credit; Agriculture; Agriculture, Coopera-  
tive; Forests and forestry; Poultry

**Turf, The.** See Horse racing

#### Turkey

See also Food supply—Turkey

#### Politics and government

One of the war's great results: the downfall  
of Turkey. C. Poe. *Prog F* 33:1375 D 14 '18

#### Turkeys

Bell turkey and his mates. C. S. Phelps. *il*  
*Rural N Y* 76:1125 S 29 '17  
Breeding, feeding and successful management  
of turkeys. Mrs H. E. Hoak. *il Reliable P J*  
23:1196-7 F '17  
Care and feed of poults. E. R. Wood. O Judd  
*Farmer* 62:10 F 3 '17  
Care of turkeys. *Field* *il* 26:256 *Mr* '16  
Enterohepatitis or black-head and the bio-  
logical laboratory system of raising tur-  
keys. C. H. Higgins. 6p '16 *Canada Ag*  
Experience in raising turkeys artificially.  
A. E. Vandervort. *Nat Stock & F* 41:198  
*My* 12 '17  
Experience in turkey raising. Mrs N. Grover.  
*Rural N Y* 75:570 *Ap* 1 '16  
Experience with turkeys. *Nat Stock & F* 40:  
1323 *Mr* 3 '17  
Experience with turkeys. *Nat Stock & F* 40:  
164 *My* 6 '16  
Failure with turkeys. *Fruit-Grower* 27:180 *Mr*  
1 '16  
Fattening and preparing turkeys for market.  
M. K. Boyer. *Am P Advocate* 26:640-1 N '18  
Fattening the national bird. *il O Judd*  
*Farmer* 63:7 O 20 '17  
Feeding turkeys for fall market. Mrs C. A.  
Cox. *Country Gent* 82:1788 N 17 '17  
Few thoughts on turkey raising. F. Horning.  
*il Rural N Y* 75:602 *Ap* 8 '16  
Finishing the turkey. S. Huff. *il Field* *il* 27:  
880 N '17  
Getting started with turkeys. A. W. Galli-  
gher. *il Fruit-Grower* 28:150 F 15 '17  
How I manage turkeys. C. E. Jordan. *Nat*  
*Stock & F* 40:1406 *Mr* 17 '17  
How I raise turkeys. Mrs C. Elder. *Nat Stock*  
& *F* 40:362 *JI* 1 '16  
How I raise turkeys. F. Horning. *Rural N Y*  
77:659 *My* 4 '18  
How I raised 100 turkeys. Mrs L. A. Bryant.  
*Prog F* 33:3 *Ja* 5 '18  
How I succeeded with turkeys. Mrs F. M.  
Haynes. *Prac F* 114:64 F 15 '18  
How the turkey was named. M. Purvis. *Breed-  
er's Gaz* 73:1034 *My* 16 '18  
How to raise turkeys. *Prog F* 31:58 *Ja* 8 '16  
How to raise turkeys. C. B. Williams. *Nat*  
*Stock & F* 41:221 *My* 19 '17  
How we raise turkeys. *Nat Stock & F* 42:156  
*My* 4 '18  
How we succeed with turkeys. E. M. Willis.  
*Prac F* 114:160 *Ap* 15 '18  
Lost art of raising turkeys. F. H. Valentine.  
*il Country Life* 30:60 *My* '16  
Make waste land profitable by raising tur-  
keys. T. Hewes. *Reliable P J* 25:857 D '18  
Money in turkeys. *Am P Advocate* 24:450 *Ap*  
'16; Same. *N Y Prod R* 42:1162 O 25 '16  
More turkey talk. Mrs C. K. Turner. *Fruit-  
Grower* 27:321 *Je* 1 '16  
Nature's way with turkeys. *Nat Stock & F*  
40:410 *JI* 15 '16  
New Jersey woman's experience with turkeys.  
F. M. Tucker. *Prac F* 113:69 F 15 '17  
Next Thanksgiving's turkey. M. K. Cox. *il*  
*Country Gent* 83:11 *JI* 27 '18  
Preparation of turkeys for market. *J Ag*  
(*Quebec*) 22:81 N '18  
Preparing the turkeys for market. D. E. War-  
ner. *il Country Gent* 82:1840 N 24 '17  
Prime holiday turkeys. C; S. Phelps. *il Coun-  
try Gent* 81:1981 N 11 '16  
Profitable turkey culture. G; Enty. *Am P Ad-  
vocate* 24:360, 460 *Mr-Ap* '16  
Raise more turkeys. G. S. Fisher. *Nat Stock*  
& *F* 40:1059 *Ja* 13 '17



**Turkeys—Continued**

- Raising baby turkeys. M. M. Stearns. *il Country Gent* 81:580 Mr 11 '16
- Raising baby turks. M. M. Stearns. *il Ohio F* 137:318-19 F 26 '16
- Raising ducks, geese, and turkeys; suggestions for teachers in secondary schools. H. P. Barrows. (Doc. 57) 10p '17 U.S. States relations service, Washington, D.C.
- Raising of turkeys. I. N. McFee. *il Ohio F* 141:240 F 16 '18
- Rearing of turkeys with special reference to the blackhead disease. R I Ag Ext B n s 2:1-20 '16
- Seasonal work with turkeys. W. Montgomery. O Judd Farmer 62:14 F 3 '17
- Side line of turkeys. G. H. Dunne. *il Country Gent* 82:878 My 12 '17
- Start with turkeys. M. M. Stearns. *il Country Gent* 81:257 F 5 '16
- Starting with turkeys. Wallaces' F 43:688 Ap 19 '18
- Successful turkey raising. Kimball's D F 14: 470 Jl 15 '16
- Summer turkey problems. A. E. Vandervort. Am P Advocate 25:461 My '17
- Texas turkey trade. Int R Sci & Prac Ag 8,no 11:1154-5 N '17
- Thanksgiving turkey. E. W. Gage. *il Breeder's Gaz* 72:931 N 22 '17
- Thanksgiving turkey. A. S. Weiant. *il U S Ag Yearbook* 1916:411-19; Same. Separate 700
- This spring's turkeys. R. S. Moseley. *Country Gent* 81:901 Ap 22 '16
- Thoughts on turkeys. M. A. Jull. J Ag (Quebec) 20:230 My '17
- Three women who make mammoth bronze turkeys pay well. Mrs D. C. Amos and others. *il Reliable P J* 25:201+ Ap '18
- Turkey breeding. Wallaces' F 41:645 Ap 21 '16
- Turkey breeding. A. Hart. J Dept Ag Victoria 16:626-8 O '18
- Turkey day. Mrs G. A. Van Doren. Rural N Y 76:88 Ja 20 '17
- Turkey for Christmas. C. L. Opperman. *il Country Gent* 81:2188-9 D 23 '16
- Turkey raising. A. S. Weiant. *il Farmers' B* 79:1-26 '17; Excerpts. Am P Advocate 26:92 Ja '18
- Turkey rearing in Italy. A. Castellari. Int R Sci & Prac Ag 9,no 1:86-7 Ja '18
- Turkeys. M. Miller. Nat Stock & F 40:1445 Mr 24 '17
- Turkeys a valuable side line. Wallaces' F 41: 743 My 12 '16
- Turkeys for fall markets. O Judd Farmer 61: 2 S 30 '16
- Turkeys need care; here are methods. Prog F 31:789 Je 17 '16
- Turkeys on the farm. F. W. Kazmeier. Tex Ag Ext B B-10:75-80 '16
- Weak poults. Ohio F 141:112 Ja 26 '18
- When turkeys are sold. A. E. Vandervort. Nat Stock & F 40:774 O 28 '16
- Woman's method with turkeys. M. Mahaney. *il O Judd Farmer* 60:12 F 5 '16

**Diseases and pests**

- Avenue and development of tissue-infection in intestinal trichomoniasis. P. B. Hadley. bibliog *il R I Ag Exp B* 165:1-64 '16
- Role of the flagellated protozoa in infective processes of the intestines and liver. P. B. Hadley. bibliog *il R I Ag Exp B* 166:1-40 '16
- Sick turkeys. Farm Eng 6:9 Ja '18
- To reduce blackhead. Prac F 113:100 Mr 1 '17
- Turkey diseases. Wallaces' F 41:956 Jl 7 '16
- Turkeys without blackhead. P. B. Hadley. *Country Gent* 81:1378 Jl 15 '16

**Turkeys, Wild**

- Wild turkeys. *il J Heredity* 7:138-42 Mr '16

**Turnip contests**

- Boys' turnip growing competition. F. L. Fuller. Ag Gaz of Canada 3:346-7 Ap '16

**Turnip greens**

- Turnip greens and black-eyed peas. M. M. Williams. *Country Life* 31:98 Ap '17

- Turnip lice. See Cabbage lice

**Turnips**

- Experience with turnips; symposium. Market Growers J 20:437 Je 1 '17
- Experiences with turnips; symposium. Market Growers J 23:153+ O 15 '18
- Farm accounts; wintering lambs on turnips. A. Loose. J Bd Ag 24:634-6 S '17
- Grow turnips for the dairy herd. L. A. Higgins. Prog F 33:868 Ag 3 '18
- Growing turnips. Prac F 112:310 Ag 15 '16
- Late turnips. J. A. Paice. Gard Chron (Lond) 64:31 Jl 27 '18
- Turnip recipes. M. H. Talbott. *Country Gent* 81:368 F 12 '16
- Turnips after oats. R. Stewart. *Country Gent* 82:926 My 26 '17
- Value of the turnip as a vegetable and stock food. J Bd Ag 23:66-7 Ap '16
- See also Rutabagas

**Composition**

- Reactions of the phosphorus of the thickened root of the flat turnip. B. L. Hartwell and others. bibliog J Ag Research 11:359-70 N 19 '17

**Diseases and pests**

- Colletotrichum leafspot of turnips. B. B. Higgins. *il J Ag Research* 10:157-62 Jl 23 '17
- Destructive aphid on turnips. *il Conn State Ag Exp Rep* 1916,pt 2:98-104 '17
- Dry-rot of turnips; suggestions regarding control. A. H. Cockayne. J Ag New Zealand 17:70-3 Ag '18

**Seed**

- Methods of turnip-seed production in Europe. A. H. Cockayne. J Ag New Zealand 17:168-9 S '18
- Turnip- and rape-seed production. A. H. Cockayne. J Ag New Zealand 16:311-23 Je '18

**Statistics**

- Commercial stocks of turnips and rutabagas. U S Food Surveys 1:15-16 Jl 24 '18
- \* Mangels and turnips in Ontario. (In Report, Bur. of industries, 1917, p. 34) '18 Ontario ag. dept., Toronto

**Turpentine**

- Increased yield of turpentine and rosin from double chipping. A. W. Schorger and R. L. Pettigrew. *il U S Ag B* 567:1-9 '17

**Statistics**

- Census of manufactures 1914; turpentine and rosin. J: B. Hopkins. 10p '17 U.S. Bur. of the census, Washington, D.C.
- International trade in turpentine. See United States Department of agriculture Yearbooks

**Turtles**

- Amazon turtle as a producer of eggs, meat and fat. J. S. Tavares. Int R Sci & Prac Ag 9,no 1:91-2 Ja '18
- Turtles of the West Indies. T. de Booy. *il Sci Am Sup* (233 Broadway, N.Y. 10c) 85: 292 My 11 '18

**Tussock moths**

- Relation between climate and life-cycle of the tussock moth. Int R Sci & Prac Ag 8,no 8:1200 Ag '17

See also White-marked tussock moths

**Tutu**

- Tutu poisoning in cattle. A. R. Young. J Ag New Zealand 15:307-8 D '17

- Twig blight. See Fire blight

**Twig pruners**

- Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v* 16,no 26:65-7 '16

**Twin City milk producers' association**

- Getting a price for milk. S. B. Cleland. Kimball's D F 15:462 Jl 1 '17
- Organization meeting, St Paul, Sept. 1, 1916. Jersey B 35:1460 S 20 '16
- Producers' organization project. K. A. Kirkpatrick. Kimball's D F 15:12 Ja 15 '17
- Selling milk by business methods. H. G. Van Pelt. Kimball's D F 16:1 Ja 1 '18

**Twin City milk producers' assn.—Continued**

Twin City milk producers organize. R. G. Jones. Hoard's D 52:252 S 15 '16

See also Twin City milk producers' exchange

**Twin City milk producers' exchange**

Milk making pays these farmers. A. E. Richter. il Country Gent 82:1379 S 8 '17

**Twine.** See Binder twine**Twins**

Biology of twins. il J Heredity 8:243-8 Je '17

Fertility of free-martin. E. N. Wentworth. Breeder's Gaz 69:1271 Je 15 '16

Free-martin. L. J. Cole. Breeder's Gaz 72:204 Ag 16 '17

Sterility of the free-martin. Am Vet M Assn J 49:781-2 S '16

Studies of free-martins. F. R. Lillie and C. L. Chapin. Int R Sci & Prac Ag 8,no 10:1380-2 O '17

See also Birth, Multiple

**Twitch grass.** See Quack grass**Two-banded fungus beetles.** See Fungus beetles**Two-lined chestnut borer.** See Chestnut borers, Two-lined**Two young patriots; story.** T. C. Harbaugh. See weekly numbers of Ohio farmer Sept. 21-Oct. 26, 1918**Tylenchus.** See Nematodes**Tyloses**

Tyloses: their occurrence and practical significance in some American woods. E. Gerry. bibliog il J Ag Research 1:445-70 Mr '14

**Typewriters**

Farmer's office assistant. E. L. Kranich. Breeder's Gaz 69:724 Mr 30 '16

Typewriter as a money-making piece of farm machinery. C. O. Carpenter. Prog F 32:129 F '17

Typewriter on the farm. F. N. G. Kranich. Power F 27:46 My '18

**Typha**

Cat tail plant in industry. Scientific Am Sup (233 Broadway, N.Y. 10c) 85:155 Mr 9 '18

Germany's exploitation of new material. Ag J of India 12:325-6 Ap '17

Typha fiber, a suggested cotton substitute; attempts have been made in France to use typha or cat tail for papermaking. Paper (117 E. 24th st, N.Y. 25c) 22:13 Mr 20 '18

Typha plant—a substitute for cotton. Scientific Am Sup (233 Broadway, N.Y. 10c) 83: 52 Ja 27 '17

See also Cattails

**Typhoid fever**

Fighting typhoid. Wallaces' F 43:188 F 1 '18

Guard against typhoid. Prog F 31:812 Je 24 '16

Life, death and speech; typhoid fever prevention. H. Quick. Country Gent 81:1621 S 2 '16

New feeding in the treatment of typhoid fever. A. C. Walton. J Home Econ 9:14-18 Ja '17

Observations sur l'influence chimique des milieux de culture sur le développement et la production de l'indol par les colibacilles et par les bacilles typhiques. E. Zunz and P. György. bibliog J Bact 1:627-61 N '16

Relationship of milk supplies to typhoid fever. W. H. Frost. Pub Health Repts (U. S. Public Health Service, Washington, D. C.; 5c Supt. of doc.) 31:3291-3302 D 1 '16

Typhoid—a rural disease. C. H. Lerrigo. il Country Gent 81:1346 Jl 8 '16

Typhoid fever. E. Mellen. O Judd Farmer 63: 22 S 1; 18 S 8; 26 S 15 '17

Typhoid fever; its causation and prevention. L. L. Lumsden. (B. 69) 22p il '17 U. S. Public health service, Washington, D.C.

Typhoid fever; the scourge of summer—what it is; how handled. L. F. Rainsford. il Rural N Y 75:1214 S 16 '16

See also Paratyphoid fever

**Tyrosinase**

Tyrosinase of the potato and sugar beet. Int R Sci & Prac Ag 7,no 1:54 Ja '16

**U****Udder**

Cow's udder and milk secretion. G. H. Conn. Kimball's D F 14:503 Ag 15 '16

Quality of the udder. V. E. LeRoy. Hoard's D 52:908 Ja 19 '17

Quality of udder overlooked. W. O. Mills. il Hoard's D 52:163 S 1 '16

Teat operations. T. H. Ferguson. Hoard's D 56:666 D 6 '18

See also Mammary glands; Mammary veins

**Diseases**

Caked udder. Country Gent 83:40 Mr 2 '18

Congestion of the udder. A. S. Alexander. Kimball's D F 16:158 Mr 1 '18

Control of mammitis. M. Thomas. J Dept Ag Victoria 15:116-19 F '17

Dealing with teat troubles. A. S. Alexander. Kimball's D F 16:44, 83 Ja 15-F 1 '18

Diseases of the cow's teats. G. H. Conn. Kimball's D F 14:584 S 15 '16

Diseases of the cow's udder. G. H. Conn. Kimball's D F 14:543 S 1 '16

Garget. Country Gent 81:1333 Jl 8 '16

Garget. J. F. DeVine. Hoard's D 53:604 Ap 27 '17

Garget or mammitis in cows. Ariz Ag Exp Timely Hints 125:1-6 '17

Garget or mammitis in cows. G. H. Conn. Kimball's D F 14:8 Ja 15 '16

Mammitis from infection. A. S. Alexander. Kimball's D F 16:110 F 15 '18

Mammitis or garget. Hoard's D 53:958 Jl 6 '17

Mammitis or garget. A. S. Alexander. Kimball's D F 16:17 Ja 1 '18

Milk fever. B. L. Harfield. J Dept Ag S Australia 22:121-4 S '18

Treating affected teats. W. H. Underwood. Jersey B 35:2033 D 27 '16

Trouble with the milk ducts. Va Ag Dept B 110:15-16 Mr '16

Udder diseases and their treatment. J. W. Kalkus. Western Wash Ag Exp B v 4:2-7 F '17

**Udo**

Experiments with udo, the new Japanese vegetable. D: Fairchild. il U S Ag B 84:1-15 '14

How to grow and prepare the Japanese salad plant, udo. Rural N Y 76:146 F 3 '17

Udo, a vegetable novelty. il Gard M 22:242 Ja '16

**Ultra violet rays**

Effect of Roentgen and ultraviolet rays upon fungi. H. L. Trumbull and J. W. Hotson. il Phyt 7:426-31 D '17

Light and colour. P. A. Boving. J Ag (Quebec) 19:204 Mr '16

**Underdrainage.** See Drainage**Underwoodia**

Photographs and descriptions of cup-fungi; the genus underwoodia. F. J. Seaver. il Mycol 10:1-3 Ja '18

**Unearned increment**

Gambling on the unearned increment. E. Davenport. Country Gent 83:11+ Ag 3 '18

Unearned increment in Gary. R. M. Haig. Political Sci Q (Columbia univ., N.Y. \$1) 32: 80-94 Mr '17

**Unemployment.** See Labor, Compulsory**Unexpected Thanksgiving.** H. Richmond. Nat Stock & F 41:824-5 N 24 '17**Union dairy company, Chicago**

What happens before the milk man comes. il Creamery 5:19-24 My '17

**Union expérimentale des agriculteurs de Quebec**

Report, 1916. (In Report, 1917, p. 211-14) '17

Quebec ag. dept., Quebec

Report, 1917. 4p n. d. L'Institut agricole d'Oka, Quebec

Published in French and English

**Unione nazionale delle lattierie sociali**

National union of dairy societies in 1916-1917. Int R Ag Econ 9,no 2:120-2 F '18



**United farm women of Alberta**

Reports, addresses and resolutions submitted to the 4th annual convention at Calgary, Alberta, Jan. 22-25, 1918. (*In Report, United farmers of Alberta, 1917, p. 271+*) '18

**United farmers of Alberta**

Annual report and year book 1917. 384p 25c '18 P. P. Woodbridge, sec., Calgary

**United fruit companies of Nova Scotia**

Brotherhood of fruit growers. A. J. Campbell. il Ohio F 137:785-6 Je 10 '16

United fruit companies of Nova Scotia. W. H. Woodworth. il Mass Ag Bd B 2 (5th ed):184-98 '16

**United mine workers**

Anthrax wage agreement. Am Coop J 11:1062 Je '16

Coal strike situation. Am Coop J 11:648 F '16

Financial statistics. Am Coop J 11:871 Ap '16

Soft coal miners get an increase. Am Coop J 11:870 Ap '16

What the miners ask. Am Coop J 11:758-9 Mr '16

**United States**

New civic spirit. C: Zueblin. il Farmers Inst Rep 1917:83-92 '17; Same. il Farmers Inst Household Sci 1917:67-76 '18

See also subhead United States under special subjects, e.g. Agriculture—United States, Dairying—United States

**Aeronautics, Military**

Flying corps recruits from the ranks of country life. P. P. Stockbridge. il Country Life 32:11-4 O '17

**Agriculture, Department of**

After the federal department. O Judd Farmer 62:13 Ja 27 '17

Agricultural education in the United States. E: Porritt. Quarterly Review (249 W. 13th st, N.Y. \$2) 228:315-32 O '17; Same cond. Int R Sci & Prac Ag 9,no 2:132-9 F '18

Annual reports for the year ended June 30, 1916. 451p 50c '17 U S Ag

Annual reports for the year ended June 30, 1917. 499p '18 U S Ag

Beekeeping at Washington; what Uncle Sam is doing for the beekeeper. il Am Bee J 56:43-6 F '16

Cooperation in war work. Weekly N L 5:6 D 26 '17

Department of agriculture and the food situation. D: F. Houston. Science (Science Press, Garrison, N.Y. 15c) n s 46:528-9 N 30 '17

Department works with us; better co-operation. il Field II 26:401-3 My '16

\* Education and economic success; some lessons from America. Fabricius. Fortnightly R (249 W. 13th st, N.Y. 50c) 110:198-208, 354-66 Ag-S '18

How Department helped to meet farm labor need. Weekly N L 6:7 D 11 '18

How the Department of agriculture promotes organization in rural life. C. W. Thompson. U S Ag Yearbook 1915:272a-p

Life and adventures of a Farmers' bulletin. W: H. Dean. il Country Gent 81:98-9 Ja 15 '16

List of workers in subjects pertaining to agriculture and home economics, 1917-1918; pt. 1, United States department of agriculture; pt. 2, State agricultural colleges and experiment stations. 68,89p '18 U S Ag

Meat-inspection service of the United States Department of agriculture. G. Ditewig. il U S Ag Yearbook 1916:77-97; Same. Separate 714

Meeting the farmer halfway. C. Vrooman. U S Ag Yearbook 1916:63-75; Same. Separate 698

Report of the librarian for the fiscal year ended June 30, 1918. 16p '18 U S Ag

Report of the Secretary of agriculture, for year ended June 30, 1918. D. F. Houston. 54p '18 U S Ag

Report of the Secretary of agriculture, 1917. 46p '17 U S Ag

Report of the solicitor for the fiscal year ended June 30, 1917. 29p '17 U S Ag

Secretary Houston discusses the agricultural situation. Hoard's D 56:692 D 13 '18

Tells help by Department in nation's work of war. Weekly N L 6:3 D 11 '18

\* War work of the Department of agriculture. C. Ousley. Outlook (381 4th av, N.Y. 10c) 119:517-17 Jl 31 '18

Washington at work. Cornell Countryman 14:279-82, 371-6, 465-8, 552-6, 647-50 Ja-My '17

Washington at work. Penn State F 9:427-9+, 449-51+; 10:1-3, 25-7+, 47-8+, 70-2+, 94-5 O-N '16, Ja-My '17

Washington at work. Purdue Ag 11:11-13+ N '16; 11-13 Ja; 10-13 F; 10-13 Ap; 13-15 My; 9-11 Je '17

The articles referred to in above three entries are furnished by Department chiefs, and the three series are practically the same

What the Department of agriculture is doing. Weekly N L 5:2+ Je 5; 2+ Je 12; 8+ Je 19; 12-13 Je 26; 6-7 Jl 3; 6-7 Jl 10; 7-8 Jl 17; 8-9 Jl 24; 10-11 Jl 31; 6-6-7 Ag 7; 6-7 Ag 14; 6-7 Ag 21; 4-5 Ag 28; 12-13 S 4; 8-9 S 11; 6 S 18; 7-8 S 25; 12-13 O 2; 15-16 O 9; 7-8 O 16; 6-7 O 23; 6-7 O 30; 12-13 N 6; 7-8 N 13; 6-7 N 20; 14-15 N 27; 22-3 D 4; 11-13 D 11; 6-7 D 18 '18

What's the matter with the Department? W: H. Dean. Country Gent 82:415-16, 482-3, 532-3, 589+, 641 Mr 3-31 '17

Winning our seed independence. J: R. McMahon. il Country Gent 83:3-4 N 23 '18

Wonderful Four-H clubs. T. Worthington. il St Nicholas (353 4th av, N. Y. 25c) 45:547-52 Ap '18

Work of the Department of agriculture. Science (Science Press, Garrison, N.Y. 15c) n s 46:607-10 D 21 '17

Work of the United States Department of agriculture. D. F. Houston. (*In Agricultural extension, p 22-51*) '16 National implement & vehicle assn., 76 W. Monroe st., Chicago

Work of the U.S. Department of agriculture. C. Vrooman. Am Assn Farmers' Inst Workers Pro 1916:27-30 '17

Yearbook, 1917. il maps U S Ag Yearbook 1917:1-853 '18

See also Food research laboratories

Appropriations

Agricultural appropriation bill. S. Anderson, and others. Congressional Record 56:5769-72, 5776-80 Ap 19 '18

Agricultural appropriation bill. E. S. Candler and others. Congressional Record 56:7482-6, 7488-9 My 22 '18

Agricultural appropriation bill. T: P. Gore and others. Congressional Record 56:3190-200, 3208-18 Mr 4 '18

Agricultural appropriation bill. A. J. Gronna and others. Congressional Record 56:3281-8 Mr 5 '18

Agricultural appropriation bill. J. C. McLaughlin and others. Congressional Record 56:1419-46, 7329-45 Ja 28, My 20 '18

Agricultural appropriation bill. H. Smith and others. Congressional Record 56:3748-55 Mr 14 '18

Agricultural appropriation bill. W. H. Stafford and others. Congressional Record 56:7391-415 My 21 '18

Agricultural appropriation bill. A. J. Volstead. Congressional Record (Washington, D.C.) 56:11794-6 S 27 '18

Agricultural appropriation bill, by A. F. Lever and others; Agriculture, by W: P. Borland. Congressional Record 56:1471-99, 1501-2 Ja 29 '18

Agriculture appropriation bills; hearings before House committee on agriculture on the agriculture appropriation bill: estimates of different departments. 15 pts '18 Apply to congressmen

Agricultural appropriations. A. B. Fall and others. Congressional Record 56:4036-46 Mr 20 '18

Agricultural appropriations. T: P. Gore and others. Congressional Record 56:3910-23 Mr 18 '18

Agricultural appropriations. A. F. Lever and others. Congressional Record 56:5449-54 Ap 13 '18

Agricultural appropriations. J. C. McLaughlin and others. Congressional Record 56:5689-726 Ap 18 '18

- U.S.—Agriculture, Dept. of—Appropriations—*Cont.*  
 Agricultural appropriations. L. Y. Sherman. Congressional Record 56:4144-53 Mr 21 '18  
 Agricultural appropriations. J. S. Williams and others. Congressional Record 56:3861-77 Mr 16 '18  
 Agricultural appropriations, by Atlee Pomerene and others; Same, by W. E. Borah; Same, by F. B. Kellogg. Congressional Record 56:3965-77, 4017-23 Mr 19 '18  
 Agriculture. W. R. Green and others. Congressional Record (Washington, D.C.) 56: 1635-51 Ja 31 '17  
 Agriculture. H. W. Sumners. Congressional Record (Washington, D.C.) 56:2290-4 F 14 '18  
 Agriculture appropriation bill, 1917; hearings before the U.S. Senate committee on agriculture and forestry on H. R. 12717; an act making appropriations for the Department of agriculture for the fiscal year ending June 30, 1917, and for other purposes. (May 15 and 17, 1916.) 84p '16 Apply to congressmen  
 Appropriations of the federal Department of agriculture of the United States for the fiscal year ending June, 30, 1917. Int R Sci & Prac Ag 8 no 3:327-30 Mr '17  
 Asks \$6,000,000 to buy seed for farmers. Weekly N L 5:2 Ja 9 '18  
 Dept. of agric. appropriations total nearly \$25,000,000. N Y Prod R 42:798 S 13 '16  
 Discussion of proposed appropriation to enable the Secretary of agriculture to establish and operate plants for the drying or dehydration of vegetables, fruits, and other edible products. G. W. Norris and others. Congressional Record 56:3707-11 Mr 13 '18  
 Emergency agricultural appropriations. P. Harrison and others. Congressional Record 56:7243-7 My 17 '18  
 Food production fund; Secretary Houston submits estimate. Weekly N L 5:1 Mr 27 '18  
 House bill would appropriate \$11,712,283 to aid agriculture. Weekly N L 5:1 My 15 '18; Same. Kimball's D F 16:443 Je 1 '18  
 Sale of seed grain to farmers. Congressional Record 56:4554-88, 4593-601, 4611-12 Mr 28 '18  
 Speech of Hon. William E. Borah in the Senate of the United States, Sept. 6, 1918. Congressional Record (Washington, D. C.) 56: 10964-6 S 7 '18  
 Stimulating production; urgency deficiency act of 1918. Wallaces' F 43:1007 JI 5 '18  
 Stimulation of agriculture. T. P. Gore and others. Congressional Record (Washington, D. C.) 56:10779-807 S 4 '18  
 Stimulation of agriculture. T. P. Gore and others. Congressional Record (Washington, D.C.) 56:12455-61 O 21 '18  
 Stimulation of agriculture. W. L. Jones and others. Congressional Record (Washington, D. C.) 56:10536-44 Ag 30 '18  
 Stimulation of agriculture. W. S. Kenyon and others. Congressional Record (Washington, D. C.) 56:10633-50 Ag 31 '18  
 Stimulation of agriculture. W. S. Kenyon and others. Congressional Record (Washington, D.C.) 56:12679-82 N 18 '18  
 Stimulation of agriculture. A. Pomerene and others. Congressional Record (Washington, D. C.) 56:10845-64 S 5 '18  
 When Congress trims the money bill. Country Gent 81:787+ Ap 8 '16

#### Bibliography

- List of publications issued since July 1, 1913 (revised to Dec. 31, 1916). 114p '17 U S Ag

#### Animal industry, Bureau of

- Billion dollar industry. il Kimball's D F 14: 626+ O 1 '16  
 Bureau of animal industry as a war auxiliary. J. R. Mohler. Am Vet M Assn J 54:96-107 N '18  
 Bureau of animal industry range sheep experiment. F. R. Marshall. Nat Wool Grower 7:35-6 Ja '17  
 Experimental sheep husbandry in the states and the Bureau of animal industry. F. R. Marshall. Am Soc Animal Production Pro 1915-1916:165-8 '17

- Milk supply problems. N Y Prod R 47:144 D 4 '18  
 1916 B. of A. I. report. N Y Prod R 43:318, 354, 394 D 20 '16-Ja 3 '17  
 Notices regarding meat inspection. (Service and regulatory announcements—Bur. of animal industry 121) p 48-53 '17 U S Ag  
 Raising sheep on shares with Mr & Mrs Coyote. il Am Sheep B & W 36:137 Mr '16  
 Regulation of the manufacture and sale of veterinary biologic products by the Bureau of animal industry; with discussion. J. R. Mohler and others. Am Vet M Assn J 52: 829-50 Mr '18  
 Reorganization of the work of the Bureau of animal industry. Hoard's D 52:66 Ag 11 '16  
 Reply from Secretary Houston. Kimball's D F 14:524 S 1 '16  
 Report for the fiscal year ended June 30, 1917. 63p '17 U S Ag  
 Special federal war emergency poultry work. Reliable P J 25:415+ Je '18  
 Two new divisions; tuberculosis eradication and tick eradication divisions created in Bureau of animal industry. Weekly N L 4: 3 My 9 '17  
 Uncle Sam, stockman. A. D. Melvin. il Cornell Countryman 14:552-6 Ap '17; Same. Purdue Ag 11:13-15 My '17; Same. il Penn State F 10:70-2+ Ap '17  
 What Uncle Sam is doing for poultry. P. T. Woods. il Am P J 47:982-6, 1050-3, 1118-20 Ag-O '16  
 Work of the Bureau of animal industry. Hoard's D 50:798 Ja 7 '16  
 Work of the Bureau of animal industry and the war. U. G. Houck. Am Vet M Assn J 52:798-809 Mr '18  
 Work of the Bureau of animal industry in improving the sheep industry. J. R. Mohler. Am Sheep B & W 38:85-7 F '18; Same. Nat Wool Grower 8:26-8+ F '18

#### Army

- Enlarging the army. Wallaces' F 43:1136 Ag 9 '18  
 Feeding the army. D: Lawrence. il Country Gent 82:1194-5 JI 28 '17  
 Foresters to the front. B. Adams. il Am For 23:453-7 Ag '17

#### Commissariat

- Mealtime on a transport. Rural N Y 77:880 JI 13 '18

#### Expeditionary force

- American spirit in France. il Country Life 35: 25-32 N '18  
 Education while you fight. A. B. Maurice. il Country Life 35:33-8 N '18

#### Insignia

- Meaning of military insignia. il Ohio F 142: 252 S 14 '18

#### Medical corps

- Army veterinary service; regulations governing voluntary enlistment in the enlisted reserve corps of the medical department. Am Vet M Assn J 53:121-4 Ap '18

#### Officers

- Problems and opportunities presented by the new federal army reserve law, by G. P. Benton; Reserve officers' training corps, by W. M. Riggs; Land-grant colleges and their part in the national defense, by E. Orton, jr. Assn Am Ag Coll & Exp Pro 1916:145-66 '17

#### Veterinary corps

- Army veterinary legislation; Chamberlain and Hay bills. D: E. Buckingham. Am Vet M Assn J 49:121-4 Ap '16  
 Army veterinary service. Am Vet M Assn J 54:262-6 D '18  
 Army veterinary service. R. V. Agnew. Am Vet M Assn J 51:587-91 JI '17  
 Army veterinary service. Major Rainey. Am Vet M Assn J 53:249-83 My '18  
 Economic and military necessity of an army veterinary service. J. J. Aitken. Am Vet M Assn J 52:870-3 Mr '18



**U.S.—Army—Veterinary corps—Continued**

Organization of the veterinary corps of the national army. D. S. White. Am Vet M Assn J 52:728-35 F '18; Same cond. Assn Am Ag Coll & Exp Pro 1917:125-8 '18  
Report of the Committee on army veterinary service. Am Vet M Assn J 52:78-81 O '17  
Veterinary curriculum and army veterinary service; with discussion. J. P. Turner. Am Vet M Assn J 53:571-87 Ag '18  
Veterinary preparedness. R. V. Agnew. Am Vet M Assn J 48:605-10 F '16  
Veterinary service of the army of the United States. J. P. Turner. Am Vet M Assn J 54:126-36 N '18

**Biological survey**

Lobo, C. Hayne. il Am Sheep B & W 38:699-701 N '18

**Botany**

See Botany—United States

**Chemistry, Bureau of**

Index to service and regulatory announcements 1 to 22. (Service and regulatory announcements—Chem. index, 1918) 34p '18 U S Ag  
Report for the fiscal year ended June 30, 1917. 20p '17 U S Ag  
Testing the things the nation needs. C. L. Alsberg. il Cornell Countryman 14:465-8 Mr '17; Same. il Purdue Ag 11:10-13 Ap '17; Same. il Penn State F 10:47-8+ Mr '17

**Children's bureau**

Children's year. E. Mellen. O Judd Farmer 64:24 Mr 16 '18

**Commerce**

Contraction of meat imports. Breeders' Gaz 69:128 Ja 20 '16  
Our foreign trade in farm and forest products. P. Elliott. U S Ag B 296:1-50 '15  
Selling farm stock in South America. H. T. Morgan. Country Gent 81:197 Ja 29 '16  
See also Merchant marine—United States

**Congress**

When Congress trims the money bill. Country Gent 81:737+ Ap 8 '16

**Crop estimates, Bureau of**

Estimating the nation's crops. L. C. Estabrook. Penn State F 9:449-51+ N '16; Same. Purdue Ag 11:11-13+ N '16  
Government crop reports; sources of information, methods of preparation and checking; demonstrated accuracy. (C. 17, rev.) 19p map '18 U.S. Bureau of crop estimates, Washington, D. C.  
How crop figures are gathered by country wide organization. Weekly N L 6:8 D 11 '18  
Report for the fiscal year ended June 30, 1917. 13p '17 U S Ag

**Defenses**

Shall the United States prepare for war? O Judd Farmer 60:5 Mr 18 '16  
Taxation for preparedness. B. W. Currie. Country Gent 81:1283-4 Jl 1 '16

**Description and travel**

Across the plains in 1861 with pure-bred cattle and sheep for California. I. H. Butterfield. Nat Stock & F 42:365 Jl 13 '18  
Touting the tourists. M. Daniels. il Am For 24:77-84 F '18

**Economic conditions**

Prepare for peace.—economic war will surely follow. D. Kirschbaum. Am Sheep B & W 36:129-30 Mr 16 '16

**Education, Bureau of**

Relation of the Bureau of education to the agricultural colleges. S. P. Capen. Assn Am Ag Coll & Exp Pro 1915:140-50

**Entomology, Bureau of**

Controlling American insects—helpful and harmful. L. O. Howard. il Cornell Countryman 14:279-82 Ja '17; Same. Penn State F 10:1-3 Ja '17

**Farm equipment control, Office of**

Uncle Sam's tractor man. J. R. McMahon. il Country Gent 83:12-13 N 2 '18

**Farm management, Office of**

Plan of the Department of agriculture for handling the farm labor problem. E. V. Wilcox. Am Econ Review (Ithaca, N Y. \$1.25) 8:sup158-70 Mr '18  
Work of the Office of farm management relating to land classification and land tenure. W. J. Spillman. Am Econ Review (Ithaca, N Y. \$1.25) 8:sup65-71 Mr '18

**Federal farm loan board**

See Federal farm loan board

**Federal trade commission**

Cost accounting; Federal trade commission offers cooperation with manufacturers. N Y Prod R 42:846 S 20 '16  
Federal trade commission and the packers. Wallaces' F 43:1409 O 4 '18  
Report on flour milling and jobbing. 27p '18 U.S. Federal trade comm., Washington, D.C.  
Trade associations and better business methods. E. N. Hurley. Am Fert 44:21-3 Ap 1 '16  
Trade commission criticised; Chamber of commerce of U.S. sends protest to President. N Y Prod R 46:738 S 18 '18

**Flora**

See Botany—United States

**Food administration**

See Food control—United States

**Food inspection service**

Pathological aspects of the federal fruit and vegetable inspection service. C. L. Shear. Phyt 8:155-60 Ap '18

**Food purchase board**

New purchasing committee to co-ordinate buying for army, navy and allies. N Y Prod R 45:223 D 19 '17

**Food research laboratory**

Saving the products of poultrymen for table use. Reliable P J 25:543-4+ Ag '18  
Useful institution. N Y Prod R 43:902 Mr 28 '17  
Views of head of United States food research laboratory on present importance of poultry industry. Reliable P J 25:381-5 Je '18

**Foreign relations**

See also Monroe doctrine

**Foreign seed and plant introduction, Office of**

Plant-introduction gardens of the Department of agriculture. P. H. Dorsett. il U S Ag Yearbook 1916:135-44; Same. Separate 687

**Forest service**

See Forest service (United States)

**History**

Forest legislation in America prior to March 4, 1789. J. P. Kinney. Cornell Ag Exp B 370:361-405 '16

**Civil war**

Uncle Henry's own story. Wallaces' F 43:440, 491 Mr 8-15 '18

**Horticultural board, Federal**

Report for the fiscal year ending June 30, 1917. 16p '17 U S Ag

**Industries and resources**

Fur trade of the United States. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:24-5 Ja 12 '18  
Industrial preparedness for peace; agricultural conservation. E. E. Miller. Scientific Am (233 Broadway, N.Y. 10c) 116:120+ F 3 '17

U.S.—Industries and resources.—*Continued*

KCI answers "Here!" V: Willard. il *Sunset* (San Francisco 15c) 40:10-13 Ap '18

\* Should we have an annual census of agriculture and manufactures? O. P. Austin. *Am Statistical Assn* (491 Boylston st, Boston \$1) 15:786-93 S '17

United States richer in mineral resources than any other country. *Am Coop J* 11:646 F '16

War problems and what the government is doing to meet them. B. T. Galloway. *Cornell Countryman* 14:719-20 Je '17

*See also* Agriculture—United States; Dairying—United States; Forests and forestry—United States; United States—Commerce; also names of industries and products

## Insecticide and fungicide board

Report for the fiscal year ended June 30, 1917. 4p '17 U S Ag

## Land tenure

*See* Land tenure—United States

## Law

*See also* Agricultural credit—United States—Law; Agricultural law, and references under that subject; Food law; Highway law; Warehouses—Laws and regulation

## Marine corps

Devil dogs. F. Gibbons. il *Country Life* 35: 26-30 D '18

First to fight: a history of the marines. A. S. McLeomore. il *Country Life* 35:31-3 D '18

Otherwise the sector was quiet. A. W. Catlin. il *Country Life* 35:35-43 D '18

When the tide turned: the marine's own story as told to Arthur Bartlett Maurice. il *Country Life* 35:44-7 D '18

## Markets, Bureau of

Attitude of the Bureau of markets toward the grain trade. F. A. Derby. *Coop Manager & F* 7:40 Jl '18

Federal market news service of livestock and meats. L. D. Hall. (*In* Nat. conf. on marketing and farm credits, 1916, p 248-61) \$2 '17 C. W. Holman, sec., Madison, Wis.

Federal office of markets and rural organization. J. C. Gilbert. *Mass Ag Bd Yearbook* 1916, pt 2:109-21 '17

How the Bureau of markets helps in marketing southern crops. C. J. Brand. *Prog F* 33: 882 Ag 10 '18

Large usefulness is found for market news services. *Weekly N L* 6:10 D 11 '18

Market news service. *N Y Prod R* 45:109 N 28 '17

Office of markets; reasons for its organization and general character of its work. *N Y Prod R* 42:882 S 27 '16

Report for the fiscal year ending June 30, 1916. *Ag Digest* 1:259 Ja '17

Uncle Sam: market news reporter. J. R. McMahon. *Country Gent* 82:1860 N 24 '17

Value of a market news service to farmers and fruit growers; with discussion. H. W. Selby. *Mass Ag Bd Yearbook* 1917, pt 2:8-27 '18

What U.S. Bureau of markets does for fruit-growers. R. L. Ringer. *Better Fruit* 13:7+ O '18

Work and viewpoint of the Office of markets and rural organization. W. A. Sherman. *N Y Ag Dept B* 81:1734-48 Mr '16; Same. (*In* *Peninsula hort. soc. Trans.*, 1916, p. 73-82) '16 W. Webb, sec., Dover, Del.; Same. *N Y Ag Dept Rep* 1916, pt 3:1734-48 '17

## Food inspection service

*See* United States—Food inspection service

## National parks

*See* National parks

## Navy

Feeding the navy. D: Lawrence. il *Country Gent* 82:1284-5 Ag 18 '17

Pleasure craft for the U.S. navy; photographs. E. Levick. *Country Life* 32:54-5 Jl '17

They're in the navy now; yachting has gone to war in earnest. L. Perry. il *Country Life* 34:33-8 Ag '18

## Park service, National

Report of the director for the fiscal year ended June 30, 1917. 258p il maps '17 U.S. Dept. of interior, Washington, D.C.

*See also* National parks

## Plant industry, Bureau of

Report for the fiscal year ended June 30, 1917. 32p '17 U S Ag

## Politics and government

Facts kept from the farmer. 82p '18 National nonpartisan league, St Paul, Minn.

## Public lands

*See* Forest reserves; Public lands—United States

## Public roads and rural engineering, Office of

Construction and maintenance of roads and bridges from July 1, 1913, to Dec. 31, 1914. U S Ag B 284:1-64 '15

Report for the fiscal year ended June 30, 1917. 22p '17 U S Ag

Work of the Division of rural engineering, United States Department of agriculture; with discussion. E. B. McCormick. *Am Soc Ag Eng Trans* 11:92-103 '18

## Reclamation service

*See* Reclamation service (United States)

## Shipping board

Loi portant constitution d'un office fédéral des transports maritimes dans le but d'encourager, de développer et de créer une marine auxiliaire, une réserve navale et une marine marchande pour satisfaire aux besoins du commerce des Etats-Unis avec ses territoires et possessions et avec les pays étrangers; de régler les opérations des chargeurs maritimes exerçant le commerce avec l'étranger ou entre les Etats de la Confédération; et visant aussi d'autres fins. *Int Yearbook Ag Leg* 1916:441-4 '17

## Soils, Bureau of

Bureau of soils—its organization and function. M. Whitney. il *Penn State F* 9:427-9+ O '16

Report for the fiscal year ended June 30, 1917. 8p '17 U S Ag

## States relations service

Report of the Director for the fiscal year ended, June 30, 1918. 37p '18 U S Ag

States relations service; its organization and work. A. C. True. maps *Cornell Countryman* 14:647-50 My '17; Same. *Purdue Ag* 11:8-11 Je '17; Same. *Penn State F* 10:94-5 My '17

## War industries board

Agriculture to have representation in machinery of War industries board. *Weekly N L* 5:14-15 Je 26 '18

Preference of industries. *Am Fert* 49:30-3 S 28 '18

Priority policies affecting industry. *Am Fert* 48:29 Ap 27 '18

Priority policies affecting industry. *Am Fert* 48:78+ Je 8 '18

## War trade board

Cooperation of the War trade board requested in the enforcement of the plant quarantine act. (Service and regulatory announcements—Fed. Hort. Bd. 54) p 71-3 '18 U S Ag

## Weather bureau

Work of the weather men. C. V. Marvin. il map *Cornell Countryman* 14:371-6 F '17; Same. *Purdue Ag* 11:10-13 F '17; Same. il *Penn State F* 10:25-7+ F '17



**United States botanic garden**

Story of Easter in plants. il Gard Chron Am 20:178-80 Ap '16

To enlarge United States botanic garden. il plan Gard Chron Am 20:356-7 Ag '16

**United States boys' working reserve**

Agricultural training for boys important; Nevada offers great opportunity. Irr Age 33:44 Ap '18

\* Boys' working reserve: its value to national education. R: Hatton. School Life (Washington, D.C.) 1:6, 14 O 16 '18

Boys' working reserve of Illinois. E. Davenport. O Judd Farmer 64:14 F 9 '18

Boys' working reserve, U S A. J. H. Sandfort. O Judd Farmer 62:4 Je 30 '17

Farm craft lessons for reserve volunteers: lessons 1-7. 4 pamphlets '18 B. D. Butler, dir., U. S. Boys' working reserve, Room 47, 120 W. Adams st, Chicago

Titles follow: American boy and the war, by E. Davenport; When the city boy goes to the farm, by E. Davenport; The horse, by J. L. Edmonds; The cow; Swine

First line of home defense; what is being done to mobilize working reserves for agriculture. W. Harper. map Country Gent 82: 1025 Je 16 '17

Illinois bulletins 1-5. '18 B. D. Butler, dir., U. S. Boys' working reserve, Room 47, 120 W. Adams st., Chicago, Ill.

Titles follow: U. S. reserve volunteer, by E. D. Butler; U. S. Boys' working reserve; Loyal farm boy and the war, by E. Davenport; Training city boys to be farm helpers, by W. J. Bogan; Call of the war to the loyal farmer, by E. Davenport

Look over city boys. O Judd Farmer 64:10 Mr 16 '18

Mobilizing Michigan's boy-power. E. R. Trangmar. il Country Gent 83:8-9 Mr 30 '18

National census. I: D. Strauss. Breeder's Gaz 73:158 Ja 24 '18

Organization and purpose. School Review (Univ. of Chicago Press, Chicago 20c) 26: 125-7 F '18

Reserves for the army and reserves for the farm. il Purdue Ag 13:57 N '18

Suggestions for teachers giving practical instruction to city boys in: (a) Care and handling of work horses; (b) Care, adjustment, and use of farm machinery; (c) Care and handling of dairy cows and milk. W. M. Jardine. (C. 7) 30p il '18 Kansas State council of defense, State House, Topeka

Training boys for farm work. Ia Ag Ext Emergency Leaflet 35:1-4 '18

Training town boys for farm work. il Wallaces' F 43:1103 Ag 2 '18

\* United States boys' working reserve. Monthly R (U. S. Bur. of Labor Statistics, Washington, D.C.) 4:991-3 Je '17

\* United States boys' working reserve. E: G. Jenkins. Boys' Workers Round Table (1 Madison av, N.Y. 20c) 1:26-7 Je '18

**United States food administration.** See Food control—United States

**United States Food administration grain corporation**

Doubling the farmer's wheat dollar. C: W. Holman. il Country Gent 83:8-9 Ja 26 '18

\* Expansion of grain corporation. (In Official statement no. 2, p. 1-2) '18 U. S. Food administration, Washington, D.C.

\* Flour purchase plan; export buying of cereal products. (In Official statement no. 5, p. 10-11) '18 U. S. Food administration, Washington, D.C.

Government to buy wheat. Hoard's D 54:153 Ag 31 '17

\* Grain corporation operations. (In Official statement no. 4, p 11) '18 U. S. Food administration, Washington, D.C.

Handling the wheat crop. W: H. Dean. il Country Gent 83:5-6 Ag 10 '18

New United States food administration grain corporation. Coop Manager & F 7:23 S '17

\* Plan of wheat and flour control for the 1918 wheat crop. (In Official statement no. 3, p. 8-10) '18 U. S. Food administration, Washington, D.C.

President authorizes wheat purchase—executive order. W. Wilson. Weekly N L 5:4 Jl 3 '18

Specific information for the country grain trade. J. W. Shorthill. Am Coop J 13:4 S '17

Three months of the grain corporation. F. L. Carey. Coop Manager & F 7:46-7 Ja '18

U. S. grain corporation. A. Secor. Coop Manager & F 7:31 Ja '18

Wheat for food and feed. J. C. Marquis. il Country Gent 83:11-12 N 30 '18

World's greatest wheat dealer. W: H. Dean. Country Gent 82:1441-2 S 22 '17

**United States food purchase board.** See United States—Food purchase board

**United States food research laboratory.** See United States—Food research laboratory

**United States forest products laboratory**

Wood researches prove beneficial; laboratory work at Madison. il O Judd Farmer 62:3 Ja 6 '17

Work of the United States forest products laboratory. J For 15:509-12 Ap '17

**United States forest supervisors**

Convention, Denver, Colorado. Am For 23:234-5 Ap '17

**United States government poultry farm**

United States government poultry farm. G. M. Curtis. il Reliable P J 24:843-5+ D '17

U. S. government 20,000-layer poultry plant. il Reliable P J 25:57+ Mr '18

**United States grain corporation.** See United States Food administration grain corporation

**United States highways council**

Federal highways council to control all road work. Weekly N L 5:16 Je 26 '18

**United States live stock industry committee**

Conference at Washington, Sept. 5-6. Wallaces' F 42:1272 S 21 '17

Conference, Washington, D.C. Sept. 5-7. F. Rasmussen. Penn State F 10:138-9 O '17

Livestock conference, Washington, D. C., Sept. 5-6; with resolutions. Kimball's D F 15:720-1 O 1 '17; Same (resolutions). Breeder's Gaz 72:339 S 13 '17; Same (resolutions). Nat Stock & F 41:594 S 15 '17; Same (resolutions). Weekly N L 5:1-3 S 19 '17; Excerpts (resolutions). Am Sheep B & W 37:540 S '17; Wallaces' F 42:1242 S 14 '17; Hoard's D 54: 256 S 21 '17; Creamery 6:71 O '17; Nat Wool Grower 7:56 O '17

**United States livestock sanitary association**

19th annual meeting, Dec., 1915. Am Vet M Assn J 48:387-8 Ja '16

20th annual meeting, Chicago, Dec. 5-7, 1916. Am Vet M Assn J 50:635-50 Ja '17

22d annual meeting, Chicago, Dec. 2-4. Hoard's D 56:701 D 13 '18

**United States public service reserve**

U. S. public service reserve. Power F 26:24 O '17

**United States soldiers' home**

Dairy herd at National soldiers' home. W. C. Barnes. il Breeder's Gaz 74:115 Jl 25 '18

**University farm gardens.** See Agricultural college farm gardens

**University libraries.** See College libraries

**Uredineae.** See Rusts

**Urine**

Agricultural source of benzoic acid. P. J. Maloney and F. T. Shutt. Ag Gaz of Canada 5:1130-2 D '18

Concerning certain aromatic constituents of urine; a study of the non-phenolic volatile oils isolated from the urine of cows, goats, horses and human beings. R. J. Anderson. N Y State Ag Exp Tech B 55:1-25 '16

See also Manures, Liquid

**Uruguay.** See subhead Uruguay under Agricultural credit, Agricultural education, Agriculture, Dairying, Food control, Live stock, Soils, Wool

**Ustilaginaceae.** See Smuts

**Utah**

Finding the house of the cliff dwellers. J. E. Wing. *Breeder's Gaz* 69:25 Ja 6 '16

Zion canyon—masterpiece among Utah's scenic wonders. M. A. Byrne. *il Irr Age* 33: 137-42 Jl '18

See also Tooele valley, Utah; also subhead Utah under Agriculture, Grain, Irrigation, Sheep, Soil surveys, Soils

**Utah irrigation and drainage congress**

Purpose and policies and resolutions. *Irr Age* 33:53, 56 Ap '18

**Utah state agricultural college**

Extensive work of the agricultural college. *il Country Gent* 81:933 Ap 29 '16

**Utah woolgrowers' association**

Convention, Salt Lake City, Jan. 15-16. *Am Sheep B & W* 38:130 F '18

**V**

**Vacant lands cultivation society, Croydon.** See Croydon vacant lands cultivation society

**Vacant lot cultivation**

Activities of Toronto back-yard garden committees. *Ag Gaz of Canada* 4:321 Ap '17

Allotment movement. F. E. Green. *Contemporary Review* (249 W. 13th st, N.Y. 50c) 114: 90-6 Jl '18

\* Back yard and vacant lot gardens a national necessity. Playground (1 Madison av, N.Y. 25c) 12:113-15 Je '18

City full of gardens. A. Fearing. *il Country Life* 30:90 My '16

Consideration of method and accomplishment in the cities of the Dominion. *il Ag Gaz of Canada* 4:1083-97 D '17

Denver union water co. furnishes free water for irrigation of vacant lot gardens. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:455-6 My 8 '18

Expectations and plans of the cities of Canada for the present year. *Ag Gaz of Canada* 5:391-6 Ap '18

1st annual report of the Ottawa vacant lot association. 23p *il '17 A. S. Jost, sec., 23 Monk st, Ottawa*

Garden making on vacant lots and the home vegetable garden. W. T. Macoun. 16p '17 *Canada Ag*

Low water rate for vacant lot gardens at Glendale, Cal. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 49:463 My 8 '18

Mobilizing unused land and forces to meet an unprecedented crisis. R. G. Stoddard. *il Am City* (Tribune bldg., N.Y. 35c) 16:471-81 My '17

Vacant lot gardening; with discussion. T. D. Dockray. (*In Report, Horticultural societies of Ontario, 1917, p. 39-48*) *il '18 Ontario ag. dept., Toronto*

**Vacation clubs**

Vacation-club work. J. H. Beveridge. (*In Pro., Nat. educ. assn., 1916, p. 1060-3*) \$2 '16 D. W. Springer, sec., Ann Arbor, Mich.

**Vacations**

Farm woman's vacation. E. T. Owen. *Ohio F* 142:150 Ag 17 '18

How about a vacation this summer? H. Quick. *Country Gent* 81:1359 Jl 15 '16

Rubber-tired vacations. *il Power F* 26:26 S '17

**Vaccination**

Avoiding bad results from vaccination. C. G. Starr. *Breeder's Gaz* 69:1291 Je 22 '16

Bad results with vaccination. C. G. Starr. *Breeder's Gaz* 70:275 Ag 24 '16

Curative treatment of epizootic lymphangitis by vaccinotherapy; preparation of a polyvalent pyovaccine. *Int R Sci & Prac Ag* 9, no 3:342-3 Mr '18

Desiccated anthrax antigen for immunization purposes. N. S. Ferry. *Am Vet M Assn J* 51:200-3 My '17

Technique of vaccinating hogs. R. W. Cassidy. *Breeder's Gaz* 70:12 Jl 6 '16

Vaccinations against hemorrhagic septicemia. J. B. Hardenbergh and F. Boerner, jr. *Am Vet M Assn J* 49:55-9; 50:868-76 Ap '16, Mr '17

Vaccines. L. Roger. (*In Smithsonian inst. Report 1915, p. 459-66*) '16 *Smithsonian inst., Washington, D. C.*

See also Anthrax—Preventive inoculation

**Vail, Theodore Newton, 1845-**

Portrait. *Am For* 22:547 S '16; *Field* 11 27:23 Ja '17

**Vallisneria**

Pollination of *vallisneria spiralis*. R. B. Wylie. *il Bot Gaz* 63:135-45 F '17

**Valuation**

Appraisals and depreciation of fertilizer plants. W. S. Rankin. *Am Fert* 45:94+ Jl 22 '16

Discussion as to the method of effecting valuations. G. Albani. *Int R Sci & Prac Ag* 7, no 8:1168-71 Ag '16

Factors of farm appraisal. S. N. Reep. *il Hoard's D* 55:958 Je 28 '18

Farm valuations for book-keeping purposes. J. Wylie. *J Ed Ag* 22:1215-28 Mr '16

Method of valuation of real estate. A. Serpieri. *Int R Sci & Prac Ag* 8, no 1:139-47 Ja '17

Method of valuation of real estate; its application to agricultural and forest valuations. A. Serpieri. *Int R Sci & Prac Ag* 8, no 12:1276-7 D '17

Valuing farm lands for purchase. R. L. Adams. *Country Gent* 83:12 Ja 12 '18

**Value**

That elusive capital. S. Fraser. *Country Gent* 81:321 F 12 '16

See also Farm values; Prices; Supply and demand

**Valves.** See Automobile engines—Valves

**Vanadium**

Does vanadium interfere with the determination of phosphorus in soils when the phosphorus is weighed as magnesium pyrophosphate? R. A. Gortner and W. M. Shaw. *bibliog Soil Sci* 2:299-304 S '16

**Van Alstyne, Edward**

Sketch. L. Howard. *por Hoard's D* 55:94 F 8 '18

**Vancouver fair**

Jerseys at Vancouver fair. *il Jersey B* 37: 1540 S 25 '18

**Van Fleet, Walter, 1857-**

Dr W. Van Fleet, rose hybridizer. *il por Am Flor* 47:1234 D 23 '16

Dr Walter Van Fleet, Robert White medallist, 1918. *por Gard M* 28:92 O '18

**Vanilla**

Vanilla. T. B. McClelland. *Porto Rico Ag Exp Rep* 1916:23-4 '18

**Vanillin**

Cause of the disappearance of cumarin, vanillin, pyridine and quinoline in the soil. W. J. Robbins. *bibliog il Ala Ag Exp B* 195:49-64 '17

Destruction of vanillin in the soil by the action of soil bacteria. W. J. Robbins and A. E. Elizando. *bibliog Ala Ag Exp B* 204: 125-31 '18

Field test with a toxic soil constituent: vanillin. J. J. Skinner. *il U S Ag B* 164:1-9 '15

Field tests of fertilizer action on soil aldehydes. J. J. Skinner and C. F. Noll. *il Am Soc Agron J* 8:273-98 S '16

Presence of some benzene derivatives in soils. E. C. Shorey. *J Ag Research* 1:359-63 F '14

**VanNatta, Frank W.**

Portrait. *Breeder's Gaz* 70:7 Jl 6 '16

**Variation (biology)**

Behaviour of tobacco variations, in Java. H. Jensen. *Int R Sci & Prac Ag* 8, no 5:720-2 My '17

Bottle-necked lemon. L. Swingle. *il J Heredity* 8:559-60 D '17

Brachism, a hereditary deformity of cotton and other plants. O. F. Cook. *il J Ag Research* 3:387-400 F '15

Bud variation as a practical asset in horticulture. M. J. Dorsey. *il Minn Hort* 46:304-11 Ag '18

Bud variation in lemons. A. D. Shamel. *il J Heredity* 8:75-81 F '17; *Abstract. Int R Sci & Prac Ag* 8, no 6:858-9 Je '17



**Variation (biology)**—*Continued*

- Bud variation in potatoes. A. W. Sutton. *Gard Chron* (Lond) 64:190, 199-200 N 9-16 '18
- Bud variation of *eucynmus*. A. D. Shamel. *il J Heredity* 8:218-20 My '17
- Bud variation of *pittosporum*. A. D. Shamel. *il J Heredity* 8:357-8 Ag '17
- Case of variations observed in the potato in Holland. *Int R Sci & Prac Ag* 7,no 10:1435-6 O '16
- Cell measurement as an aid in the analysis of quantitative variation. W. Brotherton, jr. and H. H. Bartlett. *il Am J Bot* 5:192-206 Ap '18
- Citrus-fruit improvement: a study of bud variation in the Marsh grape-fruit. A. D. Shamel and others. *il U S Ag B* 697:1-112 '18
- Citrus-fruit improvement: a study of bud variation in the Valencia orange. A. D. Shamel and others. *il U S Ag B* 624:1-120 '18
- Citrus-fruit improvement: a study of bud variation in the Washington navel orange. A. D. Shamel and others. *il U S Ag B* 623:1-146 '18
- Color and color-pattern mechanism of tiger beetles. V. E. Shelford. (Ill. biol. monographs, v. 3, no. 4) 135p bibliog *il* (Ap) '17 Univ. of Illinois, Urbana
- Color inheritance in mammals. S. Wright. *J Heredity* 9:33-8 Ja '18
- Coloration of the seed coat of cowpeas. A. Man. *il J Ag Research* 2:33-56 Ap '14
- Concerning the mutation theory. T. H. Morgan. *Sci Monthly* (Science Press, Garrison, N.Y. 30c) 6:385-405 My '18
- Conservatism and variability in the seedling of dicotyledons. E. W. Sinnott. *il Am J Bot* 5:120-30 Mr '18
- Doubling of crocuses and daffodils. F. M. Fultz. *il Sci Am Sup* (233 Broadway, N. Y. 10c) 86:244 O 19 '18
- Evolution by mutation. T. H. Morgan. *Sci Monthly* (Science Press, Garrison, N.Y. 30c) 7:46-53 JI '18
- Experimental study of genetic relationships. H. H. Bartlett. *Am J Bot* 2:132-55 Mr '15
- Fertility in *cichorium intybus*: the sporadic occurrence of self-fertile plants among the progeny of self-sterile plants. A. B. Stout. bibliog *il Am J Bot* 4:375-95 JI '17
- Fifteen- and sixteen-chromosome *oenothera* mutants. A. M. Lutz. bibliog *il Am J Bot* 4:53-111 F '17
- Forgotten bud variations. L. B. Scott. *il J Heredity* 7:452-5 O '16
- Further evidence for age and area; its applicability to the ferns, etc. J. C. Willis. bibliog *Ann Bot* 31:335-49 JI '17
- Genetic study of plant height in *phaseolus vulgaris*. R. A. Emerson. bibliog *il Neb Ag Exp Research B* 7:1-73 '16
- Heredity and mutation as cell phenomena. R. R. Gates. *Am J Bot* 2:519-28 D '15
- Individual variation in the alkaloidal content of belladonna plants. A. F. Sievers. *J Ag Research* 1:129-46 N '13
- Lemon bud variation. A. D. Shamel. *il J Heredity* 8:284 Je '17
- Lobed leaves in maize. J. H. Kempton. *il J Heredity* 7:508-10 N '16
- Mass mutation in *zea mays*. H. de Vries. *Science* (Science Press, Garrison, N.Y. 15c) n s 47:465-7 My 10 '18
- Mass mutations and twin hybrids of *oenothera grandiflora* Ait. H. DeVries. bibliog *il Bot Gaz* 65:377-422 My '18
- Matroclonic inheritance in mutation crosses of *oenothera Reynoldsii*. C. D. La Rue and H. H. Bartlett. *il Am J Bot* 4:119-44 Mr '17
- Mutation in Egyptian cotton. T. H. Kearney. bibliog *il J Ag Research* 2:287-302 JI '14
- Mutation in *matthiola annua*, a Mendelizing species. H. H. Bartlett. *Bot Gaz* 63:82-3 Ja '17
- Mutation in *matthiola annua*, a Mendelizing species. H. B. Frost. bibliog *il Am J Bot* 3:377-83 JI '16
- Mutations of *oenothera stenomeres*. H. H. Bartlett. *il Am J Bot* 2:100-9 F '15
- New dimorphic mutants of the *oenotheras*. H. DeVries. *il Bot Gaz* 62:249-80 O '16
- Oenothera* genetics. B. C. Helmick. *Bot Gaz* 63:81-2 Ja '17
- Oenothera lamarckiana* mut. *velutina*. H. DeVries. *il Bot Gaz* 63:1-24 Ja '17
- Oenothera* mutants with diminutive chromosomes. A. M. Lutz. *il Am J Bot* 3:502-26 N '16
- On cultural bud mutations of some species of *solanum* and on the acclimatization in France of some Bolivian species. C. Verne. *Int R Sci & Prac Ag* 8,no 8:1115-16 Ag '17
- On endemism and the mutation theory. H. N. Ridley. *Ann Bot* 30:551-74 O '16
- On pairs of species. R. R. Gates. *il Bot Gaz* 61:177-212 Mr '16
- Orange bud variation. A. D. Shamel. *il J Heredity* 8:176-7 Ap '17
- Origin of the striped cane. A. D. Shamel. *il J Heredity* 8:471-2 O '17
- Parallel mutation in *drosophila funebris*. A. H. Sturtevant. *Science* (Science Press, Garrison, N.Y. 15c) n s 48:72-3 JI 19 '18
- Plant industry based upon mutation; varieties of Egyptian cotton have arisen largely through mutation. T. H. Kearney. *il J Heredity* 9:51-61 F '18
- Recurving of milo and some factors influencing it. A. B. Conner and R. E. Karper. *il Tex Ag Exp B* 204:1-30 '17
- Relative age of endemic species and other controversial points. J. C. Willis. bibliog *Ann Bot* 31:189-208 Ap '17
- Remarkable buttonballs. R. W. Shufeldt. *il J Heredity* 8:310-11 JI '17
- \* Role of factor mutations in evolution. E. B. Babcock. bibliog *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:116-28 F '18
- Significant accuracy in recording genetic data. E. M. East. *Am J Bot* 3:211-22 My '16
- Somatic mutations in sunflowers. T. D. A. Cockerell. *il J Heredity* 8:467-70 O '17
- Somatic segregation. E. J. Kraus. *il J Heredity* 7:2-8 Ja '16
- Somatic segregation, a misleading term. E. B. Babcock and F. E. Lloyd. *il J Heredity* 8:32-9 F '17
- Some variable ears of dent corn. A. D. Shamel. *il J Heredity* 9:29-32 Ja '18
- Striking orange bud variations. A. D. Shamel. *il J Heredity* 9:189-91 Ap '18
- Studies in juglans: further evidence that the oak-like walnut originates by mutation; a parallel mutation in juglans hindsii (Jepson) Sargent. E. B. Babcock. *il Cal Univ Pub Ag Sci* v 2,no 3 71-80p '16 (10c)
- Study of bud variations in coleus. *J Heredity* 8:518 N '17
- Study of the influence of environment. *N J Ag Exp Rep* 1916:447-9 '17
- Systematic analytical study of certain North American convallariaceae, considered in regard to their origin through discontinuous variation. R. R. Gates. *Ann Bot* 32:253-7 Ap '18
- \* Three mutations in previously known loci. D. E. Lancefield. bibliog *Am Naturalist* (Science Press, Garrison, N.Y. 40c) 52:264-9 Ap '18
- Unusual variation in crook-neck squash. J. G. Cook. *il J Heredity* 9:24 Ja '18
- Variation and correlation in wheat, with special reference to weight of seed planted. A. C. Arny and R. J. Garber. bibliog *J Ag Research* 14:359-92 Ag 26 '18
- Variation in artichokes. A. D. Shamel. *il J Heredity* 8:306-9 JI '17
- Variations in *anemone nemorosa*. E. J. Salisbury. *il Ann Bot* 30:525-8 O '16
- Variations in Washington navel orange. *il Rural N Y* 77:1374 D 14 '18
- Women's eyes and potato skins. *il J Heredity* 7:475-7 O '16
- See also Breeding; Color of animals; Color of plants; Evolution; Heredity; Mendelism; Natural selection; Species; Variegation; Variety tests
- Variegated cutworms.** See Cutworms
- Variegated poplar and willow borers.** See Poplar and willow borers
- Variation**
- Causation of variegated leaves. *il Gard Chron* Am 20:22-3 Ja '16

**Variegation—Continued**

- Studies on the hybrids of capsicum annuum; on some variegated races. S. Ikeno. *Int R Sci & Prac Ag* 8, no 7:991-2 J1 '17  
 Variegated leaves. *il Rural N Y* 75:197 F 5 '16

**Variety tests**

- Cereal experiments in Maryland and Virginia. T. R. Stanton. *il map U S Ag B* 336:1-51 '16  
 Cotton experiments, 1917. H. B. Brown and C. T. Ames. *Miss Ag Exp B* 184:1-28 '18  
 Dry farm grain tests in Montana. A. Atkinson and N. C. Donaldson. *il map Mont Ag Exp B* 110:167-218 '16  
 Dry farming investigations at the Harney branch station. L. R. Breithaupt. *il Ore Ag Exp B* 150:1-46 '18  
 Experiments in field technic in plot tests. A. C. Arny and H. K. Hayes. *bibliog J Ag Research* 15:251-62 O 28 '18  
 Experiments in field technic in rod row tests. H. K. Hayes and A. C. Arny. *bibliog J Ag Research* 11:399-419 N 26 '17  
 Experiments on varietal resistance to the bean and cotton anthracnose diseases. C. W. Edgerton and C. C. Moreland. *il La Ag Exp B* 155:1-24 '16  
 Method of correcting for soil heterogeneity in variety tests. F. M. Surface and R. Pearl. *bibliog J Ag Research* 5:1039-50 F 28 '16  
 Methods used and results obtained in cereal investigations at the Cornell station. H. H. Love and W. T. Craig. *il Am Soc Agron J* 10:145-57 Ap '18  
 Progress report, substation no. 5, Temple, Texas, 1910-1914. *il Tex Ag Exp B* 215:1-28 '17  
 Report of horticultural substation; variety tests. *Mont Ag Exp B* 114:116-23 '16  
 Report of progress of work and guide to experimental plots; North central experiment station, Grand Rapids. *il Minn Ag Exp* 64p '17  
 Results of co-operative experiments in agriculture. C. A. Zavitz. (*In Report, Ontario ag. and exp. union, 1916, p. 9-33*) '17 Ontario ag. dept., Toronto  
 Size of plots for field experiments with crops. W. M. Jardine. *bibliog Am Soc Agron J* 9:402-5 D '17  
 Tests of varieties of corn at Auburn. E. F. Cauthen. *il Ala Ag Exp B* 200:30-6 '18  
 Use of checks and repeated plantings in varietal tests. F. H. Pritchard. *Am Soc Agron J* 8:65-81 Mr '16  
 Varietal tests of farm crops. *Minn Ag Exp Rep* (Crookston ser., v. 10, no. 1, p. 38-47) '17  
 Variety testing and crop improvement. *Nev Ag Exp Rep* 1917:39-43 '18  
 Variety testing at the Dominion experimental farms, and what has been accomplished by it. W. T. Macoun. *Ag Gaz of Canada* 4:349-54 My '17  
 Variety tests with potatoes, oats and barley. *J Dept Ag S Australia* 20:602-7 Mr '17  
 Vegetable tests on sandy soil at the Umatilla experiment farm. R. W. Allen. *il Ore Ag Exp B* 136:1-38 '16  
 Wheat. N. Schmitz. *il map Md Ag Exp B* 198:59-94 '16; Same. *Md Ag Exp Rep* 1916-1917 '17  
 Winter oats, barley, spelt and emmer. N. Schmitz. *il Md Ag Exp B* 200:122-7 '17; Same. *Md Ag Exp Rep* 1916-1917 '17  
 Work of the Truckee-Carson reclamation project experiment farm in 1917. F. B. Headley. (*W. I. A. C.* 23) 24p *il '18 U S Ag*  
*See also subdivision Varieties under names of crops, e.g. Cotton—Varieties, Oats—Varieties, Vegetables—Varieties*

**Varnish mixture; story.** *Ohio F* 142:146 Ag 17 '18

**Varying hares.** See Rabbits

**Vases, Lawn.** See Garden ornaments and furniture

**Vassar college**

- Dietary study at Vassar college. A. L. Macleod and M. A. Griggs. *J Home Econ* 10:97-107 Mr '18

**Veal**

- Digestibility of very young veal. C. F. Langworthy and A. D. Holmes. *bibliog J Ag Research* 6:577-88 J1 17 '16

- Immature meat. *Am Vet M Assn J* 49:448-50 J1 '16  
 Increasing the meat supply. C. O. Levine. *Hoard's D* 51:300 Mr 10 '16  
 Young veal for food. *Wallaces' F* 41:163 F 4 '16

**Composition**

- Biochemical comparisons between mature beef and immature veal. W. N. Berg. *bibliog J Ag Research* 5:667-711 Ja 10 '16

**Statistics**

- Commercial stocks of veal. *U S Food Surveys* 1:7-9 Je 29 '18

**Veeries**

- Veery, alias, Wilson's thrush. E. S. Jones. *Ohio F* 137:537 Ap 8 '16

**Vegetable gardening**

- All-the-year-round garden. *Prog F* 32:88 Ja 27 '17  
 Allotment gardens in Belfast. G. H. Oliver. *il J Dept Ag Ireland* 17, no 3:428-32 '17  
 April garden. W. F. Massey. *Prog F* 33:436 Ap 6 '18  
 Canada now gardens officially. J. R. McMahon. *il Country Gent* 83:10-11 My 18 '18  
 Canning crops. *Market Growers J* 22:401 Je 1 '18  
 Cultivating and fertilizing the vegetable garden. A. J. Pinn. *Ag Gaz of New South Wales* 27:713-20 O '16  
 Cultivating vegetables by electricity. *Ag Digest* 2:583 Ag '17  
 Early cabbage, cauliflower and lettuce. D. C. Mooring. *il Okla Ag Exp C* 68:1-7 '18  
 Early spring garden notes. *Prac F* 112:146 Ap 1 '16  
 Essentials to good vegetable production. G. P. Kapnick. *Fruit-Grower* 28:131 F 15 '17  
 Everyman's garden; some vegetables you may yet plant. *il Country Gent* 82:1287 Ag 18 '17  
 Fall garden. W. F. Massey. *Prog F* 31:1028 Ag 26 '16  
 Fall garden suggestions. D. C. Mooring. *Prog F* 32:945 S 8 '17  
 Farmer's garden and the way I manage it. H. E. Cox. *il Nat Stock & F* 41:1359 Mr 23 '18  
 Food facts of importance in America. L. Theiss and M. Theiss. *Touchstone* (118 E. 30th st, N.Y. 35c) 3:348-51 J1 '18  
 Food production at Aldenham. E. Molyneux. *il Gard Chron* (Lond) 62:12-13 J1 14 '17  
 Forcing vegetables. R. W. Thatcher. *Gard Chron* (Lond) 63:9 Ja 5 '18  
 Garden conscription—the solution of the food problem. L. Theiss and M. Theiss. *il Century* (353 4th av, N.Y. 35c) 96:275-83 Je '18  
 Garden crops. A. G. Bouquet and others. *Ore Ag Ext B* 209:1-8 '17  
 Garden hints for February. *Prac F* 112:52 F 1 '16  
 Garden hints for May. W. F. Massey. *Prac F* 113:180 My 1 '17  
 Garden in April. W. F. Massey. *Prac F* 114:136 Ap 1 '18  
 Garden in May. *Prac F* 112:190 My 1 '16  
 Garden in May. W. F. Massey. *Prac F* 114:172 My 1 '18  
 Garden in July. *Prac F* 112:278 J1 15 '16  
 Garden in August. W. F. Massey. *Prac F* 112:294; 113:268 Ag 1 '16, Ag 1 '17  
 Garden in September. W. F. Massey. *Prac F* 113:300 S 1 '17  
 Garden matters needing attention. W. F. Massey. *Prac F* 114:120 Mr 15 '18  
 Garden notes. *Prac F* 112:342 S 15 '16  
 Garden primer; how to plant and care for a vegetable garden. Sp '17 Mayor Mitchel's food supply committee, 71 Broadway, N.Y.  
 Garden suggestions for February. W. F. Massey. *Prac F* 114:46 F 1 '18  
 Garden suggestions for July. W. F. Massey. *Prac F* 113:244 J1 1 '17  
 Gardening for profit and pleasure. Mrs. B. Martin. *Prac F* 112:98 Mr 1 '16  
 Gardening in the winter. *Prog F* 33:1072 O 5 '18  
 Gardens and allotments. *Gard Chron* (Lond) 62:228 D 8 '17  
 Gardens behind the trenches. W. H. Dean. *il Country Gent* 83:15 Mr 30 '18  
 Good care made a good garden. W. F. Kennedy. *Prac F* 114:88 Mr 1 '18



**Vegetable gardening—Continued**

- Growing cabbage, cauliflower and broccoli, by J. L. Stahl; Kale, marrow cabbage and dwarf Essex rape, by E. B. Stookey. Western Wash Ag Exp B v 6:20-2, 22-4 My '18  
 Growing plants for war gardens. C. E. Durst. il Ill Ag Exp C 216:1-16 '18  
 No longer available for general distribution  
 Growing vegetable crops on muck land. P. Work. Market Growers J 13:277-8 Ap 15 '16  
 Growing vegetable plants. J. S. Gardner. il Penn State F 10:51+ Mr '17  
 Growing vegetables for the cannery and evaporator. A. G. B. Bouquet. Better Fruit 12:5-7 Mr '18  
 Handy garden measures. M. G. Kains. Fruit-Grower 27:240 Ap 1 '16  
 Helps on gardening and canning. H. J. Reed and L. R. Gaddis. il Purdue Ag Ext B 54:1-8 '17  
 High-pressure gardening. il Gleanings 46:436-9 Jl '18  
 How I make a garden. J. M. Bonner. Prac F 112:99 Mr 1 '16  
 How to plant. H. D. Hemenway. Mass Ag Bd B 5:71-9 '18 (3d ed. rev.)  
 Instructions in gardening. il Ia Ag Ext Junior C 48:1-8 Mr '18  
 June garden. Prac F 112:230 Je 1 '16  
 Kitchen garden. See weekly numbers of *Gardeners' chronicle* (London)  
 Labor-saving methods in transplanting. R. W. DeBaun. il Market Growers J 22:268-9 Ap 1 '18  
 Last call for food production. F. F. Rockwell. il Country Life 34:52-3 Je '18  
 Manuring of cottage gardens and allotments. J Bd Ag 22:1271-4 Mr '16; Same. Gard Chron (Lond) 59:231 Ap 29 '16  
 May in the vegetable garden. Prac F 112:210 My 15 '16  
 Midsummer garden. Prac F 112:264 Jl 1 '16  
 Mulching vegetable crops. R. L. Watts. Country Gent 82:120 Ja 20 '17  
 Nine principles of efficiency in vegetable gardening. C. H. Hodges. il Am Gas Eng J (42 Pine st., N.Y. 10c) 106:321-3 Mr 31 '17  
 Our garden. G. Deitz. Fruit-Grower 27:187 Mr 1 '16  
 Planning the vegetable garden for maximum returns from minimum space. M. G. Kains. il Gard M 23:85-7 Mr '16  
 Possibilities of the fall vegetable garden. C. E. Durst. il Ill Ag Exp B 200:1-8 '17  
 Preparedness in the vegetable garden. Ag Digest 2:825-6 F '18  
 Present sowing for extra early crops. il Gard M 26:95-6 O '17  
 Preventing injuries to tender vegetables. M. G. Kains. Fruit-Grower 27:266 Ap 15 '16  
 Profitable garden. F. C. Winship. Country Gent 81:270 F 5 '16  
 Profitable little garden. A. W. Gallagher. Fruit-Grower 27:240 Ap 1 '16  
 Propagation of vegetable crops. A. J. Pinn. il Ag Gaz of New South Wales 27:801-6 N '16  
 Review of our garden articles. W. F. Massey. Prac F 112:101 Mr 1 '16  
 Seasonable notes. Gard Chron (Lond) 62:146 O 13 '17  
 Seeds are as gold this year. F. F. Rockwell. il Gard M 27:135 Ap '18  
 Small garden with big results. il Nat Stock & F 42:448 Ag 10 '18  
 Some aspects of the allotments movement in France. J Dept Ag Ireland 17,no 4:611-18 '17  
 Some problems arising out of the food situation. Gard Chron (Lond) 63:63 F 16 '18  
 Start the fall garden early. L. A. Markham. Prog F 32:870 Ag 11 '17  
 Successfully managed garden. C. G. Addison. il Prac F 112:95 Mr 1 '16  
 Summer care of the farmer's garden. E. L. Kirkpatrick. il Ohio F 137:733 My 27 '16  
 Summer garden. Prac F 112:246 Je 15 '16  
 Thinning plants. Weekly N L 4:5 Je 20 '17  
 This year's conditions and next year's garden. W. F. Massey. Prac F 113:361 N 1 '17  
 Town allotments and productive thrift. G. Fletcher. J Dept Ag Ireland 17,no 3:433-41 '17

- Transplanting vegetables to economize on space. H. W. Doyle. il Gard M 25:282-3 Je '17  
 Treatment of vegetables in dry weather. A. B. Wadds. Gard Chron (Lond) 64:57 Ag 10 '18  
 Vegetable garden; discussion. Minn Hort 45:345-9 S '17  
 Vegetable garden helps. Fruit-Grower 27:212 Mr 15 '16  
 Vegetable garden in New Hampshire. J. B. Scherrer. il diags N H Ag Ext B 6:1-42 '16  
 Vegetable gardening. J. B. Burrows. Ill State Hort Soc Trans 1917:319-27 '18  
 Vegetable gardening in Georgia. T. H. McHatten and others. Ga Ag Coll (Ext) B 120:1-48 '17 (rev. ed. of B. 88)  
 Vegetable planting; a spotting machine. il Rural N Y 77:319 Mr 2 '18  
 Vegetables all the year. E. S. Brinton. Fruit-Grower 27:213 Mr 15 '16  
 Wages vs. crops. B. Hall. Independent (119 W. 40th st., N.Y. 10c) 89:352 F 26 '17  
 We must have all-the-year gardens. W. F. Massey. Prog F 31:724 Je 3 '16  
 What kinds of vegetables to grow this year. il Country Gent 81:220-1 Ja 29 '16  
 When and how to plant garden crops. W. N. Hutt. Prog F 33:97 Ja 26 '18  
 \* Winter garden in the cellar. E. I. Farrington. il Independent (119 W. 40th st., N.Y. 10c) 96:168 N 9 '18

See also Agriculture and the war—Factory gardens; Agriculture and the war—Home gardens; Cold frames; Community gardens; Gardening; Greenhouses—Vegetable growing; Hotbeds; Market gardening; Vegetable growers' associations; also names of vegetables

**Bibliography**

- Books on vegetable gardening for the small library. E. L. Bascom. Wis Lib (Madison) B v 14:82-3 Mr '18  
 Vegetable gardening; a bibliography prepared by the committee on food information, of the A. L. A. War service committee. J. W. Lloyd and C. E. Durst. 6p mime '17 Univ. of Ill., Coll. of ag., Urbana

**Planting plans and tables**

- Cropping plan. Gard Chron (Lond) 61:114 Mr 17 '17  
 Fall planting dates. Fla Ag Dept Quar B v 27:19-23 Jl '17  
 Plan for the garden. C. H. Chesley. Nat Stock & F 40:1436 Mr 24 '17  
 Planting chart for all the year garden. Prog F 33:190 F 16 '18  
 Planting table for vegetables. G. G. Weathersbee. Prog F 31:214 F 12 '16  
 Spring garden. J. C. C. Price. Ala Ag Ext C 14 4p '18  
 Temperature requirements; vegetable necessities. M. G. Kains. il O Judd Farmer 60:6+ Mr 4 '16  
 Tested planting table for the vegetable garden. S. P. Baldwin. Gard M 23:88-9 Mr '16  
 Tested vegetable planting table for the South. S. P. Baldwin. Gard M 24:10-11 Ag '16  
 Vegetable growers' planting table. Country Gent 81:114 Ja 15 '16  
 Vegetable planting table. E. Ragsdale. Ga Ag Coll (Ext) C 50:1-4 '17  
 When to plant in any part of the country. Gard M 27:136 Ap '18  
 When to plant the spring and fall garden. maps Prog F 33:416 Mr 30 '18

**Vegetable gardening, Commercial**

- Can vegetables be grown commercially without animal manures? S. B. Haskell. Market Growers J 21:245-8 D 1 '17  
 Commercial vegetable garden. S. F. McPharce. il Fruit-Grower 28:278 Je 1 '17  
 Crops for canning—new methods. A. E. Wilkinson. Nat Stock & F 40:110 Ap 22 '16  
 Growing vegetables for cannery and evaporator. A. G. B. Bouquet. Market Growers J 22:411-12 Je 15 '18  
 Radishes, onions and tomatoes. J. M. Smith. Market Growers J 18:148-9 F 15 '16  
 Role of crops, or the selection of crops to grow for market. J. R. Bechtel. il Penn State F 10:49-50 Mr '17

**Vegetable gardening, Commercial—Continued**

Vegetable cash crops for all conditions. P. Work. *il* Cornell Countryman 14:381-6 F '17  
 Vegetable growing as a business. H. F. Tompson. N H Ag Dept Rep v 34:160-6 '16

*See also* Market gardening; Truck farming

**Vegetable gardening, Home**

Almost the eleventh hour, but not yet too late to plant. Country Gent 82:933 My 26 '17  
 Amateur adventures in a city back yard. A. Merlin. Country Gent 81:224 Ja 29 '16  
 August in your own war garden. A. Kruhm. *il* Country Life 32:49 Ag '17  
 Back-yard garden. J. R. Bechtel. Pa Ag Ext C 53:1-15 '17  
 Backyard garden and its earnings. L. H. Williams. Rural N Y 77:1397 D 21 '18  
 Back-yard gardening for business men. T. R. Best. 125p 15c '17 Street & Smith, publishers, 79-89 7th av., New York  
 Back yards profitable. Am P Advocate 26:90 Ja '18  
 Back yards profitable. Weekly N L 5:5-6 D 19 '17  
 Bankers: start home garden work in your city or town at once. Banker-F 4:5 Ap '17  
 Beginner's garden. W. C. McCollom. *il* Gard M 26:188-90 Ja '18  
 Businesslike farm garden. O Judd Farmer 62:19 Mr 31 '17  
 Care of the garden in hot weather. J. W. Lloyd. Ill Ag Exp C 224:1-4 '18  
 Carrots, salsify, parsnips. Country Gent 82:772 Ap 21 '17  
 Chronicle of a 1917 war garden. R. S. Payne. *il* Gard M 27:18-19 F '18  
 City and suburban vegetable garden. H. M. Conolly. *il* Farmers' B 936:1-52 '18  
 City gardening game. W. H. Main. Rural N Y 76:1248 O 27 '17  
 Close planting in small gardens. Gard M 28:60 S '18  
 Conscript your garden for the war. F. F. Rockwell. *il* Country Life 33:56-7 Mr '18  
 Control of diseases and insect enemies of the home vegetable garden. W. A. Orton and F. H. Chittenden. *il* Farmers' B 856:1-70 '17  
 Cutting the cost of living. *il* Country Gent 82:715-16 Ap 14 '17  
 Earliest planting in the open ground. *il* Country Gent 82:656 Mr 31 '17  
 Early vegetables. Weekly N L 4:1 Mr 28 '17  
 Easy plans that will really work. *il* Gard M 25:28-9 F '17  
 Even now it is not too late for all-round garden. *il* Country Gent 82:997 Je 9 '17  
 Everyman's garden; corn, beans, melons, cucumbers, squashes. *il* Country Gent 81:1032 My 13 '16  
 Everyman's garden; first planting in the open ground. Country Gent 81:796 Ap 8 '16  
 Everyman's garden; planning the vegetable garden for 1916. *il* Country Gent 81:118-19 Ja 15 '16  
 Everyman's garden; starting early vegetables in greenhouse or hotbed. *il* Country Gent 81:396-7 F 19 '16  
 Everyman's garden; tomatoes, eggplants, cabbage, lettuce. *il* Country Gent 81:977 My 6 '16  
 Extension bulletins. N H Ag Ext Press B 62, 63, 64, 68, 69, 71, 72 7 leaflets '17  
 The titles follow: Planting plans for the home vegetable garden; Cutworms in gardens; Seed potatoes and their treatment; Bean growing; Potato culture; Necessity of the vegetable garden during war; Vegetable garden  
 Extension circulars. Mass Ag Ext C 16, 23, 24 '17  
 Titles are: Plan for family garden; Farmers' home garden; Boys' and girls' club garden  
 Fall preparations for spring gardening. J. W. Lloyd. *il* Ill Ag Exp C 232:1-4 '18  
 Farm garden. G. M. Stack. Farm Eng 5:4 Ap '17  
 Farm garden in the North. J. H. Beattie. *il* maps Farmers' B 937:1-53 '18  
 Farm vegetable garden. H. O. Werner. *il* N D Ag Exp C 17:1-64 '18  
 Fertilizing the farm garden. A. E. Wilkinson. *il* O Judd Farmer 64:6 Mr 2 '18

Fertilizing the home vegetable garden. J. C. Fridmore. (B. 23) 8p *il* n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.

First aid to the war gardener. A. Kruhm. *il* Country Life 33:58-9 Mr '18  
 Garden. S. B. Shaw. Md Ag Ext B 3:57-68 '18 (rev.)  
 Garden for every home. C. Osias. (Civico-educ. Lectures no. 12) 11p '17 Philippine Islands Bur. of educ., Manila  
 Garden making on vacant lots and the home vegetable garden. W. T. Macoun. 16p '17 Canada Ag  
 Garden movies, no. 9; conservation by timely steps to outwit early frost. *il* Gard M 28:43 S '18  
 Gardens for all. J. R. Bechtel. Penn State F 11:271-2 F '18  
 Good garden one-fourth of the living. L. A. Markham. Prog F 31:252 F 19 '16  
 Good garden resolution for 1917. Country Gent 82:18 Ja 6 '17  
 Good management in the garden. C. H. Chesley. Green's Fruit Grower 37:8 Ap '17  
 Grow a vegetable garden; we must feed ourselves. J. H. Prost. 43p *il* '18 International harvester co., Agricultural extension dept., Chicago  
 Grow an Illinois Central garden. 12p n. d. Illinois Central railroad, Chicago  
 Grow your own food and save the freight. W. F. Massey. *il* Prac F 114:217 Je 15 '18  
 Growing a year's vegetable supply. J. S. Doig. Gard Chron Am 26:271-2 Je '16; Same. Gard Chron Am 21:151 Ap '17  
 Helps on gardening and canning. H. J. Reed and L. R. Gaddis. *il* Purdue Ag Ext B 54:1-8 '17  
 Hints on home gardening. C. W. Waid. Mich Ag Ext Club B 8:1-8 '16  
 Home garden. W. B. Lanham and G. D. Everett. Tex Ag Ext B B-44:1-8 '18  
 Home garden. C. C. Starring. Mont Ag Exp C 75:87-118 '18  
 Home garden competition; symposium. Market Growers J 21:105+ S 1 '17  
 Home garden; cucumbers, squashes and pumpkins. *il* Country Gent 83:42 Ap 6 '18  
 Home garden; early plans for next year's crops. *il* Country Gent 83:18 D 14 '18  
 Home garden; growing eggplants and peppers of quality. *il* Country Gent 83:42 Ap 20 '18  
 Home garden hints. Weekly N L 4:4 Mr 21; 4 Mr 28; 4 Ap 4 '17  
 Home garden; how late can we sow beans, corn and peas? *il* Country Gent 83:30 Jl 20 '18  
 Home garden in Idaho. W. C. Edmundson and J. S. Welch. *il* Idaho Ag Exp B 106:1-30 '18  
 Home garden in Kentucky. C. S. Adams. *il* Ky Ag Exp C 14:1-59 '17  
 Home garden in North Carolina. C. R. Hudson. N C Ag Ext C 10:1-4 '16  
 Home garden in West Virginia. B. E. Sayre. *il* W Va Ag Dept B 31:1-29 '17  
 Home garden of 1918. *il* Country Gent 82:2060 D 29 '17  
 Home garden; plan; spray calendar; pruning and spraying; garden tillage tools. W. B. Nissley. *il* N Y School of Agriculture on Long Island (Farmingdale) B v 2:1-12 Ja '17  
 Home garden possibilities. P. Work. Cornell Countryman 15:405+ Ap '18  
 Home garden; preparing the soil and sowing the seed. *il* Country Gent 83:34 Mr 30 '18  
 Home garden; profitable crops for the small garden. *il* Country Gent 83:28 D 21 '18  
 Home garden; protecting the crops from bugs and blights. *il* Country Gent 83:28 Je 22 '18  
 Home garden; root crops for winter. *il* Country Gent 83:34 My 25 '18  
 Home garden; some crops to grow for next winter. *il* Country Gent 83:36 My 4 '18  
 Home garden; the beet is an easy crop to raise. *il* Country Gent 83:24 Mr 2 '18  
 Home garden; thinking over some choice varieties. *il* Country Gent 83:23 Ja 5 '18  
 Home garden; transplanting and thinning for big crops. Country Gent 83:34 My 11 '18  
 Home garden; varieties. *il* Country Gent 83:20 F 9 '18



**Vegetable gardening, Home—Continued**

- Home garden; vegetables that may be started now for fall crops. *il Country Gent* 83:32 Je 29 '18
- Home garden; watering, mulching and enriching the soil. *il Country Gent* 83:28 Je 15 '18
- Home garden; what to plant in the late garden. *il Country Gent* 83:35 My 18 '18
- Home garden; what to sow and plant for succession crops. *Country Gent* 83:27 Je 1 '18
- Home garden; you can grow vegetables for winter in cold frames and hotbeds. *il Country Gent* 82:1413 S 15 '17
- Home gardening in the South. H. C. Thompson. *il maps Farmers' B* 934:1-44 '18
- Home gardens. W. E. Lommel. *il Ind Ag Exp C* 80:1-24 '18
- Home gardens, have one! H. Hendy. *il Purdue Ag* 12:373-4 Mr '18
- Home vegetable garden. M. F. Ahearn. *Kan Ag Exp C* 64:1-8 '18
- Home vegetable garden. W. R. Beattie. *il Farmers' B* 255:1-47 '17
- Home vegetable garden. R. B. Cruickshank. *il Ohio Ag Ext B v 13, no 16* 20p '17-'18
- Home vegetable garden. R. W. DeBaun. *N J Ag Dept C* 4:1-12 '16
- Home vegetable garden. L. R. Hartill. *il N Y (Long Island) State School of Ag B v 3:1-45* Ja '18
- Home vegetable garden. R. A. McGinty. *Colo Ag Exp B* 241:1-35 '18
- Home vegetable garden. H. F. Thompson. *Mass Ag Ext C* 69 4p '18
- Home vegetable garden. C. W. Waid. *il plans Mich Ag Ext B* 4:1-34 '16
- Home vegetable garden. J. C. Whitten. *Mo Ag Exp C* 83:1-22 '18
- Home vegetable garden. P. Work. *il Cornell Ag Ext B* 14:475-95 '17
- Home vegetable gardening. G. W. Hood. *il Neb Ag Ext B* 50:1-16 '18
- Home vegetable gardening; with discussion. G. H. Van Houten. (*In Nebraska Horticulture v. 6, no. 12, p. 145-56*) (F) '17 Neb. state hort. soc., Lincoln
- Home vegetable gardens a patriotic duty. A. M. Burke. *Gard M* 25:231-2 My '17
- Home war garden. J. J. Thornber. *il Ariz Ag Ext C* 22:1-22 '18
- Hotbeds and cold frames for the home garden. R. E. Marshall and C. Woolsey. *Va Ag Ext B* 22:1-14 '17
- House mother's vegetable garden. Mrs. E. W. D. Holway. *Minn Hort* 45:402-4 O '17
- Housewife's vegetable-garden. K. V. Saint Maur. *il Good Housekeeping* (119 W. 40th st., N.Y. 15c) 64:120 Ja '17
- How much of a vegetable garden? A. Kruhm. *il Country Life* 29:46-7 Mr '16
- How teachers of elementary schools may use Farmers' bulletin 936, The city and suburban vegetable garden. F. E. Heald. 2p '18 U.S. States relations service, Washington, D.C.
- Increased food production. *Gard Chron (Lond)* 61:161-2 Ap 21 '17
- Independence via the kitchen garden. *il Field* 11 28:156-7 Mr '18
- Iowa farm garden. C. L. Fitch. *il Wallaces' F* 43:599 Ap 5 '18
- July in your own war garden. A. Kruhm. *il Country Life* 32:52-3 Jl '17
- June action in the war garden. A. Kruhm. *il Gard M* 27:231 Je '18
- Landscape-vegetable-gardening. R. Dean. *il Country Life* 31:45-7 Mr '17
- Liberty garden for every home. 15p '18 Illinois farmers' institute, Springfield, Ill.
- Light activities all along the line. *Gard M* 28:10 Ag '18
- Main planting time—corn, beans, vine crops. *il Country Gent* 82:812 Ap 28 '17
- Make your war garden attractive. L. W. Ramsey. *il Gard M* 26:200-1 Ja '18
- Making a small home garden. A. L. Dacy. *W Va Ag Ext C* 117:1-12 '17; Same. C 174
- Making of a good family garden. L. M. Montgomery. *Ohio F* 141:213-14 F 16 '18
- Managing a half acre war garden. F. J. Paris. *il Gard M* 27:131-2 Ap '18
- Mobilize the country-home garden. R. C. E. Brown. (Columbia war papers, ser. 1, no. 3) 6p '17 Division of intelligence & publicity, Columbia university, N.Y.
- My garden—my hobby. Mrs. H. A. Mason. *Prac F* 113:94 Mr 1 '17
- My war garden. C. Wedge. *il Minn Hort* 46:26-34 Ja '18
- My war garden and how it grew. B. Barker. *Prac F* 114:89 Mr 1 '18
- Nevada war gardens. C. S. Knight. *il Nev Ag Ext B* 16:1-23 '18
- On the trail of the slacker; midsummer work in following up. *Gard M* 27:258 Jl '18
- One best bet for the woman. H. C. Brent. *Gard M* 25:271 Je '17
- Our first year war gardens. G. Tabor. *il Country Life* 33:67-9 F '18
- Our vegetable garden. *Fruit-Grower* 27:283 My 1 '16
- Our vegetable garden. M. G. Kains. *Fruit-Grower* 27:106 F 1 '16
- Patriotic garden. *Gard M* 25:275-9, 313-17; 26:9-10 Je-Ag '17
- Peas, beans, and beets. *Weekly N L* 4:8 Ap 18 '17
- Plan for a vegetable garden. M. B. Cummings. *Vt Ag Ext C* 8:1-4 '18
- Plan your back yard garden on paper. plan Am P Advocate 24:496-7 Ap '16
- Planning the home garden. *Rural N Y* 77:370, 406 Mr 9-16 '18
- Planning the war garden. J. R. Hepler. *NH Ag Ext C* 32:1-11 '18
- Plans and specifications for your vegetables. *il Country Gent* 82:108 Ja 20 '17
- Plant a garden and help win the war. *Wis Horticulture (Madison)* 8:1-8sup Mr '18
- Planting for canning needs. F. F. Rockwell. *il Gard M* 27:229-30 Je '18
- Poultry and garden on an acre in 1917. M. C. Wilson. *Am P J* 49:294-5 Mr '18
- Production and conservation series no. 1-2, 4-8, 10, 25. *Vt Ag Ext* 10p '17 (Mim)
- Titles are: Working a small garden; Peas a valuable and desirable garden vegetable; Garden planning: varieties to plant and how placed; Field beans; Bean anthracnose; How to grow juicy red tomatoes; Seed treatment to prevent oat smut; Successful potato culture; Bordeaux mixture
- Raise your own vegetables. S. F. McPhearce. *Green's Am Fruit Grower* 38:19 F '18
- Rotation in the garden. W. F. Massey. *Prog F* 33:636 My 25 '18
- Satisfactory vegetable garden on the fruit farm; with discussion. A. G. B. Bouquet. (*In 8th annual report, 1916, p. 47-53*) '17 Oregon state hort. soc., C. D. Minton, sec., Portland, Ore.; Same. *Better Fruit* 11:224-F '17
- School and home gardening. R. S. Mackintosh. *Minn Ag Ext Spec B* 21:1-8 '18
- Selecting the war garden. E. L. Kirkpatrick. *il Rural N Y* 77:107 Ja 26 '18
- Shall I plant a garden this year? J. W. Lloyd. *Ill Ag Exp C* 209:1-4 '18
- Simple talk for the beginner. *Gard M* 27:14 F '18
- Small home garden. *Okla Ag Ext C* 70:1-8 '18
- Small vegetable garden; suggestions for utilizing limited areas. *il Farmers' B* 818:1-44 '17; Same. *Mo Ag Bd B v* 15:1-47 Jl '17; Same cond. *Am P J* 48:538-4 Ap '17
- Spring and summer garden; preparing, fertilizing and planting. W. F. Massey. *Prog F* 32:90 Ja 27 '17
- Spring work in a garden. L. J. Haynes. *Wallaces' F* 41:492 Mr 24 '16
- Start that garden now. *Prog F* 32:1360 D 29 '17
- Start war gardens right. J. S. Gardner. *Penn State F* 11:234 Ja '18
- Start your home vegetable garden now. R. W. De Baun. *Rural N Y* 76:725 My 26 '17
- Starting next year's food garden. D. Lumsden. *il Gard M* 28:82-3 O '18
- Still time in South. maps *Weekly N L* 6:4-Ag 7 '18
- Successful gardening. *il Ia Ag Ext B* 62:1-8 '18
- Successful planting in the garden. *il O Judd Farmer* 64:5 Mr 2 '18
- Taking the beginner into confidence. *Gard M* 27:180 My '18

**Vegetable gardening, Home—Continued**

- Taking the gamble out of gardening. A. Kruhm. *il Gard M* 22:189-90 Ja '16
- That kitchen garden. H. W. Schneek. *il Cornell Countryman* 15:263-4 F '18
- That vegetable garden. J. R. Hepler. *Hoard's D* 53:469 Ap 6 '17
- Thrift in little gardens. K. Kidder. *Touchstone* (118 E. 30th st., N.Y. 35c) 1:388-91 Ag '17
- Time of planting vegetables. J. C. Whitten. *Mo Ag Ext C* 21:1-4 '17
- Time to start winter crops. *Country Gent* 82:1029 Je 16 '17
- Timely hints for the home gardener. *il Green's Fruit Grower* 37:29 Ap '17
- Timely hints for the home gardener. *Penn State F* 10:121-2 Je '17
- Tips on gardening. *Weekly N L* 4:4 Ap 11 '17
- Tomato is one of our most profitable crops. *il Country Gent* 83:21 F 23 '18
- Two crops in one season. J. H. Sperry. *Country Gent* 82:1027 Je 16 '17
- Two women and their garden. M. A. Turnure and M. I. Bounds. *O Judd Farmer* 64:4 Mr 2 '18
- Utility garden in Missouri. P. Kincaid. *O Judd Farmer* 64:18 Mr 9 '18
- Variety of useful food-growing hints for the home gardener. *Country Gent* 82:901 My 19 '17
- Vegetable garden for every home. S. C. Johnston. *Ontario Ag Dept C* 3:1-12 '17
- Vegetable garden for every home. R. S. Mackintosh. *Minn Hort* 45:219-20 My '17
- Vegetable garden guide. J. C. Hogenson and others. *Utah Ag Ext C v* 6:no 11:1-16 '18
- Vegetable growing. *bibliog il plan Mass Ag Ed B* 5:1-193 '18 (3d ed. rev.)
- Revised edition includes following new articles: Common potato diseases and their control, by A. V. Osmun; Common storage of fruits and vegetables, by E. H. Forbush
- Vegetable growing in the home garden. A. Geddis. *Gard Chron Am* 22:39-40 F '18
- Vegetable planting. *Weekly N L* 4:7 Ap 11 '17
- Vegetables to grow and how to grow them. C. P. Close. (Doc. 49) 7p *il '17 U. S. States relations service, Washington, D.C.*
- Wandering gardens versus war gardens. M. P. Hanford. *il Prac F* 114:85 Mr 1 '18
- War garden. *il Country Gent* 82:1089 Je 30 '17
- War-time garden. A. M. Burke. *Gard M* 27:76-7 Mr '18
- War-time gardening. F. Duncan. n.p. 25c '17
- Frank Shay & co., 17 West 8th st., New York
- War vegetable gardening and the home storage of vegetables. 31p *il '18 National war garden comm., Maryland bldg., Washington, D.C.*
- We discover our garden's possibilities. Mrs W. Ray. *il Prac F* 114:86 Mr 1 '18
- Why did your garden fail? *il Purdue Ag* 10:39-40 Mr '16
- Why some beginners' gardens don't succeed. *Gard M* 27:128 Ap '18
- Winter cellar gardens. E. I. Farrington. *Country Gent* 82:1648 O 27 '17
- Winter garden in the cellar. E. I. Farrington. *il Country Gent* 81:1976 N 11 '16
- Winter garden in the cellar: with discussion. N. A. Rasmussen. *Minn Hort* 45:379-82 O '17
- Working a backyard garden. *Rural N Y* 77:485 Mr 30 '18

*See also* Agriculture and the war—Home gardens

**Planting plans and tables**

- Cropping a ten-rod allotment. A. W. Ashby. *J Bd Ag* 24:49-57 Ap '17
- Fall and winter garden: how to have one. *Prog F* 32:215 F 17 '17
- Garden hints. R. T. Neal. *Hampton Leaflets v* 7,no 11 4p n.d.
- Home garden. *Country Gent* 83:38+ F 2 '18
- Home vegetable garden. A. French. *plan Mass Ag Bd B* 5:52-67 '18 (3d ed. rev.)
- Keep the home pot boiling; succession plantings. A. Kruhm. *Gard M* 27:192 My '18
- Making the smallest quantity reach the farthest. G. Tabor. *Gard M* 26:191-4 Ja '18

- Plan and tools for the home garden. C. P. Close. (Doc.—84) 6p *il '18 U. S. States relations service, Washington, D. C.*
- Planning a small home garden with planting directions. *O Judd Farmer* 60:3 Ja 15 '16
- Planting on the basis of personal needs. E. L. Kirkpatrick. *Gard M* 25:26-7 F '17
- Value of a small home garden. Mrs. E. M. Anderson. *il Prac F* 113:92 Mr 1 '17
- Vegetable efficiency-chart. *il Literary Digest* (119 W. 40th st., N.Y. 10c) 54:465 F 24 '17

**Vegetable growers' association of America**

- Annual convention, Chicago, Sept. 26-29, 1916. R. W. De Baun. (*In Pro.* N.J. state hort. soc., 1916, p 46-9) '17 H. G. Taylor, sec., Riverton, N.J.
- Conference, Detroit, Jan. 18-19. Market Growers J 22:88+ F 1 '18
- On to Springfield; let's get together. H. F. Tompson. *Market Growers J* 21:141-3 O 1 '17
- 9th annual convention, Chicago, Sept. 26-29, 1916. *Am Flor* 47:541-3 S 30 '16; *Am Flor* 47:604-5 O 7 '16; *Market Growers J* 19:177-82 O 15 '16
- 10th annual meeting, Springfield, Mass., Oct. 10-13, 1917. *Am Flor* 49:697-9 O 20 '17; *Ohio F* 140:367 O 27 '17; *Market Growers J* 21:189-94+ N 1 '17

**Vegetable growers' associations**

- Cantaloupe association in Madison county, Ky. *Ky Ag Dept Rep* 1916-1917:355-7 '18
- New job for the bank roll; Virginia potato growers buy supplies with surplus. J. H. Collins. *il Country Gent* 82:759-60 Ap 21 '17
- Successful cooperative marketing, by W. H. Ingling; Cortland county potato growers' association, by E. H. Forristall. *N Y Ag Dept Rep* 1916,pt 2:369-73, 374-7 '17; Same. *N Y Farms & Markets Dept Ag B* 102:92-6, 97-100 D '17
- From *N Y Ag Dept Bulletin* 77

- Truck growers' association: how it may succeed. L. A. Markham. *Prog F* 31:742 Je 3 '16

*See also* names of associations, e.g. Boston market gardeners' association, Colorado beet growers' association, Connecticut vegetable growers' association, Marietta truck growers' association, Maryland vegetable growers' association, Michigan potato growers' association, Minnesota state vegetable growers' association, New York state potato growers' association, New York state vegetable growers' association, Ohio vegetable growers' association, Ontario vegetable growers' association, Potato association of America, Vegetable growers' association of America, Vegetable growers' section of the State horticultural association of Pennsylvania

**Vegetable growers' section of the State horticultural association of Pennsylvania**

- Annual meeting, Harrisburg, Jan. 23-5, 1917. J. R. Bechtel. *Market Growers J* 20:149 F 15 '17

- News of vegetable growers' organizations. *Market Growers J* 22:128 F 15 '18

- 2d annual convention, Reading, Pa., Jan. 18-20. *Market Growers J* 18:119 F 15 '16

**Vegetable handling**

- Pathological aspects of the federal fruit and vegetable inspection service. C. L. Shear. *Phyt* 8:155-60 Ap '18

- Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473-A) 59p *il* 50c '18 *Am. ry. perishable freight assn., 135 E. 11th Place, Chicago*

**Vegetable ivory**

- South America raises no elephants, but is exporting quantities of ivory. *Current Opinion* (63 W. 36th st., N.Y. 25c) 63:284-5 O '17

*See also* Feeding and feeding stuffs—Vegetable ivory

**Vegetable oil industry**

- Vegetable oil industry, Hull, England. H. M. Evington. (Commerce Reports no. 133) p 919-27 (Je 7) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.



**Vegetable oil industry—Continued**

- \* Vegetable-oil industry of Kobe. E. R. Dickover. (Commerce Reports no. 255) p 403-12 (O 30) '18 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Vegetable-oil industry in São Paulo. C. L. Hoover. (Commerce Reports no. 273) p 710-11 (N 21) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

See also Oils and fats

**Vegetable oils.** See Oils and fats

**Vegetables**

- \* Bacterial examination of green vegetables. F. W. Kurk. Am J Pub Health (126 Massachusetts av, Boston \$4 per yr.) 8:660-1 S '18
- Best crops, successive crops and vegetables for winter use. A. Martini. Wis Hort Soc Rep 48:102-8 '18
- Canadian embargo on vegetables from U.S. Market Growers J 23:70 Ag 15 '18
- Doing up the surplus from the garden. E. E. Trumbull. il Gard M 25:289 Je '17
- Double cropping in the Lea valley. Gard Chron (Lond) 64:75 Ag 24 '18
- Economic value of certain vegetables. F. S. Stoker. Royal Hort Soc J 42,pts 2-3:355-7 S '17
- Experiments in growing vegetable seeds in 1915. W. T. Macoun. il Ag Gaz of Canada 3: 11-18 Ja '16
- Experiments on the supposed deterioration of varieties of vegetables in Porto Rico, with suggestions for seed preservation. C. F. Kinman and T. B. McClelland. il Porto Rico Ag Exp B 20:1-30 '16
- Florists growing vegetables. C. W. Waid. Market Growers J 18:341 My 15 '16
- Food fight. Independent (119 W. 40th st, N.Y. 10c) 92:435 D 1 '17
- Forcing vegetables in winter. W. F. Massey. Prac F 112:309 Ag 15 '16
- Fresh fruits and vegetables as conservers of other staple foods. C. L. Hunt. Farmers' B 87:1-11 '17
- Fuel and food values of different vegetables. Prog F 32:658 Je 2 '17
- Garden medicines and beautifiers. Prog F 31: 122 Ja 22 '16
- Good vegetables—and others. A. E. Junkin. Nat Stock & F 40:1120 Ja 27 '17
- Growing of vegetables. E. Jenkins. il Gard Chron Am 21:89-90 Mr '17
- Growing unusual vegetables. R. D. Pearce. Market Growers J 18:133 F 15 '16
- Growing vegetables for the French army. il Gard Chron Am 22:11 Ja '18
- Home vegetable garden. W. R. Beattie. il Farmers' B 255:1-47 '17
- How to pick, cook and serve the vegetables you have grown. il Country Gent 82:1176 J1 21 '17
- Important sources of mineral foods; non-starchy vegetables. Ia Ag Ext Short Course Notes 15:1-12 '17-'18
- Improvement of vegetable varieties by selection. R. Wellington. il Minn Hort 45:212-14 My '17
- Making real use of the garden's crops. I. M. K. Allison. Gard M 26:132 N '17
- New vegetables worth while. C. M. Weed. il House Beautiful (3 Park st., Boston 25c) 41:242 Mr '17
- Ornamental vegetables. il Gard Chron (Lond) 61:171 Ap 28 '17
- Palate of civilized man and its influence on agriculture. D. Fairchild. il J Fr Inst (Franklin Inst., Philadelphia 50c) 185:299-316 Mr '18
- Plant breeding at home. C. E. Brehm. Country Gent 81:1065 My 20 '16
- Plant improvement by vegetable growers. C. E. Durst. Market Growers J 20:197-8 Mr 1 '17
- Practical suggestions and seasonal hints. M. G. Kains. Fruit-Grower 27:62 Ja 15 '16
- Preparedness for winter food supply bulletin. E. W. D. Laufer. Better Fruit 11:10 Je '17
- Producing vegetables for winter under glass. A. Kruhm. il Gard M 24:132-3 N '16
- Prospects of the vegetable crops at Aldenham. E. Beckett. Gard Chron (Lond) 64:13 J1 13 '18

- Provide plenty of vegetables for winter use. W. F. Massey. Prog F 31:852 J1 8 '16
- Raw vegetables healthful. S. L. Lewis. Better Fruit 11:16 Je '17
- Relative food values of different vegetable crops. Gard Chron (Lond) 61:86 F 24 '17
- Reliable vegetables for present planting. A. Kruhm. il Gard M 25:287 Je '17
- Right time to plant vegetables. J. W. Lloyd. il Ag Exp C 217:1-4 '18
- Royal horticultural society's vegetable campaign. il Gard Chron (Lond) 62:145 O 13 '17
- Rules for canning vegetables. M. G. Feint. O Judd Farmer 61:34 J1 29 '16
- Seasons and dates for planting vegetables and other crops in Florida. Fla Ag Dept Quar B v 26:31-6 O '16
- Select vegetables. E. Beckett. Gard Chron (Lond) 61:59 F 10 '17
- Some problems arising out of the food situation. Gard Chron (Lond) 63:68 F 16 '18
- To stretch the food supply. Creamery 5:18-19 Ag '17
- Try these vegetables. Prog F 33:92 Ja 26 '18
- Types of vegetables. Market Growers J 19:243 N 15 '16
- Uncommon vegetables for the home garden. il Purdue Ag 10:39-41 Ap '16
- Value of fruits and vegetables in the diet. E. Nickerson. Minn Hort 46:61-2 F '18
- Vegetable forcing in northern Indiana. D. Leatherman. Ohio F 137:171 F 5 '16
- Vegetable growing in Minnesota; discussion. Minn Hort 46:294-8 Ag '18
- Vegetable novelties. Gard Chron (Lond) 62: 108 S 15 '17
- Vegetable possibilities of our common weeds. il Gard Chron Am 21:195-6 My '17
- Vegetable tying question. H. F. Thompson. Market Growers J 22:286 Ap 1 '18
- Vegetables. (In Geography of the world's agriculture, p. 97-9) maps '17 U S Ag
- Vegetables for canning. A. E. Wilkinson. Nat Stock & F 40:1024 Ja 6 '17
- Vegetables for cold frames; with discussion. D. Henniger. (In Pro. N.J. state hort. soc., 1916, p 115-24) '17 H. G. Taylor, sec., River-ton, N.J.
- Vegetables for northern Indiana. Fruit-Grower 27:142 F 15 '16
- Vegetables on a fruit farm. W. H. Jenkins. Green's Am Fruit Grower 38:8 F '18
- Vegetables out of season. J. G. Boyle. il Fruit-Grower 27:123 F 15 '16
- Vegetables under glass. C. N. Crotsenburg. il Fruit-Grower 28:126 F 15 '17
- What's new in vegetable and flower seeds? il Gard M 27:74-5 Mr '18
- Work of the Yuma experiment farm in 1916. R. E. Blair. (W. I. A. C. 20) p 37-40 il '18 U S Ag
- See also Cookery—Vegetables; Greens, Edible; Market gardening; Root crops; Vegetable gardening; also names of vegetables, e.g., Artichokes, Asparagus, Beets, Brussels sprouts, Cabbages, Carrots, Cauliflowers, Celeriac, Celery, Chayotes, Chinese cabbage, Cucumbers, Daikon, Dasheens, Eggplants, Endive, Horseradish, Kale, Kohlrabi, Leeks, Lettuce, Lima beans, Okra, Onions, Parsnips, Peas, Peppers, Potatoes, Radishes, Rutabagas, Salsify, Spinach, Squashes, Tomatoes, Turnips, Udo

**Diseases and pests**

- Bacterial diseases of vegetables found in Ontario. D. H. Jones. il Ontario Ag Dept B 240:1-24 '16
- Common diseases and insects attacking garden plants. A. T. Stevens and G. H. Lamson. Conn Ag Coll Ext C 15 8p '17
- Common diseases of garden vegetables and truck crops. M. T. Cook. il N J Ag Exp C 89:1-22 '17
- Common garden pests and diseases. A. L. Dacy. W Va Ag Ext C 206:1-12 '18
- Common insects and plant diseases of the farm, garden and orchard. W. E. Rumsey. il W Va Ag Dept B 17:1-37 '16
- Control of diseases and insect enemies of the home vegetable garden. W. A. Orton and F. H. Chittenden. il Farmers' B 856:1-70 '17

**Vegetables—Diseases and pests—Continued**

- Control of garden diseases and insects. A. Frank. Western Wash Ag Exp B v 6:38-41 Je '18
- Control of some garden insects. L. B. Smith. il Va Truck Exp B 23:489-506 Ap '17
- Control of some of the important garden and truck crop insects. T. J. Talbert. il Mo Ag Ext C 15:1-24 '17
- Control of vegetable diseases. H. E. Bartram. Vt Ag Ext C 9:1-4 '18
- Defend your garden against insect pests. L. G. Geutner. Wis Ag Ext C 82 4p '17
- Diseases of vegetable and garden crops. J. A. Stevenson. J Dept Ag Porto Rico 1:93-117 Ap '17
- Everyman's garden; various members of the bug family. Country Gent 82:116 Jl 7 '17
- Florida truck and garden insects. J. R. Watson. il Fla Ag Exp B 134:35-127 '17
- Fruit and vegetable diseases and their control. E. C. Stakman and A. G. Tolaas. il Minn Ag Exp B 153:1-67 '16
- Fungoid and insect pests and their control. Gard Chron (Lond) 63:196 My 11 '18
- Getting the jump on the garden Huns. F. F. Rockwell. il Gard M 27:187-8 My '18
- Handbook of common garden pests. J. G. Sanders. il Pa Ag Dept B v 1, no 2:1-24 My '18
- How some of our common vegetable diseases and insect pests pass thru the winter, and what can be done towards controlling them at that time. A. Frank. Western Wash Ag Exp B v 6:117-20 N '18
- How to control garden pests. G. C. Starcher and others. Ala Ag Ext C 18:36-42 '18
- Important insects of the truck gardens of Illinois. J. J. Davis. il Ill Farmers Inst C 4:1-42 '16 (2d ed.)
- Important vegetable diseases. J. A. Stevenson and R. C. Rose. Porto Rico Insular Exp Rep 1916-1917:83-93 '17
- Insect pests of vegetables. J. S. Houser. il Ohio Ag Exp B v 2:232-40 Jl '17
- Insects affecting vegetable crops in Porto Rico. T. H. Jones. il U S Ag B 192:1-11 '15
- Insects affecting vegetables. C. J. S. Bethune. il Ontario Ag Dept B 251:1-32 '17
- Insects and diseases of vegetables and how to combat them. C. P. Close. (Doc. 52) 10p il '17 U. S. States relations service, Washington, D.C.
- Insects and plant diseases attacking garden crops. J. H. Merrill and L. E. Melchers. Kan Ag Exp C 65:1-12 '18
- Meeting enemies in the garden. il Purdue Ag 12:415-16 Ap '18
- Miscellaneous truck-crop insects in Louisiana. T. H. Jones. il U S Ag B 703:1-19 '18
- More important fungus and bacterial diseases of vegetables in Ontario. J. E. Howitt and D. H. Jones. il Ontario Ag Dept B 258:1-47 '18
- Protecting the home garden from insects and fungous diseases. C. H. Nissley. il N J Ag Dept C 11 7p '17
- Relation of the common root maggot (*Pegomyia fusciceps* Zett.) to certain crops in Louisiana. E. S. Tucker. J Econ Entom 10: 397-406 Ag '17
- Simplifying garden warfare. F. F. Rockwell. il Gard M 25:323-4 Jl '17
- Some diseases of horticultural plants and their control. Purdue Ag 11:32-3 Ap '17
- Some garden pests. G. H. Copley. il Gard Chron (Lond) 63:253 Je 22 '18
- Some important diseases of truck crops in Florida. C. D. Sherbakoff. il Fla Ag Exp B 139:193-277 '17
- Spray schedule for fruits and vegetables. A. S. Colby. Green's Am Fruit Grower 38:9-10 F '18
- Spraying calendar for the truck patch. Market Growers J 18:395 Je 15 '16
- Tarred felt discs for protecting cabbages and related vegetables from attacks of the root fly. A. D. Imms. il J Bd Ag 23:1222-4 Mr '17
- Truck crop diseases and how to control them. R. E. Vaughn. Ill State Hort Soc Trans 1916: 329-33 '17
- Truck crop diseases and their control. L. R. Jones. il Am Flor 47:544 S 30 '16
- Truck spray calendar. Country Gent 81:974 My 6 '16
- Vegetable diseases and their remedies. G. R. Hoerner. il Minn Hort 46:148-54 Ap '18

**Exhibits**

Report of the committee on vegetables for the year 1916. J. L. Smith. il Mass Hort Soc Trans 1916, pt 2:203-10 '17

**Formulas for preservation**

Formula for preserving fruits and vegetables for exhibition purposes, etc., etc. A. C. Lanoie. (In Report, Quebec Pomological and fruit growing soc., 1916, p. 29-31) '16

**Judging**

How to judge vegetables. W. N. Craig. il Gard M 28:49, 64 S '18

Standard for judging vegetables. Ag Gaz of Canada 5:625-6 Je '18

**Marketing**

Advertising that sells garden truck. W. Covey. Country Gent 81:1750 S 30 '16

Advertising your wares. Market Growers J 22: 366 My 15 '18

Big bunches pay. H. J. Dietz. Country Gent 81:891 Ap 22 '16

Developing markets for new varieties. F. Osborn. il System on the Farm 1:194 Jl '17

Experiences in marketing. Market Growers J 22:319+ Ap 15 '18

Gardener's marketing exchange. L. F. Miller. Country Gent 83:56 Mr 9 '18

Making good in the market. F. E. Daggett. il Country Gent 81:1615 S 2 '16

Marketing garden truck. Country Gent 81: 1509 Ag 12 '16

Marketing greenhouse vegetables. F. J. Zuck. Market Growers J 21:6 Jl 1 '17

Methods of successful market growers. R. W. DeBau. il Ohio F 140:261 S 29 '17

Motor trucks for marketing vegetables; symposium. il Market Growers J 20:291-300 Ap 1 '17

Nine guides to successful house-to-house selling. J. Spears. il System on the Farm 1:190-1 Jl '17

Points on marketing to consumers. Market Growers J 20:97 F 1 '17

Selling to the consumer. J. R. Spears. Country Gent 81:477 F 26 '16

Standardization of vegetables. S. J. Cook. (In Pan American scientific congress Pro., 1915, v. 3, p. 475-9) '17

Vegetable growers' market. E. I. Farrington. Rural N Y 77:67 Ja 19 '18

**Nomenclature**

Lost names of seeds in eighteenth century catalogues. J. Murison. Gard Chron (Lond) 62:226-7 D 8 '17

Present status of vegetable nomenclature; with discussion. C. E. Durst. il (In Report, Ontario vegetable growers' assn., 1916, p. 39-54) '17 Ontario ag. dept., Toronto, Canada

Vegetable growers' attitude toward nomenclature. C. E. Durst. Market Growers J 19: 101-3 S 1 '16

**Packing**

How prices are increased by using the right fruit and vegetable packages. il System on the Farm 1:225-8 Ag '17

Packing fruit and vegetables for market. C. C. Hulsart. il Prac F 113:282 Ag 15 '17

Packing mid-summer produce. M. R. Conover. il Ohio F 142:122 Ag 10 '18

Proper packages a big factor in profitable vegetable marketing. H. B. Fullerton. Penn State F 10:45-6 Mr '17

**Preservation**

Brining vegetables. M. Hepworth. W Va Ag Ext C 213:1-4 '18

Drying and brining garden stuff. C. B. Williams. Ohio F 140:123 Ag 18 '17

Drying of fruits and vegetables and preservation of vegetables by fermentation and salting. il Ontario Ag Dept C 12:1-23 '18

Food problem not yet solved; save the vegetables. Nat Stock & F 41:467 Ag 11 '17



**Vegetables—Preservation—Continued**

- Manual of home storage, pickling, fermentation and salting vegetables. 12p. '17 National emergency food garden commission, 210-220 Maryland bldg., Washington, D. C.  
 Preservation of vegetables by fermentation and salting. L. A. Round and H. L. Lang. Farmers' B 881:1-15 '17  
 Preserving vegetables by fermentation. Rural N Y 76:969 Ag 11 '17; Same. Prog F 32:908 Ag 25 '17  
 Preserving vegetables by salting, drying, and storing. 16p '18 U.S. Food administration, Washington, D.C.  
 Preserving vegetables with salt. E. L. Kirkpatrick. il Gard M 28:22-3 Ag '18  
*See also* Canning and preserving; Drying (fruits and vegetables)

**Prices**

- Crop and market outlook and review. See semi-monthly numbers of Market growers journal  
 Vegetable and fruit markets. Am Flor 49:1124 D 8 '17

**Seed**

- Commercial acreage, average yield per acre, commercial production, and estimated commercial consumption, for the United States. U S Seed Rep 2:4 D '18  
 Commercial stocks, receipts, imports, exports, and estimated sales for 1917 and 1918. U S Seed Rep 2:3 D '18  
 Conserving seed by more careful planting. J. R. Hepler. Market Growers J 22:125-6 F '18  
 Economy in the use of vegetable seeds. J Bd Ag 24:713-20 O '17  
 Experiments on the supposed deterioration of varieties of vegetables in Porto Rico, with suggestions for seed preservation. C. F. Kinman and T. B. McClelland. il Porto Rico Ag Exp B 20:1-30 '16  
 Field root and vegetable seed growing in the maritime provinces. S. J. Moore. Ag Gaz of Canada 4:122-3 F '17  
 Growing of roots and vegetables for seed in the province of Quebec. J. A. Simard. il Ag Gaz of Canada 4:559-61 J1 '17  
 Growing vegetable seed. W. B. Davis. Country Gent 81:1400 J1 22 '16  
 Growing your own vegetable seed. V. A. Martin. il Penn State F 9:412 Je '16  
 Harvesting vegetable seeds. H. F. Thompson. Market Growers J 23:108 S 15 '18  
 Home garden; selecting and keeping your own seed. Country Gent 82:1556 O 13 '17  
 Home saving of vegetable-seeds. W. H. Taylor. J Ag New Zealand 17:221-4 O '18  
 How long are seeds good? Gard M 27:146 Ap '18  
 Location and extent of commercial seed acreage, usual yield, and time of harvesting for seed; seed survey of July 1, 1918; tabulation and maps. U S Seed Rep 2:2-7 N '18  
 Notes on preliminary garden seed survey. U S Seed Rep 1:2 Ja '18  
 Preliminary garden seed survey of November 1, 1917. U S Seed Rep 1:2 D '17  
 Problem of vegetable seed. P. Work. il Cornell Countryman 14:299-300 Ja '17  
 Relation of the seedsman's disclaimer to the purchase of vegetable seeds. A. L. Stone. Market Growers J 19:205-6 N 1 '16  
 Report of vegetable seed stocks for Canada. U S Seed Rep 1:7 Ap '18  
 Retail prices on vegetable seeds. U S Seed Rep 1:4 F '18  
 Save vegetable seed. Weekly N L 5:1-2 S 26 '17  
 Save your own vegetable seed. W. W. Tracy and A. J. Pieters. Weekly N L 4:3 J1 11 '17  
 Saving vegetable seeds. M. G. Dunn. Hoard's D 55:1054 J1 19 '18  
 Saving vegetable seeds. N. C. Helms. Country Gent 82:1343 S 1 '17  
 Saving vegetable seeds for the home and market garden. W. W. Tracy. il Farmers' B 884:1-16 '17  
 Seed growing in the West. Market Growers J 23:203 D 1 '18

- Seeds and the man. Gard M 27:123 Ap '18  
 Seeds are as gold this year. F. F. Rockwell. il Gard M 27:135 Ap '18  
 Selection and wintering of biennial vegetables for seed. W. T. Macoun. (E. F. C. 15) 2p n.d. Canada Ag  
 Vegetable seed crop conditions. U S Seed Rep 2:8 J1 '18  
 Vegetable seed crop conditions in the West. U S Seed Rep 2:2-3 Ag; 2 S '18  
 Vegetable seed crop conditions; with statistics. U S Seed Rep 2:2-3 Ag '18  
 Vegetable seed is scarce. H. M. Earl. Country Gent 83:26 Ja 26 '18  
 Vegetable seed outlook on the Pacific coast. U S Seed Rep 1:8 Mr '18  
 Vegetable seed production in California. R. G. Risser. Market Growers J 23:90 S 1 '18  
 Vegetable seed supplies. Gard Chron (Lond) 62:140 O 6 '17  
 Vegetable seeds. Gard Chron (Lond) 61:136 Mr 31 '17  
 Vegetable seeds; production, acreage and growers' prices for the United States, Jan. 31, 1918. U S Seed Rep 1:3 My '18  
 Way with badly germinating seeds. Gard Chron (Lond) 63:124 Mr 23 '18  
 Why we grow some of our seed. J. V. Sheap. Country Gent 81:1543 Ag 19 '16

**Standards**

- Standardization of vegetables. S. J. Cook. (In Pan American scientific congress Pro., 1915, v. 3, p. 475-9) '17

**Statistics**

- Vegetables and nursery products. Cal Ag Bd Rep 1917:119-29 '18

**Storage**

- Better bins for vegetables. J. R. McMahon. il Country Gent 81:2057 N 25 '16  
 Cold storage for vegetables. Am Flor 45:1396 Ja 15 '16  
 \* Cold storage of fruits and vegetables. C. W. Moores. il House Beautiful (41 Mt Vernon st, Boston 25c) 44:210 S '18  
 Experiences with storing vegetables; symposium. Market Growers J 21:83+ Ag 15 '17  
 Extension circulars. Mass Ag Ext C 45, 49 '17  
 Titles are: Home vegetable storage; Storage for vegetables; an outdoor pit  
 Farm storage for vegetables. L. M. Montgomery. Ohio F 140:322 O 13 '17  
 Farm storage of vegetables in the South. Prog F 33:198 F 16 '18  
 Fruit and vegetable storage structures. il plan Concrete (Telegraph bldg., Detroit, Mich. 20c) 11:37-8 Ag '17  
 \* Harvest home. E. I. Farrington. Independent (119 W. 40th st, N.Y. 10c) 95:328-9 S 7 '18  
 Harvesting and storing vegetables for home use. J. J. Gardner. il Colo Ag Exp B 232:1-7 '17  
 Harvesting and storing vegetables for winter. J. L. Stahl. il Western Wash Ag Exp B v 5:83-5 S '17  
 Helping Hoover with concrete—storage cellars. il plan Concrete (Telegraph bldg., Detroit, Mich. 20c) 12:191-3 Je '18  
 Home garden; harvesting and storing vegetables for winter. il Country Gent 83:38 O 19 '18  
 Home garden; storing vegetables over winter. plan Country Gent 82:1456 S 22 '17  
 Home storage of vegetables. J. H. Beattie. il plans Farmers' B 879:1-22 '17  
 Home storage of vegetables. C. L. Fitch and J. H. Allison. Minn Hort 46:385 O '18  
 How the gardener may store vegetables for winter use. il Country Gent 81:1768 S 30 '16  
 How to store vegetables for winter use. J. G. Moore. il Wis Ag Ext C 92:1-8 '17  
 Keeping it when you've got it. F. F. Rockwell. il Gard M 26:83-5 O '17  
 Keeping vegetables in cold storage. Market Growers J 22:86 F 1 '18  
 Natural winter storage of vegetables in the home. Gard Chron Am 21:302 Ag '17  
 Points on vegetable storage. C. O. Ormsbee. Market Growers J 22:134 F 15 '18

**Vegetables—Storage—Continued**

- Ripening and storage of foods. Ohio F 140: 274 S 29 '17
- Root and vegetable cellars. Mrs W. W. Burdett. *il Rural N Y* 75:1231 S 23 '16
- Scientific methods of conserving vegetables. Gard Chron Am 22:13-14 Ja '18
- Storage of vegetables. Gard Chron Am 21:237 Je '17
- Storage of vegetables. F. C. Gaylord. *il Purdue Ag Ext B* 58:1-3 '17
- Storage of vegetables. A. C. Gorham. J Ag (Quebec) 20:95 N '16
- Storage of vegetables. A. C. Gorham. J Ag (Quebec) 21:83-4 D '17
- Storage of vegetables. J. E. Hepler. *il N H Coll Ag Ext C* 20:1-12 '17
- Storage of vegetables for winter use. J Bd Ag 24:840-3 N '17
- Storage of vegetables for winter use. J. W. Lloyd. *Ill Ag Exp C* 231:1-4 '18
- Storing cabbage and root crops. J. R. Bechtel. *il Nat Stock & F* 42:576 S 21 '18
- Storing vegetable crops for winter use. M. G. Dunn. Hoard's D 56:158 Ag 30 '18
- Storing vegetables; symposium. Prac F 113: 364 S 1 '17
- Storing vegetables. G. H. Copley. Gard Chron (Lond) 64:141 O 5 '18
- Storing vegetables. A. L. Dacy. W Va Ag Ext C 153:1-4 '17
- Storing vegetables for home use. R. A. McGinty. Colo Ag Ext B 145 4p '18
- Storing vegetables for winter. J. R. Hepler. O Judd Farmer 63:9 O 13 '17
- Storing vegetables for winter. E. H. Kirkpatrick. Ohio F 138:50 Jl 15 '16
- Storing vegetables for winter. M. C. Merrill. *il Utah Ag Exp C* 26:1-8 '17
- Storing vegetables for winter and spring. Prog F 32:1028 O 6 '17
- Storing vegetables for winter use. Purdue Ag 13:16 O '18
- Storing without a storehouse. W. C. McCollom. *il Gard M* 28:77 O '18
- Sweet potato storehouse. plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2259: 46 Ag 31 '18
- Vegetable pit. M. G. Dunn. Hoard's D 54: 240 S 14 '17
- Vegetable storage cellar. plan Am Lumberman (431 S. Dearborn st, Chicago 15c) 2262: 44 S 21 '18
- Vegetable storage on the farm. B. S. Brown. *il Maine Ag Ext B* 120:1-15 '18
- War vegetable gardening and the home storage of vegetables. 31p *il '18 National war garden comm., Maryland bldg., Washington, D.C.*
- Winter handling of vegetables. C. S. Adams. Ky Ag Dept Rep 1916-1917:449-55 '18
- Winter storage of vegetables. I. Smith. Wis Hort Soc Rep 48:186-92 '18

See also Storage of farm produce; also subhead Storage under name of Vegetables, e.g. Celery—Storage, Potatoes—Storage, Root crops—Storage

**Transportation**

- Plant diseases of importance in the transportation of fruits and vegetables. G. H. Coons and R. Nelson. (C. no. 473-A) 59p *il 50c '18 Am. ry. perishable freight assn., 135 E. 11th Place, Chicago*

**Statistics**

- Car-lot shipments of fruits and vegetables in the United States in 1916. P. Froehlich. U S Ag B 667:1-196 '18

**Varieties**

- Back-yard garden; crops and varieties. J. R. Bechtel. Pa Ag Ext C 53:11-15 '17
- Best varieties of vegetables. J Ag (Quebec) 21:149 Ap '18
- Connecticut vegetable variety survey. H. F. Huber. Market Growers J 18:250-1 Ap 1 '16
- Desirable vegetable varieties. Field II 26:246 Mr '16
- Home garden; vegetables that may be started now for fall crops. *il Country Gent* 83:32 Je 29 '18

- Seeking the best in the catalogs. W. J. Ritterskamp. *il O Judd Farmer* 60:4 Mr 4 '16
- Selecting vegetables to meet the rising cost of living. A. Kruhm. *il Gard M* 24:206-8 Ja '17
- Some standard vegetables. Prac F 112:438 D 1 '16
- Varietal character in garden vegetables. W. W. Tracy. Am Flor 51:502 S 28 '18
- Varieties for the home garden. *il Rural N Y* 77:187 F 9 '18
- Variety tests of potatoes, tomatoes, cabbage and other vegetables. T. H. White. *il Md Ag Exp B* 204:231-62 '17; Same. Md Ag Exp Rep 1916-1917 '17
- Vegetable tests on sandy soil at the Umatilla experiment farm. R. W. Allen. *il Ore Ag Exp B* 136:1-38 '16
- Vegetable varieties and seeds. *il Country Gent* 82:326 F 17 '17
- Vegetable varieties for southern Idaho. F. W. Beckwith. Market Growers J 20:376 My 1 '17
- Vegetable varieties for the back-yard garden. Penn State F 11:90+ Mr '18
- Vegetable varieties of Canadian origin. A. J. Logsdail. *il Ag Gaz of Canada* 4:171-4 Mr '17
- Vegetable variety survey in New Jersey. R. W. DeBaun. Market Growers J 18:10 Ja 1 '16
- Vegetables for home and market gardens. Ag Digest 1:361 Mr '17
- Vegetables for the war garden. Nat Stock & F 41:1251 Mr 2 '18
- Vegetables from the home garden. W. N. Craig. Gard Chron Am 21:193-4 My '17
- Your seed order and the tangle of varieties. *il Gard M* 26:197-9 Ja '18

**Weights and measures**

- How to mark contents of fruit and vegetable containers. Pa Ag Dept Dairy Dept B v 15: 7-8 Je '17

**Vegetables, Cooling of**

- Handling and precooling of Florida lettuce and celery. H. J. Ramsey and E. L. Markell. *il U S Ag B* 601:1-28 '17

**Vegetables, Dried**

- Dried peas and beans. Ohio F 141:511 Ap 6 '18
- Dried vegetables as a war garden economy. C. L. Pack. Gard M 23:46 S '18
- Dried vegetables for everyday economy. G. V. Gray. Country Gent 82:405 F 24 '17
- Forming new fashions in food; the bearing of taste on one of our great food economies, the dried vegetable. D. Fairchild. *il Nat Geographic Magazine* (Hubbard Memorial Hall, Washington, D. C. \$2.50 per yr.) 33: 356-68 Ap '18
- High cost of living. G. V. Gray. *il Farm Eng* 5:20+ Mr '17
- Reviving a lost art. *il Nat Geographic Magazine* (Hubbard Memorial Hall, Washington, D.C. 25c) 31:475-80 Je '17
- Some simple fruit and vegetable evaporators. F. P. Reagle. *il plans Industrial Arts Magazine* (129 Michigan st, Milwaukee, Wis. 25c) 7:145-51 Ap '18
- Suggestive ways of using dried vegetables and fruits in the diet. W Va Ag Ext November Lesson 5p '17 (Mim.)
- \* Time to use the dried things. C. B. King. *il Good Housekeeping* (119 W. 40th st, N.Y. 20c) 67:55 N '18

- To be soaked overnight; dried vegetables. M. H. Talbott. Country Gent 81:429 F 19 '16

- Use of dried fruits and vegetables. Mrs A. W. Parks. Neb Ag Ext Emergency B 33:1-12 '18

- Use of dried vegetables. E. C. Horst. *il Overland* (259 Minna st, San Francisco 10c) n 8 71:452-7 My '18

- See also Drying (fruits and vegetables); Potatoes, Dried

**Vegetables, Evaporation of. See Drying (fruits and vegetables)****Vegetables, Respiration of**

- Respiration experiments with sweet potatoes. H. Hasselbrung and L. A. Hawkins. bibliog J Ag Research 5:509-17 D 20 '15



**Vegetables, Washing of**

Washing fruits and vegetables. A. W. Bitting. (B. 12) il plans '17 Research laboratory, Nat. canners assn., Washington, D.C.

**Vegetarianism**

Effect of omnivorous and vegetarian diets on reproduction in the albino rat. J. R. Sloaner and T. A. Card. Science (Science Press, Garrison, N.Y. 15c) n s 47:223-4 Mr 1 '18

Food and common sense. E. Lyttelton. Fortnightly Review (249 W. 13th st., N. Y. 50c) 109:398-407 Mr '18

Why need we be poisoned? M. Drew. Contemporary Review (249 W. 13th st., N.Y. 50c) 109:452-61; 111:76-86 Ap '16, Ja '17

**Vegetation**

Carrying capacity of grazing ranges in southern Arizona. E. O. Wooton. bibliog il U S Ag B 367:1-40 '16

Crop centers of the United States. A. E. Waller. bibliog maps Am Soc Agron J 10:49-83 F '18

Indicator significance of vegetation in Tooele valley, Utah. T. H. Kearney and others. il map J Ag Research 1:365-418 F '14

Native vegetation and climate of Colorado in their relation to agriculture. W. W. Robbins. il maps Colo Ag Exp B 224:1-56 '17

Natural revegetation of range lands based upon growth requirements and life history of the vegetation. A. W. Sampson. il J Ag Research 3:93-148 N '14

Preliminary soil census of Alabama and west Florida. R. M. Harper. map Soil Sci 4:91-107 Ag '17

Vegetation of Shackleford bank. I. F. Lewis. (Econ. paper no. 46) 40p il map '17 N. C. geological and econ. survey, Raleigh

See also Desert vegetation

**Velvet bean caterpillars**

Control of the velvet bean caterpillar. J. R. Watson. il Fla Ag Exp B 130:49-58 '16; Same. Fla Ag Dept Quar B v 26:69-80 Jl '16

Life-history of the velvet-bean caterpillar (anticarsia gemmatilis Hübner). J. R. Watson. il map J Econ Entom 9:521-8 D '16

**Velvet beans**

Corn silage and velvet beans found to be good feed for fattening cattle. Weekly N L 6:6 S 11 '18

Cottonseed, soy bean and velvet bean products compared. Prog F 33:1303 N 30 '18

Harvesting soy and velvet beans. Prog F 33: 318 Mr 9 '18

Letters from velvet bean enthusiasts. Prog F 33:314 Mr 9 '18

Market for velvet beans wanted. Prog F 32: 1070 O 13 '17

Methods of planting and growing velvet beans. J. F. Duggar. Prog F 32:474 Ap 14 '17

New fodder for the South. J. C. Williams and S. D. Fuller. il Field 11 27:866+ N '17

Origin of the Georgia and Alabama varieties of velvet bean. H. S. Coe. maps Am Soc Agron J 10:175-9 Ap '18

Plant velvet beans. J. F. Duggar. Prog F 32: 357 Mr 17 '17

Planting and cultivation of velvet beans. Prog F 32:438 Ap 7 '17

Report on velvet bean marketing. U S Seed Rep 1:3 Ja '18; Same. Prog F 33:178 F 9 '18

Soil improvement crops. S. M. Tracy. (In Cut-over land conf. of the South, 1917, p. 97-103) \$2.50 '17 Southern pine assn., New Orleans, La.

Special southern grain and forage crops: acreage 1916 and 1917. map Monthly Crop Rep 4: 48 My '18

Structure of the pod and the seed of the Georgia velvet bean, stizolobium deeringianum. C. V. Piper and J. M. Shull. il J Ag Research 11:673-6 D 24 '17

Varieties of velvet beans. J. F. Duggar. Prog F 32:383 Mr 24 '17

Velvet beans. J. R. Fain and others. Ga Ag Coll (Ext) C 48:1-4 '17

Velvet beans. C. V. Piper. (Doc. 44) 6p map '17 U. S. States relations service, Washington, D.C.

Velvet beans. S. M. Tracy and H. S. Coe. il maps Farmers' B 962:1-37 '18

Velvet beans; Chinese and early speckled. N. L. Willett. Prog F 31:318 Mr 4 '16

Velvet beans; how to grow and use. C. B. Williams. il N C Ag Exp C 35:1-4 '17

Velvet beans; how to grow them. Prog F 33: 213 F 16 '18

Velvet beans in corn. il Country Gent 81: 1948 N 4 '16

Velvet beans in corn. J. O. Montegut. Prog F 33:630 My 18 '18

Velvet beans in Mississippi. E. B. Ferris. il Miss Ag Exp B 179:1-19 '17

Velvet beans in the South. C. B. Williams. map Country Gent 82:218 F 3 '17

Velvet beans: their place in southern farming. B. L. Moss. il Prog F 33:310 Mr 9 '18

See also Feeding and feeding stuffs—Velvet beans

**Diseases and pests**

See also Velvet bean caterpillars

**Velvet leaf**

Resistance of seed coats of abutilon theophrasti to intake of water. W. E. Davis. Bot Gaz 64:166-7 Ag '17

**Venezuela. See Agriculture—Venezuela; Dairying—Venezuela.**

**Preservation**

Conserving a deer. Mrs M. Kennedy. Rural N Y 77:71 Ja 19 '18

**Venom**

Rattlesnake and his poison. il Rural N Y 77: 761 Je 8 '18

**Venom, Physiological effects of**

Effects of snake venom on domestic animals and the preparation of anti-venomous serum. D. T. Mitchell. Int R Sci & Prac Ag 7, no 10:1463-5 O '16

**Ventilation**

More about ventilation. W. A. Semmons. Kimball's D F 14:193, 245 Mr 15-Ap 1 '16

Right and wrong ventilation. W. A. Semmons. Kimball's D F 14:109, 147 F 15-Mr 1 '16

Sanitary engineering; proper ventilation. Farm Eng 3:178 F '16

Ventilation. (In Minnesota farmers' institute annual, 1916, p 228-30) '16 Extension division, University Farm, St Paul

Ventilation in the hog house. Wallaces' F 41: 314 F 25 '16

Ventilation; some causes of failure—importance of proper ventilation. L. Kleima. N Y Prod R 46:405 Jl 10 '18

See also Barns and stables—Ventilation; Creameries—Ventilation; Milk depots—Ventilation; Poultry houses—Ventilation

**Verbena bud moth. See Bud moths**

Verdict of the violin; story. C. B. Staff. Am Coop J 13:336-7 Ap '18

**Vermont. See subhead Vermont under Agriculture, Agriculture, Dairying, Forests and forestry, Trees**

**Vermont agricultural experiment station**

Twenty-ninth annual report, 1915-1916. Vt Ag Exp B 199:1-16 '16; Same together with bulletins for 1915-1916. 750p '16

30th annual report, 1916-1917. Vt Ag Exp B 208:1-16 '17

**Vermont dairymen's association**

46th annual convention, Burlington, Jan. 11-13. N Y Prod R 41:493+ Ja 19 '16

47th annual meeting, Burlington, Jan. 9-11, 1917. Hoard's D 53:49 F 2 '17; N Y Prod R 43:453 Ja 17 '17

48th annual meeting, Burlington, Jan. 15-17. N Y Prod R 45:391+ Ja 23 '18

**Vermont horticultural society**

Meeting at Montpelier, Vermont, Nov. 14-16, 1916. C. O. Ormsbee. Fruit-Grower 27:508 D 1 '16

- Vermont maple sugar makers' association**  
Convention, St Albans, Jan. 3-5, 1917. J Ag (Quebec) 20:184 Mr '17
- Vermont state fair**  
Jerseys at Vermont state fair; with list of awards. Jersey B 35:1506 S 27 '16
- Vernonia**  
Carduaceous species of puccinia; species occurring on the tribe vernoniae. H. S. Jackson. Bot Gaz 65:289-312 Ap '18
- Vorticillium**  
Some vorticillium diseases. I. C. Jagger and V. B. Stewart. Phyt 8:15-19 Ja '18  
Wilt diseases of okra and the vorticillium-wilt problem. C. W. Carpenter. bibliog il J Ag Research 12:529-46 Mr 4 '18
- Vesicular stomatitis.** See Stomatitis, Vesicular
- Vespa mima sequoia.** See Sequoia pitch moths
- Vetch**  
Bur clover and Augusta vetch. R. E. Lambert. Prog F 31:968 Ag 5 '16  
Clover and vetch do well in south Alabama. J. E. Pittman. il Prog F 31:1040 Ag 26 '16  
Culture of sweet clover and vetch. E. G. Montgomery. il Cornell Reading Courses 5, no 108:123-40 '16; Same. Cornell Ag Exp Rep 1916, v 2:1213-30 '17  
Experience with vetch. W. E. Farver. Nat Stock & F 40:788 N 4 '16  
Hairy vetch. H. E. Thorp. Prog F 31:1017 Ag 19 '16  
Hairy vetch. C. B. Williams. il N C Ag Ext C 16:1-8 '16  
How to feed the dairy cow. H. G. Van Pelt. Kimball's D F 14:639 O 1 '16  
How to recognize some of the clovers and vetches. J. F. Duggar. il Prog F 31:948 Ag 5 '16  
Peas and vetches in western Washington. E. B. Stookey. il Western Wash Ag Exp B v 4:2-6 Mr '17  
Purple vetch. R. McKee. il map Farmers' B 967:1-12 '18  
Rye and vetch for orchard cover. A. N. Brown. il Country Gent 83:22 Ag 17 '18  
Vetch. F. E. Robertson. il N Y Ag Dept B 87:2929-37 S '16  
Vetch and clover. W. H. Barton and W. R. Elliott. S C Ag Ext B A:1-20 '16 (rev)  
Vetch and its culture. H. J. Wheeler. (B. 2) 32p il n.d. Am. agricultural chemical co., 92 State st., Boston  
Vetch for green manure and feed. Rural N Y 77:667 My 11 '18  
Vetch growing in the south Atlantic states. A. G. Smith. il Farmers' B 529:1-16 '17 (rev.)  
Vetch rebuilds the soil. R. H. Moulton. il Hoard's D 54:31 Ag 3 '17  
Vetches, by C. V. Piper and R. McKee; with a chapter on Vetch seed and its adulterants, by F. H. Hillman. il map Farmers' B 515:1-24 '17 (rev.)  
Winter or hairy vetch. Wallaces' F 41:957 Jl 7 '16  
Winter vetch—a substitute for crimson clover. A. E. Grantham. Prac F 114:270 Ag 15 '18  
Winter vetch for green manure. A. E. Grantham. il Country Gent 82:1374 S 8 '17
- Seed**
- Report of stocks of peas, beans, spring vetch and sweet corn. U S Seed Rep 1:6 Ap '18
- Veterinarians**  
Army veterinary legislation; Chamberlain and Hay bills. D: E. Buckingham. Am Vet M Assn J 49:121-4 Ap '16  
Army veterinary service. R. V. Agnew. Am Vet M Assn J 51:587-91 Jl '17  
Challenge to the veterinarian. S: R. Guard. Field 11 28:80 F '18  
Examining boards. T: E. Maloney and E. W. Babson. Am Vet M Assn J 49:70-84 Ap '16  
Farmer and his veterinarian. H. E. McCartney. Breeder's Gaz 71:872 Ap 26 '17  
Farmer and the veterinarian. Penn State F 9:317 F '16  
Food supply problems and the veterinarian's responsibility. L. M. Steckel. Am Vet M Assn J 54:231-4 D '18
- Illegal practice. G: J. Goubeaud. Am Vet M Assn J 48:597-604 F '16  
Licensed veterinarians of Wisconsin, January, 1917. Wis Ag Dept B 9:1-24 '16  
Number of veterinarians in active practice in each state. Am Vet M Assn J 49:613 Jl '16  
Organization of the veterinary corps of the national army. D: S. White. Am Vet M Assn J 52:728-35 F '18; Same cond. Assn Am Ag Coll & Exp Pro 1917:125-8 '18  
Parsing the veterinarian (past, present, and future). T. P. White. Am Vet M Assn J 54:30-3 O '18  
Publicity policy for the profession. F. F. Sheets. Am Vet M Assn J 49:340-51 Je '16  
Report of the committee on army veterinary service. Am Vet M Assn J 52:78-81 O '17  
Should the state board examinations include recent developments in veterinary science? A. D. Knowles. Am Vet M Assn J 49:517-18 Jl '16  
Veterinary conditions out West. E. T. Baker. Am Vet M Assn J 51:379-83 Je '17  
Veterinary practitioner in the control of infectious diseases. V. A. Moore. Am Vet M Assn J 54:211-16 D '18  
Veterinary preparedness. R. V. Agnew. Am Vet M Assn J 48:605-10 F '16
- Veterinary anatomy**  
Demonstration of abdominal and pelvic viscera of horse and ox on partially dissected subjects. H. S. Murphey. Ia Ag Coll Offic Pub v 14, no 36:25-34 '16  
Preservation and in situ fixation of veterinary anatomical subjects by intravascular injection. F. A. Lambert. il Am Vet M Assn J 49:381-91 Je '16  
Some points on the surgical anatomy of the anterior part of the head, including a preliminary study of the teeth and sinuses of the horse. H. S. Murphey. bibliog il Ia Ag Coll Offic Pub v 14, no 36:56-156 '16
- Veterinary biologic products**  
Observations on the use of biological products. C. E. Salsbery. Am Vet M Assn J 54:244-50 D '18  
Regulation of the manufacture and sale of veterinary biologic products by the Bureau of animal industry; with discussion. J: R. Mohler and others. Am Vet M Assn J 52:829-50 Mr '18
- Veterinary colleges**  
Report of college committee for years 1913-15. Am Vet M Assn J 48:772-83; 49:125-9 Mr-Apr '16  
See also Montreal school of comparative medicine and veterinary surgery
- Veterinary corps, United States army.** See United States—Army—Veterinary corps
- Veterinary dentistry**  
Local anesthesia in animal dentistry. H. E. Bemis. il Am Vet M Assn J 51:188-93 My '17
- Veterinary diagnosis**  
Clinical examination of animals. R. R. Bolton. Ia Ag Coll Offic Pub v 14, no 36:7-17 '16  
Conglutination test with special reference to the diagnosis of glanders. C. P. Fitch. bibliog Am Vet M Assn J 48:566-74 F '16  
Detection of John's disease by the use of Johnin. E. G. Hastings and others. Am Vet M Assn J 52:462-6 Ja '18  
Diagnosis of dourine by complement fixation. J: R. Mohler and others. bibliog J Ag Research 1:99-107 N '13  
Diagnosis of glanders by means of coagulation tests. Int R Sci & Prac Ag 7, no 2:239-41 F '16  
Diagnosis of infectious abortion of cattle with special reference to the intradermal abortion test. J: Reichel and M. J. Harkins. il Am Vet M Assn J 50:847-62 Mr '17  
Directions for preparation of veterinary specimens for examination. M. Francis. Tex Ag Exp C 16:1-7 '16  
Examination of the eye. R. R. Bolton. Am Vet M Assn J 54:22-9 O '18  
Eye as an indicator of disease. A. Saperstein. Am Vet M Assn J 48:745-6 Mr '16



**Veterinary diagnosis—Continued**

- Further investigations of the etiology and control of infectious abortion in mares. E. S. Good and W. V. Smith. bibliog il Ky Ag Exp B 204:337-96 '16
- Further studies in X-ray diagnosis in veterinary medicine. L. Griessman. il Am Vet M Assn J 49:830-5 S '16
- Hemorrhagic septicemia, its clinical diagnosis. H. Jensen. Am Vet M Assn J 54:39-47 O '18
- Intra-palpebral mallein test. A. Liautard. Am Vet M Assn J 49:9-11 Ap '16
- Intra-palpebral reaction in the diagnosis of epizootic lymphangitis. A. Lanfranchi. Int R Sci & Prac Ag 9,no 2:198-9 F '18; Same. Am Vet M Assn J 53:784-5 S '18
- Note on the diagnosis of glanders. A. H. Shilston. il Ag J of India 11:65-70 Ja '16
- Ophthalmic mallein for the diagnosis of glanders. J. R. Mohler and A. Eichhorn. il U S Ag B 166:1-11 '15
- Ophthalmic test for glanders: with a simplified method of procedure. N. S. Ferry. Am Vet M Assn J 50:41-6 O '16
- Osmotic equilibrium between blood and milk in the cow. F. H. Van Eer Laan. Int R Sci & Prac Ag 7,no 7:992-3 Jl '16
- Palpebral malleinization. Am Vet M Assn J 53:587-96 Ag '18
- Preliminary report on the intrapalpebral mallein test. L. Price. il Am Vet M Assn J 53:597-606 Ag '18
- Reliability of cell proliferative changes in the diagnosis of rabies. J. B. Hardenbergh and B. M. Underhill. bibliog il Am Vet M Assn J 49:663-8 Ag '16
- Second report of the special committee for the detection of glanders. Am Vet M Assn J 50:747-57 F '17
- Sources of error in the mallein ophthalmic reaction. J. Schnürer. Am Vet M Assn J 50:733-9 F '17
- Value of post mortem examinations. W. C. Thompson. N J Ag Exp Hints to Poultrymen v 5 4p D '16
- See also Complement fixation test; Conglutination test; Tuberculin test

**Veterinary education**

- Agricultural college an important stepping stone to the veterinary school. W. H. Dalrymple. Am Vet M Assn J 50:62-5 O '16
- A.V.M.A. committee on veterinary education in agricultural colleges. Am Vet M Assn J 48:491-6, 634-6 Ja-F '16
- American veterinary medical association; report of section on college faculties and examining boards. M. Jacob; R. D. Wall. Am Vet M Assn J 52:740-7 F '18
- Education of a veterinarian. E. L. Quitman. Am Vet M Assn J 53:569-71 Ag '18
- Examining boards. T. E. Maloney and E. W. Babson. Am Vet M Assn J 49:70-84 Ap '16
- Importance of veterinary instruction. J Ag (Quebec) 20:21 Jl '16
- Lost opportunities; with discussion. D. S. White. Am Vet M Assn J 50:679-91 F '17
- Practical part of veterinary education. A. S. Cooley. Am Vet M Assn J 49:699-700 Ag '16
- Reciprocity and equality in veterinary instruction. H. E. Bemis. Am Vet M Assn J 53:567-8 Ag '18
- Report of the committee on agricultural college education. Am Vet M Assn J 50:629-33 Ja '17
- Veterinary curriculum and army veterinary service; with discussion. J. P. Turner. Am Vet M Assn J 53:571-87 Ag '18
- Veterinary education in New York state. R. W. Gannett. Am Vet M Assn J 52:692-702 F '18
- Veterinary education in New York state. T. B. Rogers. Am Vet M Assn J 53:97-105 Ap '18
- Veterinary faculties and state examining boards. S. Stewart. Am Vet M Assn J 49:392-6 Je '16
- See also Veterinary colleges

**Veterinary inspection**

- Diplomacy in the field. E. Horstman. Am Vet M Assn J 53:646-8 Ag '18

**Veterinary law**

- Licensed veterinarians of Wisconsin, January, 1917. Wis Ag Dept B 9:1-3 '16

**Veterinary meat inspectors' association of Canada.** See Dominion veterinary meat inspectors' association of Canada

**Veterinary medical association, American.** See American veterinary medical association

**Veterinary medical association of New Jersey**  
Annual meeting, Paterson, Jan. 10, 1918. Am Vet M Assn J 52:752-61 F '18

**Veterinary medical associations.** See names of associations, e.g. American veterinary medical association, Indiana state veterinary medical association, Massachusetts veterinary association, New York state veterinary medical society, Southeastern states veterinary medical association, Veterinary medical association of New Jersey

**Veterinary medicine**

- American veterinary medical association. F. Torrance. Am Vet M Assn J 53:794-804 S '18
- Challenge to veterinarians. W. H. Hoskins. Field il 28:320 My '18
- Classification of inflammations. S: H. Burnett. Am Vet M Assn J 53:30-4 Ap '18
- Condition powders and condimental stock feeds. W. M. Burson. Ga Ag Coll (Ext) C 47:1-4 '17
- Efficacy of some anthelmintics. M. C. Hall and W. D. Foster. bibliog J Ag Research 12:397-447 F '18 '18
- Ethics of the profession of veterinary medicine. C. F. Davis. Am Vet M Assn J 51:548-54 Jl '17
- Farm medicine chest. A. S. Alexander. Kimball's D F 15:643, 906 S 15, D 15 '17
- Farmer and the veterinarian. H. H. Havner. Nat Stock & F 40:446 Jl 29 '16
- Few veterinary medical suggestions. M. Jacob. Jersey B 36:1253 Ag 15 '17
- Items in recent history of veterinary medicine. J. Law. Am Vet M Assn J 51:504-26, 655-74, 786-816 Jl-S '17
- Live stock and veterinary conditions in Georgia. E. M. Nighbert. Am Vet M Assn J 48:613-17 F '16
- Live stock production and the veterinarian. F. Torrance. Am Vet M Assn J 52:493-7 Mr '18
- Modern ammunition for fighting animal diseases. N. S. Mayo. Breeder's Gaz 72:1073 D 13 '17
- Organotherapy and the classification of therapeutic tissue extracts. R. A. Archibald. Am Vet M Assn J 54:33-9 O '18
- Ounce of prevention. C: D. Kirkpatrick. Wal-laces' F 42:1439 O 19 '17
- Principles of osteopathy as applied in the treatment of veterinary patients; with discussion. E. A. A. Grange. Am Vet M Assn J 52:670-4 F '18
- Publicity policy for the profession. F. F. Sheets. Am Vet M Assn J 49:340-51 Je '16
- Reliable sheep licks. W. T. Ritch. Am Sheep B & W 37:740 D '17
- Reply to Dr James Law's items in the recent history of veterinary medicine. J. R. Mohler. Am Vet M Assn J 52:380-5 D '17
- Report of the Committee on veterinary history. Am Vet M Assn J 49:420-30 Je '16
- Report on the use of Dakin's solution. H. E. Kingman. Am Vet M Assn J 52:185-8 N '17
- Services of veterinary medicine in the war. E. Fröhner. Am Vet M Assn J 52:84-6 O '17
- Sheep licks. W. T. Ritch. Am Sheep B & W 38:46 Ja '18
- Simple methods of animal restraint; with suggestions for supplies to keep in the home kit. W. C. Fair. Ohio F 140:135 Ag 25 '17
- Study of veterinary science. Ag Gaz of Canada 4:874-81 O '17
- Value and importance of veterinary service in the interest and welfare of the public health. W. Thomson. Am Vet M Assn J 52:428-39 Ja '18
- Veterinary and medical science. A. M. Paterson. J Ag New Zealand 14:186-90 Mr '17

**Veterinary medicine—Continued**

- Veterinary problems. See weekly numbers of Progressive farmer beginning Jan. 5, 1918
- Veterinary science and its relation to agriculture. N. E. McEwen. J Ag (Quebec) 20: 188 Mr '17
- Violet ray in veterinary medicine. W. L. Clark. Am Vet M Assn J 53:774-7 S '18
- Why sal-tonik was given a patent right. G. L. Owens. Coop Manager & F 7:48-9 S '17
- See also Infectious diseases in animals; Parasites—Animals; Quarantine, Veterinary; Veterinary biologic products; Veterinary dentistry; Veterinary research; also subhead Diseases under names of animals, e.g. Cattle—Diseases, Live stock—Diseases and pests, Swine—Diseases; also Canada—Veterinary director general; United States—Animal industry, Bureau of; also names of diseases, e.g. Abortion, Infectious, Anthrax, Anthrax, Symptomatic, Foot-and-mouth disease, Tuberculosis in cattle

**Study and teaching**

- Announcement veterinary degree course 1917-18. il Ga Ag Coll B 125:1-8 '17
- Report of practitioner's short course in veterinary medicine, Vol. 1, no. 1. il map Ia Ag Coll Offic Pub v 14, no 36:1-253 '16
- Supply exhausted
- State board examinations. C. J. Sigmond. Am Vet M Assn J 51:636-41 Ag '17
- Veterinary obstetrics**
- Caesarean section with removal of entire uterus. W. M. Pendergast. Am Vet M Assn J 48:467-8 Ja '16
- Notes on parturition. A. M. Paterson. J Ag New Zealand 13:136-7 Ag '16
- Removing retained placentae by injecting placental vessels with saline solution; with discussion. R. R. Shaw. Am Vet M Assn J 51:60-3 Ap '17
- Retained afterbirth. G. H. Conn. Kimball's D F 14:433 Jl 8 '16
- Retention of the placenta. G. H. Conn. Hoard's D 52:940 Ja 19 '17

**Veterinary patent medicines**

- A. V. M. A. committee on advertisements of veterinary remedies. Am Vet M Assn J 48: 487-91 Ja '16
- Stock tonic trade in Nebraska. H. Kline. Breeder's Gaz 74:80 Jl 18 '18

**Veterinary research**

- New center for veterinary research. R. W. Shufeldt. il Am Vet M Assn J 53:626-31 Ag '18

**Veterinary surgery**

- Contribution on the use of sugar as a dressing in veterinary surgery. Int R Sci & Prac Ag 7, no 2:237-9 F '16
- Fistulous withers in the horse and its operative treatment. R. Mayer. Am Vet M Assn J 49:702-4 Ag '16
- Perforated bowel in the horse. A. P. Drew. Am Vet M Assn J 49:85-6 Ap '16
- Recto-vaginal fistula and recto-vaginal fissure. R. C. Moore. Am Vet M Assn J 52:456-62 Ja '18
- Relief of lameness. L. G. W. Hart. Am Vet M Assn J 53:662-3 Ag '18
- Removal of the nasal septum. H. E. Bemis. il Am Vet M Assn J 49:397-9 Je '16
- Simple livestock surgery. W. C. Jeffries. Ohio F 137:68 Ja 15 '16
- Sugar in surgery. G. Bussano. Am Vet M Assn J 48:662-5 Mr '16
- Teat operations. T. H. Ferguson. Am Vet M Assn J 53:659-61 Ag '18
- See also Capons and caponizing; Castration; Fractures; Gonadectomy; Veterinary obstetrics

**Viburnums**

- Cultivation and varieties. Gard Chron Am 20: 282 Je '16
- Summer-flowering American viburnums. Am Flor 47:30 Jl 22 '16
- Useful viburnums, or snowballs. W. E. Bontrager. Ohio Ag Exp B v 3:135-6 Ap '18

**Vice (tool)**

- Bench vice. J. J. Ricketts. J Dept Ag Victoria 15:311-12 My '17

Victoria, Australia. See subhead Australia under main divisions

**Village communities**

- Village industries. Int R Ag Econ 61:131-2 Ja '16

**Village improvement**

- Boomerang of social service. W. Buck. Country Life 31:122 Mr '17
- Civic improvement in village and country. F. A. Waugh. Mass Ag Ext C 11 4p '17
- Clean-up by a booster club. C. A. Goss. O Judd Farmer 60:22 Ap 1 '16
- How Wenham gets together. M. H. Northend. il plan Country Life 33:48-9 Ja '18
- Improvements along the country roadside. G. Stack. il Farm Eng 3:241 Ap '16
- Keeping everlastingly at it. H. C. Bennett. il Country Gent 82:468-9 Mr 3 '17
- Making over a town. il Country Life 33:49-51 D '17
- Palos Park, Illinois improvers. il Country Gent 81:723 Mr 25 '16
- Village and its melting pot. C. F. Withington. il Country Life 31:44 Ja '17
- Waking up the village school. J. L. Ashlock. il Country Gent 81:1785+ O 7 '16
- What money cannot buy. H. C. Bennett. Country Gent 81:2146-7+ D 16 '16
- Your town newspaper. W. Shaw. Country Gent 81:1760 S 30 '16

See also County organization

Vilmorin, Joseph Marie Philippe Leveque de, 1872-1917

- Life and work. Am Flor 49:101 Ag 4 '17
- Sketch. J Heredity 8:355-6 Ag '17; Same. Gard Chron Am 21:305 Ag '17

Vine. See Grapes

**Vinegar**

- Agricultural law, 1916; adulterated vinegar. N Y Ag Dept B 83:2004-6 My '16; Same. N Y Ag Dept Rep 1916, pt 3:2004-6 '17
- Cider and cider vinegar. L. M. Montgomery. Ohio F 138:498 N 18 '16
- Cider and vinegar a by-product of the Minnesota orchard. W. G. Brierley. il Minn Hort 45:318-21 Ag '17
- Cider vinegar. E. L. Kirkpatrick. Ohio F 138: 282 S 23 '16
- Cider vinegar. W. E. Wiecking. Country Gent 81:1722 S 23 '16
- Country vinegar. il Country Gent 82:1496 S 29 '17
- Facts about the vinegar business. Rural N Y 76:640 My 5 '17
- Homemade apple vinegar. A. M. Latham. Country Gent 81:1867 O 21 '16
- Home-made cider and vinegar. Wallaces' F 41:1173 S 8 '16
- How to make good cider vinegar; methods explained. Weekly N L 6:5 O 16 '18
- How to make vinegar. Green's Fruit Grower 36:25 F '16
- Into the vinegar bottle. E. H. Favor. il Fruit-Grower 28:330 Ag 1 '17
- Make orange vinegar instead of apple product in citrus regions. Weekly N L 5:11 Jl 24 '18
- Making vinegar from the washings of the cappings. Am Bee J 57:345 O '17
- Manual of laws pertaining to the Department of farms and markets; adulterated vinegar. N Y Farms & Markets Dept Ag B 108:96-8 Je '18
- Manufacture of cider vinegar and other apple juice products. A. H. Pulver. il Rural N Y 77:1325, 1346 N 30-D 7 '18
- Manufacture of cider vinegar from Minnesota apples. W. G. Brierly. Minn Hort 44:313-16 Ag '16
- New York cider and vinegar makers. A. H. Pulver. Rural N Y 77:1183 O 19 '18
- Points in vinegar making. L. R. Bryant. O Judd Farmer 62:22 Mr 17 '17
- Slow barrel process for making cider vinegar. Prog F 31:632 My 6 '16
- Tests for cider vinegar. E. W. Mitchell. Rural N Y 75:1201 S 16 '16
- Vinegar farm; making low grade apples into vinegar. A. M. Latham. Ohio F 142:54 Jl 20 '18
- Vinegar from waste fruits. W. V. Cruess. il Cal Ag Exp B 287:169-84 '17



**Vinegar—Continued**

Vinegar making. L. A. Munger. W Va Ag Dept B 13:35-7 Ja '16  
Vinegar making by the storage method. J. L. Stahl. Western Wash Ag Exp B v 6:108-9 N '18

**Analysis**

Vinegars. Assn Offic Ag Chem J 2,no 2,pt 2: 253-8 Ag '16

**Vines.** See Climbing plants; Grapes

**Vineyards.** See Grapes

**Violet rove beetles**

Violet rove-beetle. F. H. Chittenden. il U S Ag B 264:1-4 '15

**Violets**

Growing single violets. H. G. McCallum. il Country Gent 81:1732 S 23 '16  
How to make a violet patch. H. G. McCallum. il Country Life 29:80 Mr '16  
Sweet peas and violets. Am Flor 49:200 Ag 18 '17  
To propagate sweet violets. Gard Chron Am 21:244 Je '17  
Violet culture. A. B. Perry. Gard Chron Am 21:94 Mr '17  
Violet growing at Rhinebeck. Am Flor 49:1360 Ja 12 '18  
Violets. Am Flor 47:54 Jl 29 '16  
Violets and pansies. C. W. Johnson. Am Flor 47:1324 D 30 '16

**Diseases and pests**

Diseases of violets. Gard Chron Am 21:10 Ja '17

See also Violet rove beetles

**Vireos**

Red-eyed vireo. E. S. Jones. Ohio F 137:632 Ap 29 '16  
Vireos. A. A. Allen. il Am For 23:272-4 My '17  
White-eyed vireo. E. S. Jones. Ohio F 139:535 Ap 7 '17

**Virgil (Publius Virgilius Maro)** 70-19 B.C.

Virgil, the poet of beedom. D. M. McDonald. Am Bee J 58:274-5 Ag '18

**Virginia**

Virginia's growth in agriculture and other closely related interests. G. W. Koerner. il Va Ag Dept B 115:5-17 '17

See also subhead Virginia under special subjects, e.g. Agriculture—Virginia, Forests and forestry—Virginia

**Agriculture and immigration, Department of**

Annual report, 1915. il Va Ag Dept B 109:1-191 '16

Year book 1916; annual report of the Commissioner and the Board of agriculture and immigration, 1916. il Va Ag Dept B 115:1-159 '17

**Description and travel**

Virginia, the no-man's land of touring. L. C. Hale. il Country Life 31:49-52; 32:62-4 Ap-My '17

**Forester, State**

Administrative report for the calendar years. 1916-1917. 81p '18 Va. State forester, Univ of Va., Charlottesville

**Highway commissioner, State**

\* 11th annual report for the year ending September 30, 1917. 111p il '18 The commissioner, Richmond

**Markets, Division of**

Virginia division of markets. il Va Ag Dept B 115:114-16 '17

**Virginia agricultural and mechanical college and polytechnic institute**

Holsteins at the Virginia college of agriculture. O. A. Thomas. il Hoard's D 51:141 F 18 '16

**Virginia agricultural experiment station**

Annual report. 1915-1916. il Va Ag Exp Rep 1915-1916:1-213 '17

**Virginia dairymen's association**

10th annual meeting, Roanoke, March 1-2, 1917. Hoard's D 53:369 Mr 23 '17

**Virginia Guernsey breeders' association**

Winter meeting, Winchester, March 7-8. J. C. Courter. Hoard's D 55:514 Ap 12 '18

**Virginia state dairymen's association**

Meeting, Winchester, Va., March 7-8. R. E. Hunt. Hoard's D 55:471 Ap 5 '18; Same cond. Jersey B 37:508 Ap 3 '18

**Virginia state fair**

Virginia state fair. Breeder's Gaz 72:673-4 O 18 '17

**Visiting nurses.** See Nurses and nursing

**Vital statistics**

Are more boys born in war time? J Heredity 7:478 O '16

Fewer birth and deaths: what do they mean? W. F. Willcox. J Heredity 7:119-27 Mr '16

Increase of ignorance. J Heredity 8:178-83 Ap '17

Infant mortality. Creamery 4:46 Jl '16

Marriage rate of nurses. J Heredity 8:510-11 N '17

Population of California. Cal Ag Bd Rep 1917: 20-37 '18

Stanford's marriage rate. J Heredity 8:170-3 Ap '17

Value of vital statistics. Rural N Y 77:89 Ja 19 '18

See also Infant mortality

**Vitamines**

Biological analysis of pellagra-producing diets: the dietary properties of mixtures of maize kernel and beans. E. V. McCollum and N. Simmonds. Int R Sci & Prac Ag 9,no 1:10-13 Ja '18

Biological analysis of pellagra-producing diets; the minimum requirements of the two unidentified dietary factors for maintenance as contrasted with growth. E. V. McCollum and N. Simmonds. Int R Sci & Prac Ag 9,no 4:407-9 Ap '18

Dairy products essential to health. E. V. McCollum. N J Ag Dept B 16:57-71 '18

Dairy products make us what we are. E. V. McCollum. Kimball's D F 16:356-7+ My 1 '18; Same. Jersey B 37:973-4+, 1015+ Je 19-26 '18; Excerpts. Creamery 7:30-3 My '18

Dietary deficiency of cereal foods with reference to their content in antineuritic vitamin. C. Voegtlin and others. U S Pub Health Rep (Washington, D.C.) 33:647-66 My 3 '18

Distribution in wheat, rice and maize grains of the substance, the deficiency of which in a diet causes polyneuritis in birds and beriberi in man. H. Chick and E. M. Hume. Int R Sci & Prac Ag 9,no 2:131-2 F '18

Food value of eggs. T. F. McGrew. Am P Advocate 26:564 S '18

Growth-promoting properties of foods derived from corn and wheat. C. Voegtlin and C. N. Myers. bibliog Pub Health Reports (U. S. Pub. health service, Washington, D. C.) 33:843-68 My 31 '18

Influence of heat on growth-promoting properties of food. E. V. McCollum. Creamery 7:30-1 Ap '18

Known and unknown with regard to the etiology and prevention of beriberi, by E. B. Vedder; Beriberi, estudio epidemiológico y experimental, by M. G. Lebrede; Concerning the chemical nature of the vitamins, by R. R. Williams; Infantile scurvy, by A. F. Hess. (In Pan American scientific congress Pro., 1915, v. 10, p. 22-9, 29-39, 39-47, 48-51) '17

Milk necessary for the nation's welfare. E. B. Hart and H. Steenbock. il Wis Ag Exp B 291:1-20 '18; Same. Hoard's D 55:836-9 Je 7 '18; Same. Jersey B 37:1117-18+ Jl 17 '18

Nature of the dietary deficiencies of the oat kernel. E. V. McCollum and others. Int R Sci & Prac Ag 9,no 5:587-9 My '18

Necessity of vitamins for growth and existence. Creamery 7:32a-32d S '18

New facts on feeding cattle for successful growth and reproduction. E. B. Hart and others. il Wis Ag Exp B 287:1-24 '18; Same. Kimball's D F 16:292+, 340-1 Ap 15-My 1 '18; Same cond. Jersey B 36:1245-7 Ag 15 '17; Abstract. il Hoard's D 55:684-5 My 10 '18

**Vitamines—Continued**

- So-called vitamins or food accessories and their importance in nutrition of animals. F. W. Christensen. N D Ag Exp Spec Food B v 4, no 12 p 331-46 '17
- Some recent investigations in nutrition at the University of Wisconsin. R. Loughlin. J Home Econ 9:546-9 D '17
- Study of the dietary essential, water-soluble B, in relation to its solubility and stability towards reagents. E. V. McCollum and N. Simmonds (J. Biol. Chem. 33, no. 1:55-89 '18) Exp Sta Record 38:612-13 My '18
- Supplementary dietary relationship between leaf and seed as contrasted with combinations of seed with seed. E. V. McCollum and others. Int R Sci & Prac Ag 9, no 3:348-51 Mr '18
- Vitamine content of brewers' yeast. A. Seidell. Int R Sci & Prac Ag 9, no 5:539 My '18
- Vitamines. Rural N Y 77:724 My 25 '18
- Vitamines; abstract. W. Ramsden. J Franklin Inst (Franklin Inst., Philadelphia 50c) 186:265 Ag '18
- Vitamines and nutrition. P. A. Fish. Am Vet M Assn J 54:17-22 O '18
- Vitamines and nutrition. H. Steenbock. il Sci Monthly (Science Press, Garrison, N. Y. 30c) 7:179-88 Ag '18
- Vitamines: nature's preventive medicines. Gard Chron (Lond) 62:251 D 22 '17
- Vitamines or hormones. Creamery 7:43 My '18
- Vitamines or life preservers. J Home Econ 8:642-3 D '16; Same. Ohio F 141:58+ Ja 12 '18

**Viticulture.** See Grapes**Vitrolite**

- Cleanliness in dairy products plants. Creamery 4:26 F '16

**Vocational education**

- Pre-vocational and vocational training. Ag Gaz of Canada 5:712-14 Ji '18
- Shop work. B. A. Rockwell. il Penn State F 11:84-5 Mr '18
- Smith-Hughes bill. M. S. Woolman. J Home Econ 8:241-6 My '16
- Training women to earn—a national movement. A. E. Dodd. J Home Econ 9:441-6 O '17
- Vocational education; its relation to school gardening. C. W. Pugsley. il Neb Ag Ext B 42:1-11 '17

See also Soldiers, Disabled—Re-education

**Laws and legislation**

- Smith-Hughes act. Assn Am Ag Coll & Exp Pro 1917:79-125 '18

**Vocational schools**

- Organization and supervision. H. C. Fetterolf. Penn State F 11:80 Mr '18
- Vocational school. C. J. Kell. il Penn State F 11:81 Mr '18

**Volatile oils.** See Essences and essential oils**Voies**

- Comparative experiments in Austria on the control of field-voles. F. Stramak. Int R Sci & Prac Ag 7, no 4:624-5 Ap '16
- Control of field voles in Italy. A. Splendore. Int R Sci & Prac Ag 7, no 9:1391-2; 8, no 4:668-71 S '16, Ap '17
- Plague of voles and its sudden disappearance in the district of Ouman Kiev, Russia, in 1915. K. W. Rossikov. Int R Sci & Prac Ag 7, no 12:1865-7 D '16

**Volvox**

- Vertical distribution of volvox in the plankton of Lake Monona. G. M. Smith. bibliog Am J Bot 5:178-85 Ap '18

**Voting**

- Farmers and the politicians. H. Quick. Country Gent 81:1263+ Je 24 '16

**Vultures**

- Diurnal birds of prey—hawks, eagles and vultures. A. A. Allen. il Am For 24:281-4 My '18

**W****Wages**

- Buttermaker's salary; has it advanced in proportion to the advance in other labor? N Y Prod R 45:502 F 13 '18
- Butter makers' wages. N Y Prod R 43:462-3 Ja 17 '17
- Cash value of a man. J. H. Robinson. Nat Stock & F 40:1110 Ja 27 '17
- Cheese maker's pay; should it be advanced when working on salary or commission? N Y Prod R 45:514 F 13 '18
- Increase in agricultural wages from 1914 to 1916. Int R Ag Econ 81:67-73 S '17
- Jest supposin'; what would happen if the farmer paid city wages. E. Davenport. Country Gent 83:3+ D 21 '18
- Order as to benefits and advantages which may be reckoned as payment of wages in lieu of payment in cash. J Bd Ag 25:905-7 O '18
- Paying the buttermaker. N Y Prod R 45:434 Ja 30 '18
- Systems of paying milk-wagon drivers. Creamery 6:26 S '17
- Trend in wages. C. Reittel. Annals Am Acad (36th st. and Woodland av., Philadelphia \$1) 74:245-56 N '17
- Wages in logging. J For 15:497-8 Ap '17

**Australia**

- Interesting award affecting labour in sheep-farming. Int R Ag Econ 9, no 3:234-40 Mr '18

**California**

- Report on the regulation of wages, hours and working conditions of women and minors in the fruit and vegetable canning industry of California. (B. 1) 1769 il '17 Cal. Industrial welfare comm., 525 Market st, San Francisco

**France**

- Agricultural wages during the war. Int R Ag Econ 76:104-6 Ap '17
- Average wages of agricultural labourers in France. Int R Ag Econ 69:101-7 S '16
- Increase in agricultural wages from 1914 to 1916. Int R Ag Econ 81:67-73 S '17

**Great Britain**

- Agricultural wages in Great Britain. Monthly R (U.S. Bur. of labor statistics, Washington, D.C.) 6:97-100 Ja '18
- Corn production act, 1917, in England and Wales. J Bd Ag 24:621-8 S '17; Same cond. Int R Ag Econ 82:67-71 O '17
- Enquiry into the rate of wages per acre in England, 1913-1914. W. H. R. Curtler. Int R Ag Econ 68:85-103; 70:88-103 Ag, O '16
- Farm workers' wages in Scotland. H. A. Johnson. (Commerce Reports no. 165) p 201 (Ji 17) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Rates of cash wages of agricultural labourers in England and Wales. Int R Ag Econ 81:74-8 S '17

- \* Work of the Agricultural wages board of England. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1509-11 Je '18

**Hawaiian Islands**

- Sliding scale bonuses in the sugar-cane plantations of Hawaii. Int R Ag Econ 9, no 3:258-60 Mr '18

**Ireland**

- Agricultural wages in Ireland. C. C. Broy. (Commerce Reports no. 224) p 1122 (S 24) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

**Netherlands**

- Farm laborers' wages in Holland. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:103 Ja '18

**Spain**

- Distribution of rural property; hired labour. Int R Ag Econ 67:100-6 Ji '16



**Wages—Continued**

**Sweden**

Agricultural labour and wages in Sweden. Int R Ag Econ 62:113-25; 63:106-23; 64:113-17 F-Ap '16  
Labour supply, working hours and wages in Swedish agriculture in 1914. Int R Ag Econ 67:118-21 JI '16

**United States**

Farm wages in the United States in 1917. Econ World (128 Water st, N.Y. 25c) n s 15:699 My 18 '18  
Gain in farm-wage rates in 1917 shown in report from department. Weekly N L 5:6 My 22 '18  
Labor award in packing-house industries. Monthly R (U. S. Bur. of labor statistics, Washington, D. C.) 6:1163-75 My '18  
Wages of farm labor in the United States. Monthly Review (U. S. Bur. of labor statistics, Washington, D. C.) 6:1484-5 Je '18  
Wages of male farm labor. Monthly Crop Rep 3:25 Mr '17  
Wages of male farm labor in United States. Monthly Crop Rep 4:27 Mr '18

**Wages boards**

Agricultural wages boards in England and Wales. J Bd Ag 24:754-5 O '17; Same. Int R Ag Econ 84:79-82 D '17  
\* Work of the Agricultural wages board of England. Monthly R (U.S. Bur. of Labor Statistics, Washington, D.C.) 6:1509-11 Je '18

**Wagon tires. See Tires**

**Wagons**

Combination wagon bed, box, and racks. L. M. Roehl. Hoard's D 53:374 Mr 23 '17  
Combination wagon rack. C. A. Norman. plan Purdue Ag 13:60-1 N '18  
Handy underhung farm wagon. E. C. Vollmer. Hoard's D 52:576 N 17 '16  
How I built a box rack for my wagon. E. Rogers. Power F 27:16 N '18  
Long-reach farm wagon. H. H. Shepard. il Country Gent 83:22 O 26 '18  
Questions of draft. H. C. Ramsower. Ohio F 137:623 Ap 29 '16  
Rack for hauling hogs. H. S. Heath. Ohio F 138:494 N 18 '16  
Value of bolster springs. J. S. Underwood. Market Growers J 18:8 Ja 1 '16  
Wagons and buggies. G. H. Alford. Prog F 33:478 Ap 13 '18

*See also* Hand carts; Tires

**Standards**

New farm wagon standards. Power F 27:59 JI '18

**Wake robin. See Trillium**

**Wales.** See subhead Great Britain under special subjects, e.g. Agriculture—Great Britain, Dairying—Great Britain

**Walking trips**

Boys' hike. il Penn State F 9:299-300 Ja '16

**Wall barley. See Squirreltail grass**

**Wall coverings**

Concerning our walls. H. Mason. Ohio F 139:162 F 3 '17  
Wall and floor coverings. F. Hawk. Ohio F 137:578 Ap 15 '16  
What to do with your walls. G. R. Wilmot. il Country Gent 81:719 Mr 25 '16

**Wall paper**

New wallpapers for halls. il Country Life 31:90 Ja '17  
New wall papers show a change of heart. il Country Life 29:98 F '16  
Old pictorial wall papers. H. D. Bogan. il Country Life 32:48-50 JI '17  
Points to consider in selecting wall paper. Purdue Ag 10:44 Ap '16

*See also* Wall coverings

**Wallace, Henry, 1836-1916**

Uncle Henry's own story. Wallaces' F 41:1698; 42:11, 46, 89, 140, 188, 240, 290, 346, 396, 438, 482, 528, 568, 610, 646, 686, 718, 752, 784, 838, 1589, 1618, 1644, 1684, 1734, 1756; 43:8, 40, 80, 120, 233, 286, 344, 399, 440, 491, 535, 571, 604, 642, 676, 716, 748, 780, 812, 852, 876 D 29 '16-My 11, 25, N 23 '17-Ja 25, F 8-My 31 '18

Appreciation of life and work; symposium. Wallaces' F 41:351-6+ Mr 3 '16

From a boyhood friend. G: A. Ross. Wallaces' F 42:345 F 23 '17

Good farming, clear thinking, right living. H. Quick. Country Gent 81:737 Ap 1 '16; Same. Wallaces' F 42:344 F 23 '17

Life and work. por Rural Manhood 7:64-5 Ap '16

Life and work. H. Quick. por Country Gent 81:737 Ap 1 '16

Portrait. Breeder's Gaz 69:485 Mr 2 '16

Real friend to man. A. B. Cummins. Wallaces' F 42:343 F 23 '17

Rock upon which he built. H: C. Wallace. Wallaces' F 42:342 F 23 '17

Sketch. por Ohio F 137:332 Mr 4 '16; Hoard's D 51:277, 296 Mr 10 '16

Unselfish publicist. C. Thorne. Wallaces' F 42:343 F 23 '17

**Wallaces' farmer (periodical)**

Farm papers and the war. Wallaces' F 43:302 F 15 '18

Farmer and the war. Wallaces' F 43:352 F 22 '18

**Wallflowers**

Observations on the anatomy of teratological seedlings. H. S. Holden and D. Bexon. bibliog il Ann Bot 32:513-30 O '18

On an early mention of the double wallflower (cheiranthus cheiri). E. R. Saunders. il Royal Hort Soc J 42,pt 1:27-34 O '16

**Wallrothiella**

Wallrothiella arceuthobii. J. R. Weir. il J Ag Research 4:369-78 JI '15

**Walls**

Remedies for a bad wall. H. D. Eberlein. Country Gent 83:36 O 5 '18

Walls in and about the garden. W. H. Butterfield. il Gard M 24:6-8 Ag '16

*See also* Retaining walls; Wall coverings; Walls, Concrete

**Walls, Concrete**

Concrete wall construction. Wallaces' F 41:187 F 4 '16

Concrete wall under building. Rural N Y 77:223 F 16 '18

**Walls, Retaining. See Retaining walls**

**Walnut**

Black walnut. Weekly N L 4:6 Je 20 '17

Black walnut from the Guggenheim estate offered to the government. Am For 24:482 Ag '18

Black walnut in demand for guns and airplanes. Weekly N L 5:1 JI 3 '18

Black walnuts for timber and nuts. T. P. Littlepage. il Country Gent 81:877 Ap 22 '16

California walnut grove soil management. L. D. Batchelor. Better Fruit 11:8 N '16

English walnut culture in the Pacific Northwest. A. A. Quarnberg. Better Fruit 10:13-14 Mr '16

English walnut industry in the Northwest. K. Fearcy. Better Fruit 13:10-11 JI '18

English walnuts. Green's Fruit Grower 36:17 Ag '16

English walnuts in the East. J. R. Smith. il Country Gent 81:1220-1 Je 17 '16

Fair prices for black walnut. H. B. Krausz. Prog F 33:814 JI 20 '18

Grafting tardy walnut trees. C: L. McNary. Better Fruit 12:8-9 Je '18

Grafting walnuts and hickories. J. R. Smith. il Country Gent 81:195-6 Ja 29 '16

Harvesting & packing California walnut crop. L. D. Batchelor. Better Fruit 13:13 O '18

Knot over Washington's tomb. G. T. K. Norton. il Am For 23:351-2 Je '17

Money in walnuts. F. Groner. Better Fruit 11:27 S '16

Persian walnut; a typical problem in tree breeding. J. R. Smith. il J Heredity 7:55-60 F '16

Plant black walnut. Am For 24:692 N '18

Prices for black walnut timber. Rural N Y 77:914 JI 27 '18

Problems in walnut breeding. L. D. Batchelor. il J Heredity 7:61-5 F '16; Abstract. Int R Sci & Prac Ag 8,no 2:226-8 F '17

Profit in black walnuts. F. Marsh. Fruit-Grower 28:284 Je 1 '17

**Walnut—Continued**

- Profitable side line for farmers. A. M. Rud. *il Illustrated World* (Drexel av. and 58th st., Chicago 15c) 26:253-4 O '16
- Studies in juglans: further evidence that the oak-like walnut originates by mutation; a parallel mutation in juglans hindsii (Jepson) Sargent. E. B. Babcock. *il Cal Univ Pub Ag Sci v 2, no 3* 71-80p '16 (10c)
- Trees of Vermont; the walnuts. G. P. Burns and C. H. Otis. *il Vt Ag Exp B* 194:76-81 '16
- Types of black walnut. A. Rutledge. *Gard M* 23:120 Mr '16
- Walnut—cultural methods—top grafting. J. B. Neff. *Better Fruit* 12:7 N '17
- Walnut culture in the lower San Joaquin valley. W. W. Fitzgerald. *il Cal State Comm Hort B v 5:77-94* Mr '16
- \* Walnut harvesting in America. Lee McCrae. *il Social Progress* (205 W. Monroe st., Chicago 20c) 2:634-7 N '18
- Walnut in the war. *il Am For* 24:579-84 O '18
- Walnut industry in the Northwest. F. Groner. *Better Fruit* 13:14 S '18
- Walnut tree and the pecan nut tree. L. Trabut. *Int R Sci & Prac Ag* 8,no 6:881-3 Je '17
- Walnuts from California. J. H. Collins. *il Country Gent* 82:2216-17 D 30 '16
- Walnuts in Asia, etc. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 83:83 F 10 '17
- War's demands are taking black walnut; this is a good year to plant the trees. *Weekly N L* 6:6 S 25 '18

**Diseases and pests**

- Armillaria mellea, a basidiomycete injurious to the walnut tree, in France. P. Guinier. *Int R Sci & Prac Ag* 8,no 12:1293 D '17
- Walnut; bacteriosis or walnut blight. C. F. Cole. *il J Dept Ag Victoria* 14:154-61 Mr '16
- See also Walnut aphids; Walnut blight; Walnut datana.

**Marketing**

See also California walnut growers' association

**Walnut aphids**

- Control of walnut aphids. A. A. Brock. *il Cal State Comm Hort B v 6:478-9* N '17
- Observations on a fungus enemy of the walnut aphid in southern California. O. F. Burger and A. F. Swain. *il J Econ Entom* 11:278-89 Je '18
- Walnut aphides in California. bibliog *il U S Ag B* 100:1-48 '14

**Walnut blight**

- Walnut blight in the eastern United States. S. M. McMurran. *il U S Ag B* 611:1-7 '17

**Walnut datana**

- Two destructive fall caterpillars. J. S. Houser. *il Ohio Ag Exp B v 1:297-300* O '16

**War**

- Is war necessary? P. Popenoe. *J Heredity* 9:257-62 O '18
- Offensive upon nature's forces; moral equivalent of war. H. Israel. *Rural Manhood* 8:18-20 Ja '17
- War and the weather. R. A. Mordoff. *Cornell Countryman* 25:77+- N '17
- War, immigration, eugenics; third report of the Committee on immigration, American genetic association. *il J Heredity* 7:243-8 Je '16
- War, science, civilization, by W. E. Ritter. *Review, J Heredity* 7:186-9 Ap '16
- See also European war; Horses in war

**War bread. See Bread****War camp community service**

- What we are doing for the boys in camp. P. R. Jacques. *il Country Life* 35:59-61 N '18

**War economy**

- Elimination of waste a patriotic duty. C. Campbell. *Irr Age* 32:122 Je '17; Same. *il Power F* 26:8 Jl '17
- To the woman in the country. *il Country Life* 33:45-7 Ap '18

See also Home economics—War economy

**War emergency food associations**

- Plan for mobilizing Iowa food producers. *Ia Ag Ext Emergency Leaflet* 3:1-4 '17

**War finance**

- Farmer and the revenue bill. B: Marsh. Wallaces' *F* 43:1165 Ag 16 '18

**War gardens. See Agriculture and the war, subheads** Factory gardens and Home gardens; Community gardens; Vegetable gardening, Home**War loans**

- Farmer and the liberty loan. *Banker-F* 5:2-3 F '18
- Farmer and the third liberty loan. *Ag Digest* 2:961 My '18
- Liberty bonds and the farmer. H. Quick. *il Country Gent* 83:3-4+ Mr 16 '18
- Liberty bonds: future loans and the farmer's interest therein; with discussion. F. Debevoise. *N Y Farms & Markets Dept Ag B* 105:174-87 Mr '18
- Saving by liberty bonds. B. F. Harris. *Country Gent* 82:1378 S 8 '17
- Second liberty loan and the American farmer. W. G. McAdoo. 13p '17 U. S. Sec. of treasury, Washington, D.C.
- What is a liberty loan bond? *Ag Digest* 2:485 Je '17
- Women and liberty bonds. Wallaces' *F* 43:1424 O 4 '18

**War measures****United States**

- Governmental regulation during the world war. C. R. Van Hise. *Assn Am Ag Coll & Exp Pro* 1917:134-46 '18

**War savings stamps**

- Demand for thrift. C. O. Carpenter. *Prog F* 32:1359 D 29 '17
- United States government war saving stamps. Hoard's *D* 54:807 D 23 '17
- United States government war-saving stamps. *Weekly N L* 5:1-2 Ja 16 '18

**War service. See United States boys' working reserve; Woman—War service****Warble flies**

- Further contribution on the biology of hypodermia lineatum. S. Hadwen. 10p bibliog *il '16 Canada Ag*
- Get the ox-warble. *Jersey B* 37:99 Ja 16 '18
- Hypodermal anaphylaxis. *il Am Vet M Assn J* 49:309-11 Je '16
- Life history of hypodermia bovis and h. lineatum. S. Hadwen. *Am Vet M Assn J* 51:541-4 Jl '17
- Observations on the migration of warble larvae through the tissues. S. Hadwen and E. A. Bruce. 14p *il '16 Canada Ag*
- Ox warble flies. map *Ohio Ag Exp B v 3:23-5* Ja '18
- Ox warbles. Kimball's *D F* 16:220 Mr 15 '18
- Ox warbles damage cattle. *Jersey B* 36:53 Ja 10 '17
- Ox warbles in cattle. *Prog F* 31:150 Ja 29 '16
- Warble fly. *J Dept Ag Ireland* 17,no 4:657-8 '17
- Warbles in cattle. *J. Troop. Purdue Ag* 10:36 Ap '16
- Warbles or grubs in the backs of cattle. T. Butler. *Prog F* 32:59 Ja 20 '17

**Warblers**

- Warblers. A. A. Allen. *il Am For* 23:221-4 Ap '17

**Wardrobes**

- More closet room. H. Tachau. *Country Gent* 81:1636 S 2 '16

**Warehouses**

- Cotton warehouse construction. R. L. Nixon. *il plans U S Ag B* 277:1-38 '15
- Cotton warehouses; storage facilities now available in the South. R. L. Nixon. *U S Ag B* 216:1-26 '15
- Investigation in wool warehousing. *Nat Wool Grower* 7:56 O '17
- Serious warehouse accident of Merchants' refrigerating co. *N Y Prod R* 46:73 My 15 '18
- See also Grain elevators

**Accounting**

- System of accounts for cotton warehouses. R. L. Newton and J. R. Humphrey. *U S Ag B* 520:1-31 '17



**Warehouses—Continued**

**Disinfection**

Some problems in the control of insects in stored foods in California. R. W. Doane. J Econ Entom 11:313-19 Je '18

**Laws and regulation**

- Great aid to better marketing. il O Judd Farmer 61:3 O 21 '16  
 Handling, marketing and warehousing cotton. (B. 33) p 11-16 '17 Warehouse and marketing dept., Austin, Texas  
 Markets and warehouse law of the state of Texas. (House bill no. 97) 24p '17 Von Boeckmann-Jones co., Austin, Tex.  
 Minnesota grain and storage laws. Coop Manager & F 6:28 Ag '17  
 More license regulations. N Y Prod R 47:188 D 11 '18  
 Proposed rules and regulations of the Secretary of agriculture for cotton warehouses under the United States warehouse act. (Service and regulatory announcements—Markets 27) 40p '17 U S Ag; U S Ag C 94: 1-43 '18  
 Special regulations governing licensees engaged in business as cold storage warehousemen and others. N Y Prod R 46:659 S 4 '18  
 U.S. warehouse act. Am Coop J 12:17 S '16  
 \* Warehouse, grain, and weights and measures laws of Minnesota up to and including laws passed at the legislative session of 1917. i-xiv, 1-69p n.d. Review pub. co., St Paul, Minn.

See also Texas—Warehouse and marketing department

**Warehouses, Cooperative**

Successful co-operative feedstore-warehouse. Ohio F 142:190 Ag 31 '18

**Wash rooms**

Farm-house wash rooms. F: W. Ives. Ohio F 142:202 Ag 31 '18

**Washing. See Laundry**

**Washing machines**

I buy my wife a power washer. W. B. Jones. il Power F 27:32 Ap '18  
 No more blue Mondays now. il O Judd Farmer 60:19 My 20 '16

**Washing of fruit. See Fruit, Washing of**

**Washing of vegetables. See Vegetables, Washing of**

**Wash-stands**

Old wash-stands. A. Fearing. il Country Life 33:71 N '17

**Washington, George, 1732-1799**

Country home of George Washington. P. Wilstach. il plan Country Gent 29:23-6 Ap '16  
 Domestic life at Mount Vernon. P. Wilstach. il Country Life 30:35-7 My '16  
 George Washington as a planter and country gentleman. P. Wilstach. il map Country Life 30:31-3 Je '16  
 Sketch. C. B. Galbreath. Nat Stock & F 40: 1224 F 17 '17  
 Washington's last headquarters. M. Stapley. il Country Life 32:84+ Je '17  
 Washington's prophecy; some of his ideals apply to to-day's problems. Country Gent 82:404 F 24 '17

**Washington, D. C.**

Washington in war time. W. C. Barnes. il Breeder's Gaz 72:1031+ D 6 '17  
 Washington of the future. A. B. Maurice. il maps Country Life 34:46-54 S '18  
 Winter vacation; our best investment. E. F. Dickinson. il Rural N Y 76:227 F 17 '17

**Description**

Washington of to-day. R. V. Oulahan. il Country Life 34:33-40 S '18

**History**

Washington before the war. H. H. Smith. il maps Country Life 34:25-32 S '18

**Social life and customs**

Washington's country life. H. Brooks. il Country Life 34:40-6 S '18

**Washington (state)**

See also subhead Washington under special subjects, e.g. Agriculture—Washington, Dairying—Washington

**Farm markets, Office of**

Activities of the Office of farm markets. A. Hobson. Western Wash Ag Exp B v 5:126-7 D '17  
 Adjustments of disputes between buyers and sellers of farm produce. A. Hobson. Western Wash Ag Exp B v 6:11-13 Ap '18  
 Washington's new office of markets. Better Fruit 11:10 My '17

**Forester, State**

Annual reports for the years ending Nov. 30, 1915, and Nov. 30, 1916. 41p il '16 Wash. State bd. of forest comrs., Olympia

**Highway commissioner, State**

\* 6th biennial report for the period Oct. 1, 1914, to Sept. 30, 1916. 123p il '16 Wash. State highway comr., Olympia

**Washington agricultural experiment station**

Adams branch experiment station: 1st annual report for the year ending June 30, 1916. il Wash Ag Exp B 138:1-16 '17  
 Index to general bulletins 1-25. H. B. Clees. Wash Ag Exp 12p '17  
 Indexes to Popular bulletins numbers 1 to 100. H. B. Clees. 30p '16 Washington ag. experiment station, Pullman  
 Twenty-sixth annual report for the year ending June 30, 1916. il Wash Ag Exp B 136: 1-66 '17

**Washington forest fire association**

10th annual report, 1917. 24p '18 Washington forest fire assn., 1126 Henry bldg., Seattle

**Washington state college**

Activities at the state college of Washington; views. Country Gent 81:567 Mr 11 '16

**Washington state dairymen's association**

23d annual convention, Snohomish, 1916. Jersey B 35:308 Mr 1 '16

**Washington state fair**

Sheep overtop any form of livestock at the Washington state fair. Am Sheep B & W 38:661-2 O '18

**Washington state grain growers, shippers and millers association**

11th annual convention, Pullman, Jan. 2-4, 1917. Coop Manager & F 6:34-43 F '17

**Washington state horticultural association**

13th annual meeting, North Yakima, Washington, Jan. 8-5, 1917. E. F. Stephens. Fruit-Grower 28:60 Ja 15 '17

**Washington state land settlement association**

Washington state land settlement association; what is it, and why? E. F. Benson. Western Wash Ag Exp B v 6:106-7 N '18

**Washington (state) university**

Development of home economics at the University of Washington. E. I. Raitt. J Home Econ 9:314-19 Jl '17

**Wasps**

Paper-making in the insect world. R. W. Shufeldt. il Am For 23:431-2 Jl '17  
 Tool-using animal. H. Hutchinson. Living Age (6 Beacon st, Boston 15c) 294:381-3 Ag 11 '17  
 Wasps; methods of destruction. J Bd Ag 23: 241-2 Je '16

See also Digger wasps; Fig wasps; Sycamore-fig wasps

**Waste**

Avoiding farm wastes. il System on the Farm 1:344, 378-9 N-D '17  
 Don't waste food and clothing; what to do with the things you throw away. M. Woolley. Farm Eng 5:5 D '17  
 Great American waste; losses on the farm and at country shipping points. L. D. H. Weld. il Country Gent 82:1254 Ag 11 '17  
 Household waste and public waste. J Home Econ 9:432 S '17

See also Food waste

**Waste land**

Clearing waste land. System on the Farm 1:308 O '17

**Waste land—Continued**

- Put the waste lands to work. B. L. Moss. Prog F 32:1148 N 3 '17  
 Rearranging the farm; mobilizing the waste places. Rural N Y 76:829 Je 30 '17  
 War on waste areas. P. A. Ingvason. il Nat Wool Grower 8:36-8 Mr '18

See also Drainage; Irrigation; Reclamation of land

**Waste products**

- Conservation of fertilizer materials from minor sources. C. C. Fletcher. il U S Ag Yearbook 1917:283-8  
 Developing the by-products industry. P. H. Weyrauch. Better Fruit 10:9 My '16  
 Fertilizers from industrial wastes. W. H. Ross. U S Ag Yearbook 1917:253-63  
 How junk will help to junk the Junkers. W. B. Jones. il Power F 27:12-13 O '18  
 Plants for saving waste potatoes. Wallaces' F 41:212 F 11 '16  
 Selling rags and waste. Rural N Y 75:785 My 20 '16  
 Waste sulphate liquor problem. B. Johnsen. Sci Am Sup (233 Broadway, N. Y. 10c) 86: 190-1 S 21 '18

See also subhead Byproducts under special subjects, e.g. Cherries—By-products, Tomatoes—By-products

**Bibliography**

- List of references on the utilization of waste. U.S. Library of Congress. 9p '17  
 Obtainable only thru Public affairs information service, 958-964 University av., N.Y. (Typew 45c)  
 Contains references to many subjects of interest, i.e. Cotton waste, Garbage as fertilizer, Wood waste, Wool waste, and the utilization of other farm products

**Water**

- Brackish water wells in the Agra division. E. A. Molony. Ag J of India 12:665-6 O '17  
 Clay boulders and the rolling action of water. E. B. Watson. Soil Sci 3:513-14 Je '17  
 Have a drink! C. H. Lerrigo. Country Gent 81:1049 My 13 '16

See also Bog water; Cooling towers; Erosion; Rain and rainfall; Rivers; Snow; also headings beginning Water

**Analysis**

- Chalybeate waters from tube-wells in the Punjab; their significance to the municipal engineer and the manufacturer. J. H. Barnes and Arjan Singh. il Ag J of India Sci Congress No 1917:43-66  
 Composition of the irrigation waters of Utah. J. E. Greaves and C. T. First. Utah Ag Exp B 163:1-43 '18; Abstract. J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:1001-4 D '18  
 Methods of analysis. bibliog Assn Offic Ag Chem J 1,no 4,pt 2:35-52 F '16  
 Report on water; the separation and determination of calcium and strontium. W. W. Skinner. Assn Offic Ag Chem J 2,no 3,pt 1: 113-16 N '16  
 Waters of the Rio Grande. W. P. Headden. Colo Ag Exp B 230:1-62 '17

**Bacteriology**

- Aerobic spore-forming bacillus giving gas in lactose broth isolated in routine water examination. E. M. Meyer. J Bact 3:9-14 Ja '18  
 Bacteria and the water supply. D. H. Jones. il Ontario Ag Dept B 265:13-17 '18  
 Bacteria in commercial bottled waters. M. M. Obst. U S Ag B 369:1-13 '16  
 Bacteriological examination of water. H. E. Hasseltine. (Reprint no. 432 Pub. health reports) 10p '17 U.S. Public health service, Washington, D.C.  
 Comparative bacteriological study of the water supply of the city and county of Denver, Colorado. W. G. Sackett. il Colo Ag Exp B 225:1-14 '17  
 Elimination of spurious presumptive tests for b. coli in water by the use of gentian violet. I. C. Hall and L. J. Ellefson. bibliog J Bact 3:329-54 J1 '18

Observations on the types of organisms isolated from water after treatment with calcium hypochlorite. M. A. Smeeton. J Bact 2:355-9 J1 '17

Occurrence of different types of the colon-aerogenes group in water. L. A. Rogers. bibliog J Bact 3:313-23 J1 '18

Study of green fluorescent bacteria from water. F. W. Tanner. bibliog J Bact 3:63-101 Ja '18

Use of a three per cent lactose litmus agar plate for the demonstration of b. coli in water examination. E. M. Meyer. J Bact 2: 237-40 My '17

**Water, Bottled**

- Bacteria in commercial bottled waters. M. M. Obst. U S Ag B 369:1-13 '16  
 Report on the determination of radioactivity. F. B. Furber. Assn Offic Ag Chem J 2,no 3,pt 1:116-19 N '16

**Water, Distilled**

- Harmful action of distilled water. R. H. True. bibliog Am J Bot 1:255-73 Je '14  
 Question of the toxicity of distilled water. R. P. Hibbard. bibliog Am J Bot 2:389-401 O '15

**Water, Underground**

- Locating underground streams; a waterfinder. W. H. Day. il Ag Gaz of Canada 5:798-800 Ag '18

Water analysis. See Water—Analysis

**Water birds**

- Great Plains waterfowl breeding grounds and their protection. H. C. Oberholser. il U S Ag Yearbook 1917:197-204; Same. Separate 723

Mortality among waterfowl around Great Salt Lake, Utah. A. Wetmore. il U S Ag B 217: 1-10 '15

Waterfowl at the Madison Square Garden show. Am P Advocate 25:195 F '17

Waterfowl, turkeys and guinea fowl. See monthly numbers of American poultry advocate

See also Ducks; Geese; Geese, Wild; Loons; Swans

**Water closets**

- Chemical closet. E. D. Rich. il Mich State Bd of Health (Lansing) Eng B 5:1-9 '16  
 Sanitary seat. Rural N Y 75:122 Ja 22 '16

See also Privies

**Laws**

- Privies and cesspools. (In Municipal ordinances, 1916, p. 230-8) '17 U.S. Pub. health service, Washington, D.C.

Water cooling towers. See Cooling towers

**Water cress**

- Farming a hundred brooks. E. I. Farrington. Country Gent 81:2072 D 2 '16  
 Home grown water cress. Fruit-Grower 27:331 Je 15 '16  
 Watercress as a crop. Purdue Ag 10:42 Mr '16

**Diseases and pests**

- Bad attack by the mustard beetle on watercress. A. Roebuck. il J Bd Ag 23:238-41 Je '16

**Seed**

- Germination tests of the seeds of garden cress (*lepidium sativum*) under very varied conditions. P. Lesage. Int R Sci & Prac Ag 8,no 1:51-2 Ja '17

Water distillation. See Distillation

Water-dog. See Newts

**Water flow**

- Behavior of cup current meters under conditions not covered by standard ratings. F. C. Scobey. J Ag Research 2:77-83 My '14

Flow conditions in irrigation flumes unstable. J. S. Longwell. Eng News-Record (10th av at 36th st, N.Y. 15c) 80:38-9 Ja 3 '18

Flow through submerged rectangular orifices with modified contractions. V. M. Cone. J Ag Research 9:97-114 Ap 23 '17

Flow through weir notches with thin edges and full contractions. V. M. Cone. bibliog J Ag Research 5:1051-1113 Mr 6 '16



# Water gardens

- Constructing and planting an aquatic pond. il Gard Chron Am 22:79 Mr '18
- Gardening the water's edge. R. Dean. il Country Life 30:22-3 Ag '16
- Water garden while you wait. H. Whipple. il Country Life 32:50-1 Ag '17
- Water lilies and aquatic plants for every garden. C. L. Tricker. il Gard Chron Am 21: 202-3 My '17
- Water lilies for the home garden. W: Tricker. il Gard Chron Am 20:122-3 Mr '16
- When you have a brook bed. S. F. Hamblin. il Gard M 24:8-9 Ag '16
- Woman and her water garden; photographs. I. H. Hardie. Country Life 32:51 Jl '17

See also Aquatic plants

# Water heaters

- Anti water-freezer for a henhouse. H: Musch, jr. il Rural N Y 75:795 My 20 '16
- Built-in tank heater. H. L. Heath. il Ohio F 137:251 F 19 '16
- Heating drinking water for stock. H. C. Campbell. plan Hoard's D 51:3 Ja 28 '16
- Water heaters for farm homes. F: W. Ives. il Ohio F 142:228 S 7 '18

# Water hemlock

- Cicuta (water hemlock) as a poisonous plant. C. D. Marsh and others. 4p il '17 U. S. Bur. of animal industry, Washington, D.C.; Same cond. Weekly N L 4:3 Je 20 '17; Same cond. Am Flor 49:204 Ag 18 '17
- Cicuta, or water hemlock. C. D. Marsh and others. il U S Ag B 69:1-27 '14
- Water hemlock, a poisonous plant. W. W. Robbins. il Colo Ag Ext B 139 4p '18

# Water hyacinth

- Utilising the water hyacinth for commercial purposes. Ag Gaz of New South Wales 27: 817-18 N '16
- Water hyacinth. Ag J of India 12:333-5 Ap '17

# Water hyacinth as fertilizer

- \* Fertilizing values of water hyacinth. Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:415 O 30 '18
- Water hyacinth (eichornia crassipes Solms.) and its value as a fertiliser. R. S. Finlow and K. McLean. Ag J of India 12:419-24 Jl '17; Abstract. Int R Sci & Prac Ag 8,no 9: 1223-4 S '17

# Water laws

- Législation des eaux. Int Yearbook Ag Leg 1916:584-96 '17

# Water lilies

- Water lilies for commercial use. il Am Flor 50:1104 Je 22 '18
- Water lilies for the home garden. W: Tricker. il Gard Chron Am 20:122-3 Mr '16
- Water-lilies in St Vincent. W. N. Sands. Gard Chron (Lond) 64:135 O 5 '18

## Diseases and pests

- Leafspot-rot of pond lilies caused by helicosporium nymphaeum. F: V. Rand. il J Ag Research 8:219-32 F 5 '17

# Water measurement

- Construction and use of farm weirs. V. M. Cone. Farmers' B 83:1-18 '17
- Important questions for irrigators. G. Lowther. Irr Age 31:149-50 Ag '16
- Turn-out box with weir. il Irr Age 31:122 Je '16

See also Water flow; Water meters; Weirs

# Water meters

- Behavior of cup current meters under conditions not covered by standard ratings. F. C. Scohey. J Ag Research 2:77-83 My '14
- Experiments in the use of current meters in irrigation canals. S. T. Harding. J Ag Research 5:217-32 N 8 '15
- Reliance irrigation meter for registering flow in ditches and canals. il Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 49:112 Ja 30 '18

# Water molds. See Molds (botany)

# Water pipes

- Insulating water pipes. Rural N Y 75:192 F 5 '16
- Protecting water pipes. Wallaces' F 43:1794 D 6 '18

- Water supply; piping. J: D. Kilpatrick. Field 11 26:380 Ap '16

See also Pipes, Wood

# Water power

- Electric lights from water power. G: H. Zouck. il Country Gent 81:511 Mr 4 '16
- Electric power development in the United States. H. H. Chapman. Am For 22:236-7 Ap '16
- Electric power from stream. Rural N Y 75:212 F 5 '16
- Farm power from farm streams. S: O. Rice. il Country Gent 83:13 Mr 23 '18
- \$59 power plant. C: J. Lisle. il Country Gent 81:393 F 19 '16
- Made in America; cheap water power in the West to produce fertilizers. W: H. Dean. il Country Gent 81:1011-12 My 13 '16
- Our water power. G. Pinchot. Wallaces' F 43: 85 Ja 18 '18
- Power development—reclamation service projects. A. P. Davis. Irr Age 31:134-5 Jl '16
- Public water power. G. Pinchot. Am Flor 46: 926 My 20 '16
- Utilizing the power of air and water. F. W. Ives. il Ohio F 139:605 Ap 28 '17
- Water power for electric light. Rural N Y 75: 258 F 12 '16
- Waterpower legislation. H. H. Chapman. Am For 22:242-3 Ap '16
- Water power on national forests. il Am For 23:42 Ja '17
- Water power: the nation's need. Irr Age 32: 181-3 O '17
- Water that runs uphill. G: F: Stratton. il Country Gent 83:5 F 9 '18

## Bibliography

- Irrigation, drainage, and water power (exclusive of Pacific states); list of publications for sale by the Superintendent of documents, Washington, D.C. (Price list 42—9th ed.) 2lp '18 U.S. Supt. of doc., Washington, D.C.

# Water purification

- Chalybeate waters from tube-wells in the Punjab: their significance to the municipal engineer and to the manufacturer. J. H. Barnes and Arjan Singh. il Ag J of India Sci Congress No 1917:43-66
- Comparative bacteriological study of the water supply of the city and county of Denver, Colorado. W. G. Sackett. il Colo Ag Exp B 225:1-14 '17
- Handy farm mechanics. S: O. Rice. il Country Gent 83:19 Je 22 '18
- Observations on the types of organisms isolated from water after treatment with calcium hypochlorite. M. A. Smeeton. J Bact 2:355-9 Jl '17
- Waste waters from potato-starch factories in Hungary; their noxious action and purification. J. Halmi. Int R Sci & Prac Ag 7,no 5:736-7 My '16
- Water on the farm. F. B. Guthrie. Ag Gaz of New South Wales 29:381-6 Je '18

See also Filters and filtration; Water supply

# Water requirements of crops

- Breeding millet and sorgo for drought adaptation. A. C. Dillman. il U S Ag B 291: 1-19 '16
- Corn growing under droughty conditions. C. P. Hartley and L. L. Zook. il Farmers' B 773:1-24 '16
- Drought-resisting adaptation in seedlings of Hopi maize. G. N. Collins. bibliog il J Ag Research 1:293-302 Ja '14
- Drouth-resisting crops. I: Motes. O Judd Farmer 60:8 Je 24 '16
- Duty of water and how to determine it. E. C. McClellan. Irr Age 32:184-6 O '17
- Duty of water in irrigation. Irr Age 31:132 Jl '16
- Economical irrigation of alfalfa in Sacramento valley. S. H. Beckett and R. D. Robertson. il Cal Ag Exp B 280:273-94 '17
- Economical use of irrigation water. W. L. Powers. il map Ore Ag Exp B 140:1-79 '17
- Effect of continued capillary watering. L. Daniel. Int R Sci & Prac Ag 8,no 1:84-6 Ja '17

**Water requirements of crops—Continued**

- Effect of fall irrigation on crop yields at Belle Fourche, S. Dak. F. D. Farrell and B. Aune. U S Ag B 546:1-13 '17
- Effect of frequent cutting on the water requirement of alfalfa and its bearing on pasture. L. J. Briggs and H. L. Shantz. il U S Ag B 228:1-6 '15; Abstract. Int R Sci & Prac Ag 7,no 2:221-3 F '16
- Effect of soil moisture content on certain factors in wheat production. F. S. Harris and H. J. Maughan. Utah Ag Exp B 152:1-15 '17
- Effects of acid and alkaline solutions upon the water relation and metabolism of plants. A. Dachnowski. bibliog Am J Bot 1:412-39 O '14
- Experiments in the irrigation of apple orchards. E. P. Taylor and G. J. Downing. il Idaho Ag Exp B 99:1-48 '17
- Experiments on the economical use of irrigation water in Idaho. D. H. Bark. il U S Ag B 339:1-57 '16; Excerpts. Better Fruit 11:9 JI '16; Excerpts. Irr Age 31:151-2 Ag '16
- Factors in drouth resistance. E. C. Miller. il Breeder's Gaz 70:649-50 O 12 '16
- Factors influencing the water requirements of plants. C. C. Thom and H. F. Holtz. bibliog Wash Ag Exp B 146:1-64 '17
- How to get rich lands; water: its relations to a productive soil. T. Butler. Prog F 32:174 F 10 '17
- Influence of excess of water in the soil during the second half of the summer, on the formation of secondary potato tubers and their starch content. M. Arkhangelskij. Int R Sci & Prac Ag 7,no 8:112-14 Ag '16
- Influence of hybridization and cross-pollination on the water requirement of plants. L. J. Briggs and H. L. Shantz. il J Ag Research 4:391-402 Ag '15
- Irrigation and manuring studies; effect of varying quantities of irrigation water and manure on the growth and yield of corn. F. S. Harris and D. W. Pittman. Utah Ag Exp B 154:1-29 '17
- Irrigation of alfalfa in Imperial valley. W. E. Packard. il Cal Ag Exp B 234:67-84 '17
- Less water and more land. J. L. Ashlock. Country Gent 81:450 F 26 '16
- On the resistance of plants to withering. F. Cavara and R. Parisi. Int R Sci & Prac Ag 8,no 3:353-5 Mr '17
- Optimum moisture conditions for young lemon trees on a loam soil. L. W. Fowler and C. B. Lipman. Cal Univ Pub Ag Sci v 3,no 2 25-36p, pl 9-11 '17 (15c)
- Physiological balance of nutrient solutions for plants in sand cultures. A. G. McCall. bibliog il Soil Sci 2:240-5 S '16
- Physiological water requirement and the growth of plants in glyceoll solutions. A. Dachnowski and R. Gormley. bibliog Am J Bot 1:174-85 Ap '14
- Progress report of cooperative irrigation experiments at California university farm, Davis, Cal., 1909-1912. S. H. Beckett. U S Ag B 10:1-21 '13
- Relation between quantity of irrigation water used and quantity of crop produced. J. A. Widtsoe. bibliog (In Pan American scientific congress Pro., 1915, v. 3, 107-121) '17
- Relative water requirement of corn and the sorghums. E. C. Miller. il J Ag Research 6:473-84 Je 26 '16
- Relative water requirement of plants. L. J. Briggs and H. L. Shantz. bibliog il J Ag Research 3:1-64 O '14
- Some abnormal water relations in citrus trees of the arid southwest and their possible significance. R. W. Hodgson. Cal Univ Pub Ag Sci v 3,no 3 37-54p, pl 12 '17 (20c)
- Time at which cotton uses the most moisture. C. K. McClelland. Am Soc Agron J 10:185-9 Ap '18
- Transpiration as a factor in crop production. T. A. Kieselbach. bibliog il Neb Ag Exp Research B 6:1-214 '16
- Value of Sudan grass as a forage crop. Int R Sci & Prac Ag 7,no 1:68 Ja '16

Water as a factor of production in leguminosae. Int R Sci & Prac Ag 7,no 2:208-9 F '16

Water requirement of plants as influenced by environment. L. J. Briggs and H. L. Shantz. il (In Pan American scientific congress Pro., 1915, v. 3, p. 95-107) '17

Water requirements and growth of young cypress. W. R. Mattoon. il Soc Am For Pro 11:192-7 Ap '16

Water supply of the soil. A. R. Whitson and H. B. Hendrick. U S Ag B 355:24-31 '16

See also Dry farming; Plants—Transpiration

**Water rights**

Adjusting Idaho's water rights. Irr Age 31:139 JI '16

Beneficial use to stop big water waste in Idaho. Irr Age 31:58-9 F '16

Important questions for irrigators. G. Lowther. Irr Age 31:149-50 Ag '16

See also Riparian rights

**Water softening**

Handy farm mechanics. S: O. Rice. il Country Gent 83:19 Je 22 '18

**Water storage**

Irrigation water for domestic use. Irr Age 32:171 S '17

Water supply. J: D. Kilpatrick. Field II 26:290 Mr '16

See also Dams; Irrigation; Rain and rainfall; Reservoirs; Water supply; Water tanks; Weirs

**Water supply**

Failing water supply. Rural N Y 76:833 Je 30 '17

Hooverizing of water. G: F: Stratton. il Country Gent 83:8+ O 12 '18

Seepage and return waters, 3 pts. L. G. Carpenter. Colo Ag Exp B 180:1-70, 1-48, 1-146 '11 (Reprint '16)

Solving water waste problems. R. B. Sleight. il Farm Eng 5:5 JI '17

Water supply and sanitation. Texas Univ (Austin) B 1733:1-33 Je 10 '17

Contents: Stream pollution, by V. M. Ehlers; Dry closet system, by E: H. McCuiston; Bacteriology and sanitation, by I. M. Lewis; Filtration and sterilization of water, by R. G. Tyler; Septic and Imhoff tanks, by M. C. Welborn

Watering bees automatically. A. C. Gilbert. Gleanings 44:240-1 Mr 15 '16

See also Artesian wells; Cisterns; Dams; Drinking fountains; Filters and filtration; Irrigation; Pumps; Rain and rainfall; Reservoirs; Snow surveys; Water storage; Water tanks; Wells

**Colorado**

Comparative bacteriological study of the water supply of the city and county of Denver, Colorado. W. G. Sackett. il Colo Ag Exp B 225:1-14 '17

Waters of the Rio Grande. W: P. Headden. Colo Ag Exp B 230:1-62 '17

**Idaho**

Experiments on the economical use of irrigation water in Idaho. D. H. Bark. il U S Ag B 339:1-57 '16

See also Water rights—Idaho

**Montana**

Artesian water for irrigation in Little Bitterroot valley, Montana. O. E. Meinzer. (Water-supply paper 400—B) 37p il maps '16 U.S. Geological Survey, Washington, D.C.; Excerpt. Irr Age 32:45 Ja '17

**New Jersey**

Report on the water supply in the cranberry bogs of New Jersey. F. O. Church. N J Ag Exp Rep 1916:343-66 '17

**United States**

Making ground water survey. Irr Age 31:105 My '16

See also Water users' associations



Water supply, Rural

- Campaign for running water for farm houses. Metal Worker (243 W. 39th st., N.Y. 10c) 87: 227-30 F 16 '17
- Change in water supply system. Wallaces' F 43:1302 S 13 '18
- Cheap water supply for the kitchen. Wallaces' F 43:83 Ja 18 '18
- Cheap water system for the home. W: H. Dean. Country Gent 81:549 Mr 4 '16
- Cheap waterworks for farm homes. D. Scoates and J. W. Carpenter, jr. Prog F 31: 1123 S 23 '16
- Convenient gravity water system. H. F. Bailey. Prog F 33:1172 O 26 '18
- Development of water supplies for rural communities in Saskatchewan. E. L. Miles. plans Eng & Contracting (608 S. Dearborn st, Chicago \$3 per yr.) 50:254-5 S 11 '18
- Domestic water supply on the farm. H. E. Murdock. il plans Mont Ag Exp C 66:83-103 '17
- Double water supply system in country home. il plan Metal Worker (243 W. 39th st, N.Y. 10c) 89:351-3 Mr 15 '18
- Farm house plumbing system. D. H. Stowell. O Judd Farmer 60:22 Ap 29 '16; Same. O Judd Farmer 61:20 S 30 '16
- Farm water supply. Farm Eng 3:147 Ja '16
- Farm water supply. J. E. Cowper. Country Gent 81:1553 Ag 19 '16
- Farm water supply. H. E. Cox. il Rural N Y 75:520 Mr 25 '16
- Farm water supply and sewage disposal. W. H. Day and others. il plans Ontario Ag Dept B 267:1-80 '18
- Farm water system. Wallaces' F 43:1822 D 13 '18
- Fire protection on a farm. Field Il 26:484 My '16
- Getting running water in the kitchen. Mrs W. T. Taylor. Prog F 31:57 Ja 8 '16
- Getting water into the farmhouse. C. E. Williams. il O Judd Farmer 61:5 Ag 5 '16
- Gravity system in water supply. I. W. Dickerson. Wallaces' F 43:1416 O 4 '18
- Handling hydraulic ram. Rural N Y 77:1182 O 19 '18
- Harnessing the spring. J. W. McCoy. Country Gent 81:741 Ap 1 '16
- Home water works. D. Scoates. il Farm Eng 7:7 Ap '18
- Hot and cold water in the farm kitchen. il Scientific Am (233 Broadway, N.Y. 10c) 118: 109 F 2 '18
- House equipment for running water. J. L. Mowry. Minn Ag Ext B 61:1-8 '16
- How to have pure cistern water. C. H. McCormick. Ohio F 138:15 Jl 1 '16
- Hydraulic ram control. J. C. Umstott. Ohio F 137:834 Je 24 '16
- Install a farm water system. I. W. Dickerson. Wallaces' F 43:1262 S 6 '18
- Installation and operation of the hydraulic ram. il Metal Worker (50 Union sq., N.Y. 10c) 87:69-71 Ja 12 '17
- Installing a ram. plan Rural N Y 77:1403 D 21 '18
- Installing farm waterworks. C. C. Conger, jr. Prog F 31:1122 S 23 '16
- Modern conveniences for the farm home. E. T. Wilson. plans Farmers' B 270:1-48 '16
- Modernizing the farm home. A. C. Wortman. Fruit-Grower 28:299 Je 15 '17
- Need of water supply and plumbing systems in farm and country homes. Domestic Eng (407 S. Dearborn st, Chicago 10c) 82:336-8 Mr 2 '18
- Novel water supply system. O Judd Farmer 61:14 N 11 '16
- One more water system. Nat Stock & F 40: 20 Ap 1 '16
- Plumbing and heating old farm residence of revolutionary days. J. F. Newman. Domestic Eng (407 S. Dearborn st., Chicago 10c) 78:38-40, 74-6, 112-13, 155-7 Ja 13-F 3 '17
- Pneumatic water systems for country houses and estates. J. A. Devo. il plan Am Architect (243 W. 39th st, N.Y. 25c) 112:480-5 D 26 '17
- Pressure water supply lightens farm work. il Metal Worker (243 W. 39th st, N.Y. 10c) 90:382-3 O 4 '18
- Pure water in plenty. A. Wentworth. il Kimball's D F 14:49 F 1 '16
- Running water for farm homes. D. Scoates and J. W. Carpenter, jr. il Miss Ag Ext C 6:1-15 '16
- Running water for house. E. S. Keene. il plan Ohio F 138:288 S 23 '16
- Running water in the farm home. M. Ryder. Hoard's D 54:754 D 21 '17
- Running water possible for every country home. R. U. Blasingame. il Ala Ag Ext C 4: 1-31 '16
- Sanitary water supply for the home. J. J. Thornber. Ariz Ag Exp Timely Hints 131: 1-7 '17; Same (pt. 1). Irr Age 33:212 N '18 (to be cont)
- Selling private water supply systems to rural homes. I. Spear. Domestic Eng (407 S. Dearborn st, Chicago 10c) 82:476-9+ Mr 30 '18
- Selling the farm water supply outfit. il plan Metal Worker (243 W. 39th st, N.Y. 10c) 89: 630-1 My 17 '18
- Simple inexpensive hot water system. J. A. Starrak. plan J Ag (Quebec) 22:100 D '18
- Siphon for water supply. Wallaces' F 43:1113 Ag 2 '18
- Suburban water supply. J: R. McMahon. il Country Gent 81:1511-12 Ag 12 '16
- Successful water system. C. Vinet. Fruit-Grower 28:31 Ja 1 '17
- Suggestions for the farm water supply campaign. F. S. Hanley. Domestic Eng (407 S. Dearborn st, Chicago 10c) 82:494 Mr 30 '18
- System for home water supply. Wallaces' F 43:1336 S 20 '18
- Utilizing the power of air and water. F. W. Ives. il Ohio F 139:605 Ap 28 '17
- Water at the barn for the livestock. Prac F 114:51 F 1 '18
- Water on the farm. F. B. Guthrie. Ag Gaz of New South Wales 28:761-6, 837-41; 29:77-81, 154-7, 229-34, 305-10, 381-6, 572-4 N-D '17, F-Je, Ag '18
- Water pressure system. I. W. Dickerson. Wallaces' F 43:694 Ap 19 '18
- Water problem simplified; equipment for running hot and cold water. W. A. Ether-ton. il Farm Eng 3:249-50 My '16
- Water supply and sewage disposal for country houses. G. L. Robinson. Am Architect (243 W. 39th st., N.Y. 25c) 111:267-70 Ap 25 '17
- Water supply for cows and dairies. E. W. Murphy. J Dept Ag Victoria 15:760-1 D '17
- Water supply for the farm. W: C. Davidson. Hoard's D 52:832-3 Ja 5 '17
- Water supply in Iowa homes. O Judd Farmer 60:12 Ja 8 '16
- Water supply of rural schools. S. A. Ward-low. O Judd Farmer 61:24 N 11 '16
- Water supply of the farmhouse. J: D. Wal-ters. Kan Ag Ext B 10:1-42 '16
- Water-supply on the farm; utilizing springs. J: D. Ritchie. il J Ag New Zealand 12:361-3 My '16
- Water supply, plumbing, and sewage disposal for country homes. R. W: Trullinger. U S Ag B 57:1-46 '14
- Water-supply, sewerage and heating for Florida home. W. G. Kirchoffer. plan Eng News-Record (10th av at 36th st, N.Y. 15c) 81:443-4 S 5 '18
- Water supply systems for the farm home. il Field Il 27:41 Ja '17
- Water system. I. W. Dickerson. Wallaces' F 43:763 My 3 '18
- Water systems for farm homes. F. C. Fenton. il Mo Ag Ext C 49:1-16 '18
- Water systems for farm homes. P. T. Hines. Prog F 32:1062 O 13 '17
- Water systems for farm homes. G: M. War-ren. il Farmers' B 94:1-68 '18
- Waterworks for the farm. Prog F 33:1012 S 14 '18
- Waterworks outfit for the home. J Home Econ 8:260-1 My '16
- We study water and ward off a typhoid epidemic. Country Gent 82:35 Ja 6 '17

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 Keeping water tanks from freezing. Wallaces' F 43:1716 N 22 '18  
 Water supply tank. Wallaces' F 43:816 My 17 '18  
 Water tank on silo. Wallaces' F 43:1011 JI 5 '18  
 Water tank underground. R. Olney. il Rural N Y 77:578 Ap 20 '18

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- Concrete stock and supply tank. H. C. Campbell. Hoard's D 55:321 Mr 15 '18  
 Fire boxes for concrete tanks. D. R. Van Horn. Farm Eng 5:13 Ag '17

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- Government emphasizes need of Water users association. Irr Age 31:101 My '16  
 Steps toward project control. F. D. Pyle. il Irr Age 32:166-8 S '17  
 Uncle Sam's irrigation school. Irr Age 31:107 My '16  
 Water users' association as a practical form of organization for the federal water users. O. E. Farnham. Irr Age 32:133-4 JI '17  
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- Locating underground streams; a waterfinder. W. H. Day. il Ag Gaz of Canada 5:798-800 Ag '18

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- Watermelon anthracnose. Am Flor 46:152 F 5 '16; Same. Va Ag Dept B 113:6-E JI '16

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- Remedies for watermelon rot. M. L. Williams. il Country Gent 82:1390 S 8 '17  
 Watermelon stem-end rot. Weekly N L 4:11 My 16 '17  
 Watermelon stem-end rot. F. C. Meier. il J Ag Research 6:149-52 Ap 24 '16

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- Carloads of watermelons. W. L. Nelson. il Country Gent 81:879 Ap 22 '16  
 Early watermelons. C. Rapp. Country Gent 82:252 F 10 '17  
 Home canning; watermelons. A. M. Johnson. Country Gent 82:1246 Ag 4 '17  
 Melon culture in the South. E. M. Hartman. Ohio F 137:688 My 13 '16  
 Table syrup from waste watermelons. il Va Ag Dept B 109:155-6 '16

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- Watermelon diseases. W. A. Orton. il Farmers' B 82:1-18 '17; Excerpts. Va Ag Dept B 126:167-74 '18

- Watermelon wilt disease. Prog F 31:767 Je 10 '16; Same. Market Growers J 19:6 JI 1 '16; Same cond. Am Flor 46:1068 Je 3 '16

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- Selling association for watermelon growers. R. M. Harkey. Prog F 31:902 JI 22 '16

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- Waterproofing concrete. P. T. Hines. Country Gent 83:15 Ja 12 '18

- Waterproofing cotton and paper. A. C. Bartlett. Gard Chron (Lond) 61:238 Je 9 '17

**Watersheds**

- Forest cover and snow retention on the east slope of the front range in Colorado. N. deW. Betts. il Soc Am For Pro 11:27-32 Ja '16

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- Annual winter meeting, Waukesha, Wis., Feb. 5. Hoard's D 55:208 F 22 '18

**Waukesha county Holstein breeders' association**

- Annual meeting, Pabst stock farm, Oconomowoc, Aug. 3, 1917. Kimball's D F 15:553 Ag 15 '17

**Wax work**

- Wax modeling from nature. P. Collins. il Scientific Am Sup (233 Broadway, N.Y. 10c) 85:248-50 Ap 20 '18

**Waxes**

- \* Wax palm and its uses. C. D. Mell. Scientific Am Sup (233 Broadway, N.Y. 10c) 86:395 D 21 '18

*See also* Beeswax; Grafting wax

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- Cedar waxwing. H. W. Weisgerber. il O Judd Farmer 60:31 Mr 25 '16  
 Waxwings family. A. A. Allen. il Am For 23: 98-9 F '17

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- Talks to young trappers. G. J. Thiessen. il Country Gent 82:2026 D 22 '17  
 Trapping the mink and the weasel. G. J. Thiessen. Farm Eng 4:84 N '16

**Weather**

- Dry farmer's fight with the weather. J. C. Alter. map Nat Wool Grower 7:7-10 O '17  
 Insurance against bad weather. W. G. Reed. il maps' Country Gent 82:479-80 Mr 10 '17  
 Ohio weather for 1915. J. W. Smith and C. A. Patton. maps Ohio Ag Exp B 296:349-428 '16  
 Ohio weather for 1916. W. H. Alexander and C. A. Patton. maps Ohio Ag Exp B 314:617-97 Je '17  
 Ohio weather for 1917. W. H. Alexander and C. A. Patton. maps Ohio Ag Exp B 324:487-576 '18

- \* Temperature of 1917; average temperature for 36 years. (In Report, Bur. of industries, 1917, p. 21-6) '18 Ontario ag. dept., Toronto  
 Useful weather proverbs. J Ag (Quebec) 21: 182 Je '18

- War and the weather. R. A. Mordoff. Cornell Countryman 25:77+ N '17

- War does not affect weather here or elsewhere; observations combat theory. Weekly N L 6:3 S 11 '18

- Weather and war. Wallaces' F 42:759 My 4 '17  
 Weather and wealth. E. Huntington. Hoard's D 52:177 S 1 '16

*See also* Climate; Evaporation; Meteorology; Rain and rainfall; Snow

**Statistics**

- Temperature and precipitation statistics. Monthly Crop Rep 4:97 Ag '18

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- \* Long range temperature forecasts. F. S. Wood. Sci Am Sup (233 Broadway, N. Y. 10c) 85:318-20 My 13 '18

*See also* Weather lore

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- What will to-morrow's weather be? W. Mason. Country Life 34:84 O '18

**Weaving**

- Development of weaving. A. E. Hill. J Ag (Quebec) 20:216 Ap '17  
 Weaving. il J Ag (Quebec) 20:178 F '17

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Wedding flowers and decorations. *Am Flor* 50:1014-15 Je 8 '18

When Betsy Jane was married. I. C. B. Allen. *Country Gent* 82:980 Je 2 '17

**Wedge:** story. R. L. Apsey. *il Country Gent* 83:8-9 + J1 27 '18

**Wedgwood wars.** See Pottery

**Weeds**

Agricultural seed: concerning weeds and weed seeds. G. P. Burns and A. K. Peitersen. *il Vt Ag Exp B* 200:1-79 '16

Aquatic weeds of the Godavari and Pravara canals of the Bombay presidency—a problem in applied ecology. W. Burns. *il Ag J of India Sci Congress* No 1916:65-71 '16

Baled hay and weeds. *Rural N Y* 76:695 My 19 '17

Blackberry nuisance and destruction. *J Ag New Zealand* 14:52-4 Ja '17

Chemical method of killing weeds. *il Municipal Eng* (702 Wulsin bldg., Indianapolis, Ind. 25c) 54:161 Ap '18

Common corn field weeds. *il Wallaces' F* 41:978 J1 14 '16

Common weeds. E. E. Shaw. *Country Life* 31:81 Mr '17

\* Control and eradication of weed pests. (*In* Executive com. Report, 1918, p. 21-2) '18  
Australia Advisory council of science and industry, Melbourne

Control of weeds by chemical treatment. O. L. Clark. *il Mass Ag Ext C* 54 3p '18

Co-operative experiments in weed eradication. J. E. Howitt. (*In* Report, Ontario ag. and exp. union, 1916, p. 40-2) '17 Ontario ag. dept., Toronto

Corn field weeds. *il Wallaces' F* 43:1085 J1 26 '18

Effect of weeds upon cereal crops. W. E. Brenchley. *Int R Sci & Prac Ag* 8,no 7:984-5 J1 '17

Effect of weeds upon crops. W. E. Brenchley. *J Bd Ag* 24:1394-1400 Mr '18

Enemy at the door. *Gard M* 27:65 Mr '18

Eradicating noxious weeds by grazing. M. E. Woods. *Nat Wool Grower* 8:13-15 J1 '18

Eradication of rootstock weeds. E. B. Stookey. *il Western Wash Ag Exp B v* 5:63-8 Ag '17

Eternal battle with weeds. L. H. Pammel. *il Country Gent* 83:5 My 25 '18

Every weed an enemy. *Weekly N L* 4:7 Je 27 '17

Experience in weed burning on Pacific electric railway. C. A. Elliott. *il Electric Railway J* (239 W. 39th st., N.Y. 10c) 50:183-4 Ag 4 '17

Facts about weeds and insects. G. Fontanel. (*In* 9th Report, Quebec society for the protection of plants, 1916-1917, p. 112-17) '17

Fox-tail; cinquefoil; horse-nettle. *il Wallaces' F* 41:1120 Ag 25 '16

Handling the weed situation. A. D. Selby. *Ohio Ag Exp B v* 1:243-4 Ag '16

Hay-fever season is here. H. R. Cox. *il Country Gent* 81:1467 Ag 5 '16

Herbicide investigations. G. P. Gray. *Cal State Comm Hort B v* 5:133-9 Ap '16

Hints on weed control. H. W. Davey. *J Dept Ag Victoria* 16:631-2 O '18

How to avoid the weed danger. *Power F* 25:25+ Mr '16

How weeds travel. *Wallaces' F* 41:1113 Ag 25 '16

Importance of knowing weeds. F. J. Pipal. *il Purdue Ag* 10:18-19 F '16

Insects attacking weeds in Minnesota. S. Marcovitch. (*In* Report State entomologist, 1915-1916, p. 135-52) '16 Minn. ag. exp. station, St Paul

Introduction of weeds. H. W. Andrew. *J Dept Ag S Australia* 21:298-307 N '17

Kainit as a means of destroying weeds. H. Witte. *Int R Sci & Prac Ag* 7,no 3:455 Mr '16

Killing the young weed. C. E. Michels. *Rural N Y* 76:675 My 12 '17

Killing weeds by chemical treatment. *il Electric Railway J* (239 W. 39th st., N.Y. 10c) 49:555-6 Mr 24 '17

Know your weeds. *il Hoard's D* 54:162 Ag 31 '17

Lawns or weeds. O. W. Newman. *il Cal State Comm Hort B v* 5:337-42 S '16

Leaflet (No. 112) dealing with weeds. *Gard Chron* (Lond) 60:85 Ag 19 '16

New weed. H. W. Andrew. *il J Dept Ag S Australia* 20:557-8 F '17

Noxious weeds. A. L. McEwin. *J Dept Ag S Australia* 21:215-18 O '17

Noxious weeds in New Zealand. A. H. Cockayne. *J Ag New Zealand* 14:339-44 My '17

Noxious weeds; list of plants proclaimed under the thistle act for the state of Victoria. *J Dept Ag Victoria* 16:445-7 J1 '18

Our friends, the enemy. *Wallaces' F* 41:1092-3 Ag 18 '16

Our worst weeds. *il Mont Ag Exp B* 113:93-100 '16

Plant communities of farm land. R. G. Stapledon. *bibliog Ann Bot* 30:161-80 Ja '16

Plant warfare. W. E. Brenchley. *Gard Chron* (Lond) 59:293 Je 3 '16

Ration of farm weeds to hay fever. H. M. Hall. *il Cal State Comm Hort B v* 6:44-7 F '17

Relation of weed growth to nitric nitrogen accumulation in the soil. L. E. Call and M. C. Sewell. *bibliog Am Soc Agron J* 10:35-44 Ja '18

Rogues' gallery of weeds; pictures. *Country Gent* 81:1107 My 27 '16

Some observations on weeds. J. H. Maiden. *Ag Gaz of New South Wales* 27:29-39, 235-46 Ja, Ap '16

Spent oxide as a weed eradicant. M. G. Hall. *Gas Age* (52 Vanderbilt av, N.Y. 20c) 41:273 Mr 15 '18

Submarine saw removes weeds in streams and lakes. *il Eng News-Record* (10th av at 36th st, N. Y. 15c) 80:305-6 F 14 '18

Sugar cane paper for fighting weeds. *il Scientific Am* (233 Broadway, N.Y. 10c) 118:358 Ap 20 '18

\* Suggestions for the study of weeds in agriculture in the elementary schools. (B. v. 15,no. 4) 22p '18 Wis. Normal school, Platteville

Summary of co-operative experiments in weed eradication, 1912-1917; with discussion. J. E. Howitt. (*In* Report, Ontario ag. & exp. union, 1917, p. 10-14) '18 Ontario ag. dept., Toronto

Summer work on weeds. A. Boss. O Judd Farmer 61:10 Ag 5 '16

Treatment of weeds infesting corn crops by means of sulphuric acid. *Int R Sci & Prac Ag* 7,no 1:164-5 Ja '16

Twenty worst weeds of New South Wales. J. H. Maiden. *Ag Gaz of New South Wales* 28:653-4 S '17

Two weeds new to the state. A. A. Hamilton. *Ag Gaz of New South Wales* 27:275-6 Ap '16

Vegetable possibilities of our common weeds. *il Gard Chron Am* 21:195-6 My '17

Water weed at Toorourong. A. J. Ewart. *J Dept Ag Victoria* 16:109-10 F '18

Weed collections. *Wallaces' F* 42:1154 Ag 24 '17

Weed control. *Ag Gaz of Canada* 3:249-53 Mr '16

Weed control. J. P. Helyar. *N J Ag Exp C* 60:1-12 n.d.

Weed control on state highway right of way. A. B. Fletcher. *Cal State Comm Hort B v* 6:90-3 Ap '17

\* Weed destruction in sugar cane fields. *Sci Am Sup* (233 Broadway, N.Y. 10c) 86:343 N 30 '18

Weed eradication. O. W. Newman. *Cal State Comm Hort B v* 5:53-9 F '16

Weed problem. *J Ag* (Quebec) 21:176 My '18

Weed problem in American agriculture. H. R. Cates. *il U S Ag Yearbook* 1917:205-15; Same. Separate 732

Weeds. H. W. Davey. *J Dept Ag Victoria* 15:427-34 J1 '17

**Weeds—Continued**

- Weeds—a menace to alfalfa. F. S. Prince. Ohio F 140:115 Ag 18 '17
- Weeds and their eradication. A. L. Stone. Hoard's D 53:682 My 11 '17
- Weeds and their identification. E. Atkinson. il J Ag New Zealand 12:32-9, 175-87, 381-5 Ja, Mr, My '16
- Weeds at Sydney in 1802-4. il Ag Gaz of New South Wales 27:40 Ja '16
- Weeds commission active in Manitoba. Ag Gaz of Canada 3:566-7 Je '16
- Weeds: how to control them. H. R. Cox. il Farmers' B 660:1-31 '18 (rev.)
- Weeds in meadows at the Lieteensuo experiment station. E. F. Simola (Finska Mosskulturför. Arsbok., 20, no. 2 92-124p. '16) Exp Sta Record 38:141 F '18
- Weeds of New South Wales. J. H. Maiden. il Ag Gaz of New South Wales 27:235-46, 335-8, 423-4, 863-4; 28:46-8, 131-3, 181-4, 244-6, 327-8, 409-16, 489-97, 563-70; 29:31-7, 110-12 Ap-Je, D '16, Ag '17, Ja-F '18
- Weeds on the East-West railway. H. W. Andrew. J Dept Ag S Australia 20:982-3 Jl '17
- Weeds: their control or destruction. T. Butler. Prog F 31:1097 S 16 '16
- What hoeing and weeding does. P. E. Triem. Gard M 25:286 Je '17
- See also names of weeds, e.g. Bindweed, Broom rape, Californian thistles, Canada thistles, Cockleburrs, Cranesbill, Dandelions, Dock, Dodder, Goat's rue, Hawkweeds, Jimson weed, Johnson grass, Larkspurs, Live-forever (weed), Morning-glories, Mustard, Wild, Nut grass, Oats, Wild, Pennyroyal, Quack grass, Ragwort, Sand-burs, Sorrel, Thistles, Water hyacinth, Wild carrot, Wild garlic, Yellow rocket, Yellow star thistles

**Laws**

- Acts relating to agriculture; legislation for weed control. Ag Gaz of Canada 4:508-13 Je '17
- Law of Alberta, Canada, relating to noxious weeds. W: E. Hannan, comp. 8p '18 N.Y. (state) Lib. legislative reference section. Obtainable only thru Public affairs information service, 958-964 University av, N.Y. (Type-w 40c)
- Noxious weed law amended. A. L. Stone. Hoard's D 55:649 My 3 '18
- Noxious weeds as an administrative problem. F. S. Pope. J Ag New Zealand 15:191-6 O '17
- State action for the eradication of weeds and the provision of pure seeds. J Bd Ag 24:705-12 O '17
- Wisconsin weed law. Wis Ag Dept C 9 4p '18

**Seed**

- Buried weed seeds. W. E. Brenchley. J Ag Sci 9:1-31 Ag '18
- Buried weed seeds. W. E. Brenchley. J Bd Ag 21:299-306 Je '17
- Does composting kill weed seeds? J. F. Duggar. Prog F 33:144 F 2 '18
- How weed seeds are scattered. T. Butler. Prog F 31:1091 S 9 '16
- Injurious weed seeds in feeding stuffs. H. B. Sifton. il Ag Gaz of Canada 5:951-7 O '18
- Making weed seed collections—suggestions for teachers of rural science. J. R. Dymond. il Ag Gaz of Canada 5:772-5 Ag '18
- Seed and weed control. H. W. Andrew. J Dept Ag S Australia 21:256-8 O '17
- Seed inspection and weed control. P. B. Kennedy. il Cal State Comm Hort B v 7:160-7 Mr '18
- Sowing weeds with impure seeds. F. J. Pipal. il Purdue Ag 11:30-1 F '17
- Survival of weed seeds. W. E. Brenchley. Gard Chron (Lond) 64:193 N 16 '18
- Weed seed in clover and grass. il Wallaces' F 43:87 Ja 18 '18
- Weed seed tax; screenings are a loss to the grower, but a valuable by-product to the trade. F. S. Rose. il Country Gent 83:5-4 Ag 24 '18
- Weed seeds and impurities in imported seeds. E. Breakwell. Ag Gaz of New South Wales 29:633-8 S '18

Weeds and seeds. J Dept Ag S Australia 21:646-7 Mr '18

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See also Alfalfa weevils; Avocado weevils; Bean weevils; Boll weevils; Bud weevils; Corn weevils; Grain weevils; Leaf weevils; Pales weevils; Pine weevils; Pineapple black weevils; Poplar root weevils; Potato weevils; Strawberry root weevils; Strawberry weevils; Sugar-cane root borers; Sweet potato weevils

**Weights and measures**

Household measurements. J Home Econ 8:202 Ap '16

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Coop Manager & F 7:53 Jl '18

Marking containers. Weekly N L 4:4 Jl 25 '17

New England bushel box. Market Growers J 19:7 Jl 1 '16

Pick the right package. Country Gent 82:1294 Ag 18 '17

Proposed changes in the standard eleven-quart basket and apple box. P. J. Carey. (In Report, Ontario fruit growers' assn., 1917, p. 66-70) '18 Ontario ag. dept., Toronto

Report of chief inspector of weights and measures. (In Annual report, 1917, p. 135-52) '17 Dairy and food comr., Madison, Wis.

Selling produce by weight. J: Grattan. Rural N Y 76:68 Ja 20 '17

Some information that comes in handy to most good farmers. Fla Ag Dept Quar B v 27:29-31 Jl '17

To shippers of fruits and vegetables. C. L. Alsberg. Am Fruit Grower 38:16 S '18

Weight of dairy products; of feeding stuffs; of fat cattle. Fla Ag Dept Quar B v 28:24-6 Jl '18

Weights measures and money of the various countries with their English equivalents. Int R Sci & Prac Ag 9,no 1ix-xi Ja '18

Where there's a will there's a weight; photographs. Ag Digest 2:795 Ja '18

See also Aerometers; Containers; Scales (weighing instruments); also subhead Weights under special subjects, e.g. Butter—Weights, Fruit—Weights and measures, Vegetables—Weights and measures

**Laws and legislation**

Comb honey and the federal net weight law. F. Rauchfuss. Am Bee J 56:167 My '16

Grape basket law. Fruit-Grower 27:495 N 15 '16

Illinois grain dealers' association tests the Shippers weight law of Illinois and finds it constitutional. Coop Manager & F 6:24-5 Ja '17

Interpretation of the net weight regulations for marking packages of honey. B. N. Gates. Mass Ag Bd Yearbook 1917,pt 2:146-51 '18

Laws of the state of New York in relation to weights and measures. 22p '17 N.Y. State supt. of weights and measures, Albany

\* Laws of Wisconsin relating to weights and measures. 19p '18 Wis. Dairy and food comr., Madison

Laws on packages explained. Market Growers J 23:204 D 1 '18

Manual of laws pertaining to the Department of farms and markets; general business law as it relates to weights and measures and Department of foods and markets, including other provisions relating to food and farm products. N Y Farms & Markets Dept Ag B 108:211-40 Je '18

Missouri supreme court renders decision to the effect that Merchants' exchange of St Louis is forbidden to issue certificates for weights they supervise. Coop Manager & F 6:27 F '17

Must label packages showing the net contents. N Y Prod R 46:583 Ag 14 '18



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 Net container act and the standardization law. C: G. Johnson. Cal State Comm Hort B v 6:98-9 Ap '17  
 New federal container law. Prac F 113:364 N 1 '17

Packages within the law; what the fruit and vegetable grower should know about the standard container act. H. A. Roberts. il Country Gent 83:8 My 25 '18

Poids, mesures et monnaies. Int Yearbook Ag Leg 1916:415-25 '17

Regulating package weight; text of a recent supreme court decision. N Y Prod R 42: 522 J1 19 '16

Standard basket and container law. Am Flor 47:424 S 9 '16

Statutes of Massachusetts relating to weights and measures and the licensing, inspection and sale of various articles, with an appendix containing recent federal legislation. 120p '17 Mass. Comr. of weights and measures, Boston

• Warehouse, grain, and weights and measures laws of Minnesota up to and including laws passed at the legislative session of 1917. i-xiv, 1-69p n.d. Review pub. co., St Paul, Minn.

Weight and measure laws of the state of Iowa, effective July 1, 1917. 11p n.d. Ia. Dairy and food comm., Des Moines

Weights and measures bill. Am Flor 46:96 Ja 29 '16

See also Barrels—Laws

**Weirs**  
 Construction and the use of farm weirs. V. M. Cone. Farmers' B 813:1-18 '17  
 Flow through weir notches with thin edges and full contractions. V. M. Cone. bibliog J Ag Research 5:1051-1113 Mr 6 '16  
 New irrigation weir. V. M. Cone. il J Ag Research 5:1127-43 Mr 13 '16

**Welding**  
 How to do welding on the farm. H. A. von Nieda. Power F 27:46 Ja '18

**Welfare work in industry**  
 Garden insurance against strikes. H. S. Stabler. il Country Gent 81:1020-1 My 13 '16

**Wells**  
 Farm well is an important factor in dairying. A. C. Norris. Ohio F 137:461 Mr 25 '16  
 Well water. E. C. Doepkin. Ohio F 138:15 J1 1 '16

See also Artesian wells; Cisterns; Water supply

**Wenham, Massachusetts**  
 How Wenham gets together. M. H. Northend. il plan Country Life 33:48-9 Ja '18

**West**  
 See also subhead Western states under special subjects, e.g. Agriculture—Western states, Dairying—Western states

**Description and travel**

Notes of a far western trip. L. B. Pierce. Nat Stock & F 42:672 O 26 '18

**West Bridgford allotment-holders' association**  
 West Bridgford allotment-holders' association. J Bd Ag 24:883-5 N '17

**West Indian mole cricket.** See Changas

**West Indies**

See also Agricultural credit—West Indies; Agriculture, Cooperative—West Indies; Botany—West Indies

**Description and travel**

West India ramble. W. J. Young. il Am Bee J 56:343-5 O '16

**West Virginia**

See also subhead West Virginia under special subjects, e.g. Agriculture—West Virginia, Food supply—West Virginia

**Agriculture, Department of**

Second biennial report, 1915-1916; and report of state entomologist, July 1, 1914-June 30, 1916. il W Va Ag Dept B 18:1-120 '16

**Markets, Bureau of**

West Virginia market law. W Va Ag Dept B 21:1-5 '16

**West Virginia agricultural experiment station**  
 Report, July 1, 1914, to June 30, 1916. map W Va Ag Exp Rep 1916:1-98 '16

**West Virginia live stock association**  
 Annual meeting, Morgantown, Jan 2-6, 1917. W Va Ag Dept B 30:1-71 '17

West Virginia live stock and directory of breeders; annual meeting, Morgantown, West Va., Jan. 5-6, 1916. W Va Ag Dept B 16:1-104 '16

**West Virginia state poultry association**  
 West Virginia poultry, and list of West Virginia breeders of pure bred fowls; with constitution of assn. and papers read at 8th annual meeting. il W Va Ag Dept B 14:1-103 '16

**West Virginia university**

**College of agriculture**

Program for farmers' week, Jan. 7-11, 1918. W Va Univ (Morgantown) B 18, no 3, pt 2: 1-15 Ja '18

Second report on the university farm garden. A. L. Dacy. il W Va Ag Exp B 156:1-22 '16  
 Winter short courses in agriculture, Jan. 7 to March 8, 1918. W Va Univ (Morgantown) B 18, no 3:1-11 Ja '18

**Western Canada irrigation association**  
 11th annual convention held at Maple Creek, Saskatchewan. H. Vanderhoof. Irr Age 32: 168-70 S '17

12th annual convention, Nelson, B. C., July 24-26. Irr Age 33:168-9 Ag '18

Unique organization. R. J. C. Stead. Irr Age 33:109 Je '18

**Western Canada live stock union**  
 Proceedings of the 5th annual convention, Regina, Saskatchewan, Nov. 14-15, 1917. 157p n.d. Alberta Dept. of ag., Live stock branch, Edmonton

**Western cedar borer.** See Cedar borers

**Western dairy products show**  
 Show and convention of Western dairy instructors, Yakima, Wash., Feb. 28-Mar. 2. N Y Prod R 45:740 Mr 20 '18; Hoard's D 55:392 Mr 22 '18

**Western grain dealers' association**  
 18th annual meeting held at Des Moines, Apr. 17-18. Coop Manager & F 6:70-8 My '17  
 19th annual convention, Fort Dodge, Ia., April 18-19. Coop Manager & F 7:46-9 My '18

**Western Guernsey breeders' association**  
 Meeting, June 6, 1917. Hoard's D 53:892 Je 22 '17  
 Meeting, Madison, Feb. 8th. Hoard's D 55: 252 Mr 1 '18

**Western New York butter and cheese makers' association**  
 9th annual meeting, Cuba, Jan. 14. N Y Prod R 45:402 Ja 23 '18

**Western New York horticultural society**  
 First organization of fruit growers, 1855. J: Hall. il N Y Ag Dept B 79, pt 1:717-26 Ja '16; Same. N Y Ag Dept Rep 1916, pt 2:717-26 '17

New York horticulturists 62d annual meeting, W. H. Jenkins. Fruit-Grower 28:154 F 15 '17

61st annual convention, Rochester, N.Y. Fruit-Grower 27:130+ F 15 '16; Ohio F 137: 220 F 12 '16; Rural N Y 75:238, 275 F 12-19 '16

62d annual meeting, Rochester, Jan. 1917. Ohio F 139:194 F 10 '17; Rural N Y 76:229, 283 F 17-24 '17

62d annual meeting, Rochester, N. Y., Jan. 1917. C: A. Green. Green's Fruit Grower 37:12 F '17

63d annual meeting, Rochester, Jan. 30-Feb. 1. Ohio F 141:248, 267+ F 16-23 '18; Rural N Y 77:232, 283, 317, 379 F 16-Mr 9 '18

**Western newt.** See Newts

**Western red-rot.** See Heart rot

**Western wheat grass**

Quack grass and western wheat grass. A. N. Hume and S. L. Sloan. *il S D Ag Exp B* 170:496-524 '16

**Diseases and pests**

Bacterial disease of western wheat-grass, agropyron Smithii. P. J. O'Gara. *il Phyt* 6: 341-50 Ag '16

**Western wheat-stem sawflies**

Observations upon the habits of the western wheat stem sawfly in Manitoba and Saskatchewan. N. Criddle. *Ag Gaz of Canada* 4:176-7 Mr '17

**Western yellow pine. See Pine****Wetherhill, Cyrus**

Master builder of the early nineteenth century. M. W. Cole. *il Country Life* 29:22-3 F '16

**Whale meat**

Ocean venison. *il Sci Am Sup* (233 Broadway, N.Y. 10c) 85:312 My 18 '18

\* Whale meat approved by the American public. *il Sci Am* (233 Broadway, N.Y. 10c) 119: 388 N 16 '18

\* Whale-meat in war time. W. P. Pycraft. *Nature* (St Martin's st, London, W.C. 6d) 101: 24 Mr 14 '18

**Whales**

Whale as a food factor. C. H. Claudy. *il Scientific Am* (233 Broadway, N.Y. 10c) 118: 208-9 Mr 9 '18

Whale beef and whales. E. T. Martin. *Scientific Am Sup* (233 Broadway, N.Y. 10c) 85:23 Ja 12 '18

**Wheat**

Absorption of sodium and calcium by wheat seedlings. H. S. Reed. *il Bot Gaz* 66:374-80 O '18

Agricultural statistics; wheat situation, present and prospective. T. K. Doherty. *Ag Gaz of Canada* 5:109-12 Ja '18

Alarming wheat situation. B. W. Snow. *O Judd Farmer* 62:10 Ap 14 '17

Anomaly of wheat anthers. S. A. Anthony. *il J Heredity* 9:166-8 Ap '18

Another view of wheat. A. W. Large. *Nat Stock & F* 42:465 Ag 17 '18

Billion bushels of wheat recommended for next year. *Weekly N L* 5:1-3 Ag 15 '17

Bread for a warring world. S. Sosland. *il Country Gent* 81:43-4 Ja 8 '16

Bread from underground grain. *Scientific Am* (233 Broadway, N.Y. 10c) 116:17 Ja 6 '17

Campaign for more wheat. J. Murray. *J Ag* (Quebec) 21:117 F '18

Color classification of wheat. *Am Soc Agron J* 9:281-4 S '17

Comparison of annual cropping, biennial cropping, and green manures on the yield of wheat. B. A. Madson. *Cal Ag Exp B* 270:1-14 '16

Condition of winter wheat. *Am Fert* 46:32 Ap 14 '17

Continuous growing of wheat and rye with and without a legume as green manure. *il N J Ag Exp Rep* 1916:380-3 '17

Crops we must raise next year. J. C. Marquis. *Country Gent* 83:5-6 S 7 '18

Date and rate of seeding wheat. C. G. Williams. *Ohio Ag Exp B v* 3:267-8 S '18

Department announces plan for liberty wheat harvest in 1919. *Weekly N L* 5:1 JI 31 '18

Does it pay to grow oats and wheat? *Prog F* 32:879 Ag 18 '17

Doubling our wheat; raise more wheat. W. I. Chamberlain. *Nat Stock & F* 42:384, 404, 425, 484, 554 JI 20-Ag 4, 24, S 14 '18

Drying for milling purposes of damp and garlicky wheat. J. H. Cox. *il map U S Ag B* 455:1-10 '16

Effect of rate and date of sowing on yield of winter wheat. W. M. Jardine. *Am Soc Agron J* 8:163-6 My '16

Effect of sodium nitrate applied at different stages of growth on the yield, composition, and quality of wheat. J. Davidson and J. A. Le Clere. *Am Soc Agron J* 9:145-54 Ap '17

Effect of sodium salts in water cultures on the absorption of plant food by wheat seedlings. J. F. Breazeale. *J Ag Research* 7:407-16 N 27 '16

Effect of soil moisture content on certain factors in wheat production. F. S. Harris and H. J. Maughan. *Utah Ag Exp B* 152:1-15 '17

Effect of the concentration of the nutrient solution on the growth of barley and wheat in water cultures. W. E. Brenchley. *il Ann Bot* 30:77-90 Ja '16

Effect of three annual applications of boron on wheat. F. C. Cook and J. B. Wilson. *bibliog J Ag Research* 10:591-7 S 17 '17

Effects of manganese and iron on the growth of wheat. W. E. Totttingham and A. J. Beck. *Int R Sci & Prac Ag* 8,no 4:574-5 Ap '17

Factors contributing to the lodging of wheat. V. Rivera. *Int R Sci & Prac Ag* 7,no 6:883-4 Je '16

Farmers' experiment plots; wheat and oat harvest, 1917-18. R. G. May. *Ag Gaz of New South Wales* 29:705-16 O '18

Feeding-off growing wheat. J. W. Shaw. *Ag Gaz of New South Wales* 27:203-8 Mr '16

Fertilizing the wheat crop. C. E. Thorne. *Ohio Ag Exp B v* 3:199-203 JI '18

Fertilizing the wheat crop in southwestern Ohio. C. E. Thorne. *il Ohio Ag Exp B v* 3:269-71 S '18

Flour and wheat in the Montana gold camps, 1862-1870. H. A. Trexler. 20p '18 Dunstan ptg. and stationery, Missoula, Mont.

Food needs for 1919; part of agricultural program for the period beginning with the autumn of 1918; fall-sown wheat and rye. *U S Ag C* 108:1-13 '18

Geography of wheat prices; summary of conditions affecting farm prices of wheat in different parts of the United States. L. B. Zapoleon. *maps U S Ag B* 594:1-46 '18

Gluten of bread. *il J Heredity* 8:350-4 Ag '17

Handling damp wheat. *Va Ag Dept B* 109: 126-7 '16

Harvesting wheat; symposium. *il Prac F* 113: 216 Je 1 '17

Home-ground wheat. *Weekly N L* 4:2 Ja 24 '17; Same. *Power F* 26:38 Mr '17

How Marquis wheat originated. C. Stokes. *il Field* 11 27:612 Ag '17

How much wheat to grow next year. *O Judd Farmer* 65:108 Ag 10 '18

\* How to grow wheat and grass on the same land. *Nature* (St Martin's st, London, W.C. 6d) 101:170 My 2 '18

Increasing the wheat yield. A. E. Grantham. *Prac F* 114:254 Ag 1 '18

Inheritance of glume length in triticum polonicum; a case of zygotic inhibition. W. O. Backhouse. *Int R Sci & Prac Ag* 9,no 4: 436-8 Ap '18

Injuries to rye and wheat grain produced by threshing, and its consequences. J. N. Walden. *Int R Sci & Prac Ag* 7,no 8:1108-9 Ag '16

Mineral food requirements of the wheat plant at different stages of its development. A. G. McCall and P. E. Richards. *il Am Soc Agron J* 10:127-34 Mr '18

More money from wheat. C. A. Waugh. *Coop Manager & F* 6:74-5 Ja '17

More wheat in 1919. J. F. Barker. *Ohio F* 141:743 Je 8 '18

Nature study with wheat. J. T. Pridham. *il Ag Gaz of New South Wales* 28:719-25 O '17

Next step in improvement in wheat cropping —how to increase wheat production in 1918 and 1919. H. L. Bolley. *Science* (Science Press, Garrison, N.Y. 15c) n s 46:49-54 JI 20 '17

1917 wheat crop. *Am Fert* 46:30 My 12 '17

Notes on the world's cereal situation. T. K. Doherty. *Ag Gaz of Canada* 4:535-40 Je '17

Occurrence of manganese in wheat. W. P. Headen. *bibliog J Ag Research* 5:349-55 N 22 '15

Occurrence of sterile spikelets in wheat. A. E. Grantham and F. Groff. *il J Ag Research* 6:235-50 My 8 '16



**Wheat—Continued**

- Osmotic pressure of soil moisture and glassiness of the grain of Bielotourka wheat. N. Toulaiikov. *Int R Sci & Prac Ag* 7, no 9:1257-60 S '16
- Our wheat supply in 1918. C. W. Holman. *Power F* 27:37 My '18
- Pasturing winter wheat. A. R. Jaqua. *Country Gent* 83:46 F 9 '18
- Pickling wheat. H. A. Mullett. *il J Dept Ag Victoria* 14:275-9 My '16
- Planting for the liberty wheat harvest. *Prac F* 114:292 S 1 '18
- Planting ideas on wheat and rye. A. E. Grantham. *Prac F* 114:287 S 1 '18
- Proportion of grain to sheaf as a factor in wheat selection. J. T. Pridham. *Ag Gaz of New South Wales* 28:91-4 F '17
- Quality in wheat. J. T. Pridham. *Ag Gaz of New South Wales* 27:621-5 S '16
- Relationship between the osmotic pressure of the soil solution and the growth of wheat. M. N. Toulaiikov. *Int R Sci & Prac Ag* 7, no 12:1741-4 D '16
- Researches on the pigmentation of the ear of wheat in Russia. *Int R Sci & Prac Ag* 9, no 1:45-7 Ja '18
- Rotation on the wheat farm. H. Ross. *Ag Gaz of New South Wales* 27:77-80 F '16
- Shall we eat whole-wheat bread? R. A. Dutcher. *Science (Science Press, Garrison, N.Y. 15c)* n s 47:228-32 Mr 8 '18
- Snow and wheat. C. A. Ludwig. *Rural N Y* 75:614 Ap 15 '16
- Soil management in relation to winter-killing of wheat. *Purdue Ag* 10:21-2+ Je '16
- Some common losses in wheat which are easily remedied. W. C. Smith. *Coop Manager & F* 7:42 JI '18
- Spring wheat in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. *map U S Ag B* 214:1-43 '15
- Spring-wheat situation. H. Steenerson. *Congressional Record (Washington, D.C.)* 56: 6283-9 Ap 29 '18
- Success with wheat. C. H. Marshall. *Prog F* 31:1002 Ag 19 '16
- Supply of wheat. G. W. Norris. *Annals Am Academy (36th st and Woodland av, Philadelphia \$1)* 78:164-8 JI '18
- Teaching agriculture. G. A. Bricker. *Ohio F* 142:248, 281, 300 S 14-23 '18
- To what extent should the wheat acreage be increased? T. Butler. *Prog F* 33:975 S 7 '18
- Warring nations need American wheat. *Am Coop J* 11:490+ Ja '16
- Waste no wheat this year. W. L. Nelson. *il Country Gent* 82:1109-10 JI 7 '17
- What about wheat? B. W. Snow. O Judd Farmer 60:8 Ap 1 '16
- What shall we do with wheat bran; is its use for human food the most efficient utilization of its mineral constituents? A. D. Holmes. *Sci Am (233 Broadway, N. Y. 10c)* 119:106 Ag 10 '18
- What treatment for wheat? D. Cunningham. *il Country Life* 29:78 Mr '16
- Wheat. (*In* Geography of the world's agriculture, p. 13-26) maps '17 U S Ag
- Wheat condition. H. S. Elliott, comp. *Fla Ag Dept Quar B v* 28:13-17 JI '18
- Wheat crop and farm labor. J. M. Baer. *Review of Reviews (30 Irving Place, N. Y. 25c)* 57:298-9 Mr '18
- Wheat crop of 1918. T. Shaw. *Breeder's Gaz* 71:1158 Je 7 '17; *Excerpts. Ag Digest* 2:527 JI '17
- Wheat decline and prospect. O Judd Farmer 60:14 Mr 11 '16
- Wheat experiments. C. G. Williams. *Ohio Ag Exp B v* 1:227-9 Ag '16
- Wheat farmers' dilemma. T. P. Gore. *Forum (118 E. 28th st, N.Y. 25c)* 60:257-66 S '18
- Wheat flour allowance. *J Home Econ* 10:183-4 Ap '18
- Wheat for a hungry world. *Banker-F* 5:5 Mr '18
- Wheat growing—place in crop rotation. *il Prac F* 112:311 Ag 15 '16
- Wheat in 1918. E. Molyneux. *Gard Chron (Lond)* 62:243 D 15 '17

- Wheat in the rotation. *il Wallaces' F* 43:1079 JI 26 '18
- Wheat needs of the world. A. Taylor. *J Home Econ* 10:1-8 Ja '18; Same. 8p '17 U.S. Food administration, Washington, D.C.
- Wheat production. H: G. Bell and others. (*Soil improvement com. B. 18*) 19p *il maps* '16 Nat. fertilizer assn., Chicago; Same. *Am Fert* 44:21-7 Je 10 '16
- Wheat prospects after the war. T. K. Doherty. *Ag Gaz of Canada* 4:638-41 JI '17
- Wheat, rye and barley: useful facts about soils, culture, etc. J. F. Duggar. *Prog F* 31: 829 JI 1 '16
- Wheat supply. J. I. France. *Congressional Record (Washington, D.C.)* 56:1589-90 Ja 31 '18
- Wheat we waste. C: Dillon. *il Country Gent* 82:1343 S 1 '17
- Wheat; where did it come from, and how old is it? *il Hoard's D* 51:24 Ja 28 '16
- Where America's wheat surplus will come from this year; supply located. *Weekly N L* 6:14 N 6 '18
- Will American corn feed France? W: H. Dean. *il Country Gent* 83:17 F 16 '18
- Winter wheat disaster grows. B. W. Snow. O Judd Farmer 62:3 My 12 '17
- Winter wheat helps solve food problem, says U.S. Chamber of commerce. *Coop Manager & F* 7:52 Je '18
- Winterkilled wheat; specialists advise what to do. *Weekly N L* 4:2 Ap 4 '17
- World is calling for wheat. A. L. French. *Prog F* 32:1048 O 6 '17
- World's supply of wheat. O. C. Stine. *maps U S Ag Yearbook* 1917:461-80
- World's wheat prospects for 1918-19. T. K. Doherty. *Ag Gaz of Canada* 5:930-2 S '18
- World's wheat prospects for the grain year 1917-1918. *Ag Gaz of Canada* 4:839-42 S '17
- See also Feeding and feeding stuffs—Wheat; Flour; Grain

**Analysis**

- Chemical and physical constants for wheat and mill products. E. F. Ladd. *N D Ag Exp B* 114:273-97 '16
- Physic acid of the wheat kernel and some of its salts. P. W. Boutwell. *Am Chemical Soc J (C: L. Parsons, sec., Box 505, Washington, D.C. \$6 per yr)* 39:491-503 Mr '17

**Breeding**

- Better seed wheat. W. L. Nelson. *il Country Gent* 81:1536 Ag 19 '16
- Can biologic forms of stemrust on wheat change rapidly enough to interfere with breeding for rust resistance? E. C. Stakman and others. *bibliog il J Ag Research* 14:111-24 JI 8 '18
- Carman's wheat-rye hybrids. C. E. Leighty. *il J Heredity* 7:430-7 S '16
- Comparative efficiency of indexes of density, and a new coefficient for measuring square-headedness in wheat. S. Boshnakian. *il plan Am Soc Agron J* 9:231-47 My '17
- Experiments in the improvement of wheat at Svalöf, Sweden. N. Nilsson-Ehle. *Int R Sci & Prac Ag* 7, no 3:354-6 Mr '16
- Fylgia, extra squarehead III, sol II, pansar, thule II, varieties of wheat selected at Svalöf, Sweden. H. Nilsson-Ehle. *Int R Sci & Prac Ag* 8, no 2:218-24 F '17
- Hybridization tests between spelt and wheat in Holland. H. M. Gmelin. *Int R Sci & Prac Ag* 8, no 9:1236-9 S '17
- Inheritance in wheat, barley and oat hybrids. E. F. Gaines. *il Wash Ag Exp B* 135:10-26 '17
- Linked quantitative characters in wheat crosses. G: F. Freeman. *Int R Sci & Prac Ag* 9, no 2:166-9 F '18
- Natural cross-pollination in wheat. H. K. Hayes. *bibliog Am Soc Agron J* 10:120-2 Mr '18
- On the inheritance of some characters in wheat. *Int R Sci & Prac Ag* 7, no 2:213-14 F '16
- Producing bread making wheats for warm climates. G: F. Freeman. *il J Heredity* 9:211-26 My '18

## Wheat—Breeding—Continued

- Researches on wheat selection; does the value of a wheat grain depend on its position in the ear? A. E. V. Richardson and W. H. Green. *J Dept Ag Victoria* 14:140-6 Mr '16
- Selection of spring wheat in Sweden. H. Nilsson-Ehle. *Int R Sci & Prac Ag* 8,no 9:1233-6 S '17
- Variations in the plants from the same head of wheat. A. J. Ewart. *J Dept Ag Victoria* 14:168-9 Mr '16
- Wheat-breeding ideals. H. Snyder. *Am Soc Agron J* 10:113-19 Mr '18
- Wheat-rye hybrids. E. A. McFadden. *il J Heredity* 8:335-6 Jl '17; Same abridged. *Ag Digest* 2:567 Ag '17

## Composition

- Composition of Italian wheats. G. Tommasei and others. *Int R Sci & Prac Ag* 7,no 5: 673-4 My '16
- Effect of sodium nitrate applied at different stages of growth on yield, composition, and quality of wheat. J. Davidson and J. A. Le Clerc. *Am Soc Agron J* 10:193-8 My '18
- Environmental influences on the physical and chemical characteristics of wheat. J. A. Le Clerc and P. A. Yoder. *J Ag Research* 1:275-91 Ja '14
- Gluten formation in the wheat kernel. G. A. Olson. *Wash Ag Exp B* 142:1-19 '17
- Immunochemical studies of the plant proteins; proteins of the wheat seed and other cereals. R. P. Wodehouse. *bibliog Am J Bot* 4:417-29 Jl '17
- Relation of phosphorus and nitrogen in soil to the composition of wheat. J. W. Ames and G. E. Boltz. *il Ohio Ag Exp B* 318:91-118 '17
- Resistance of wheat to cold in relation to its sugar content; investigations carried out in Sweden. A. Akerman and H. Johansson. *Int R Sci & Prac Ag* 8,no 9:1225-8 S '17

## Costs

- Basis of cost in wheat production. H. Ross and P. G. Gilder. *Ag Gaz of New South Wales* 28:869-80 D '17
- Cost of a bushel of wheat in 1918-1919. C. G. Williams. *Ohio F* 142:474 N 16 '18
- Cost of growing wheat on typical non-irrigated areas in Montana. E. L. Currier. *Mont Ag Exp B* 122:142-61 '18
- Cost of production of field crops. H. C. Wilson and A. J. Whelan. *il J Dept Ag Victoria* 14:296-307 My '16
- Cost of wheat. *Nat Stock & F* 42:756 N 23 '18
- Cost of wheat. H. D. F. Pinkley. *Nat Stock & F* 42:716 N 9 '18
- Cost of wheat growing. *Rural N Y* 77:892 Jl 20 '18

## Cultivation

- Cultivation of wheat by early sowing and hilling-up. H. Devaux. *Int R Sci & Prac Ag* 8,no 12:1211-12 D '17
- Early plowing—more wheat. *Power F* 26:40 Ag '17
- Economic production of wheat. H. G. Bell. *Am Fert* 47:62+ O 13 '17
- Feeding the next wheat crop. L. L. Rummell. *il Prac F* 113:266 Ag 1 '17
- Fertilization of next wheat crop. L. L. Rummell. *Hoards D* 54:325 O 5 '17
- Fertilization of wheat. *Am Fert* 47:44 Ag 18 '17
- Fertilizers for wheat. *Prac F* 112:329 S 1 '16
- Fertilizers for wheat. R. R. Hudelson. *Mo Ag Ext C* 28:1-4 '17
- Fertilizing the wheat crop. F. L. Duley. *Am Fert* 45:49 O 14 '16
- Fertilizing the wheat crop. C. E. Thorne. *il Ohio Ag Exp B v* 2:215-18, 251-3 Jl-Ag '17
- Getting best results from crops. *O Judd Farmer* 63:3 S 29 '17
- Grow winter wheat. *Wallaces' F* 42:1009, 1081, 1129 Jl 13, Ag 3, 17 '17
- Growing of winter wheat. C. W. Warburton. *il Country Gent* 82:1279 Ag 18 '17
- Growing wheat under war conditions. J. W. Henceroth. *Am Fert* 47:56+ N 10 '17
- Help fill the nation's flour barrel. R. A. Moore and E. J. Delwiche. *Wis Ag Ext C* 90 4p '17

- Helping the wheat yield. *Prac F* 113:426 D 15 '17
- How late may wheat be planted? C. O. Carpenter. *Prog F* 32:1218 N 17 '17
- How phosphate has paid on wheat. *O Judd Farmer* 63:1 Ag 11 '17
- How to grow winter wheat and rye. *Hoards D* 54:152 Ag 31 '17
- How to plant winter wheat. A. E. Barkemeyer. *Coop Manager & F* 7:25 S '17
- How to prepare ground for wheat, and time to sow. W. M. Jardine. (C. 6) 7p il '17 Kan. State council of defense, Topeka
- Illinois wheat yields with nature's fertilizers. C. G. Hopkins and others. *Ill Ag Exp C* 229 2p '18
- Improvement of the wheat field in winter. *Ohio F* 139:222 F 17 '17
- Increase the wheat area. T. A. J. Smith. *il J Dept Ag Victoria* 15:224-7 Ap '17
- Increase the wheat-production! W. D. S. MacDonald. *J Ag New Zealand* 14:255-6 Ap '17
- Increasing the production of wheat on Washington dry farms by better cultural methods. B. Hunter. *il Wash Ag Ext Ser* 1,no 40:1-16 '18
- Increasing the spring wheat area; greater acreage for 1918. *il Ag Digest* 2:919-20 Ap '18
- Increasing the wheat yield. A. E. Grantham. *Prac F* 113:282 Ag 15 '17
- Irrigation of wheat. E. S. Harris. *il Utah Ag Exp B* 146:1-31 '16
- Leading dairyman endorses million acre wheat campaign. *Ag Digest* 2:568 Ag '17
- Liming the wheat crop. C. E. Thorne. *il Ohio Ag Exp B v* 1:277-81 S '16
- Looking to better corn and wheat. A. E. Grantham. *Prac F* 113:330+ O 1 '17
- More and better wheat. *Coop Manager & F* 7: 76 O '17
- More money from wheat. (Soil improvement com. Pamph. 23) 8p n.d. Nat. fertilizer assn., Chicago
- Most profitable fertilizers for wheat. C. G. Williams. *il Ohio F* 138:167 Ag 26 '16
- Movies on preparation of the seedbed for wheat. M. A. Cobb. *il Rural N Y* 76:981 Ag 18 '17
- Notes on wheat. A. E. Grantham. *Prac F* 114:242 Jl 15 '18
- Planting wheat on lespedeza sod. *Prog F* 32: 1059 O 13 '17
- Prepare for the next wheat crop. *Va Ag Dept B* 119:3-5 Jl '17
- Preparing for wheat. *Ohio F* 138:207 S 2 '16
- Raise wheat especially. W. I. Chamberlain. *Nat Stock & F* 41:421 Jl 23 '17
- Rate of seeding and fertiliser trials with wheat, Yanco experiment farm. J. M. Pitt. *Ag Gaz of New South Wales* 27:232-3 Ap '16
- Rotations for wheat. *Weekly N L* 5:1 S 12 '17
- Secrets of a big yield. H. G. Bell. *il Country Gent* 83:43 Ja 5 '18
- Seeding of wheat. L. J. Cook. *J Dept Ag S Australia* 20:830-2 My '17
- Selecting and preparing land for the wheat crop. J. Murray. *il J Ag (Quebec)* 21:117 F '18
- Selection of wheats for spring sowing. *J Bd Ag* 23:979-84 Ja '17
- Shall we plant more spring wheat? W. L. Burlison. *Ill Ag Exp C* 214:1-2 '18
- Soil for winter wheat. R. E. Stephenson. *Rural N Y* 76:957 Ag 11 '17
- Some points in wheat-growing. W. J. Spafford. *J Dept Ag S Australia* 20:564-9 F '17
- Sow wheat early. *Weekly N L* 5:1 Ap 3 '18
- Sowing the wheat. *Ohio F* 140:162 S 1 '17
- Sowing wheat. E. Molyneux. *Gard Chron (Lond)* 62:174 O 27 '17
- Terrific losses in winter wheat. B. W. Snow. *O Judd Farmer* 62:8 Ap 28 '17
- Tillering of wheat. A. E. Grantham. *Science (Science Press, Garrison, N.Y.)* 15c) n s 46:392-4 O 19 '17
- Tillering of winter wheat. A. E. Grantham. *bibliog il Del Ag Exp B* 117:1-119 '17
- Time of seeding winter wheat. H. D. Hughes. *Wallaces' F* 43:1256 S 6 '18
- Top-dress winter wheat. *O Judd Farmer* 61:5 D 23 '16
- Top dressing wheat. J. W. Henceroth. *Coop Manager & F* 6:78 Ja '17



**Wheat—Cultivation—Continued**

- Use of sulphate of ammonia for wheat. J Bd Ag 23:576-80 S '16  
 Ways to win with wheat. Ill Farmers Inst Rep 1917:206-8 '17; Same. Ill Farmers Inst 6p '17  
 Wheat. C. F. Noll. il Pa Ag Exp B 148:1-12 '17  
 Wheat. N. Schmitz. il map Md Ag Exp B 198:59-94 '16; Same. Md Ag Exp Rep 1916-1917 '17  
 Wheat and its needs. Prog F 32:1008 S 29 '17  
 Wheat and oats; soils that are suited to these crops. W. F. Massey. Prog F 32:880 Ag 18 '17  
 Wheat and rye. F. App. N J Ag Exp C 87:1-4 '17  
 Wheat and rye. C. A. Zavitz. il Ontario Ag Dept B 261:1-30 '18  
 Wheat culture. J. W. Gilmore. Cal Ag Exp C 172:1-8 '17  
 Wheat culture. T. B. Hutcheson and T. K. Wolfe. il Va Ag Exp B 216:1-15 '17  
 Wheatfield in April. C. E. Thorne. il Ohio Ag Exp B v 2:110-12 Ap '17  
 Wheatfield in winter; improvement by use of manure, commercial fertilizers and lime. C. E. Thorne. Ohio Ag Exp B v 2:3-6 Ja '17  
 Winter wheat. Wallaces' F 42:1164 Ag 24 '17  
 Winter wheat and its culture. H. J. Wheeler. (E. 6) 24p il n.d. Am. agricultural chemical co., 92 State st., Boston

**Diseases and pests**

- Banish the barberry. il Weekly N L 5:4 Ap 3 '18  
 Banish the spiny Hun; dig out barberry because it spreads black stem wheat rust. H. R. O'Brien. il Country Gent 83:9 My 25 '18  
 Barberry and the wheat rust. W. N. Clute. Gard Chron Am 22:232 S '18  
 Barberry bush extermination being planned. Coop Manager & F 7:26 Mr '18  
 Barberry eradication and wheat rust. H. R. O'Brien. il Wallaces' F 43:775 My 10 '18  
 Barberry eradication campaign. W. E. Leer. il Purdue Ag 13:26-8 O '18  
 Barberry plant menaces wheat. O Judd Farmer 64:512 My 11 '18  
 Black or stem rust of wheat. 15p '17 Canada Ag  
 Can biologic forms of stemrust on wheat change rapidly enough to interfere with breeding for rust resistance? E. C. Stakman and others. bibliog il J Ag Research 14:111-24 Jl 8 '18  
 Case against the barberry. H. S. Jackson. il Purdue Ag Ext Leaflet 100:1-4 '18  
 Caterpillar on the ears of wheat. W. Somerville. il J Bd Ag 23:236-8 Je '16  
 Common barberry an enemy of wheat. E. M. Freeman. il Minn Ag Ext Spec B 26 4p '18  
 Control of rust. maps. Ag Gaz of Canada 5: 974-7 O '18  
 Control of three important wheat pests in Indiana. J. J. Davis. il map Ind Ag Exp C 82:1-11 '18  
 Control of wheat diseases. J. J. Thapke. il Country Gent 81:127 Ja 15 '16  
 Cooperation of nurserymen requested in eradication of common barberry to aid in the control of wheat-stem rust. (Service and regulatory announcements—Fed. Hort. Bd. 51) p 42-3 '18 U S Ag  
 County-wide survey to determine the effect of time of seeding and presence of volunteer wheat upon the extent of damage by the Hessian fly. T. H. Parks. J Econ Entom 10: 249-53 Ap '17  
 Destroy the common barberry. E. M. Freeman. il Minn Hort 46:168 Ap '18  
 Destroy the common barberry bush; it threatens the wheat crop. il S D Ag Ext C 3 4p '18  
 Destroy the dangerous barberry bushes. Coop Manager & F 7:32 My '18  
 Diseases of wheat. A. D. Selby. il Ohio Ag Exp B v 2:219-22 Jl '17  
 Ear cockles in wheat. W. Somerville. il J Bd Ag 25:850-3 O '18

- Entomological survey of Ohio wheatfields; crop for 1918 not seriously menaced. H. A. Gossard. maps Ohio Ag Exp B v 2:283-7 S '17  
 Farmers asked to report eelworms in their wheat. Weekly N L 6:1 O 23 '18  
 Grain rust threatens Iowa crops. H. R. O'Brien. Wallaces' F 43:900 Je 7 '18  
 Investigation of the supposed immunity of some varieties of wheat to the attack of Hessian fly. L. Haseman. J Econ Entom 9: 291-4 Ap '16  
 Liquid manure with addition of sulphuric acid as spring manure and means of control against weeds and lodging of wheat. I. Gigholi. Int R Sci & Prac Ag 7,no 9:1273-5 S '16  
 Nematode galls as a factor in the marketing and milling of wheat. D. A. Coleman. il map U S Ag B 734:1-16 '18  
 New disease of wheat. E. F. Smith. il J Ag Research 10:51-4 Jl 2 '17  
 New wheat diseases; destructive malady is spread through seed. Weekly N L 5:8 Ja 30 '18; Same. Coop Manager & F 7:97 Mr '18  
 New wheat pest in Missouri. A. H. Hollinger. O Judd Farmer 61:6 N 18 '16  
 Occurrence of puccinia graminis tritici-com-pacti in the southern United States. E. C. Stakman and G. R. Hoerner. il Phyt 8:141-9 Ap '18  
 Ohio is digging out barberries. H. R. O'Brien. il Nat Stock & F 42:288 Je 15 '18  
 Pests the next wheat crop must face. J. S. Houser. Ohio F 142:135 Ag 17 '18  
 Powdery mildews of avena and triticum. G. M. Reed. Mo Ag Exp Research B 23:1-19 '16  
 Protect the wheat crop; eradicate the common barberry from Illinois. il Ill Ag Ext C 22: 1-4 '18  
 Pseudomonas tritici n. sp., injurious to wheat in the Punjab. C. M. Hutchinson. Int R Sci & Prac Ag 9,no 5:630-1 My '18  
 Pull the dangerous barberry bushes; save the wheat crop. E. D. Ball and R. E. Vaughan. Wis Ag Ext C 102 4p '18  
 Sclerotium rolfsii on wheat. G. H. Godfrey. il Phyt 8:64-6 F '18  
 Serious eelworm or nematode disease of wheat; control the disease by use of clean seed—crop rotation—sanitary measures. L. P. Byars. il U S Ag C 114:1-5 '18  
 Serious wheat disease discovered in the East. Weekly N L 6:1 S 4 '18  
 Some diseases of wheat crops and their treat-ments. W. J. Spafford. J Dept Ag S Aus-tralia 20:531-48 F '17  
 Some septorias of wheat. W. B. Grove. Gard Chron (Lond) 60:194, 210 O 21-28 '16  
 Sow wheat somewhat early. H. A. Gossard. map Ohio F 140:163 S 1 '17  
 Story of black stem rust of grain and the bar-berry. E. M. Freeman. il Minn Ag Ext Spec B 27:1-8 '18  
 Third biologic form of puccinia graminis on wheat. M. N. Levine and E. C. Stakman. J Ag Research 13:651-4 Je 17 '18  
 To eradicate barberry bushes. H. R. O'Brien. Hoard's D 55:652 My 3 '18  
 Traitorous barberry. J. W. Henceroth. il Am Coop J 14:9 S '18  
 Wheat and its diseases. W. J. Spafford. J Dept Ag S Australia 21:947-9 Jl '18  
 Wheat; diseases and pests. il Md Ag Exp B 198:86-94 '16; Same. Md Ag Exp Rep 1916-1917 '17  
 Wheat-insect survey of 1918. H. A. Gossard. maps Ohio Ag Exp B v 3:259-66 S '18  
 Wheat-rust; a New Zealand observation. R. Waters. il J Ag New Zealand 13:41-6 Jl '16  
 Wheat storage problems; protection from weevils. J Dept Ag S Australia 21:588-90 F '18; Same. J Dept Ag Victoria 16:117-19 F '18; Excerpt. Ag Gaz of New South Wales 29:100 F '18  
 See also Grain borers; Lesser; Hessian flies; Wheat aphids; Wheat isosoma; Wheat jointworms; Wheat midges; Wheat scab; Wheat sheath miners; Wheat smut; Wheat thrips

## Wheat—Diseases and pests—Continued

## Bibliography

Brief list of references on wheat rust. U. S. Library of Congress. 2p '17  
Obtainable only thru Public affairs information service, 958-964 University av., N. Y. (Typew 10c)

## Exhibits

Notes on the wheats competing at the Royal agricultural society's show, 1916. F. B. Guthrie. *Ag Gaz of New South Wales* 27:627-32 S '16  
Notes on the wheats competing at the Royal agricultural society's show. F. B. Guthrie. *Ag Gaz of New South Wales* 28:627-34 S '17  
Notes on the wheats competing at the Royal agricultural society's show. F. B. Guthrie. *Ag Gaz of New South Wales* 29:543-7 Ag '18

## Government purchase

New Zealand—Government is authorized to purchase the wheat grown in New Zealand during the season 1917-1918 at 5s. 10d. (\$1.41) per bushel delivered free on board in sacks at the nearest port or where delivery is made with the consent or direction of the government. Regulations provide that, save in the case of the permission of the board of trade it shall not be lawful for any person to purchase any wheat of the ensuing harvest except in the case of a retail purchase not exceeding fifty bushels

## Grading

Flour from wheat of different test weights. T. Sanderson. *N D Ag Exp Spec Food B v* 5, no 3 37-73p '18  
Grading of wheat. B. Tapper. *Coop Manager & F* 6:79 Je '17  
Great upheaval; feed D wheat. B. W. Currie. *Country Gent* 82:716-17 Ap 14 '17  
How to apply dockage to the marketing of wheat. *Coop Manager & F* 7:32-44 Ja '18  
Laboratory apparatus for grading wheat according to the official grain standards of the United States. *Coop Manager & F* 7:32 O '17  
Method of determining dockage in wheat recommended by the Department of agriculture. C. J. Brand. *Coop Manager & F* 7:25-6 O '17  
Milling and baking data for the 1915 crop of wheat. T. Sanderson. *N D Ag Exp B* 122: 61-94 '17  
North Dakota wheat for 1916. E. F. Ladd. *N D Ag Exp B* 119:51-61 '16  
Wheat dockage on a percentage basis. *Coop Manager & F* 7:81 S '17

See also Wheat—Standards

## Harvesting

Cost of harvesting wheat by different methods. A. P. Yerkes and L. M. Church. *il U S Ag B* 627:1-21 '18  
Handling the 1918 wheat harvest in Kansas. E. C. Johnson. *U S Ag C* 121:1-7 '18  
Harvesting and thrashing wheat done in old California days. *Rural N Y* 77:1085 S 21 '18  
Harvesting oats and wheat. J. F. Duggar. *Prog F* 31:646 My 13 '16

## Judging

Judging wheat. *Hoard's D* 51:24 Ja 28 '16

## Kernels

Mechanical explanation of progressive changes in the proportions of hard and soft kernels in wheat. G. F. Freeman. *Am Soc Agron J* 10:23-8 Ja '18  
Mechanical factors determining the shape of the wheat kernel. S. Boshnakian. *il Am Soc Agron J* 10:205-9 My '18  
Phytic acid of the wheat kernel and some of its salts. P. W. Boutwell. *Am Chemical Society J* (Box 505, Washington, D.C. \$6 per yr.) 39:491-503 Mr '17  
Researches on wheat selection: does the value of a wheat grain depend on its position in the ear? A. E. V. Richardson and W. H. Green. *J Dept Ag Victoria* 14:140-6 Mr '16 (to be cont)

## Marketing

Getting all of your wheat's value. O Judd. *Farmer* 65:141 Ag 24 '18  
In and out of the yoke. C. E. Russell. 32p n.d.  
Nat. nonpartisan league, St Paul  
Loi étendant l'application et portant modification de la loi de 1915 sur les marchés de blé en Australie. *Int Yearbook Ag Leg* 1916:114-16 '17  
Marketing Virginia wheat under government regulation. *Va Ag Dept B* 124:2-4 D '17

## Milling and baking tests

Characteristics and quality of Montana-grown wheat. L. M. Thomas. *il maps U S Ag B* 522:1-34 '17  
Colloidal swelling of wheat gluten in relation to milling and baking. F. W. Upson and J. W. Calvin. *il Neb Ag Exp Research B* 8:1-26 '16  
Comparison of several classes of American wheats and a consideration of some factors influencing quality. L. M. Thomas. *il U S Ag B* 557:1-28 '17  
Dry-farmed and irrigated wheat. J. S. Jones and C. W. Colver. *Idaho Ag Exp B* 88:1-18 '16  
Effect of the density of a wheat upon its flour yield. *Int R Sci & Prac Ag* 7, no 1:139-41 Ja '16  
Flour from wheat of different test weights. T. Sanderson. *N D Ag Exp Spec Food B v* 5, no 3 37-73p '18  
Milling and baking data for the 1915 crop of wheat. T. Sanderson. *N D Ag Exp B* 122: 61-94 '17  
Milling and baking qualities of Australian wheat. R. P. Scott and F. G. B. Winslow. *il J Dept Ag Victoria* 15:474-81 Ag '17; Same cond. *Int R Sci & Prac Ag* 9, no 3:388-90 Mr '18  
Milling and baking qualities of humpback wheat. *Coop Manager & F* 6:59 F '17  
Milling and baking quality and chemical composition of wheat and flour. *il Kan Ag Exp Tech B* 1:1-83 '16  
Milling and baking tests of einkorn, emmer, spelt, and Polish wheat. J. A. McClerk and others. *Am Soc Agron J* 10:215-17 My '18  
Milling and baking tests of F. A. Q. standard wheats for season 1916. P. R. Scott and F. G. B. Winslow. *il J Dept Ag Victoria* 15: 53-9 Ja '17  
Milling and baking tests of Victorian wheat. P. R. Scott and F. G. B. Winslow. *il J Dept Ag Victoria* 14:641-52 N '16  
Milling and baking tests of wheat containing admixtures of rye, corn cockle, kinghead, and vetch. R. C. Miller. *il U S Ag B* 328:1-24 '15  
Milling properties of Ohio wheat. M. K. Corbould. *il Ohio Ag Exp B v* 2:188-92 Je '17  
Milling tests of wheat. G. W. Norris. *Ag Gaz of New South Wales* 29:97-100 F '18 (to be cont)  
Performance records of some eastern wheats in Idaho. J. S. Jones and C. W. Colver. *Idaho Ag Exp B* 103:1-32 '18  
Practical milling tests. E. F. Ladd. *il N D Ag Exp C* 15:1-11 '17  
Quality of western-grown spring wheat. C. H. Bailey. *Am Soc Agron J* 9:155-61 Ap '17  
Relation of certain physical characteristics of the wheat kernel to milling quality. C. H. Bailey. *J Ag Sci* 7:432-42 Ap '16  
Relation of phosphorus and nitrogen in soil to the composition of wheat. J. W. Ames and G. E. Boltz. *il Ohio Ag Exp B* 318:91-118 '17  
Some tests of flour made from Egyptian wheats. F. Hughes. *il Egypt Ag Tech & Sci B* 10:1-9 '16 (5c)  
Study of Colorado wheat. W. P. Headden. *Colo Ag Exp B* 244:1-32 '18  
Wheat and flour investigations. G. A. Olson. *bibliog il Wash Ag Exp B* 144:1-86 '17

## Moisture content

Capacity of wheat and mill products for moisture. W. L. Stockham. *N D Ag Exp B* 120: 97-131 '17

## Morphology

Studies on the morphology of wheat. G. H. Jensen. *bibliog il Wash Ag Exp B* 150:1-21 '18



Wheat—Continued

Nomenclature

Naming wheat varieties. C. R. Ball and J. A. Clark. *Am Soc Agron J* 10:89-94 F '18

Physiology

Microchemical studies in the progressive development of the wheat plant. S. H. Eckerson. *Wash Ag Exp B* 139:1-20 '17

Prices

Address delivered at conference of grain dealers and representatives of the Food administration. H. Hoover. *Coop Manager & F* 7:60-3 J1 '18

Agricultural appropriation bill; wheat price-fixing amendment. D: A. Hollingsworth. *Congressional Record* (Washington, D.C.) 56:5821-2 Ap 20 '18

Agricultural appropriations—price of wheat. G: W. Norris. *Congressional Record* (Washington, D.C.) 56:4213-16 Mr 22 '18

City opinion of farm profits; how it is manufactured. *Rural N Y* 77:609 Ap 27 '18

Doubling the farmer's wheat dollar. C: W. Holman. *il Country Gent* 83:8-9 Ja 26 '18

Doubling the wheat dollar. C: W. Holman. 16p '13 U.S. Food administration, Washington, D.C.

Famine prices for wheat. E. W: Gage. *Scientific Am* (233 Broadway, N.Y. 10c) 117:43 J1 21 '17

Farmer and three-dollar wheat. C: M. Harger. *Scribner's Magazine* (597 5th av, N. Y. 35c) 64:80-6 J1 '18

Fix price of wheat at \$2.50 per bushel. J: M. Baer. *Congressional Record* (Washington, D.C.) 56:6143-5 Ap 26 '18

Fixes \$2.20 basis for 1918 wheat. O Judd Farmer 64:14 Mr 2 '18

Food administration announces increase in basis wheat prices. *Weekly N L* 5:10 J1 24 '18

\* Geography of wheat prices, a review. N. A. Bengtson. *J Geography* (Appleton, Wis. 15c) 17:74-7 O '18

Geography of wheat prices; summary of conditions affecting farm prices of wheat in different parts of the United States. L. B. Zapoleon. *maps U S Ag B* 594:1-46 '18

Getting all of your wheat's value. O Judd Farmer 65:141 Ag 24 '18

How shall we solve the wheat conundrum? *Ag Digest* 2:963-4 My '18

Maximum prices for wheat, flour, bran, and pollard. *J Ag New Zealand* 14:163-5 F '17

More money for wheat growers. O Judd Farmer 64:676 Je 29 '18

National aspects of a guaranteed minimum price for wheat, and suggested basis for its equitable determination. A. J. Perkins. *J Dept Ag S Australia* 22:194-211 O '18

New price relations between commercial mill feeds and wheat. J. F. Bell. *Coop Manager & F* 7:94 Mr '18

1917 wheat crop at \$2.20. *Ag Digest* 2:651 O '17

North Dakota wheat for 1916. E. F. Ladd. *N D Ag Exp B* 119:51-61 '16

Plans are announced for wheat and flour control for the 1918 wheat crop. *Weekly N L* 5:8 J1 31 '18; Same. *Coop Manager & F* 7:32-3 Ag '18; Same. *Wallaces' F* 43:1120 Ag 2 '18

\* Plans to insure fair wheat price for crops grown in 1919. W. Wilson. (*In Official statement no. 4, p. 2*) '18 U.S. Food administration, Washington, D.C.

President puts 1919 wheat at same price as this year; proclamation and memorandum. *Weekly N L* 6:14- S 11 '18; Same (memorandum). *Nat Stock & F* 42:561 S 14 '18

\* Price of cotton and wheat. T: P. Gore. *Congressional Record* (Washington, D.C.) 56:12477-9 O 24 '18

Price of wheat. T: P. Gore. *Congressional Record* (Washington, D. C.) 56:9974-83 J1 22 '18

\* Price of wheat. T: P. Gore and others. *Congressional Record* (Washington, D.C.) 56:5090-101 Ap 6 '18

Price of wheat. D. T. Morgan. *Congressional Record* (Washington, D.C.) 56:5773-6 Ap 19 '18

Price of wheat. C. S. Wheeler. *Ohio F* 140:162 S 1 '17

Price of wheat and flour compared. *Power F* 27:28 Mr '18

Price of wheat fixed for 1919. *Coop Manager & F* 8:30 O '18

\* Proclamation guaranteeing price for the wheat crop grown in 1919. W. Wilson. (*In Official statement no. 4, p. 1-2*) '18 U.S. Food administration, Washington, D.C.

Profits and losses in wheat production during the past sixty years. *Wallaces' F* 43:849 My 24 '18

Rejecting government wheat prices. C: W: Stokes. *il Country Gent* 82:1307-8 Ag 25 '17

Some views on price-fixing. *Breeder's Gaz* 73:916 My 2 '18

Speaking of prices. F. Crissey. *il Country Gent* 82:1667-8+ N 3 '17

Statement of President Wilson issued in connection with wheat price proclamation; with proclamation. *Weekly N L* 5:1-2 Mr 6 '18; Excerpt. *Coop Manager & F* 7:34 Mr '18; Excerpt. *Power F* 27:53 Ap '18

Under the crust of the French war loaf. W: H. Dean. *il Country Gent* 83:13 Ag 17 '18

Washington and the farmer. *Am Coop J* 13:3+S '17

What congressmen think about \$2.50 wheat. *Am Coop J* 13:377 My '18

Wheat and flour prices. *Kimball's D F* 15:888 D 15 '17

Wheat and flour questions. W. W. Hunter. *Nat Stock & F* 41:605 S 22 '17

Wheat for 1917 on \$2.20 basis. O Judd Farmer 63:4 S 15 '17

Wheat prices for 1918. *Ohio F* 141:425 Mr 23 '18

Wheat prices in England, yearly, since 1259. *Monthly Crop Rep* 3:113 N '17

Wheat situation and prices. *Ag Digest* 2:925 Ap '18

Why the price of wheat was fixed at \$2.20 a bushel. *Prac F* 113:320 S 15 '17

Why there is no grain combine. J. Barnes. *Am Coop J* 12:375 Ja '17

Why wheat prices are fixed. *Ag Digest* 2:870 Mr '18

World's wheat-supply; future course of prices. *J Ag New Zealand* 14:329-32 Ap '17

Seed

Campaigning for corn and wheat in Indiana. R. S. Bundy. *il Purdue Ag* 12:94-5 N '17

Coradgery seed wheat competition, 1915. *Ag Gaz of New South Wales* 27:549-54 Ag '18

Effect of sorting grain on the yield of wheat. *Int R Sci & Prac Ag* 7,no 1:61-2 Ja '16

Farmer cannot be too careful with his seed wheat. *Va Ag Dept B* 130:2-3 J1 '18

Is wheat wheat? J. C. Beavers. *il Country Gent* 83:7 S 21 '18

Means of economizing seed oats and wheat. J. F. Dugger. *Prog F* 32:999 S 22 '17

Missouri certifying seed wheat. O Judd Farmer 63:5 Ag 18 '17

Pedigreed seed in the reach of all. A. W. Jacob. *Hoard's D* 51:801 Je 9 '16

Seed wheat for 1918's billion-bushel crop. W: H. Dean. *Country Gent* 82:1524 O 6 '17

Seed wheat; varieties for distribution among farmers. A. E. V. Richardson. *il J Dept Ag Victoria* 14:65-78 F '16

Selection plots; a reminder of wheat-growers. J. T. Pridham. *Ag Gaz of New South Wales* 27:233-4 Ap '16

Southern grown wheat seed. T. Butler. *Prog F* 32:919 S 1 '17

Storage of seed wheat in the Northwest. U S Seed Rep 1:2 N '17

Supply of seed wheat, oats, and rye in the cotton belt. U S Seed Rep 2:7 S '18

Treating seed wheat to prevent smut, scab, etc. *Ohio Ag Exp B v* 3:284-5 S '18

Variation and correlation in wheat, with special reference to weight of seed planted. A. C. Army and R. J. Garber. *biblog J Ag Research* 14:359-92 Ag 26 '18

Wheat yields increased by using right kind of seed. *Weekly N L* 6:1 Ag 28 '18

**Wheat—Seed—Continued**

You should, but you won't. S. Jordan. *il Country Gent* 83:8+ O 5 '18

See also Wheat—Breeding

**Standards**

Application of dockage in the marketing of wheat. *Farmers' B* 919:1-12 '17

Brand replies to commissioner of agriculture of No. Dakota. C: J. Brand. *Coop Manager & F* 7:37-9 Je '18

Co-operation between the U.S. D. A. and the U.S. Food administration grain corporation in the enforcement of the official grain standards of the U.S. for wheat. *Coop Manager & F* 7:24-5 N '17

\* [Copy of a letter to Hon. Charles J. Brand, chief of Bureau of markets, United States department of agriculture, Washington, D.C., answering his memoranda to His excellency, Gov. Burnquist, of Minnesota.] C. H. March and T. E. Cashman. *Congressional Record* (Washington, D.C.) 56:12436-8 O 19 '18

Federal grain supervision and the standards for wheat applied to 1917 crop of hard red spring wheat, including comparison of present and revised official standards. (Service and regulatory announcements—Markets 36) 16p '18 U S Ag

Federal wheat grades. R. D. Jarboe. *Coop Manager & F* 6:41-3 Ag '17

Federal wheat grades; regulatory announcement no. 22—effective July 1st and August 1st, 1917. *Coop Manager & F* 6:37 Ag '17

Government standards for wheat. J. W. T. Duvel. (*In* *Pro.*, Grain dealers nat. assn., 1917, p. 30-1) '17 Charles Quinn, sec.-treas., Toledo, O.

Have the farmers been given a fair deal in the federal standards for hard red spring wheat. (Service and regulatory announcements—Markets 34) 8p '18 U S Ag

Montana grain inspection and the federal grain standards for wheat. A. Atkinson. *Mont Ag Exp C* 68:1-14 '17

Notice of public hearing relating to official grain standards of the United States for shelled corn and wheat. *Coop Manager & F* 7:27-8 D '17

Notice of public hearings relating to tentative revision of the official grain standards of the United States for wheat. (Service and regulatory announcements—Markets 32) 6p '18 U S Ag

Official grain standards of the United States for wheat. (Service and regulatory announcements—Markets 22) 29p '17 U S Ag; Excerpt. *Coop Manager & F* 7:32-3 Ap '18

Superseded by Service and regulatory announcements no. 33

Official grain standards of the United States for wheat. E. J. Smiley. *Coop Manager & F* 6:59 Ag '17

Official grain standards of the United States for wheat and corn; tabulated and abridged. 24p '17 Simonds-Shields-Lonsdale grain co., Exchange bldg., Kansas City, Mo.

Official grain standards of the United States for wheat, and official grain standards of the United States for shelled corn. (Service and regulatory announcements—Markets 33) 30p '18 U S Ag; Excerpts. *Coop Manager & F* 7:34-5 Ag '18

These standards for wheat and for shelled corn supersede, on July 15, 1918, those which were published in Service and regulatory announcements nos. 11 and 22, respectively

Official standards of the United States for wheat. D. F. Houston. *Coop Manager & F* 6:30-8 My '17

Official wheat standards. W. P. Carroll. *Coop Manager & F* 6:61-2 Ag '17

Synopsis of the official grain standards of the U.S. for wheat as issued Mar. 31, 1917 and taking effect Aug. 1, 1917. C. H. Bailey. *Coop Manager & F* 6:34 Je '17

Tentative federal wheat grades. C. J. Brand. *Coop Manager & F* 6:28-30 Mr '17

U.S. wheat standards; secretary of agriculture establishes and promulgates standards under grain standards act. *Weekly N L* 4:1 Ap 11 '17; Same. *Ag Digest* 1:449 My '17

Wheat grades high. *Weekly N L* 5:6 O 24 '17  
Wheat standards and their application. G: Livingston. (Service and regulatory announcements—Markets 35) 12p '18 U S Ag

**Statistics**

See also Wheat trade—Statistics

**Storage**

Handling and storage of spring wheat. C. H. Bailey. *Am Soc Agron J* 9:275-81 S '17

Moisture content of heating wheat. C. H. Bailey. *Am Soc Agron J* 9:248-51 My '17

Protecting stored wheat. *Prac F* 113:284 Ag 15 '17

Respiration of stored wheat. C. H. Bailey and A. M. Gurjar. *bibliog J Ag Research* 12:685-713 Mr 18 '18

Serious pest to stored wheat. W. W. Froggatt. *il Ag Gaz of New South Wales* 29:726-8 O '18

Wheat storage problems; protection from weevils. *J Dept Ag S Australia* 21:588-90 F '18; Same. *J Dept Ag Victoria* 16:117-19 F '18; Same. *Ag J of India* 13:527-8 Jl '18; Excerpt. *Ag Gaz of New South Wales* 29:100 F '18

**Transportation**

Wheat and ships. *Scientific Am* (233 Broadway, N.Y. 10c) 118:294 Ap 6 '18

**Varieties**

Alaska and Stoner, or miracle wheats: two varieties much misrepresented. C. R. Ball and C. E. Leighty. *il U S Ag B* 357:1-28 '16

Cereal experiments at Dickinson, N. Dak. J. A. Clark. *il U S Ag B* 33:13-24 '14

Cereal experiments at the Williston station; experiments with wheat. F. R. Babcock. *il U S Ag B* 270:13-23 '15

Cereal investigations at Nephi substation. P. V. Cardon. *U S Ag B* 30:14-26 '13

Cereal investigations on the Belle Fourche experiment farm; experiments with wheat. C. Salmon. *il U S Ag B* 297:14-29 '15

Cultural experiments with different varieties of wheat at the östergötland agricultural experiment station, Sweden. G. Sundelin. *Int R Sci & Prac Ag* 8,no 12:1214-15 D '17

Cultural experiments with different varieties of wheat at Ultuna, Sweden. G. Nilsson. *Int R Sci & Prac Ag* 8,no 12:1212-14 D '17

Dry farming investigations at the Sherman county branch experiment station. D. E. Stephens and C. E. Hill. *il Ore Ag Exp B* 144:8-15 '17

Experiments on smut-resisting powers of different varieties of wheat. O. Von Kirchner. *Int R Sci & Prac Ag* 7,no 7:1034-7 Jl '16

Experiments with durum wheat. C. R. Ball and J. A. Clark. *bibliog il maps U S Ag B* 618:1-64 '18

Experiments with Marquis wheat. C. R. Ball and J. A. Clark. *il U S Ag B* 400:1-40 '16

Experiments with spring cereals at the eastern Oregon dry-farming substation Moro, Oreg. D: E. Stephens. *il U S Ag B* 498:14-26 '17

Experiments with wheat, oats, and barley in South Dakota. M. Champlin. *il U S Ag B* 39:7-19 '14

Experiments with wheats at Verrières, Seine-et-Oise, France. J. De Vilmorin. *Int R Sci & Prac Ag* 9,no 2:181-3 F '18

Farmers' experiment plots; wheat and oat harvest, 1915-16. *il Ag Gaz of New South Wales* 27:153-200 Mr '16

Farmers' experiment plots; wheat and oat harvest, 1917-18. R. G. May. *Ag Gaz of New South Wales* 29:708-12 O '18

Fylgia, extra squarehead III, sol II, pansar, thule II, varieties of wheat selected at Svalöf, Sweden. H. Nilsson-Ehle. *Int R Sci & Prac Ag* 8,no 2:218-24 F '17

Importance of variety in wheat growing. *Prac F* 112:295 Ag 1 '16

Improvement of Ghirka spring wheat in yield and quality. J. A. Clark. *il U S Ag B* 450:1-19 '16

Marquis wheat. C. R. Ball and J. A. Clark. *il Farmers' B* 732:1-8 '16

Miracle wheat old delusion. *Am Flor* 46:856 My 6 '16



**Wheat—Varieties—Continued**

- More wheat in 1919. C. G. Williams. Ohio F 142:161 Ag 24 '18
- Naming wheat varieties. C. R. Ball and J. A. Clark. Am Soc Agron J 10:89-94 F '18
- Notes on the stud wheat plots, 1916. J. T. Pridham. Ag Gaz of New South Wales 28:621-5 S '17
- Origin, characteristics, and quality of humpback wheat. L. M. Thomas. il U S Ag B 478:1-4 '16
- Proportion of grain to straw in varieties of wheat. J. T. Pridham. Ag Gaz of New South Wales 27:229-31 Ap '16
- Red rock wheat. F. A. Spragg and A. J. Clark. il Mich Ag Exp C 31:1-7 '16; Same. Mich Ag Bd Rep 1917:659-63
- Results obtained with the new wheat Carlotta Strampelli in the regional experimental fields in Italy. N. Strampelli. Int R Sci & Prac Ag 7:no 11:1610-11 N '16
- Results of variety tests of wheat, oats and rye (B. 232). G. M. Garren. N C Ag Exp Rep 1916 28p '17
- Seed wheat; varieties for distribution among farmers. A. E. V. Richardson. il J Dept Ag Victoria 14:65-78 F '16
- Studies concerning the elimination of experimental error in comparative crop tests. T. A. Kiesselbach. bibliog il Neb Ag Exp Research B 13:1-95 '18
- Trials of some imported wheats. J. T. Pridham. Ag Gaz of New South Wales 29:795-7 N '18
- Two good varieties of Italian wheat, Gentil rosso and Gentil bianco. A. De Rosa. Int R Sci & Prac Ag 7,no 11:1612-13 N '16
- Valuable new wheat in Kansas. C. Dillon and F. B. Nichols. il Country Gent 82:530 Mr 17 '17
- Valuable new winter wheat. L. E. Call. Wal-laces' F 41:1506 N 17 '16
- Varieties of spring wheat. Monthly Crop Rep 4:95 Ag '18
- Varieties of spring wheat. Weekly N L 5:3+ Mr 6 '18
- Varieties of wheat and other cereals. Ag Gaz of New South Wales 27:88-94 F '16
- Varieties of wheat and other cereals. Ag Gaz of New South Wales 28:83-9 F '17
- Variety tests of wheat. il Md Ag Exp B 198: 61-79 '16; Same. Md Ag Exp Rep 1916-1917 '17
- Variety tests of wheat. C. G. Williams. il Ohio Ag Exp B v 1:195-8 Jl '16
- Wheat experiments, season 1916. A. E. V. Richardson. il J Dept Ag Victoria 15:246-54 Ap '17
- Wheat varieties; notes on the test plots at Cowra. J. T. Pridham. Ag Gaz of New South Wales 29:175-80 Mr '18
- Wheat variety testing at the Delaware station, 1908-1916. il Prac F 112:360 O 1 '16
- Wheat variety tests. H. A. Mullett. il J Dept Ag Victoria 16:168-76 Mr '18
- Wheat variety tests in 1916. J Dept Ag Ire-land 17,no 2:254-6 '17
- Wheat variety trials in the Punjab. W. Rob-erts. Ag J of India 13:10-22 Ja '18
- Wheat variety trials, 1917-18; Women's train-ing farm, Cowra. M. H. Reynolds and H. Little. Ag Gaz of New South Wales 29:768-72 N '18
- Wheats for hay under irrigation at Yanco ex-periment farm. J. M. Pitt. Ag Gaz of New South Wales 28:311-16 My '17
- Yields of winter grains in Illinois. W. L. Bur-lison and O. M. Allyn. il Ill Ag Exp B 201: 97-110 '17

**Alabama**

- Alabama's share in wheat production in 1919. L. A. Niven. Prog F 33:1226 N 9 '18

**Arizona**

- Wheat planting and the seed supply. E. P. Taylor. il Ariz Ag Ext C 24:1-10 '18

**Arkansas**

- Late seeding of wheat in Arkansas. C. O. Carpenter. Prog F 31:1307 N 11 '16
- More wheat. Ark Ag Exp C 31 4p n.d.

**Australia**

- Australia—Bill providing for the erection of permanent silos and creating a commission representing the commonwealth and wheat-producing states to exercise general super-vision over the whole storage scheme. Com-monwealth advances money to the states for the construction of silos of uniform de-sign and conveniently situated. (Passed Senate Jl 27 '17)
- Australian wheat. J. S. Dunnet. Hoard's D 55:927 Je 21 '18
- Australia's 1917-1918 wheat crop relatively small. Econ World (128 Water st, N.Y. 25c) n s 15:159 F 2 '18
- Farmers' experiment plots; wheat and oat ex-periments, 1917-18. H. C. Stening. il Ag Gaz of New South Wales 29:235-58 Ap '18
- Farmers' experiment plots; wheat and oats harvest, 1915-16. il Ag Gaz of New South Wales 27:153-200 Mr '16
- Farmers' experiment plots; wheat and oat harvest, 1916-17. il Ag Gaz of New South Wales 28:247-80, 307-9 Ap-May '17
- Field day at Longerenong agricultural college. il J Dept Ag Victoria 15:1-7 Ja '17
- Field experiments with wheat, &c., Nyngan demonstration farm, 1916. H. J. Kelly. Ag Gaz of New South Wales 28:550-8 Ag '17
- Field experiments with wheat, 1915; Wagga experiment farm. W. D. Kerle. il Ag Gaz of New South Wales 27:381-92 Je '16
- Harvest reports, 1915-1916. Condothin demon-stration farm. A. H. McDougall. Ag Gaz of New South Wales 27:462-6 Jl '16
- National aspects of a guaranteed minimum price for wheat, and suggested basis for its equitable determination. A. J. Perkins. J Dept Ag S Australia 22:194-211 O '18
- Notes on the stud wheat plots, 1916. J. T. Pridham. Ag Gaz of New South Wales 28: 621-5 S '17
- R.A.S. field wheat competition. Ag Gaz of New South Wales 29:181-7 Mr '18
- Relationship between the average wheat yield and the winter rainfall. A. E. V. Richardson. J Dept Ag Victoria 14:37-40 Ja '16
- Roseworthy agricultural college harvest re-port—1917-1918. W. J. Colebatch. J Dept Ag S Australia 21:759-66 My '18
- Trials of some imported wheats. J. T. Pridham. Ag Gaz of New South Wales 29:795-7 N '18
- Victoria—Act providing for the storage of 10,000,000 bushels of silage at cost of £850,000. (Passed Council Ag 28 '17)
- Wheat crop for 1916. A. E. V. Richardson. J Dept Ag Victoria 14:257-74 My '16
- Wheat experimental plots in the Mallee, 1917 season. H. A. Mullett. il J Dept Ag Victoria 16:89-93 F '18
- Wheat experiments, season 1916. A. E. V. Richardson. il J Dept Ag Victoria 15:246-54 Ap '17
- Wheat in Australia. J. S. Dunnet. Hoard's D 55:589 Ap 19 '18
- Wheat variety trials, 1917-18; Women's training farm, Cowra. M. H. Reynolds and H. Little. Ag Gaz of New South Wales 29: 768-72 N '18
- Wheats for hay at Yanco. J. M. Pitt. Ag Gaz of New South Wales 29:259-61 Ap '18
- Wheats for hay under irrigation at Yanco ex-periment farm. J. M. Pitt. Ag Gaz of New South Wales 27:95-6 F '16
- Wheats for hay under irrigation at Yanco experiment farm. J. M. Pitt. Ag Gaz of New South Wales 28:311-16 My '17

**Brazil**

- Brazil to grant bounties for wheat produc-tion. R: P. Momsen. (Commerce Reports no. 101) p 404-5 (Ap 30) '18 U.S. Bur. of foreign and domestic commerce, Washing-ton, D.C.
- Supply and consumption of wheat. Doc Leaf-lets 1,no5:66 N '17

## Wheat—Continued

## California

Extending the area of irrigated wheat in California for 1918. F. Adams. Cal Ag Exp C 182:1-4 '17

## Canada

- Canada's wheat problem. W. S. Evans. Ag Gaz of Canada 3:1106-7 D '16
- Exportable surplus of wheat and oats. Doc Leaflets 1, no 1:6 J1 '17
- Fall wheat and fall rye for Quebec. J. Murray. J Ag (Quebec) 21:39 S '17
- \* Fall wheat and spring wheat in Ontario. (In Report, Bur. of industries, 1917, p. 28) '18 Ontario ag. dept., Toronto
- Getting ready for wheat; how it is done in western Canada. E. W. Gage. il Rural N Y 76:1287 N 10 '17
- Quebec to grow her own wheat. J. Murray. il J Ag (Quebec) 21:101 Ja '18
- Spring wheat. C. A. Zavitz. Ontario Ag Dept C 7:1-4 n.d.
- Wheat—Canada's super-gold. J. R. McMahon. il Country Gent 83:9-10 My 11 '18
- Wheat production in Canada. L. H. Newman. Int R Sci & Prac Ag 8,no 7:961-7 J1 '17
- Wheat production in the province of Quebec. A. W. Kneeland. J Ag (Quebec) 22:55 O '18
- Winter wheat. C. A. Zavitz. Ontario Ag Dept C 13:1-4 '18

## Colorado

- Cereal experiments at the Akron field station, Akron, Colo. G. A. McMurdo. il U S Ag B 402:14-24 '16
- Properties of Colorado wheat. W. P. Headden. Colo Ag Exp B 237:1-31 '18
- Study of Colorado wheat. W. P. Headden. Colo Ag Exp B 217:1-46; 219:1-131 '16; 244:1-32 '18

## Eastern states

- Culture of winter wheat in the eastern United States. C. E. Leighty. map Farmers' B 596:1-14 '17 (rev.)
- Growing spring wheat in the East. F. Menges. Prac F 114:119 Mr 15 '18

## Egypt

- Work in connection with Egyptian wheat. G. C. Dudgeon. Egypt Ag Tech & Sci B 7:1-9 '16 (5c)

## Florida

- Suggestions for fall, winter and early spring planting. Fla Ag Dept Quar B v 28:5-8 O '18
- Wheat in Florida. H. S. Elliot. Fla Ag Dept Quar B v 27:5-8 O '17

## France

- Cost of wheat. Doc Leaflets 1,no 1:9 J1 '17
- Law of October 16th, 1915, on the purchase and sale of wheat and flour for the supply of the civil population in France. Int R Ag Econ 61:118-27 Ja '16
- Results of the enquiry of the Office of agricultural information of the French ministry of agriculture on Manitoba wheat. Int R Sci & Prac Ag 9,no 1:57-8 Ja '18

## Georgia

- Wheat and rye production in Georgia. R. R. Childs. il Ga Ag Coll (Ext) B 136:1-16 '17 (reprint)

## Germany

- New practical and scientific experiments in the selection of German wheats rich in gluten. Int R Sci & Prac Ag 8,no 5:711-12 My '17

## Great Britain

- Report of the committee on home-grown wheat, England, 1913-1915. Int R Sci & Prac Ag 7,no 3:366-7 Mr '16
- Wheat prices in England, yearly since 1259. Monthly Crop Rep 3:113 N '17
- Wheat supplies of the United Kingdom. Contemporary Review (249 W. 13th st., N.Y. 50c) 111:282-9 Mr '17

## Hungary

- Importance of the awns of native wheat in Hungary and of barley in Sweden. Int R Sci & Prac Ag 8,no 5:727-9 My '17

## Illinois

- Grow more wheat in Illinois. W. L. Burlison and W. F. Handschin. il map Ill Ag Ext C 24:1-8 '18
- More wheat from Illinois next year. W. L. Burlison. il map O Judd Farmer 65:65 J1 27 '18
- Spring wheat for northern Illinois. O Judd Farmer 61:3 D 9 '16
- Wheat production in Macoupin county. O Judd Farmer 65:25 J1 13 '18
- Yields of winter grains in Illinois. W. L. Burlison and O. M. Allyn. il Ill Ag Exp B 201:97-110 '17

## India

- Saving of irrigation water in wheat growing. A. Howard and G. L. C. Howard. Ag J of India 11:14-30 Ja '16
- Wheat in the North-west Frontier province. W. Robertson Brown. il Ag J of India 13:65-70 Ja '18
- Wheat variety trials in the Punjab. W. Roberts. Ag J of India 13:10-22 Ja '18

## Indiana

- Campaigning for corn and wheat in Indiana. R. S. Bundy. il Purdue Ag 12:94-5 N '17
- Maintain the wheat acreage and increase the yield for 1919. Purdue Ag Ext 8p '18

## Iowa

- Grow spring wheat in Iowa. L. C. Burnett. Ia Ag Exp C 47:1-4 '18
- Wheat and rye production in Iowa. W. R. Hechler. il Ia Ag Exp C 37 8p '17

## Ireland

- "G. R." flour. T. Johnson. il J Dept Ag Ireland 17,no 2:264-77 '17

## Italy

- Results obtained with the new wheat Carlotta Strampelli in the regional experimental fields in Italy. N. Strampelli. Int R Sci & Prac Ag 7,no 11:1610-11 N '16
- Results of the cultivation of the Carlotta Strampelli hybrid wheat in rice fields. B. Marcarelli. Int R Sci & Prac Ag 9,no 1:58-9 Ja '18
- Two good varieties of Italian wheat, Gentil rosso and Gentil bianco. A. De Rosa. Int R Sci & Prac Ag 7,no 11:1612-13 N '16
- Wheat growing competitions in the Roman campagna in 1914. Int R Sci & Prac Ag 7, no 2:219-21 F '16
- Wheat growing in Tuscany. P. Ferrari. Int R Sci & Prac Ag 9,no 2:183-5 F '18

## Kansas

- Growing wheat in Kansas. L. E. Call and S. C. Salmon. il maps Kan Ag Exp B 219:1-51 '18
- Kansas is at it again. J. Eby. il Country Gent 82:1339-40 S 1 '17
- New wheat for Kansas. W. M. Jardine. Am Soc Agron J 9:257-66 S '17
- Relation between humidity and yield of winter wheat in western Kansas. Int R Sci & Prac Ag 7,no 2:191-2 F '16
- Time to seed wheat in Kansas. L. E. Call and others. map Kan Ag Exp B 213:1-16 '16
- Valuable new wheat in Kansas. C. Dillon and F. B. Nichols. il Country Gent 82:530 Mr 17 '17
- Will Kansas turn from wheat? C. Dillon. il Country Gent 81:1463 Ag 5 '16
- Winning the war with wheat. 8p '17 Kan. State council of defense. Seed wheat committee, Topeka

## Michigan

- More wheat for Michigan. J. F. Cox. il Mich Ag Exp C 34:1-10 '17
- Number 97,003: the development of Red Rock wheat. il Country Gent 83:5 Mr 2 '18



Wheat—Continued

Mississippi

Wheat production in the Delta. G. B. Walker. Miss Ag Exp C 4p '17

Missouri

Growing wheat in Missouri. C. A. Helm. Mo Ag Ext C 29:1-4 '17  
Missouri certifying seed wheat. O Judd Farmer 63:5 Ag 18 '17

Montana

Biggest wheat farm in the world; 200,000 acres of Indian land backed by millions of dollars. P. S. Rose. il Country Gent 83:6-7+ O 26 '18  
Cereal experiments at the Judith basin substation, Moccasin, Mont. N. C. Donaldson. il U S Ag B 398:14-26 '16  
Characteristics and quality of Montana-grown wheat. Coop Manager & F 6:29-32 Jl '17  
Characteristics and quality of Montana-grown wheat. L. M. Thomas. il maps U S Ag B 522:1-34 '17  
Cost of growing wheat on typical non-irrigated areas in Montana. E. L. Currier. Mont Ag Exp B 122:142-61 '18  
Durum wheat made to thrive past season in Montana. R. S. Scott. Coop Manager & F 7:25 Ja '18

Nebraska

Future of wheat growing in Nebraska. W. W. Burr. Neb Ag Bd B 245:270-8 '18  
Nebraska asked to increase the wheat acreage for the 1919 crop. Neb Ag Ext Emergency B 34:1-12 '18  
Rotations and tillage methods in western Nebraska. W. P. Snyder and W. M. Osborn. Neb Ag Exp B 155:10-12 '16

Netherlands

Hybridisation tests between spelt and wheat in Holland. H. M. Gmelin. Int R Sci & Prac Ag 8,no 9:1236-9 S '17

Nevada

Grain production in Nevada. C. S. Knight. il Nev Ag Exp B 89:5-28 '17

New Hampshire

Wheat growing in New Hampshire. F. W. Taylor. N H Ag Ext Press B 73 1p '17

New Mexico

Wheat. R. L. Stewart. il N M Ag Exp B 109:1-29 '18

New York

Wheat crop of New York. H. E. Wellman. Rural N Y 76:958 Ag 11 '17

New Zealand

Frost and wheat; the damaged Canterbury crops. A. H. Cockayne. il J Ag New Zealand 12:1-10 Ja '16  
Wheat-growing in the North island. W. D. S. MacDonald. J Ag New Zealand 15:1-8 Jl '17

North Carolina

Growing of wheat in eastern North Carolina. R. W. Freeman. il N C Ag Ext C 71:1-8 '18 (rev. C. 53)

North Dakota

North Dakota wheat for 1916. E. F. Ladd. N D Ag Exp B 119:51-61 '16

Ohio

Conditions of wheat and percentage of last year's crops remaining on farms March 1, 1918. Ohio Ag Dept B v 9:29-38 My '18  
Increasing Ohio's wartime yield of wheat. Ohio F 142:3 Jl 6 '18  
Lessons from the wheat crop of 1915; the Wooster experiments. C. E. Thorne. Ohio Ag Exp B v 1:215-17 Jl '16  
More wheat in 1919. C. G. Williams. Ohio F 142:70, 90, 114, 161, 191 Jl 27-Ag 10, 24-31 '18  
Ohio wheat experiments. Wallaces' F 41:975 Jl 14 '16

Ohio's wheat crop in 1918. map Nat Stock & F 41:400 Jl 21 '17  
Sixty million bushels of wheat for Ohio. C. E. Thorne. il Ohio F 140:131-2 Ag 25 '17

Spring wheat; bread supply may be increased in Ohio by emergency crop. C. G. Williams. Ohio Ag Exp B v 3:67-8 Mr '18

What Ohio tells us about wheat. Prac F 114:273 Ag 15 '18

Wheat experiments. C. G. Williams. il Ohio Ag Exp B 298:449-84 '16

Oregon

Dry farming investigations at the Sherman county branch experiment station. D. F. Stephens and C. E. Hill. il Ore Ag Exp B 144:8-15 '17  
Experiments with spring cereals at the eastern Oregon dry-farming substation Moro, Oreg. D: E. Stephens. il U S Ag B 498:14-26 '17

Russia

Effect of heating seeds upon the development of the plant; experiments made in Russia with wheat. S. J. Worobiew. Int R Sci & Prac Ag 7,no 4:527-9 Ap '16

Southern states

Growing wheat in the cotton belt. T. Butler. Prog F 31:1001 Ag 19 '16  
Profitable wheat production in the South. J. C. Pridmore. il Am Fert 47:52+ S 1 '17  
Profitable wheat production in the South. J. C. Pridmore. (B. 22) 8p il n. d. Soil improvement com., Southern fertilizer assn., Atlanta, Ga.; Same. Am Fert 47:52+ S 1 '17  
Time for seeding oats and wheat in the cotton belt. Prog F 32:879 Ag 18 '17  
Wheat production in the cotton belt. J. F. Duggar. Prog F 32:881 Ag 18 '17  
Wheat the present opportunity of the cotton belt. J. F. Duggar. Prog F 31:1293 N 4 '16

Sweden

Experiments in the improvement of wheat at Svalöf, Sweden. N. Nilsson-Ehle. Int R Sci & Prac Ag 7,no 3:354-6 Mr '16  
Fylgia, extra squarehead III, sol II, pansar, thule II, varieties of wheat selected at Svalöf, Sweden. H. Nilsson-Ehle. Int R Sci & Prac Ag 8,no 2:218-24 F '17  
Most favourable times for sowing wheat and rye at Alnarp. L. Forsberg. Int R Sci & Prac Ag 8,no 12:1216-17 D '17  
Selection of spring wheat in Sweden. H. Nilsson-Ehle. Int R Sci & Prac Ag 8,no 9:1253-6 S '17

United States

Agricultural situation for 1918: wheat; more wheat is needed for home use and for the allies. U S Ag C 90:1-32 '18  
Condition of winter wheat and rye; average for past ten years on April 1. Am Fert 44:26 Ap 15 '16  
Crop conditions very favorable; estimated acreage of spring wheat. B. W. Snow. O Judd Farmer 64:507 My 11 '18  
Crop prospects unfavorable; heavy shortage in spring wheat acreage. B. W. Snow. O Judd Farmer 60:10 My 13 '16  
Distribution among the states of surpluses and deficiencies from the 1917 wheat crop. Econ World (128 Water st, N.Y. 25c) n s 14:734 N 24 '17  
First act of food administrator. Wallaces' F 42:1141 Ag 17 '17  
Geography of wheat prices; summary of conditions affecting farm prices of wheat in different parts of the United States. L. B. Zapoleon. maps U S Ag B 594:1-46 '18  
Government to buy wheat. Hoard's D 54:152 Ag 31 '17  
Grievance of the spring wheat growers. F. O'Hara. Catholic World (120-122 W. 60th st, N.Y. 25c) 106:380-7 D '17  
Growing winter wheat on the great plains. E. C. Chilcott and J. S. Cole. Farmers' B 895:1-12 '17  
Hoarding wheat is dangerous proposition for farmers. Coop Manager & F 7:77 N '17  
1917 wheat crop at \$2.20. Ag Digest 2:651 O '17

Wheat—United States—*Continued*

- Observations on the wheat harvest of 1916. C. G. Williams. Ohio Ag Exp B v 1:323-4 N '16
- Our wheat supply in 1918. C: W. Holman. *mim* 5p '18 U.S. Food administration, Washington, D.C.
- Plans under way to insure adequate wheat production in U.S. in 1919. Weekly N L 5:8 Je 12 '18
- Rejecting government wheat prices. C: W. Stokes. *il Country Gent* 82:1307-8 Ag 25 '17
- Significance of Mr Hoover. North Am Review (171 Madison av, N.Y. 35c) 206:357-60 S '17
- Spring wheat acreage suggested for 1918. Weekly N L 5:2 F 27 '18
- Uncertain spring wheat acreage questions success, of \$2.20 price. B. W. Snow. O Judd Farmer 64:9 Mr 9 '18
- United States Food administration; policies and plan of operation; wheat flour and bread. 171p '17 U. S. Food administration, Washington, D.C.
- Washington and the farmer. Am Coop J 13: 3+ S '17
- Western farmer on wheat. G. S. Gordon. *il Rural N Y* 76:1105 S 22 '17
- Wheat and rye conference between the officials of the Department and representatives of the eleven central winter wheat-growing states, Chicago. Weekly N L 6:2 Ag 14 '18; Same abr. Breeder's Gaz 74:161 Ag 1 '18
- Wheat for 1917 on \$2.20 basis. O Judd Farmer 63:4 S 15 '17
- Wheat growing in the southeastern states. C. E. Leighty. Farmers' B 885:1-14 '17
- Why the price of wheat was fixed at \$2.20 a bushel. Prac F 113:320 S 15 '17
- Why there is no grain combine. J. Barnes. Am Coop J 12:375 Ja '17
- Winter wheat discouraging; comparison of 1916 prospects with other years. O Judd Farmer 60:14 Ap 15 '16
- Winter wheat in the great plains area; relation of cultural methods to production. E. C. Chilcott and others. map U S Ag B 595:1-35 '17
- Winter wheat yield of 572,000,000 bushels, department's forecast. Weekly N L 5:1 My 22 '18
- World food supply in sight. B. W. Snow. O Judd Farmer 64:617+ Je 15 '18  
*See also* Wheat—Standards
- Virginia**
- Summary of report on wheat marketing investigations. B. C. Moomaw, jr. Va Ag Dept B 119:5-7 Jl '17
- Washington**
- Increasing the production of wheat on Washington dry farms by better cultural methods. B. Hunter. *il Wash Ag Ext Ser* 1, no 40: 1-16 '18
- Wheat investigations of the Washington experiment station. I. D. Cardiff. Coop Manager & F 6:38 F '17
- Western states**
- War wheat plungers. R. R. Howard. *il Country Gent* 82:2001-2+ D 22 '17
- Wisconsin**
- Why Wisconsin should sow spring wheat. R. A. Moore. Wis Ag Ext C 101 4p '18
- Wyoming**
- Cereal experiments on the Cheyenne experiment farm, Archer, Wyo. J. W. Jones. *il U S Ag B* 430:12-24 '16
- Wheat aphid**
- Western wheat aphid. J. R. Parker. *il J Econ Entom* 9:182-7 F '16
- Wheat bunt.** *See* Wheat smut
- Wheat conservation**
- \* Barley bread, optimum reaction and salt effect. L. L. Landenberger. Science (Science Press, Garrison, N.Y. 15c) n s 48:269-70 S 13 '18
- Chemical analysis of wheat-flour substitutes and of the breads made therefrom. J. A. Le Clerc and H. L. Wessling. *il U S Ag B* 701: 1-10 '18
- Conservation of wheat. H. Snyder. Science (Science Press, Garrison, N. Y. 15c) n s 47:429-33 My 3 '18
- Conserve wheat? yes! Banker-F 5:10 O '18
- Conserving wheat and consuming corn. H. N. Lawrie. Oregon Voter (Portland, Ore. 10c) 12:80-1+ Ja 19 '18
- Décret ministériel fixant les règles à suivre pour la mouture du froment en Italie. Int Yearbook Ag Leg 1916:128-30 '17
- Décret n. 2691 portant diverses mesures concernant la production de la farine et la fabrication et la vente du pain de froment en Portugal. Int Yearbook Ag Leg 1916: 153-5 '17
- Entirely wheatless hot breads. A. G. Vestal. Power F 27:36 O '18
- Experiment in teaching citizenship; lessons in the use of substitute flours. E. M. Routh. J Home Econ 10:311-13 Jl '18
- Flour and war bread. J. Cox. Utah Ag Ext C v 6, no 16 8p '18
- Flour saving. Mrs C: Johnston. Rural N Y 77:964 Ag 10 '18
- Flour substitutes. Weekly N L 4:7 Jl 11 '17
- Food conservation show makes wheat flour a drug on local market. J. C. Beukema. Am City (Tribune bldg., N.Y. 35c) 19:59-61 Jl '18
- How to use other cereals. Wis Ag Ext C 105: 1-12 '18
- Making food from fodder. O. R. Geyer. *il Scientific Am* (233 Broadway, N.Y. 10c) 117: 177 S 8 '17
- Measures for protecting wheat-flour substitutes from insects. R. N. Chapman. Science (Science Press, Garrison, N. Y. 15c) n s 47:579-81 Je 14 '18
- Mill sales of wheat flour to farmers. *mim* 3p '18 U.S. Food administration, Washington, D.C.
- Milling 1918 wheat crop. Coop Manager & F 8:30 N '18
- Oats, peas, beans, and barley grows. Gard M 27:272 Jl '18
- Ordonnance du Board of trade pour 1916 visant le gaspillage du froment en Grande-Bretagne et en Irlande. Int Yearbook Ag Leg 1916:111-12 '17
- Over the top in baking. M. Corbould. *il Ohio Ag Exp B v* 3:303-8 O '18
- \* Patriotic loaf. M. J. Crosby. *il Good House-keeping* (119 W. 40th st, N.Y. 20c) 67:50 N '18
- \* Proposed temporary suspension of the internal revenue act on mixed flour. (In Official statement no. 5, p. 8-9) '18 U.S. Food administration, Washington, D.C.
- Quinoa, a South American cereal. E. Albes. *il Pan Am Union B* (17th and B sts, N.W. Washington, D.C. 25c) 47:51-61 Jl '18
- \* Release from the no-wheat pledge. (In Official statement no. 3, p. 7) '18 U.S. Food administration, Washington, D.C.
- Serving meals without wheat. J Home Econ 10:131-2 Mr '18
- Seventy-five per cent subs for summer. Power F 27:26 Je '18
- Some experiments with wheat substitutes. C. E. Gray. *il J Home Econ* 10:348-52 Ag '18
- Study of yeast bread with substitute flours. E. Sprague. *il J Home Econ* 10:272-9 Je '18
- \* Substitute bread. K. Heppie. *il Sci Am* (233 Broadway, N.Y. 10c) 119:415 N 23 '18
- Substitute breads, biscuits and muffins. B. M. Terrill. Vt Ag Ext C 13:1-8 '18
- Substitutes for wheat and meat. J. Whitacee. (In Ohio vegetable growers' assn. directory, 1918, p. 13-14) n.d. Ohio vegetable growers' assn., Columbus
- \* Les succédanés du blé dans le pain de munition. Balland. Revue Scientifique (41 rue de Châteaudun, Paris 90c) 56:353-6 Je 15 '18
- To fight starvation we must save wheat. Banker-F 5:7 My '18
- Until harvest. Hoard's D 55:478 Ap 5 '18
- Use of wheat flour substitutes in baking. H. L. Wessling. Farmers' B 955:1-22 '18



**Wheat conservation—Continued**

- Use of wheat-saving cereals. H. L. Green and others. (C. 9) 12p '18 Kansas State council of defense, State House, Topeka
- Use of wheat substitutes. Ia Ag Ext Emergency Leaflet 421-1 '18 (rev.)
- Using wheat substitutes. B. M. Terrill. Vt Ag Ext C 121-4 '18
- West Indian flour substitutes. H. D. Baker. (Commerce Reports no. 238) p 158-9 (O 11) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.
- Wheat conservation program. (In Official statement no. 4, p. 4-7) '18 U.S. Food administration, Washington, D.C.; Same. Power F 27:44 O '18; Same. Hoard's D 56: 258 S 20 '18; Same. Coop Manager & F 8:88 O '18
- Wheat conservation program for the United States. (B. 12) 15p U. S. Food administration, Washington, D.C.
- Wheat flour allowance; until the next harvest use wheatless breads and cake. J Home Econ 10:183-6 Ap '18
- Wheat-flour substitutes. M. K. Corbould. il Ohio Ag Exp B v 2:213-14 Jl '17
- Wheat flour substitutes. J. A. LeClerc. il Ia Ag Coll B v 16, no 33:1-16 '18
- Wheat only for human food—Hoover. O Judd Farmer 65:372 O 26 '18
- Wheat saving. R. Wheeler. Ill Univ (Urbana) B v 15, no 24 4p F '11 '18
- Wheat situation—how to meet it. N. Iddings. il Purdue Ag 12:574-6 Je '18
- Wheat substitutes. 31p 10c '18 Food conservation office, 77 Washington st, Providence, R.I.
- Wheat substitutes and how to use them. E. E. Walker. Wash Ag Ext Ser 1, no 38 4p '18
- Wheat substitutes: suggestions for conservation of wheat for the spring and summer of 1918. K. R. McMurray. (War papers no. 3) '18 Oberlin college, Oberlin, Ohio
- Wheatless day rule rescinded. O Judd Farmer 65:241 S 21 '18
- Wheatless recipes. N. H. Ag Ext C 40 4p '18
- Women's clubs and the war foods. M. G. Phillips. Am Bee J 58:237 Jl '18
- Wheat contests.** See Wheat—Exhibits
- Wheat corporation.** See United States Food administration grain corporation
- Wheat handling**  
Handling and storage of spring wheat. C. H. Bailey. Am Soc Agron J 9:275-81 S '17
- Wheat hay**  
Investigations into factors affecting the handling of wheat hay, including a study of its digestibility. A. I. Perkins and others. Int R Sci & Prac Ag 7, no 9:1287-9 S '16
- Wheat isosoma**  
Joint-worm in Michigan. R. H. Pettit. il Mich Ag Ext B 16 4p '18
- New species of isosoma attacking wheat in Utah; wheat sheath worms and wheat straw worms. R. W. Doane. il J Econ Entom 9:398-401 Ag '16
- Report on isosoma investigations. W. J. Phillips. il J Econ Entom 10:139-46 F '17
- Wheat jointworm and its control. W. J. Phillips. il Farmers' B 1006:1-14 '18
- Wheat straw worm. R. W. Doane. il Cal State Comm Hort B v 5:69-72 F '16
- Wheat midges**  
Controlling the midge in Ohio wheat fields. H. A. Gossard. Ohio Ag Exp B v 3:233-5 Ag '18
- Wheat midge. E. S. Jones. Ohio F 141:677 My '18 '18
- Wheat midge in rye. Wallaces' F 41:926 Je 30 '16
- Wheat milling**  
Answering wheat and flour questions. E. E. Cross. Nat Stock & F 41:646 O 6 '17
- Milling of wheat in Victoria. P. R. Scott and F. G. B. Winslow. J Dept Ag Victoria 15: 349-57 Je '17
- Wheat offals**  
Composition and classification of wheat offals. T. B. Wood and R. H. Adie. J Bd Ag 23:1179-86 Mr '17

Wheat offals and their adulteration. M. Sirot and G. Josef. Int R Sci & Prac Ag 7, no 12:1841-3 D '16

**Wheat scab**

- About wheat scab. A. I. Selby. O Judd Farmer 63:9 Ag 11 '17
- Corn-rootrot and wheatscab. G. N. Hoffer and others. J Ag Research 14:611-12 S 23 '18
- More about wheat scab. O Judd Farmer 63:4 Ag 18 '17

**Wheat sheath miners**

- Wheat-sheath miner. H. L. Seamans. bibliog J Ag Research 9:17-25 Ap 2 '17

**Wheat smut**

- Comparative smut resistance of Washington wheats. E. F. Gaines. Am Soc Agron J 10: 218-22 My '18
- Control of wheat and oat smuts. J. A. Elliott. il Ark Ag Exp C 43 3p '18
- Differences between the species of *tilletia* on wheat. A. A. Potter and G. W. Coons. bibliog il Phyt 8:106-13 Mr '18
- Experiments on smut-resisting powers of different varieties of wheat. O. Von Kirchner. Int R Sci & Prac Ag 7, no 7:1034-7 Jl '16
- Identification of smut in wheat. Wallaces' F 43:1252 S 6 '18
- Observations on the pathological morphology of stinking smut of wheat. M. F. Barrus. il Phyt 6:21-8 F '16
- Possible new fungicide for wheat and barley smut. W. W. Mackie. Science (Science Press, Garrison, N.Y. 15c) n s 48:515-16 N 22 '18
- Prevention of bunt. G. P. Darnell-Smith. Ag Gaz of New South Wales 28:185-9 Mr '17
- Prevention of smut. Power F 25:26 Ag '16
- Protect your wheat from smut. J. Murray. il J Ag (Quebec) 21:133 Mr '18
- Smut diseases of wheat. W. B. Mercer. il J Bd Ag 23:633-43 O '16
- Smuts of wheat and oats. J. F. Duggar. Prog F 32:1162 N 3 '17
- Stinking smut of wheat. G. H. Coons. il Mich Ag Ext B 16 4p Ag '18
- Stinking smut of wheat. F. D. Heald. Wash Ag Exp Pop B 115:1-14 '18
- Treating wheat for smut. Wallaces' F 43:1082 Jl 26 '18

**Wheat thrrips**

- New wheat thrrips. E. O. G. Kelly. il J Ag Research 4:219-24 Je '15

**Wheat trade**

- Future trading in wheat. L. D. H. Weld. il Country Gent 82:1701 N 3 '17
- How I study the news while holding wheat. F. H. Higgins. il map System on the Farm 1:30-2 Mr '17
- Important questions answered concerning plan worked out and approved by the Grain corporation. E. J. Smiley and F. Piazek. Coop Manager & F 7:30 Ag '18
- Warring nations need American wheat. Am Coop J 11:490+ Ja '16
- World's wheat acreage is reduced. Am Coop J 11:930-1 My '16
- World's wheat markets advance. Am Coop J 11:1212+ Ag '16
- See also Grain trade; United States Food administration grain corporation

**Regulation**

- Government control of the wheat trade in the United States. W. M. Duffus. Am Econ Review (Ithaca, N.Y. \$1.25) 8:62-87 Mr '18
- President authorizes wheat purchase—executive order. W. Wilson. Weekly N L 5:4 Jl 3 '18

**Statistics**

- Australian 1917-18 wheat crop. H. A. Treat. (Commerce Reports no. 245) p 243 (O 18) '18
- U. S. Bur. of foreign and domestic commerce, Washington, D. C.
- Australia's 1917-1918 wheat crop relatively small. Econ World (128 Water st, N.Y. 25c) n s 15:159 F 2 '18
- Average yield of wheat by states for twenty years. Ky Ag Dept Rep 1916-1917:292 '18

**Wheat trade—Statistics—Continued**

- Bulk handling of wheat—facts on bond issue: synopsis of report by G. B. Hegardt to the Portland dock commission. Oregon Voter (Portland, Ore. 10c) 9:8-15+ Ap 7 '17
- Commercial stocks of wheat and flour in the United States on August 31, 1917. U S Ag C 100:1-37 '18
- Commercial stocks of wheat, flour, and other wheat food products such as wheat breakfast foods, macaroni, and spaghetti. U S Food Surveys 2:1-12 S 6 '18
- Commercial stocks of wheat, wheat flour, and miscellaneous wheat food products. U S Food Surveys 1:3-15 My 18 '18
- Conditions of wheat and percentage of last year's crops remaining on farms March 1, 1918. Ohio Ag Dept B v 9:29-38 My '18
- Distribution among the states of surpluses and deficiencies from the 1917 wheat crop. Econ World (128 Water st, N.Y. 25c) n s 14: 734 N 24 '17
- Estimated production in 1916 of the different varieties of wheat in the three spring-wheat states. Monthly Crop Rep 3:48 Je '17
- Estimated wheat surplus and deficiency, by states. Monthly Crop Rep 3:99 O '17
- Estimated wheat surplus and deficiency by states. Monthly Crop Rep 4:123 O '18
- Facing a wheat shortage. S. R. Winters. Field II 28:331 My '18
- \* Fall wheat and spring wheat in Ontario. (In Report, Bur. of industries, 1917, p. 28) '18 Ontario ag. dept., Toronto
- Farm stocks March 1, 1917, and shipments out of country. Monthly Crop Rep 3:22 Mr '17
- Geography of wheat prices: summary of conditions affecting farm prices of wheat in different parts of the United States. L. B. Zapoleon. maps U S Ag B 594:1-46 '18
- \* Monthly summary on the wheat and flour position. March, 1918. (In Official statement no. 1, p. 8) '18 U.S. Food administration, Washington, D.C.
- Reports commercial wheat June 1, as 17,068, 487 bushels. Weekly N L 5:11 Jl 24 '18
- Statistical notes on cereals; studies on yield, trade, consumption and prices, with rates of ocean freight. (no. 4) p 13-32 (O) '16 Bur. of statistics, Int. inst. of ag., Rome
- Survey shows wheat stocks nearly triple 1917 figures. Weekly N L 6:13 O 9 '18
- Wheat and flour. Weekly N L 5:6 Mr 20 '18
- Wheat crop of 1917; area sown to winter cereals, and recent conditions. T. K. Doherty. Ag Gaz of Canada 5:643-7 Je '18
- Wheat in the United States and other countries, including exports and imports. See United States Department of agriculture Yearbooks
- Wheat, yields per acre and prices, by states, 50 years 1866-1915. U S Ag B 514:1-16 '17
- Where the wheat is held. Monthly Crop Rep 4:24 Mr '18
- Winter wheat and rye. Am Fert 48:31 Ja 5 '18
- Winter wheat: planted compared with harvested acreage. Monthly Crop Rep 4:76 Jl '18
- Wheelbarrows**
- Home-made wheelbarrow. S. A. Gant. il Swine World 5:16 Jl '18
- Wheels.** See Tires; Tractors—Wheels
- When Mildred promised:** story. R. B. Rushing. il Rural N Y 77:705 My 18 '18
- Whey**
- Disposing of fat when whey is skimmed at the cheese factory. N Y Prod R 44:70 My 9 '17
- Feeding whey to hogs. J. A. Macdonald. Rural N Y 75:822 My 27 '16
- Handling whey. N Y Prod R 46:942 O 16 '18
- Handling whey after drawing from the vat—profits in separating. N Y Prod R 46:584 Ag 14 '18
- Marketing whey butterfat. N Y Prod R 45:716 Mr 13 '18
- Skimming whey. J. E. McMurray. N Y Prod R 46:999 O 23 '18
- Skimming whey; arrangements for paying patrons in cooperative and private plants. N Y Prod R 41:820 Mr 8 '16
- Skimming whey at Vermont cheese factories. H. B. Ellenberger and M. R. Tolstrup. Vt Ag Dept B 26:1-10 '16
- Skimming whey in Vermont cheese factories. N Y Prod R 45:616 F 27 '18
- Value of whey. N Y Prod R 43:584 F 7 '17
- Value of whey as fertilizer and food for man and beast—possibilities of primost. J. L. Sammis. N Y Prod R 45:750 Mr 20 '18; Same. Hoard's D 55:1063 Jl 19 '18
- Value of whey returned to farms for feeding purposes. N Y Prod R 46:894 O 9 '18
- Whey butter to be labeled. C. E. Lee. Hoard's D 53:859 Je 15 '17
- Whey cream profits and their relation to the price charged for making cheese. N Y Prod R 43:946 Ap 4 '17
- Pasteurization**
- Pasteurization of dairy by-products; with discussion. R. S. Breed. N Y Ag Dept B 80: 1507-12 F '16; Same. N Y Ag Rep 1916, pt 3:1507-12 '17
- Pasteurization of dairy by-products (B. 412). W. D. Dotterrer and R. S. Breed. bibliog N Y State Exp Rep 1915:207-36 '16; Excerpt. N Y Prod R 41:1000+ Ap 5 '16
- Pasteurization of factory by-products at low cost. J. L. Sammis. Hoard's D 53:786 Je 1 '17
- Pasteurization of skim milk and whey; with discussion. A. L. Brockway. N Y Ag Dept B 80:1513-27 F '16; Same. N Y Ag Dept Rep 1916, pt 3:1513-27 '17
- Pasteurization of skim milk and whey as food for calves. V. A. Moore. bibliog N Y Ag Dept B 81:1780-97 Mr '16; Same. N Y Ag Dept Rep 1916, pt 3:1780-97 '17; Same. Am Vet M Assn J 49:365-80 Je '16
- Pasteurizing whey. N Y Prod R 43:400-1 Ja 3 '17
- Pasteurizing whey at Swiss cheese factories. Hoard's D 55:1027 Jl 12 '18
- Whey pasteurization. N Y Prod R 45:446 Ja 30 '18
- Whey tank. N Y Prod R 43:772 Mr 7 '17
- Whieldon, Thomas, d. 1798**
- Whieldon ware. il Country Life 32:74 Je '17
- Whippets**
- Whippet—a racing dog. W. A. Dyer. il Country Life 33:62-3 Ap '18
- Whippoorwills**
- Night-hawks and whip-poor-wills. A. A. Allen. il Am For 24:615-18 O '18
- Whip-poor-will. C. J. Hawkins. il Country Life 31:128 Mr '17
- White, Frank M.**
- Engineer White at your service. A. C. Page. por O Judd Farmer 63:3 D 15 '17
- White ants.** See Termites
- White-barked pine.** See Pine
- White cedar.** See Cedar
- White Christmas;** a shepherd's Christmas story. H. B. Arbuckle. Am Sheep B & W 37:742-5; 38:52-4 D '17-Ja '18
- White clover.** See Clover, White
- White flies**
- Aleyrodidae, or white flies attacking the orange, with descriptions of three new species. A. L. Quaintance and A. C. Baker. bibliog il J Ag Research 6:459-72 Je 19 '16
- Controlling the white fly. C. W. Waid. Market Growers J 21:104 S 1 '17
- Miscible oil versus fish-oil-soap sprays for the control of Florida aleyrodids. E. A. Back and S. S. Crossman. bibliog J Econ Entom 10:453-8 O '17
- Notes on snow flies; with the description of a new species (aleurodes alboflocosa). W. W. Froggatt. il Ag Gaz of New South Wales 29:434-6 Je '18
- On delphastus catalinae, a valuable ladybird enemy of the white flies. H. S. Smith and E. J. Branigan. il Cal State Comm Hort B v 5:448-50 D '16
- Red aschersonia; usefulness as a whitefly destroyer. Fla State Plant Bd Quar B v 1: 177-8 Jl '17



**White flies—Continued**

Whiteflies of citrus. E. W. Berger. *il Cal State Comm Hort B v 6:298-306* Jl '17  
 White fly. *Am Flor 46:152* F 5 '16

**White goods.** See Textile industry and fabrics**White grubs**

Chemical feeding analysis of white grubs and may-beetles (lachnosterna) and its economic application. J. J. Davis. *J Econ Entom 10: 41-4* F '17

Common white grubs. J. J. Davis. *il maps Farmers' B 940:1-28* '18 (B. 543 rev.)

Control of the common white grub. R. T. Cotton. *il Porto Rico Insular Exp C 12:1-7* '18

Experimental work on the control of the white grubs of Porto Rico. R. T. Cotton. *J Dept Ag Porto Rico 2:1-18* Ja '18

Fighting white grubs. *Hoard's D 51:647* My 5 '16

Habits and control of white grubs in Manitoba. N. Criddle. *il Ag Gaz of Canada 5: 449-54* My '18

Hateful white grub. *il Rural N Y 77:1021* Ag 31 '18

How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B 835:16-17* '17

Influence of trees and crops on injury by white-grubs. S. A. Forbes. *Ill Ag Exp B 187:261-5* '16

Lachnosterna records in Wisconsin. J. G. Sanders and S. B. Fracker. *il map J Econ Entom 9:253-61* Ap '16

\* North American species of the genus tiphia (hymenoptera, aculeata) in the collection of the Illinois state natural history survey (parasitic on white grubs). J. R. Malloch. (B. v. 13, Article 1) 24p *il '18 Ill. State nat. history survey, Urbana*

Progress report on white grub investigations. J. J. Davis. *il J Econ Entom 9:261-81* Ap '16

Studies on the life-history of two Kansas scarabæidæ (Coleop.). W. P. Hayes. *bibliog J Econ Entom 11:136-44* F '18

White grub control. *Am Flor 46:729* Ap 22 '16

White grub injury anticipated—crops to plant in damaged fields; Control measures. *Weekly N L 5:9, 12* Jl 3 '18

White grub investigation—a brief report of progress. A. Gibson. *il Ag Gaz of Canada 4:554-6* Jl '17

White grubs and grasshopper work. *Wis Ag Dept B 10:45-50* '16

White grubs in Iowa. R. L. Webster. *il map Ia Ag Exp C 29:1-4* '16

White-grubs injuring sugar cane in Porto Rico. E. G. Smyth. *bibliog il J Dept Ag Porto Rico 1:47-92, 141-69* Ap-Jl '17

**White grubs as food**

Lachnosterna larvæ as a possible food supply. L. O. Howard. *J Econ Entom 9:389-92* Ag '16

**White-marked tussock moths**

High school gives battle to the tussock moth. I. J. Mathews. *il Am City—City ed (Tribune bldg., N.Y. 35c) 17:325-6* O '17

Insect enemies of shade trees and shrubs. M. W. Blackman and W. O. Ellis. *il N Y State Coll For B v 16,no 26:29-33* '16

White-marked tussock moth. *il Conn State Ag Exp Rep 1916,pt 2:105-11* '17

White marked tussock moth. A. G. Ruggles. (*In Report State entomologist, 1915-1916, p. 68-70*) *il '16 Minn. ag. exp. station, St Paul; Same. (C. 42) 3p il '17 Minn. State entomologist, St Paul*

White marked tussock moth. R. L. Webster. *il Ia Ag Exp C 33:1-4* '16

White marked tussock moth. H. C. Yingling. *il Ohio Ag Exp B v 1:265-70* S '16

**White mountains**

Looping the loop in the White mountains. W. A. Dyer. *il map Country Life 29:90* Mr '16

White oak. See Oak

White pine. See Pine

White-pine blister rust. See Pine blister rust

White-pine weevils. See Pine weevils

White plymouth rocks. See Plymouth rocks (poultry)

White rat; story. B. A. Williams. *il Country Gent 83:10-11+* Je 15; 10-11 Je 22 '18

White sapote. See Sapote, White

**White snakeroot**

Eupatorium ageratoides, the cause of trembles. R. S. Curtis and F. A. Wolf. *bibliog il J Ag Research 9:397-404* Je 11 '17

Eupatorium urticaefolium as a poisonous plant. C. D. Marsh and A. B. Clawson. *bibliog il J Ag Research 11:699-716* D 24 '17; Excerpts. (A. I. 26) 6p *il '18 U S Ag*

Monograph on trembles or milksickness and white snakeroot. F. A. Wolf and others. *il N C Ag Exp Tech B 15:1-74* '18; Abstract. *Am Vet M Assn J 52:820-7* Mr '18

White snakeroot a poisonous plant. A. D. Selby. *il Ohio Ag Exp B v 2:13-14* Ja '17

White spruce. See Spruce

White-throated sparrows. See Sparrows

**Whitefish**

Breeding of white fish in Switzerland. *Int R Sci & Prac Ag 7,no 1:112-14* Ja '16

**Whitewash**

How to make whitewash. *Prog F 31:212* F 12 '16

Practical substitutes for oil paints. G. H. Dacy. *Rural N Y 77:1285* N 16 '18

Some whitewash recipes. Wallaces' *F 42:722* Ap 27 '17

To make whitewash. G. H. Glover. *Reliable P J 23:276* Ap '16

Whitewash for barns. Wallaces' *F 43:659* Ap 12 '18

Whitewash or lime paint. *Rural N Y 76:285* F 24 '17

White-wash recipe. H. W. Potts. *N Y Prod R 43:1065* Ap 25 '17

Whitewash the poultry houses. K. Perkins. *Prog F 32:862* Ag 11 '17

Whitewood. See Tulip poplar

Whitlow grass. See Drabas

Why Air Castle lost the farmer's trade. *Ohio F 140:406* N 3 '17

Wild barley. See Squirreltail grass

**Wild carrot**

Noxious roadside weeds. T. Jones. *il Ohio F 137:559* Ap 15 '16

Wild cotton trees. See Kokio

**Wild cucumber**

Seeds of the echinocystis oregana. M. R. Daughters. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10: 126-7* F '18

Wild flowers. See Flowers

**Wild garlic**

Eradication of wild onion. T. K. Wolfe. *il Hoard's D 53:767* My 25 '17

Garlic flavor in milk. *Weekly N L 4:1* F 14 '17; Same. *Jersey B 36:1011* Je 27 '17; Same cond. *Prog F 32:476* Ap 14 '17

He killed the garlic. J. H. Rittenhouse. *Nat Stock & F 42:151* My 4 '18

Kill garlic and wild onion by oil spraying. A. D. Selby and D. R. Van Atta. *il Ohio Ag Exp B v 1:355-8* D '16

Weeds of New South Wales. J. H. Maiden. *il Ag Gaz of New South Wales 27:110-12* F '18

Wild garlic. L. Roubesh. *il Nat Stock & F 42:103, 306* Ap 20, Je 22 '18

Wild onion: methods of eradication. H. R. Cox. *il map Farmers' B 610:1-11* '18 (rev.)

Wild onion or onion weed. J. H. Maiden. *il Ag Gaz of New South Wales 27:335-8* My '16

Wild onion pest. *Weekly N L 4:6* My 16 '17

Wild geese. See Geese, Wild

**Wild melon**

Feeding experiments with wild melon fruit. S. Dodd. *Ag Gaz of New South Wales 28: 815-19* N '17

Wild mustard. See Mustard, Wild

Wild oats. See Oats, Wild

Wild onion. See Wild garlic

Wild west shows. See Pendleton roundup

**Williams county (N.D.) better farming association**  
4th annual convention held at Williston, Dec. 12-15. Coop Manager & F 6:48-50 Ja '17

# **Willow**

Conspectus of Mexican, West Indian, Central and South American species and varieties of salix. C. Schneider. Bot Gaz 65:1-41 Ja '18  
Destroying willow stumps. H. E. Cox. Rural N Y 75:184 F 5 '16

Notes on American willows. C. Schneider. Bot Gaz 66:117-42, 318-53 Ag, O '18

Salix blanda. Am Flor 48:1046 My 26 '17

Trees of Vermont; the willows. G. P. Burns and C. H. Otis. il Vt Ag Exp B 194:54-9 '16

White willow a valuable asset for Minnesota planter. H. J. Ludlow. il Minn Hort 46:400-2 N '18

Willows; identification and characteristics. S. B. Detwiler. il map Am For 23:3-10 Ja '17

Willows; their growth, use, and importance. G. N. Lamb. il U S Ag B 316:1-52 '15

See also Osiers

## **Diseases and pests**

Aeriferous tissue in willow galls. A. Cosens and T. A. Sinclair. il Bot Gaz 62:210-25 S '16

Undescribed canker of poplars and willows caused by cytospora chrysosperma. W. H. Long. il J Ag Research 13:331-45 My 6 '18

See also Poplar and willow borers

**Willow borers.** See Poplar and willow borers

# **Wills**

Have you made your will? Prog F 32:17 Ja 6 '17

# **Wilson, James**

Portrait. Ag Digest 1:53 Je '16

# **Wilson, Thomas E.**

Packers are people; brief biographical sketch. L. L. Heller. il por Field Il 28:598 Ag '18  
Portrait. Breeder's Gaz 69:955 My 4 '16

# **Wilsons (poultry)**

White Wilsons; new breed of single comb layers, and how I produce them. N. W. Williams. Am P J 49:377 Mr '18

**Wilson's thrush.** See Veeries

# **Wilt disease**

Bacterial diseases of vegetables found in Ontario. D. H. Jones. il Ontario Ag Dept B 240:1-24 '16

Beetles and wilt disease of cucurbits. Market Growers J 18:80 F 1 '16

Dissemination of bacterial wilt of cucurbits. F. V. Rand. il J Ag Research 5:257-60 N 8 '15

Fusarium-blight, or wilt disease of the soybean. R. O. Cromwell. bibliog il J Ag Research 8:421-40 Mr 12 '17

Overcoming cabbage wilt. Wallaces' F 41:841 Je 9 '16

Relation of temperature to the growth and infecting power of fusarium lini. W. H. Tisdale. il Phyt 7:356-60 O '17

Some verticillium diseases. I. G. Jeger and V. B. Stewart. Phyt 8:15-19 Ja '18

Studies on bacterium solanacearum. E. E. Stanford and F. A. Wolf. bibliog map Phyt 7:155-65 Je '17

Study of wilt resistance in the seed-bed. C. W. Edgerton. il Phyt 8:5-14 Ja '18

Transmission and control of bacterial wilt of cucurbits. F. V. Rand and E. M. A. Enlows. il J Ag Research 6:417-34 Je 12 '16

Watermelon wilt disease. Prog F 31:767 Je 10 '16; Same. Market Growers J 19:6 Jl 1 '16; Same cond. Am Flor 46:1068 Je 3 '16

Wilt disease of the columbine. J. J. Taubenhaus. il Phyt 6:254-7 Je '16

Wilt diseases of okra and the verticillium-wilt problem. C. W. Carpenter. bibliog il J Ag Research 12:529-46 Mr 4 '18

See also Banana wilt; Cotton wilt; Flax-wilt; Peanut wilt; Tobacco wilt; Tomato wilt

**Wilting of plants.** See Plants, Wilting of

**Wind power.** See Windmills

# **Windbreaks**

Belt planting. W. Miller. il Country Life 30:28-9 Ag '16

Blanket for the farm. il Wallaces' F 42:135 Ja 26 '17

Evergreens for both utility and ornament. E. Ferris. il Minn Hort 44:29-32 Ja '16

Farmstead windbreaks. F. J. Kelleher. il Country Gent 81:920 Ap 29 '16

Indispensable shelter belt. J. W. Maher. il Minn Hort 46:337-43 S '18

Moving the farm south. il Wallaces' F 41:160 F 4 '16

Orcharding in Minnesota. R. Wellington. il Minn Hort 44:39-41 Ja '16

Ornamental windbreaks. W. E. Bontrager. il Ohio Ag Exp B v 2:82-4 Mr '17

Renewing the shelterbelt; with combinations of species for planting. G. B. Macdonald. Ia Ag Exp C 27:1-16 '16

Renewing the windbreak. il Wallaces' F 41:636 Ap 21 '16

Shelter belt for orchard and home grounds. il Minn Hort 44:379-86 O '16

Shelter belts. Gard Chron (Lond) 59:126 Mr 4 '16

Where the wind blows. F. A. Waugh. il Country Gent 83:1+ Je 29 '18

Windbreak as a farm asset. C. G. Bates. il Farmers' B 788:1-15 '17

Windbreaks by the mile. T. A. Hoverstad. il Minn Hort 45:326-31 Ag '17

Wind-breaks for fruit-farms. J. H. Simmonds. J Ag New Zealand 15:253-62 N '17

Windbreaks for prairie homes. O Judd Farmer 60:19 F 5 '16

# **Windmills**

Care of windmills. I. W. Dickerson. Wallaces' F 43:126 Ja 25 '18

Homemade windmill. R. H. Smith. il Rural N Y 75:149, 181 Ja 29-F 5 '16

Light from a windmill. N. D. Rand. Country Gent 83:17 Mr 30 '18

Use of windmills in irrigation in the semiarid West. P. E. Fuller. il Farmers' B 866:1-37 '17

Utilizing the power of air and water. F. W. Ives. il Ohio F 139:605 Ap 28 '17

**Window boxes.** See Window gardening

# **Window gardening**

All-season porch boxes. S. A. Hamilton. il Country Gent 83:59 Ja 19 '18

Home garden; growing flowers from bulbs indoors. il Country Gent 83:31 N 2 '18

Movable window garden rack. M. G. Kains. il Country Gent 81:222 Ja 29 '16

Window and porch boxes. J. E. Haff. il Country Life 29:44-5 Ap '16

Window boxes. il Am Flor 46:873 My 13 '16

Window boxes. il Am Flor 50:574-5 Ap 6 '18

Window boxes in winter. il Am Flor 49:801-3 N 3 '17

Window garden attractions. C. W. H. Douglass. il Am For 23:424-7 Jl '17

Window garden; fresh flavorings for the cook all winter. E. A. Cassavant. il Country Gent 82:1859 N 24 '17

Window gardening. P. E. Horton. il Purdue Ag 11:38-40 D '16

Winter window boxes and vases. il Am Flor 47:708 O 21 '16

**Window trimming.** See Show windows

# **Windows**

How to repair broken windows. J. Francis. Power F 27:34 Ja '18

# **Windsor, H. G.**

Best farmer in Missouri. J. E. Pickett. por il Country Gent 83:8-9 Ja 5 '18

**Windstorm insurance.** See Insurance, Windstorm

# **Wine yeast**

Contribution to the study of the yeasts of wine. E. Kaiser. Int R Sci & Prac Ag 8,no 1:148-52 Ja '17

Toxic and antagonistic effects of salts on wine yeast (saccharomyces ellipsoideus). S. K. Mitra. Cal Univ Pub Ag Sci v 3, no 5 63-102p il '17 (45c)



**Wines and wine making**

- Alcoholic fermentation of banana must. R. Peratti and V. Riviera. *Int R Sci & Prac Ag* 9, no 5:610-12 My '18
- California wine industry. (*In* Statistical report, 1916, p. 181-91) '17 Cal. State bd. of ag., Sacramento
- California wine industry, with statistics. *Cal Ag Bd Rep* 1917:201-13 '18
- Conditions under which the cold storage industry will render the greatest services to the vine-growing industry in Tunisia. G. Ray. *Int R Sci & Prac Ag* 7, no 9:1347-9 S '16
- Contribution to the study and treatment of the casse blanche of wines. L. Moreau and B. Vinet. *Int R Sci & Prac Ag* 8, no 12:1280-1 D '17
- Contribution to the study of bitter wines. E. Kayser. *Int R Sci & Prac Ag* 8, no 9:1295-7 S '17
- Contribution to the study of the aldehydes of wine. J. Laborde. *Int R Sci & Prac Ag* 8, no 9:1292-4 S '17
- Contribution to the study of the yeasts of wine. E. Kaiser. *Int R Sci & Prac Ag* 8, no 1:148-52 Ja '17
- Home-made wines. F. M. Seymour. *Country Life* 32:72 Ag '17
- Methods for determining the adulteration of wines. U. Pralongo. *Int R Sci & Prac Ag* 9, no 1:109-11 Ja '18
- New alcohol tables; alcoholic strength of Australian wines. W. P. Wilkinson. *J Dept Ag Victoria* 14:487-92 Ag '16
- New method for the separation and estimation of lactic, succinic and malic acid in wine. J. Laborde. *Int R Sci & Prac Ag* 9, no 4:499-501 Ap '18
- New York wine industry. L. J. Vance. *il N Y Ag Dept B* 79, pt 2:1246-67 Ja '16; Same. *N Y Ag Dept Rep* 1916, pt 3:1246-67 '17
- Notes on Portuguese wine varieties. F. de Castella. *il J Dept Ag Victoria* 14:622-8 O '16 (to be cont)
- Passage of wine over fresh lees. P. Carles. *Int R Sci & Prac Ag* 9, no 5:609-10 My '18
- Plastering of grapes and the increase of acidity and sulphates in the wine; investigations in Italy. A. Borntraeger. *Int R Sci & Prac Ag* 8, no 11:1138-40 N '17
- Process of vinification. L. A. Musso. *Ag Gaz of New South Wales* 29:204 Mr '18
- Reduction in volume of the must during fermentation. *Int R Sci & Prac Ag* 8, no 12:1279-80 D '17
- Relationships between the development of the flowers of wine and the watering of wine. R. Perotti and F. Bernardini. *Int R Sci & Prac Ag* 8, no 1:152-3 Ja '17
- Sulphurous acid in chemical combination in musts and wines. *Int R Sci & Prac Ag* 7, no 11:1676-85 N '16
- Table wines and blending wines of Sicily. C. Mancini. *Int R Sci & Prac Ag* 7, no 7:1022-3 Jl '16
- Trend of the wine industry; comparison with the coffee industry. P. Gouy. *Int R Sci & Prac Ag* 8, no 9:1315-16 S '17
- Viticulture in South Africa. A. I. Perold. *Int R Sci & Prac Ag* 7, no 1:1-30 Ja '16
- Wine making experiments with sulphur dioxide in Italy. C. Mensio. *Int R Sci & Prac Ag* 8, no 11:1140-1 N '17

*See also* Liquors; Wine yeast

**Analysis of wines**

- Report on wine. B. G. Hartmann. *Assn Offic Ag Chem J* 2:182-6 F '17
- Wines. *Assn Offic Ag Chem J* 2, no 2, pt 2: 193-242 Ag '16

**Laws**

- Décret-loi de la lieutenance n. 1254 portant des mesures pour combattre les fraudes dans la préparation et le commerce des vins en Italie. *Int Yearbook Ag Leg* 1916:657-8 '17

- Winfields'** Thanksgiving; story. H. Richmond. *Nat Stock & F* 42:766 N 23 '18

**Wings**

- Wing molt as an indication of production. O. B. Kent. *il Cornell Countryman* 15:192-3 Ja '18

**Winnowing machines.** *See* Fanning-mills

**Winslow, C. M.**

- Portrait. *Breeder's Gaz* 69:69 Ja 13 '16

**Winter**

- From a mountain garden. E. S. Rutherford. *Country Gent* 82:355 F 17 '17
- Outdoors in midwinter. *il Country Life* 29: 42-3 F '16

**Winter cress.** *See* Yellow rocket

**Winter sports**

- Snow-country holiday. A. F. Loomis. *il Country Life* 33:60-1 D '17

**Wintergreen oil**

- Extraction of wintergreen oil. *Country Gent* 81:57 Ja 8 '16

**Wire fencing**

- Corrosion of fence wire. O. W. Storey. *il Farm Eng* 6:6 F '18
- Cost of fencing farms in the north central states. H. N. Humphrey. *il U S Ag B* 321: 18-21, 26-9 '16
- Deterioration in fencing-wire; testing by post and telegraph department. J. Orchiston. *J Ag New Zealand* 16:193-5 Ap '18
- Farm and highway fencing. J. A. Talbot. *Prog F* 31:326 Mr 4 '16
- Fences a valuable farm asset. Kimball's *D F* 14:116 F 15 '16
- Fencing the estate. W. H. Butterfield. *il Country Life* 30:56 Jl '16
- Fencing the orchard. J. S. Underwood. *il Green's Fruit Grower* 36:28 Ja '16
- Hanging poultry wire netting. *Country Gent* 81:850 Ap 15 '16
- Safeguard your fences to prevent lightning from killing stock. T. Croft. *Country Gent* 81:234 Ja 29 '16

**Wire working**

- Handy farm mechanics. C. H. Willey. *il Country Gent* 83:20 Jl 13 '18

**Wireworms**

- Corn and cotton wireworm in its relation to cereal and forage crops, with control measures. E. H. Gibson. *il Farmers' B* 733:1-7 '16
- How to detect outbreaks of insects and save the grain crops. W. R. Walton. *il Farmers' B* 835:22-3 '17
- Underground enemy. *Weekly N L* 4:1 Je 20 '17
- Wireworm control. *Country Gent* 81:1552 Ag 19 '16
- Wireworm control. J. N. French. *il Cal State Comm Hort B v* 5:225-35 Je '16
- Wire worm or click beetle. *Purdue Ag* 13:69-70 N '18
- Wireworms. *Gard Chron (Lond)* 61:221 Je 2 '17
- Wireworms attacking cereal and forage crops. J. A. Hyslop. *il U S Ag B* 156:1-34 '15
- Wireworms destructive to cereal and forage crops. J. A. Hyslop. *il Farmers' B* 725:1-10 '16
- Wireworms; good farm practice tends to control these underground pests. J. R. Stear. *Ohio Ag Exp B v* 3:224-6 Jl '18
- Wireworms in potato soil. *Rural N Y* 76:284 F 24 '17

*See also* Tobacco wireworm

**Wireworms, False.** *See* False wireworms

**Wirth, Theodore**

- Minneapolis honors Wirth. *Am Flor* 45:1262 Ja 1 '16

**Wisconsin**

*See also* subhead Wisconsin under special subjects, e.g. Agriculture—Wisconsin, Dairying—Wisconsin

**Agriculture, Department of**

- Biennial report; including reports of the veterinary, entomology, immigration, state fair and crop statistical divisions for the years 1915 and 1916. *il maps Wis Ag Dept B* 10:1-193 '16

**Wisconsin—Continued****Dairy and food commissioner**

Annual report for the period ending June 30, 1917. 152p map '17 Dairy and food comr., Madison, Wis.

**Wisconsin agricultural experiment station**

Work done in 1915; directors annual report. il maps Wis Ag Exp B 268:1-82 '16

Work of the experiment station and agricultural extension service for 1916; the director's annual report. il Wis Ag Exp B 275:1-92 '17

**Wisconsin buttermakers' association**

16th annual convention, Sparta, Wis., Dec. 5-7, 1916. N Y Prod R 43:274+ D 13 '16

Wis. buttermakers convention at Eau Claire; with list of scores and awards. N Y Prod R 41:601+ F 9 '16

**Wisconsin cheese exchange**

Wisconsin cheese exchange. N Y Prod R 46:12 My 1 '18

**Wisconsin cheesemakers' association**

Convention, Milwaukee, Jan. 9-11. N Y Prod R 45:408-9+ Ja 23 '18

Wisconsin cheesemakers' association at Milwaukee; with list of scores and awards. N Y Prod R 41:453+ Ja 12 '16

**Wisconsin dairy council**

1st meeting, Madison, August 31st. Hoard's D 56:227+ S 13 '18

**Wisconsin dairymen's association**

Articles of organization. Hoard's D 55:146 F 15 '18

Breeding for business. Wallaces' F 43:807 My 17 '18

Consolidated annual reports for annual meetings 1913, 1914, 1915, and 1916. Wis Dairymen's Assn Rep 1913-1916:1-230 '17

45th annual convention, Waupaca, Dec. 5-7, 1916. E. B. Gunn. il Kimball's D F 14:819-20 Ja 1 '17

45th annual meeting, Waupaca, Wis., Dec. 5-7, 1916. Hoard's D 52:802 D 29 '16

46th annual meeting, Janesville, Nov. 20-22. Hoard's D 51:546 N 9 '17; Jersey B 36:1911+ D 5 '17; Hoard's D 54:686 D 7 '17; O Judd Farmer 63:5 D 8 '17; Kimball's D F 15:891+ D 15 '17

Resolutions adopted at 46th annual meeting. P. C. Burchard. Hoard's D 54:682 D 7 '17

Wisconsin dairymen's association in retrospect. G. W. Burchard. Hoard's D 52:834 Ja 5 '17

**Wisconsin Holstein breeders' association**

25th annual meeting, Manitowoc, Feb. 28-March 1, 1917. Hoard's D 53:332 Mr 16 '17

26th annual meeting, Burlington, Jan. 9-10. Hoard's D 55:14 Ja 25 '18

Wisconsin Holstein breeders to issue publicity booklet. Hoard's D 51:792 Je 2 '16

**Wisconsin Jersey breeders' association**

Meeting, Madison, Feb. 8, 1917. Jersey B 36:275 F 21 '17

State association entertained at Waupaca and Wauwatosa, June 29-30, 1916. Jersey B 35:1053+ Jl 5 '16

**Wisconsin live stock breeders' association**

Extracts from annual report. Hoard's D 55:228 Mr 1 '18

**Wisconsin potato growers' association**

6th annual potato show and meeting, Madison, Nov. 19-24. Market Growers J 21:250 D 1 '17

**Wisconsin state conservation commission**

Biennial report for the years 1915 and 1916. 160p il map '16 Wis. State conservation comm., Madison

Includes: Commissioners' report and recommendations; Fisheries division; Protection of fish and game division; Forestry and park divisions; Statistics

**Wisconsin state drainage association**

4th annual convention, Madison, Feb. 4, 1918. Hoard's D 55:290 Mr 8 '18

**Wisconsin state fair**

Boys' and girls' live stock at the Wisconsin state fair. D. S. Bullock. il Hoard's D 56:380 O 11 '18

Poland Chinas and Durocs at Wisconsin. M. S. McFadden. Swine World 6:42 O '18

Sheep at Wisconsin state fair. J. L. Tormey. Am Sheep B & W 37:613 O '17

Sheep show at Wisconsin state fair. il Am Sheep B & W 38:662-4 O '18

Sheep show up in the Badger state. Am Sheep B & W 36:527 S '16

State fair, Milwaukee, Sept. 9-14. il Hoard's D 56:288-9+ S 27 '18

Wisconsin fair. Breeder's Gaz 72:445+ S 20 '17; Hoard's D 54:261 S 21 '17; Kimball's D F 15:724-5 O 1 '17

Wisconsin state fair. W. A. McKerrrow. il Kimball's D F 14:630+ O 1 '16

Wisconsin's sixty-sixth state fair. Breeder's Gaz 70:475-8 S 21 '16

**Wisconsin state horticultural society**

Annual convention and exhibit. O Judd Farmer 63:7 D 29 '17

Annual report for the year ending July 1, 1918. Wis Hort Soc Rep 48:1-228 '18

Convention, Madison, Jan. 6-8, 1916. Fruit-Grower 27:58 Ja 15 '16

47th annual report for the year ending July 1, 1917. Wis Hort Soc Rep 1917:1-120

**Wisconsin university****College of agriculture**

All American farmers. E. Staley. Field Il 27:451-2 Je '17

Wisconsin college of agriculture to instruct men in Students' army training corps. A. W. Hopkins. Hoard's D 56:308 S 27 '18

**Wistaria**

Wistaria fails to bloom. Rural N Y 75:861 Je 10 '16

Wistarias of China and Japan. Gard Chron (Lond) 60:61 Ag 5 '16

**Witch grass. See Quack grass**

Witch grass and limas; story. F. Tilden. il Country Gent 82:2054-5 D 29 '17

**Witch hazel**

Witch hazels in the Arnold arboretum. A. H. Judd. il Gard M 25:122 Mr '17

**Witches broom. See Fungi****Witloof chicory. See Chicory****Wolfhounds**

Bally Shannon—dog of war. W. A. Dyer. il Country Life 35:58 N '18

Felixstowe wolfhounds. I. W. Everett. il Country Life 30:59 Je '16

Hounds of Celt and Gael. il Country Life 29:48-9 Ja '16

**Wolves**

Brief for the salaried trapper; opposed to bounty system. S. H. Hill. Am Sheep B & W 36:197 Ap '16

Trapping the fox and wolf. C. H. Chesley. O Judd Farmer 61:21 D 9 '16

Trapping the timber wolf. C. O. Ormsbee. il Country Gent 83:2 N 2 '18

**Woman**

Milk of human kindness. J. L. Jones. Hoard's D 52:755+, 801+ D 22-29 '16

Public nuisance woman. G. V. Gray. Farm Eng 5:14 S '17

Thrift is careful spending. Wallaces' F 42:157 Ja 26 '17

Value of the woman of leisure. L. H. Cox. J Home Econ 8:407-13 Ag '16

Village women of Palestine. E. B. Roberts. il O Judd Farmer 61:38 Jl 29 '16

Wheat needs of the world. A. Taylor. J Home Econ 10:1-8 Ja '18

Woman of the future. Nat Stock & F 40:824 N 11 '16

Women as school directors. Mrs M. C. Whitaker. Ohio F 138:58 Jl 15 '16

See also Beauty, Personal; Children; Colleges for women; Costume; Farm girls; Farm women; Home economics; Insurance; Maternity; Marriage; Mothers; Women's clubs

**Dress**

See Clothing



**Woman—Continued**

**Employment**

Improvement of labor conditions for women in France. J Heredity 9:165 Ap '18  
Training women to earn—a national movement. A. E. Dodd. J Home Econ 9:441-6 O '17

*See also* Woman—Occupations

**Occupations**

Creamery labor situation; large city plants said to have most difficulty—the employment of women. N Y Prod R 46:364 JI 3 '18  
Female labor in our cheese factories—can it be more extensively used? N Y Prod R 46:456 JI 17 '18  
Girl who must earn her own living: home canning. Prog F 31:598 Ap 29 '16  
Girl who must earn her own living; sewing. Prog F 31:787 Je 17 '16  
Girl who must earn her own living: writing. Prog F 31:762 Je 10 '16  
Miss Hefner—cheesemaker. S. R. Winters. il Kimball's D F 16:410 My 15 '18  
Odd jobs for women. E. A. Cosse. il Rural N Y 75:124, 628 Ja 22 Ap 15 '16  
Opportunities for profit in horticulture. M. S. Francis. Cal State Comm Hort B v 5:434-7 D '16  
Pretty girls milk in California. J. P. Hertel. il Jersey B 37:77 Ja 16 '18  
Wisconsin has the first woman cow tester. N. Negley. il Hoard's D 53:973 JI 13 '17  
Woman cheesemaker. F. H. Jeter. il Country Gent 83:36 Ja 12 '18  
Woman does man's work and wins! M. R. Tolstrup. il Hoard's D 55:89 F 8 '18  
Women's industry after the war. J Home Econ 8:263-4 My '16  
Work for girls in New York city; what chance has the untrained worker? N. C. Smithe-man. il Rural N Y 77:590 Ap 20 '18

*See also* Nurses and nursing; Stenographers; Teachers; Women as beekeepers; Women as cow testers; Women as farm laborers; Women as farmers

**War service**

Army of workers. Weekly N L 5:4 D 26 '17  
Opportunities for women in national service. Country Gent 82:915 My 19 '17  
Some things our country women are thinking and doing in national service. il Country Gent 82:1157 JI 14 '17  
Women on the farm. C. Ousley. 12p '18 U S Ag; Same. Am Fert 48:29-31 Je 22 '18  
World's food supply and woman's obligation. J. Addams. J Home Econ 10:389-400 S '18

*See also* Home economics—War economy; Woman's land army of America

**Woman suffrage**

Why women in rural communities do not need the vote. E. P. Wheeler. Cornell Countryman 25:80-1 N '17  
Why women in rural communities need the vote. E. M. Butler. Cornell Countryman 15:29 O '17

**Woman's land army of America**

Aggies are coming; women in increasing numbers grasp the plow. R. W. Elliot. il Country Gent 83:39 My 4 '18

How the women of America are helping to solve the farm labor problem. il Gard M 27:270 JI '18

Organization of agricultural units. 8p '18 Woman's land army of America, 32 5th av, N.Y.

\* Woman's land army of America. B. A. Clark. il House Beautiful (41 Mt Vernon st, Boston, 25c) 44:254-6 O '18

Women on the land. 3d ed 9p '18 Woman's land army of America, 32 Fifth av, N.Y.

Women's land army of America. R. Dean. il Country Life 33:44-5 Mr '18

Woman's national farm and garden association Conference, Chicago, April 12-14, 1916. Am Flor 46:730 Ap 22 '16

Conference of the middle-west members, Chicago, April 12-14, 1916. Wallaces' F 41:928 Je 30 '16

**Women as beekeepers**

Beekeeping for women. J. Baldensperger. Am Bee J 58:53 F '18  
Beekeeping for women. H. Mathie. Am Bee J 56:130 Ap '16  
Beekeeping for women. D. Q. Wright. il Country Gent 83:49 Ja 5; 58 F 2; 58 Mr 16 '18  
How the women win. il Am Bee J 57:372-3 N '17  
My bees. C. T. Noel. Am Bee J 58:22 Ja '18

**Women as cow testers**

Wisconsin has the first woman cow tester. N. Negley. il Hoard's D 53:973 JI 13 '17  
Women are meeting demand for testers of dairy cows. Weekly N L 6:6 N 27 '18  
Women testers in Iowa. F. W. Beckman. il Hoard's D 55:807 My 31 '18  
Young women can help. Wallaces' F 43:938 Je 14 '18

**Women as farm laborers**

Agricultural demonstrations by women in Cornwall. J Bd Ag 23:139-43 My '16  
Back to the farm! School of horticulture at Ambler, Pennsylvania. Illustrated World (Drexel av, and 58th st, Chicago 15c) 28:613 D '17  
Chronicles of Woodcock farm; a glimpse of woman's labor on the farms of 1917. H. Geithmann. il Overland Monthly (259 Minna st, San Francisco 10c) n s 71:478-84 Je '18  
Cornell farm unit. A. H. Bellows. Rural N Y 77:998 Ag 24 '18  
County scheme for training women for farm work. R. N. Dowling. il J Bd Ag 23:349-53 JI '16  
Employment of women on the land. J Bd Ag 22:1312-15; 23:143-5 Mr, My '16  
Engaged in agriculture are 1,800,000 women. Of this number 750,000 are under 20 years old and 1,050,000 are negroes, mostly in the cotton states. These figures are sent out from Washington by the division on women's war work. The department of agriculture recommends that women be trained to manage horses so they can drive reapers, binders and cultivators; those who understand automobiles could, with a little more training operate the farm tractors. (O Judd Farmer)

England's farmerettes. C. Mackenzie. il Country Gent 83:6-8 Mr 2 '18

Farm tractors, war and women. il Touchstone (118 E. 30th st, N. Y. 35c) 2:649-11 Mr '18

Farmerette. S. H. Gandier. Ag Gaz of Canada 5:702-4 JI '18

Instruction in light farm work and milking for women and children. J Bd Ag 23:264-71 Je '16

Market gardening as a career for women. L. J. Humphreys. J Dept Ag Ireland 17,no 1:36-9 '16

Mediaeval women as wage-earning farm hands. B. E. Hazard. Cornell Countryman 14:306-9, 572-3 Ja, Ap '17

More women for the farm. G. V. Gray. il Farm Eng 7:28-9 Mr '18

National service girls harvest fruit crop. il Pub Service (Toronto, Ontario) B 2:129-33 Ja '18

Night farming by women in England. il Scientific Am (233 Broadway, N.Y. 10c) 118:341 Ap 13 '18

Placing women on the land. Woman's Nat Farm and Garden Assn (Cheltenham, Pa. 10c) B v 4:1-6 F '18

Report of the committee on agriculture, May-December, 1917. 9p n.d. Mayor's committee of women on national defense, 4 E. 39th st, N.Y.

Report of the women's mission to French farms. J Bd Ag 23:292-4 Je '16; Same. Int R Ag Econ 70:115-18 O '16

Shall the farmers' wife pitch hay? E. Davenport. il Country Gent 83:15-4 F 23 '18

Successful employment of women in agriculture. J Bd Ag 23:492-3 Ag '16

Successful employment of women on farms. J Bd Ag 22:1006-7 Ja '16

Successful employment of women on farms. J. O. Peet. J Bd Ag 23:1249-52 Mr '17

Successful employment of women on the land. J Bd Ag 23:75-6 Ap '16

**Women as farm laborers—Continued**

- Testing women farm workers. J Bd Ag 24:881-3 N '17
- Training of women on the land. M. M. Macqueen. il J Bd Ag 25:810-17 O '18
- Training recruits for the farm game. A. C. Laut. il Country Gent 82:1670-1 N 3 '17
- Woman's farm in Devon. S. C. Hamlyn. J Bd Ag 25:834-9 O '18
- Women agricultural workers in Germany. J Dept Ag Ireland 17, no 2:225-41 '17
- Women agricultural workers in Great Britain. Monthly R (U. S. Bur. of labor statistics, Washington, D. C.) 6:1109-12 My '18
- Women and girls as fruit pickers. Rural N Y 76:1463 D 29 '17
- Women as farm help. Weekly N L 5:6 Ap 10 '18
- Women for farm work. Ag Digest 2:869 Mr '18
- \* Women harvesters in Great Britain: how they save the crops. il Touchstone (118 E. 30th st, N.Y. 35c) 4:138-43 N '18
- Women in agriculture during war-time. M. L. Talbot. il J Bd Ag 25:796-805 O '18
- Women in the root fields in Cardiganshire. D. W. Stapledon. il J Bd Ag 23:462-5 Ag '16
- Women of Wales and agriculture. Mrs M. S. Roberts. il J Bd Ag 25:817-26 O '18
- Women offer farm labor. il Jersey B 37:806 My 22 '18
- Women on the farm. C. Ousley. Weekly N L 5:3+ My 29 '18
- Women succeed as fruit pickers. A. H. Pulver. il Rural N Y 77:1039 S 7 '18
- Women workers on the farm. Int R Ag Econ 76:106-8 Ap '17; Same. Ag Gaz of Canada 4:835-6 S '17
- Women's land army. Mrs A. Lyttelton. J Bd Ag 25:806-10 O '18
- Women's patriotic bureau. Gard Chron (Lond) 59:228 Ap 22 '16
- Work of the women's legion in Rutland. T. Hacking. il J Bd Ag 23:1245-9 Mr '17
- Work of women on the land. il J Bd Ag 23:876-81 D '16

*See also* Woman's land army of America

**Women as farmers**

- Agricultural and horticultural courses for women in the Middle Atlantic states; tables. 2p '17 Woman's nat. farm and garden assn., 600 Lexington av., N.Y.
- Can women succeed well in standard-bred poultry business. B. H. Barrett. Reliable P J 23:863+ N '16
- Course in estate management for women in war time. E. Loines. il Country Life 34:66-7 My; 61-3 Je; 56-8 Ag '18
- Farming for women as a livelihood. L. M. Carling. J Ag (Quebec) 19:156 Ja '16
- \* Foreign women who work for Canada. V. Hayward. il Canadian M (200 Adelaide st, W. Toronto, Canada 25c) 52:553-63 N '18
- Girl who must earn her own living: keeping cows. Prog F 31:512 Ap 8 '16
- Iowa women farmers' association; what Mrs Klinck, the vice-president, has done. G. V. Gray. Farm Eng 5:30 F '17
- My interest in agriculture. F. M. Klinck. Mo Ag Bd Yearbook 1916:549-52
- Position of women in agriculture. A. D. Hall. J Bd Ag 25:785-96 O '18
- She farms alone. H. W. Doyle. il Country Gent 83:36 Ag 10 '18
- Some real women farmers. il Wallaces' F 43:1159 Ag 16 '18
- Success of a woman farmer. Power F 26:30 D '17
- Two women and a farm. B. V. B. Mendsen. il Fruit-Grower 28:67 Ja 15 '17
- What co-operation among women in the poultry field means. Mrs C. S. Valentine. Reliable P J 23:351-2+ My '16
- Woman on the farm. G. V., Gray. il Farm Eng 5:14 Ag '17
- Woman's view of the poultry business based on experience. M. I. Moore. il Reliable P J 23:482+ Je '16
- Woman's Virginia farm; how to make a living from it. Country Gent 81:2132 D 9 '16

Women at the show; the International is no longer just for men. Country Gent 82:37 Ja 6 '17

Women farm managers. Ohio F 138:338 O 7 '16

Women farmers. M. V. Landman. il Cornell Countryman 14:479-81+ Mr '17

**Women as social workers**

Woman's work in social service. L. Tilson. Wis Hort Soc Rep 48:62-72 '18

Women in national service. *See* Woman—War service

**Women's clubs**

Do farm women's clubs benefit members and community? Mrs F. L. Allen. Ohio F 137:476 Mr 25 '16

Farm club for women; with discussion. Mrs W. H. Thomas. Mo Ag Bd B v 16:1-12 N '18

Farm women's clubs. M. Hepworth. il W Va Ag Ext C 118:1-3 '17

First program on what we eat is a great success. Country Gent 81:1953 N 4 '16

How to organize and conduct one. Mrs F. Porter. Ohio F 138:264 S 16 '16

Ohio farm women's clubs. Ohio F 140:542 D 8 '17

Our club diary. Country Gent 81:2208; 82:35, 169, 301, 473, 574, 670, 753, 821, 885, 947, 1047, 1103, 1247, 1470, 1755, 1858 D 23 '16, Ja 6, 27, F 10, Mr 3, 17, 31, Ap 14, 28, My 12, 26, Je 16, 30, Ag 4, S 22, N 10, 24 '17

Parliamentary law for women. Mrs C. B. Selover. Ohio F 138:212 S 2 '16

Rural clubs for farm women. G. V. Gray. Farm Eng 5:20 Ap '17

Sisters of the sagebrush; isolated organizations set a record for efficiency. W. H. Dean. il Country Gent 81:1001-2 My 6 '16

We decide on the best way to manage our food demonstrations. Country Gent 81:2027 N 13 '16

We organize the Household science club and elect our officers. Country Gent 81:1887 O 21 '16

Woman's club. A. C. Wortman. Country Gent 81:190 Ja 22 '16

Women's club and the war foods. M. G. Phillips. Am Bee J 58:237 Jl '18

Women's economic club of Santa Barbara, Isle of Pines. il Country Gent 81:551 Mr 4 '16

Women's rural organizations and their activities. A. M. Evans. il maps U S Ag B 719:1-15 '18

*See also* General federation of women's clubs; Homemakers' clubs; Woman's national farm and garden association

**Programs**

Child—suggestive outline for club study. Ia Ag Ext Home Econ C 2:1-6 '16-'17

Club programs in home economics. H. L. Johnson. J Home Econ 9:223-8 My '17

Club programs in war time. H. L. Johnson. J Home Econ 9:471-5 O '17

Food conservation programs for meetings of women of farmers' clubs. L. Cordiner. Minn Ag Ext Spec B 20:1-7 '18

Program for 1916 meetings of United farm women. Prog F 31:265 F 19 '16

Programs and suggestions for study clubs in home economics. A. M. Turley. Ore Ag Ext B 167:1-8 '16

Programs for study clubs in home economics. Cornell Ag Exp Rep 1916, v 2:994-1012 '17

Suggested programs for farm women's clubs. Prog F 33:417 Mr 30 '18

**Women's colleges. *See* Colleges for women****Women's institutes**

Address to women institute workers. E. van Alstyne. N Y Farms & Markets Dept Ag B 97:94-6 Jl '18

Annual conventions of Ontario women's institute. G. A. Putnam. Ag Gaz of Canada 5:91-2 Ja '18

Booklet for the use of junior women's institutes in Ontario. Ontario Ag Dept C 9:1-8 '18

4th annual conference of the Women's institutes of Alberta. 23p '18 Women's inst. branch, Dept. of ag., Edmonton, Alberta



**Women's institutes—Continued**

- Home-makers' section of E. Tenn. farmers' convention. M. E. French. *Prog F* 32:663 Je 2 '17
- Illinois farmers' institute; department of household science: year book 1917. il III Farmers Inst Household Sci 1917:1-255 '18
- Loi concernant les associations agricoles féminines au Canada. *Int Yearbook Ag Leg* 1916:896-901 '17
- Ohio homemakers' week. *Ohio F* 139:203 F 10 '17
- Production activities of women's organizations, 1917-18. *Ag Gaz of Canada* 5:684-7 JI '18
- Report of the committee on women's institutes. T. B. Parker; D. H. Stockman. *Am Assn Farmers' Inst Workers Pro* 1917:73-9 '18
- Report of the women's institutes of the province of Ontario, 1916. (pt. 1) 120p '17 Ontario ag. dept., Toronto
- Report of the women's institutes of the province of Ontario, 1918; pt 2. List of meetings and speakers. 27p '18 Ontario ag. dept., Toronto
- Rural science in Prince Edward island and Nova Scotia. *Ag Gaz of Canada* 4:314-16 Ap '17
- Women's institutes. G. Hadow. il *J Bd Ag* 25:827-33 O '18
- Women's institutes and the rural school. *Ag Gaz of Canada* 5:74-8 Ja '18

**Wood**

- American hardwoods. L. Plumley. *Country Life* 31:132 Ap '17
- Brazilian woods: their utilization for the manufacture of wood pulp. *J For* 15:624-7 My '17
- Canadian Douglas fir; its mechanical and physical properties. J. S. Bates. (Forestry Branch B. 60) 84p bibliog il '18 Canada Dept. of interior, Ottawa
- Cellulose content of wood. *J For* 16:469-71 Ap '18
- Commercial uses of sugar pine. S. B. Detwiler. il *Am For* 23:283-4 My '17
- Commercial woods of the Philippines: their preparation and uses. E. E. Schneider. (B. 14) 246p il '16 Philippine Islands bur. of forestry, Manila
- Decay in wood in buildings. *J Franklin Inst (Franklin Institute, Philadelphia)* 50c 185:857-8 Je '18
- Decay of timbers in buildings. R. J. Blair. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2424+ Ap 28 '17
- Density of wood substance and porosity of wood. F. Dunlap. *J Ag Research* 2:423-8 S '14
- Distinguishing characters of North American sycamore woods. W. D. Brush. il *Bot Gaz* 64:480-96 D '17
- Douglas fir fiber, with special reference to length. H. N. Lee and E. M. Smith. bibliog il *For Quar* 14:671-95 D '16
- Economic woods of Hawaii. V. MacCaughy. *For Quar* 14:696-716 D '16
- Effect of catalyzers on the yield of products in the destructive distillation of hardwoods. R. C. Palmer. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:264-8 Ap '18
- Farmers' \$200,000,000 woodlot. H. E. G. Bryant. il *Country Gen* 82:1345 S 1 '17
- Formation of parenchyma wood following winter injury to the cambium. A. J. Mix. bibliog il *Phyt* 6:279-83 Je '16
- Friar, his dog and the iron cross; freaks in wood. A. Spencer. *Am For* 23:592 O '17
- Grain of wood. A. Koehler. il *Sci Am Sup* (233 Broadway, N. Y. 10c) 86:156-7 S 7 '18
- Guidebook for the identification of woods used for ties and timbers. A. Koehler. (Misc. RL-1) 79p il maps U. S. Forest service, Washington, D.C.
- Hardness of woods. E. L. D. Seymour. *Country Life* 31:120 Mr '17
- How war enhances the value of wood. *Current Opinion* (63 W. 36th st., N.Y. 25c) 62:224-5 Mr '17

- Influence of moisture on the yield of products in the destructive distillation of hardwood. R. C. Palmer and H. Cloukey. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10:262-4 Ap '18
- Intercellular canals in dicotyledonous woods. S. J. Record. bibliog il *J For* 16:429-41 Ap '18
- Lumber used in the manufacture of wooden products. J. C. Nellis. maps U S Ag B 605:1-17 '18
- Marketing farm woodland products in Georgia. G. N. Lamb. il map Ga Ag Coll (Ext) B 129:1-32 '17
- Marketing of woodlot products; uses of principal kinds of woods and prices. J. W. Calland. *Ohio Ag Exp B* 302:59-67 '16
- Mexican forests afford many valuable woods. *Am For* 24:590 O '18
- Notes on the principal timbers of Queensland. (Forestry B. 2) 20p '17 Queensland Dept. of public lands, Brisbane
- Photomicrographic study of decayed wood. H. N. Lee. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2423-4 Ap 28 '17
- Post timbers: factors affecting their relative durability. J. J. Crumley. il *Ohio Ag Exp B* v 2:125-9 Ap '17
- Production of lumber, lath, and shingles in 1915 and lumber in 1914. J. C. Nellis. il map U S Ag B 506:1-45 '17
- Properties of strength, elasticity, and durability. *Gard Chron (Lond)* 64:100 S 7 '18
- Pure cultures of wood-rotting fungi on artificial media. W. H. Long and R. M. Harsch. bibliog *J Ag Research* 12:33-82 Ja 14 '18
- Relative resistance of various hardwoods to injection with creosote. C. H. Teesdale and J. D. MacLean. bibliog il U S Ag B 606:1-36 '18
- Report on wood-decay investigation by the U.S. Forest service. *Eng News-Record* (10th av. at 36th st., N.Y. 15c) 78:200 Ap 26 '17
- Rôle of the microscope in the identification and classification of the timbers of commerce; with discussion. I. W. Bailey. il *J For* 15:176-91 F '17
- Sawing wood. F. L. Harris. il *Rural N Y* 77:412 Mr 16 '18
- Ship builders need black locust wood for tree-nails. *Weekly N L* 5:5 My 22 '18
- Significance of certain variations in the anatomical structure of wood. R. P. Prichard and I. W. Bailey. *For Quar* 14:662-70 D '16
- Structure and identification of our common lumber woods. C. H. Otis. il *Vt Ag Exp B* 194:194-232 '16
- Structure and identification of Queensland woods. N. W. Jolly. (Forestry B. 1) 14p il '17 Queensland Dept. of public lands, Brisbane
- Structure of wood in blueberry and huckleberry. E. M. Flint. il *Bot Gaz* 65:556-9 Je '18
- Study in the anatomy of hazel-wood with reference to conductivity of water. M. G. Holmes. *Ann Bot* 32:553-67 O '18
- Timber for structural purposes. E. A. Sterling. 20p '16 Nat. lumber mfrs. assn., Chicago
- Tyloses: their occurrence and practical significance in some American woods. E. Gerry. bibliog il *J Ag Research* 1:445-70 Mr '14
- Use of lumber on California farms. M. B. Pratt. bibliog il *Cal Ag Exp B* 299:89-121 '18
- Uses of commercial woods of the United States; beech, birches and maples. H. Maxwell. U S Ag B 12:1-56 '13
- Uses of wood. H. Maxwell. il *Am For* 24:333-41, 419-26, 473-82, 533-41, 593-602, 679-87 Je-N '18
- Utilization of elm. W. D. Brush. il map U S Ag B 683:1-43 '18
- Wood and pulp production in 1916. map Paper (117 E. 24th st., N.Y. 25c) 21:13-23 D 5 '17
- Wood on the wing. B. Adams. il *Am For* 23:583-9 O '17
- Wood-using industries of Quebec. R. G. Lewis and J. A. Doucet, comps. (Forestry Branch B. 63) 86p il '18 Canada Dept. of interior, Ottawa

**Wood—Continued**

- \* Wood utilization service; objects and methods. (C. 6) 2p '18 Cal. State forester, Sacramento

See also Bark as food; Forest products; Forests and forestry; Greenheart; Lumber; Lumbering; Timber; Trees; also headings beginning Wood; also names of special kinds of wood, e.g. Ash, Balsa tree, Birch, Cedar, Elm, Fir, Mahogany, Oak, Sandalwood

**Analysis**

Chemistry of wood. A. W. Schorger. *il J Industrial & Eng Chemistry* (Easton, Pa. 60c) 9:556-66, 748-50 Je, Ag '17; Abstract. *J For* 16:355-7 Mr '18

Chemistry of wood decay. R. E. Rose and M. W. Lisse. *J Industrial and Eng Chemistry* (Am. Chemical Soc., Easton, Pa. \$6 per yr) 9:284-7 Mr '17

Mannan content of the gymnosperms. A. W. Schorger. *J For* 15:197-202 F '17

**Bibliography**

Structural service. Am Inst Architects *J* (The Octagon, Washington, D.C. 50c) 5:246-60 My '17

Structural service department; timber, lumber, wood construction, and finish. Am Inst Architects *J* (The Octagon, Washington, D.C. 50c) 6:201-9 Ap '18

**By-products**

Indigenous tans and vegetable dyestuffs of New Zealand. B. C. Aston. *J Ag New Zealand* 15:55-62, 117-28 Ag-S '17

Stumps worth money. C. J. Zintheo. *il Country Gent* 82:288 F 10 '17

See also Wood flour; Wood waste

**Distillation**

See Wood distillation

**Preservation**

See Wood preservation

**Testing**

Ground-wood pulp. J. H. Thickers and G. C. McNaughton. *il maps U S Ag B* 343:1-151 '16

Laboratory tests on the durability of American woods. C. J. Humphrey. *il Mycol* 8:80-92 Mr '16

Mechanical properties of woods grown in the United States. J. A. Newlin and T. R. C. Wilson. *il U S Ag B* 556:1-47 '17

Southern yellow pine timbers. 47p *il* '17 Southern pine assn., New Orleans, La.

Tests of western yellow pine car sills, joists, and small clear pieces. C. W. Zimmerman. *il U S Ag B* 497:1-16 '17

Wood, Fossil. See Trees, Fossil

**Wood, Substitutes for**

Substitution of other materials for wood. *U S Ag Rep* 117:1-78 '17

Wood as feed. See Feeding and feeding stuffs—Wood

**Wood as fuel**

All boost the wood campaign. *il Banker-F* 5:6 S '18

Best wood for fuel. E. I. Farrington. *Country Life* 35:72 N '18

Burn more wood. *Power F* 27:55 F '18

Burn wood and save coal. 3p '18 U.S. Fuel administration, Washington, D.C.

Chop wood—or be cold. P. S. Lovejoy. *il Country Gent* 83:8+ Ag 31 '18

Chopping for home fires. J. K. Wright. *il Country Gent* 83:9 Mr 16 '18

Community wood-chopping day. K. B. Welles. Outlook (381 4th av, N.Y. 10c) 118:154-5 Ja 23 '18

Cordwood for fuel. (Press B. 160) 8p '18 N.C. Geological and econ. survey, Chapel Hill

Cut wood for fuel. Green's Am Fruit Grower 38:28 Ja '18

Cut wood, sell it, burn it—help save coal. Weekly N L 6:10-11 O 9 '18

Cutting wood to burn next winter. W. D. Clark. *il Country Gent* 83:2 Ag 10 '18

Emergency fuel from the farm woodland.

A. F. Hawes. *U S Ag C* 79:1-8 '17

Facts about the use of wood as emergency fuel. Va Ag Dept B 134:2-3 N '18

Firewood and faggots in war time. Gard Chron (Lond) 63:208 My 18 '18

Firewood expected to bring better profit than ever; ways of cutting it. Weekly N L 6:3 O 16 '18

\* Fire wood to relieve the coal shortage. F. W. Besley. (Forestry leaflet no. 19) 4p '18 Md. State bd. of forestry, Baltimore

Fuel and the woodlot. E. Secrest. *il Ohio Ag Exp B v* 2:257-60 Ag '17

Fuel value of wood. Am For 22:688 N '16

Fuel value of wood. Wallaces' F 43:44 Ja 11 '18; Same. *Power F* 27:17 F '18; Same. Better Fruit 13:16 O '18; Same abr. Gard Chron

Am 21:397 N '17

Good winter sport. J. C. Graham. Am For 24:585 O '18

Meeting the wood-fuel situation. E. Secrest. *il Ohio Ag Exp B v* 3:291-9 O '18

Plan for a fuel and wood supply. C. White. *Power F* 27:47 F '18

Production and use of fuel wood. E. Secrest. *il Ohio Ag Exp B v* 3:49-54 F '18

Unique plan to save coal by using stump wood. Scientific Am (233 Broadway, N.Y. 10c) 118:78 Ja 19 '18; Same cond. Coal Age

(10th av at 36th st, N.Y. 10c) 13:236 F 2 '18

Urged to burn wood. Weekly N L 5:7 N 28 '17

Uses of wood for fuel by manufacturing plants in Massachusetts. W. D. Clark. *il Am For* 24:362-4 Je '18

Value of tree stumps for fuel. Gard Chron Am 22:201 Jl '18

Wood as a substitute for heating greenhouses. A. Smith. Gard Chron Am 22:45 F '18

Wood as emergency fuel. J. H. Foster and F. H. Millen. Tex Ag Coll B v 4:1-4 Ja 15 '18

Wood as fuel. G. H. Collingwood. *il Cornell Countryman* 15:259-61 F '18

Wood fuel. W. G. Howard. (B. 16) 8p '18 N. Y. State conservation comm., Albany

Wood fuel as a national need. *il Am For* 24:85-90 F '18

Wood-fuel situation. *J For* 16:361-3 Mr '18

Wood fuel to relieve the coal shortage in eastern Canada. C. Leavitt. 16p '18 Canada Commission of conservation, Ottawa

Wood to the front as wartime fuel. Am For 23:741-2 D '17

Woodlot improvement and the production of firewood. A. E. Taylor. *il map Ohio Ag Exp B v* 3:215-21 Jl '18

**Statistics**

Cordwood used on farms. Monthly Crop Rep 4:4 Ja '18

Use of firewood on farms. Monthly Crop Rep 3:24 Mr '17

**Wood-cutting machinery**

Bucheronne, a machine for felling and sawing coppice-wood. M. de Grandseille. *il Int R Sci & Prac Ag* 9,no 5:604-5 My '18

**Wood distillation**

Hardwood distillation industry in America. E. H. French and J. R. Withrow. *il Ohio State Univ B* (Columbus) v 19,no 7:1-32 n.d.

Yields from the destructive distillation of certain hardwoods. L. F. Hawley and R. C. Palmer. *U S Ag B* 129:1-16 '14

Yields from the destructive distillation of certain hardwoods. R. C. Palmer. *U S Ag B* 508:1-8 '17

Wood fibers. See Fibers, Wood

Wood finishing

Finishing southern yellow pine. Am Coop J 11:518 Ja '16

Floors and their finish. G. R. Wilmot. *il Country Gent* 81:1059 My 13 '16

To finish redwood. Country Gent 81:391 F 19 '16

See also Stains and staining

Wood flour

Preparation and uses of wood flour. F. W. Kressmann. *Int R Sci & Prac Ag* 8,no 1:55-7 Ja '17

Wood flour and the manufacture of dynamite and linoleum. *Power F* 25:24 S '16



**Wood pipes.** See Pipes, Wood

**Wood preservation**

- Acidifying action of the basidiomycete conio-phora cerebella on timber. I. Petri. *Int R Sci & Prac Ag* 8, no 10:1431-2 O '17
- American wood preservers' association committee on specifications for the purchase and preservation of treatable timber report; abstract. *Am Soc Mechanical Eng J* (29 W. 39th st., N.Y. 35c) 39:167-8 F '17
- American wood preservers' association 13th annual convention. *Railway Age Gazette* (Woolworth bldg., N.Y. 15c) 62:149-53 Ja 26 '17 Chicago
- Butt treatment of wooden poles. A. B. Campbell. *Il Ia Ag Coll B v* 15:1-19 Ja 20 '17
- Creosoting silo staves. Wis Ag Ext C 87:13-14 '17; Same. *Hoard's D* 54:579 N 16 '17
- Crossies purchased and treated in 1915. A. M. McCreight. *U S Ag B* 549:6-8 '17
- Dry rot in timber. G. P. Darnell-Smith. *Ag Gaz of New South Wales* 28:463-6 Jl '17
- Field tests made on oil treatment of wood against marine borers. C. H. Teesdale and L. F. Shackell. *Il Eng News-Record* (10th av at 36th st, N.Y. 15c) 79:833-7 N 1 '17; Same. *Railway Age* (Woolworth bldg., N.Y. 15c) 63:891-4 N 2 '17
- Greater penetration in treating Douglas fir. O. P. M. Goss. *Il Railway Age Gazette* (Woolworth bldg., N.Y. 15c) 62:783-4 Ap 13 '17
- How to preserve farm timbers. *Am Coop J* 11:632 F '16
- Imbedding and staining of diseased wood. J. S. Boyce. *Phyt* 8:432-6 Ag '18
- Indian forest records; a further note on the antiseptic treatment of timber, recording results obtained from past experiments. R. S. Pearson. 128p bibliog il 4s 6d '18 India government printing co., Calcutta
- Insects injurious to timber in Sweden. N. A. Kemner. *Int R Sci & Prac Ag* 7, no 3:465 Mr '16
- Lengthening the life of wood. E. E. Weir. *Il Scientific Am* (233 Broadway, N.Y. 10c) 117: 189+ S 15 '17
- New method of creosoting lumber. *Sci Am Sup* (233 Broadway, N. Y. 10c) 86:167 S 14 '18
- New method of seasoning wood. *Scientific Am* (233 Broadway, N.Y. 10c) 116:42+ Ja 6 '17
- New or little known hosts for wood-destroying fungi. A. S. Rhoads. *Phyt* 7:46-8 F '17
- Pipe staves creosoted without loss of strength. O. P. M. Goss. *Eng News-Record* (10th av at 36th st, N.Y. 15c) 79:639-40 O 4 '17; Same cond. *Eng & Contracting* (608 S. Dearborn st, Chicago \$3 per yr.) 48:401-2 N 14 '17
- Preservative treatment of farm timbers. G. M. Hunt. *Il Farmers' B* 744:1-32 '16
- Preservative treatment of farm timbers. E. A. Sterling. 16p il '16 Nat. lumber mfrs. assn., Chicago
- Preserving fence posts. *Power F* 25:36 Ap '16
- Prolonging life of farm timbers. J. B. Berry. *Il Ga Ag Coll (Ext) C* 66:1-8 '17
- Protecting wood from decay and fire. C. H. Teesdale. *Il Scientific Am* (233 Broadway, N.Y. 10c) 117:290 O 20 '17
- Relative resistance of various conifers to injection with creosote. C. H. Teesdale. *il U S Ag B* 101:1-43 '14
- Relative resistance of various hardwoods to injection with creosote. C. H. Teesdale and J. D. MacLean. bibliog il *U S Ag B* 606:1-36 '18
- Report of committee on major farm buildings. R. Thelen. *il Am Soc Ag Eng Trans* 10, no 1:12-23 '17
- Seasoning of wood. H. S. Betts. *il U S Ag B* 552:1-28 '17
- Stopping leak by creosoting lumber. K. C. Barth. *il Hoard's D* 56:36+ Ag 2 '18
- Strength tests of structural timbers treated by commercial wood-preserving processes. H. S. Betts and J. A. Newlin. *U S Ag B* 286:1-14 '15
- Teredo destroys improperly treated piles. H. von Schrenk. *il Railway Age* (Woolworth bldg., N.Y. 15c) 63:657-8 O 12 '17

- Tests of the absorption and penetration of coal tar and creosote in longleaf pine. C. H. Teesdale and J. D. MacLean. *il U S Ag B* 607:1-42 '18
- Tests of wood preservatives. H. F. Weiss and C. H. Teesdale. *U S Ag B* 145:1-20 '15
- Timber storage conditions in the eastern and southern states with reference to decay problems. C. J. Humphrey. *il U S Ag B* 510: 1-42 '17
- To preserve fence posts. *Power F* 25:27 Jl '16
- Toxicity to fungi of various oils and salts, particularly those used in wood preservation. C. J. Humphrey and R. M. Fleming. bibliog *il U S Ag B* 227:1-38 '15
- Two new wood-destroying fungi. J. R. Weir. *il J Ag Research* 2:163-6 My '14
- Wood preservative statistics. *Railway Age Gazette* (Woolworth bldg., N.Y. 15c) 63:110-11 Jl 20 '17
- Wood preserving department. O. P. M. Goss. See monthly numbers of American forestry  
See also Dry rot; Powder-post beetles; Tyloses

**Bibliography**

- Indian forest records; a further note on the antiseptic treatment of timber. R. S. Pearson. p 123-8 il 4s 6d '18 India government printing co., Calcutta
- Structural service. *Am Inst Architects J* (The Octagon, Washington, D.C. 50c) 5:253-5 My '17

**Wood pulp**

- Effect of varying certain cooking conditions in the production of sulphite pulp from spruce. S. E. Lunak. *il plan U S Ag B* 620: 1-23 '18
- Effects of varying certain cooking conditions in producing soda pulp from aspen. H. E. Surface. bibliog *il U S Ag B* 80:1-63 '14
- Forestry and the paper industry. D. F. Houston. *il Am For* 23:205-12 Ap '17; Same. *Weekly N L* 4:1-3 Mr 28 '17; Excerpts. *Ag Digest* 1:445 My '17
- Ground-wood pulp. J. H. Thickens and G. C. McNaughton. *il maps U S Ag B* 343:1-151 '16
- How the Austrians make paper twine, yarn and belting. *Scientific Am* (233 Broadway, N.Y. 10c) 116:629 Je 23 '17
- New woods for paper pulp. O. Kress. *il Scientific Am* (233 Broadway, N.Y. 10c) 116: 593 Je 16 '17
- Pulpwood consumption and wood pulp production, 1916. F. H. Smith and R. K. Helphenstine, jr. 30p '17 U. S. Forest service, Washington, D.C.
- Pulp wood industry. *Rural N Y* 77:1306 N 23 '18
- Studies on paper pulps. W. H. Smith. (Technologic papers no. 88) 13p '17 U.S. Bur. of standards, Washington, D.C.
- Suitability of longleaf pine for paper pulp. H. E. Surface and R. E. Cooper. *U S Ag B* 72:1-26 '14
- Supply of pulpwood in Canada. R. H. Campbell. *Paper* (117 E. 24th st., N.Y. 25c) 22:12-14 My 1; 11-14 My 8 '18
- Waste sulphate liquor problem. B. Johnsen. *Sci Am Sup* (233 Broadway, N. Y. 10c) 86: 190-1 S 21 '18

**Statistics**

- International trade. See United States Department of agriculture Yearbooks

**Wood seasoning.** See Wood preservation

**Wood ticks**

- How sheep eradicate Rocky Mountain fever. L. Paine. *Am Sheep B & W* 36:672 N '16

**Wood-using industries**

- Forest service reports on wood-using industries of the states. R. M. Harper. *Soc Am For Pro* 11:346-53 Jl '16

**Wood waste**

- By-product mills in the hardwood industry. P. L. Buttrick. *J For* 15:435-7 Ap '17
- By-products of the forests. *Scientific Monthly* (Science Press, Garrison, N.Y. 30c) 4:286-8 Mr '17

**Wood waste—Continued**

- Making box boards from sawmill waste. P. L. Buttrick. For Quar 14:39-45 Mr '16
- Potash from incinerator ash of the Northwest. C. W. Thing. J Industrial & Eng Chemistry (Easton, Pa. 60c) 9:472-4 My '17
- Saving waste lumber at army cantonments. Il Scientific Am (233 Broadway, N.Y. 10c) 118:59 Ja 12 '18
- Utilization of waste from hardwoods. For Quar 14:346-8 Je '16
- Utilization of wood waste by chemical means. H. F. Weiss. Soc Am For Pro 11:177-84 Ap '16
- What is waste? R. C. Bryant. J For 15:978-80 D '17

See also Wood—By products

**Woodbury, C. G.**

- Portrait. Breeder's Gaz 71:1125 My 31 '17

**Woodchucks**

- Cooking a woodchuck. T. Schwenk. Rural N Y 76:990 Ag 18 '17
- Cosgrove woodchuck. Rural N Y 77:1022 Ag 31 '18
- Exterminating the woodchuck. Rural N Y 76:893 Jl 21 '17
- Getting rid of groundhogs. F. F. Rockwell. Country Gent 81:542 Mr 4 '16
- In camp with the woodchuck family. C. J. Hawkins. Il Country Life 29:58+ Ap '16

**Woodfish. See Silverfish****Woodlots**

- Care and improvement of the wood lot. C. R. Tillotson. Il Farmers' B 711:1-24 '16
- Conserving the woodlot. W. D. Ludwig. Il Country Gent 82:454 Mr 3 '17
- Coöperation in timber marketing. G. Pinchot. Prog F 31:673 My 20 '16
- County or community working plans as a basis for woodlot extension work. W. D. Sterrett. For Quar 14:467-70 S '16
- Emergency fuel from the farm woodland. A. F. Hawes. U S Ag C 79:1-8 '17
- Farm and the woodlot. J. E. Barton. 21p bibliog il n. d. Ky. State forester, Frankfort
- Farm forestry. J. H. Foster and others. Tex Ag Ext B B-42:1-17 '17
- Farm forestry in Virginia. R. C. Jones. (B. 12) 60p bibliog '17 Va. State forester, Univ. of Va., Charlottesville
- Farm forestry; its economic importance in agricultural development in North Carolina. (Press B. 157) 6p '17 N.C. Geological and economic survey, Chapel Hill
- Farm woodlots. Hoard's D 51:145 F 18 '16
- Farmer and the forester. H. S. Graves. Il Penn State F 9:472-3+ D '16
- Farmers' \$200,000,000 woodlot. H. E. G. Bryant. Il Country Gent 82:1345 S 1 '17
- Farmer's woodlot. J. J. Crumley. Il Ohio Ag Exp B v 2:375-80 N '17
- Firewood. W. J. Green. Ohio F 139:810 Je 23 '17
- Fuel and the woodlot. E. Secrest. Il Ohio Ag Exp B v 2:257-60 Ag '17
- Getting most out of woodlot. O Judd Farmer 63:12 O 20 '17
- Getting the most out of the woodlot. V. C. Isola. Il Country Gent 82:180 F 3 '17
- Getting value from the woodlot. Power F 25:37 Ag '16
- Gleaning the wood-lot. W. J. Cooper. Ohio F 138:623 D 23 '16
- Grazing the woodlot. J Ag (Quebec) 20:viii D '16
- Handling the farm woodlot. C. W. Eaton. (In Maine Forest com'rs. report, 1916, p. 112-29) il '17 Forest comr., Augusta, Me.
- Hooverising the woodlot. J. B. Bentley. Il Cornell Countryman 15:467-8 My '18
- How to improve the woodlot. Power F 27:51 Jl '18
- How to sell farm timber. P. S. Lovejoy. Il Country Gent 82:1962-3+ D 15 '17
- Improving the farm forest. W. L. Hall. Il Prog F 31:674 My 20 '16
- Making the woodlot count. R. S. Hosmer. N Y Ag Dept B 86:2361-5 Ag '16
- Management of woodlots. G. C. Piché. (In 9th Report, Quebec society for the protection of plants, 1916-1917, p. 22-4) '17
- Marketing of woodlot products. J. W. Calland. Ohio Ag Exp B 302:41-69 '16; Excerpt. Ohio Ag Exp B v 2:17-18 Ja '17
- Measuring and marketing woodlot products. W. R. Mattoon and W. B. Barrows. Il Farmers' B 715:1-48 '16; Excerpt. Power F 25:49 S '16
- Message from the chief forester of the United States; woodlots. H. S. Graves. Prog F 31:673 My 20 '16
- Mr Schoen and I sell a woodlot. P. S. Lovejoy. Il Country Gent 82:631-2+ Mr 31 '17
- New grounds not signs of progress. R. S. Maddox. Prog F 31:689 My 20 '16
- Observations on the growth of timber; experiences with the farm woodlot. C. S. Moore. Rural N Y 76:141 F 3 '17
- Pasturing the woodlot. J. S. Holmes. Prog F 31:1366 N 25 '16
- Plan for a fuel and wood supply. C. White. Power F 27:47 F '18
- \* Plan of co-operation between woodland owners and the state forester. (Forestry leaflet no. 18) 2p '18 Md. State bd. of forestry, Baltimore
- Planting old wood lots. N. C. Brown. Il Country Gent 81:465 F 26 '16
- Pointers on marketing woodlot products. S. L. Wolfe. Il U S Ag Yearbook 1915:121-30
- Reforesting a corn belt farm. H. T. Morgan. Il Field 11 26:756-7 S '16
- Role of artificial regeneration in the reforestation of hardwood woodlots. E. Secrest. J For 16:329-34 Mr '18
- Selling woodlot products on Michigan farms. E. H. Frothingham. 49p il maps '16 Public domain commission, Lansing, Mich.
- Some timely suggestions for the owners of woodlots in New England. F. H. Mosher and G. E. Clement. 8p '17 U. S. Bur. of entomology, Washington, D.C.
- Spring in the woodland. Gard Chron (Lond) 61:140 Ap 7 '17
- Status and value of farm woodlots in the eastern United States. E. H. Frothingham. maps U S Ag B 481:1-43 '17
- \* Use but do not abuse farm woodlands. C. R. Tillotson. (Misc. R.—3) 3p '18 U.S. Forest service, Washington, D.C.; Same. Am For 24:656 N '18
- Value and care of a farm woodlot. Prac F 113:13 Ja 1 '17
- War-time uses of the woodlot. A. F. Hawes. Il Am For 23:332-3 Je '17
- Waste woodland for the breeding of pigs. S. F. Edge. Il J Bd Ag 22:977-81 Ja '16
- What the farm woodlot is worth. Power F 26:50 S '17
- Woodland development and its by-product of fuel. H. J. Koehler; F. F. Moon. Il Country Life 33:50-2 Ap '18
- Woodland versus woodlot in farm forestry. W. R. Mattoon. J For 16:218-20 F '18
- Woodlot. C. A. Scott. Il Kansas Ag Exp C 58:1-37 '17
- Woodlot: a problem for New England farmers. J. W. Toumey. Il Scientific Monthly (Science Press, Garrison, N.Y. 30c) 5:193-203 S '17
- Woodlot and the Smith-Lever bill. Am For 22:51 Ja '16
- Woodlot conditions in Broome county, New York (B. 366). F. B. Moody and J. Bentley, jr. Il Cornell Ag Exp Rep 1916:227-44 '17
- Woodlot conditions in Dutchess county, New York (B. 368). F. B. Moody and J. Bentley, jr. Il Cornell Ag Exp Rep 1916:283-302 '17
- Woodlot forestry. R. Rosenbluth and B. H. Paul. (B. 9) 73p il '17 New York conservation comm., Albany
- Woodlot goes to war. P. S. Lathrop. Il Country Gent 83:11-12+ N 9 '18
- Woodlot improvement and the production of firewood. A. E. Taylor. Il map Ohio Ag Exp B v 3:215-21 Jl '18
- Woodlot: its present problems and probable future status in the United States. C. R. Tillotson. Soc Am For Pro 11:198-207 Ap '16
- Woodlots should be well stocked with trees. J. A. Ferguson. Penn State F 9:417 Je '16



**Woodlots—Continued**

Your wood lot? its money, fuel, fertilizer. *Irr*  
Age 31:122 Je '16  
*See also Timber*

**Taxation**

*Bibliography*

Taxation of woodlots. K. W. Woodward. *N H*  
Ag Ext C 39:1-19 '18

**Woodpeckers**

Food of West Virginia birds; the woodpeck-  
ers. E. A. Brooks. *W Va Ag Dept B* 15:39-  
42 '16  
Red-headed woodpecker. E. S. Jones. *il Ohio*  
F 139:258 F 17 '17  
Tree surgeon. C. J. Stanwood. *Country Life*  
31:122 F '17  
Woodpeckers. A. A. Allen. *il Am For* 23:736-40  
D '17

**Woods.** *See Forests and forestry*

**Woodwork**

Commercial uses of cypress. *il Am For* 22:  
581-5 O '16  
Commercial uses of Douglas fir. J. S. Wil-  
liams. *il Am For* 22:69-75 F '16  
Commercial uses of shortleaf pine. *il Am For*  
22:517-20 S '16  
Commercial uses of the white elm. *il Am For*  
22:262-7 My '16  
Commercial uses of white oak. *il Am For*  
22:6-11 Ja '16  
Directions for reducing a piece of stock to  
dimensions. L. M. Roehl. *Hoard's D* 53:24 Ja  
26 '17  
Uses of wood; the employment of wood as  
house finish. H. Maxwell. *il Am For* 24:  
593-602 O '18  
Woodcraft. J Ag (Quebec) 21:96 D '17  
Woodworking problems. S. T. Newton. plans  
map Manitoba *Ag Col B* 20:1-68 '16  
*See also Wood finishing*

**Wool**

About grease in wool. *Am Sheep B & W* 36:  
201 Ap '16  
Alkali and weathering studies with wool. J. I.  
Hardy. *Wyo Ag Exp Rep* 1917:164-9 '17  
As to wool shrinkage; Ohio experiment sta-  
tion offers to make scouring tests. J. W.  
Hammond. *Nat Stock & F* 42:279 Je 8 '18  
Balancing types in the range flock. R.  
Wood. *il Breeder's Gaz* 69:1111 My 25 '16  
Catch the leakage for profits. H. Hackedorn.  
*il Am Sheep B & W* 38:233-5 Ap '18  
Cleansing wool for home use. J. W. Ham-  
mond. *Breeder's Gaz* 69:723 Mr 30 '16  
Conference on increasing domestic wool sup-  
ply. *Textile World J* (461 8th av. at 34th st.,  
N.Y. \$3 per yr.) 52:22-4 D 2 '16  
Co-operation of wool growers in handling the  
clip urged as a means of increasing profits.  
*Coop Manager & F* 7:92 S '17  
Cotting of wools. *Am Sheep B & W* 38:21 Ja  
'18  
Cotton or wool uniforms. *Nat Wool Grower*  
7:51 Mr '17  
Deal in wool. Mrs W. B. Doak. *Breeder's Gaz*  
69:1328 Je 29 '16  
Desirable wool table. C. A. Steele. *il Ohio F*  
137:530 Ap 8 '16  
Detection of the heavy metals by means of  
zinc sulfide wool fibers. E. M. Chamot and  
H. I. Cole. *J Industrial & Eng Chemistry*  
(Am. Chemical Soc., Easton, Pa. 60c) 10:  
49-50 Ja '18  
Directions for caring for sheep in order to  
produce a good quality and condition of  
wool. (*In* Appendix to report, Live stock  
branch, 1917, p. 40-2) '17 Ontario ag. dept.,  
Toronto  
Experiments in breeding range sheep. F. R.  
Marshall. *Am Sheep B & W* 38:92-3 F '18  
Features of the sheep industries of United  
States, New Zealand, and Australia com-  
pared. F. R. Marshall. *il plan U S Ag B* 313:  
1-35 '15  
Future of wool raising. F. S. King. *Am*  
*Sheep B & W* 37:543 S '17  
Growers need organization. W. W. Reynolds.  
*Ohio F* 141:794 Je 22 '18

Growing and marketing wool. T. C. Stone.  
*Breeder's Gaz* 69:556-7 Mr 9 '16  
Have you any wool? F. Crissey. *il Country*  
*Gent* 83:3-4 Mr 2 '18  
How and why of wool manufacture. W. B.  
Tyrrell. *Am Sheep B & W* 37:142-4 Mr '17  
How to produce more and better wool. A. A.  
MacMillan. *il Am Sheep B & W* 38:11 Ja  
'18; Same. *J Ag (Quebec)* 21:106 Ja '18  
Improvement in range sheep. T. S. Parsons.  
*Breeder's Gaz* 69:1328 Je 29 '16  
Inferior fleece wools. S. H. Hart. *Am Sheep*  
*B & W* 38:7-9 Ja '18  
Influence of humidity upon the strength and  
the elasticity of wool fiber. J. I. Hardy.  
*bibliog il J Ag Research* 14:285-96 Ag 19 '18  
Mass meeting of manufacturers discusses  
wool conservation. *Textile World* (461 8th  
av at 34th st, N.Y. \$3 per yr.) 53:1464-5 O  
13 '17  
Meaning of clean yield of wool. S. B. Hollings.  
*Textile World J* (461 8th av. at 34th st., N.Y.  
\$3 per yr) 52:769+ Ja 13 '17  
Mohair as a savor of wool. S. B. Hollings. *Am*  
*Sheep B & W* 38:57 Ja '18  
More wool. *Am Sheep B & W* 38:314-15 My  
'18  
Next year's wool marketing. R. A. Hayne.  
*Nat Stock & F* 42:638 O 12 '18  
Plain talks about sheep. W. W. Reynolds.  
*Rural N Y* 76:765 Je 9 '17  
Plan to conserve wool. *Breeder's Gaz* 72:842 N  
8 '17  
Pointers on shearing. F. S. King. *il Am Sheep*  
*B & W* 36:68-9 F '16  
Preparing wool for market. W. B. Dale. *Am*  
*Sheep B & W* 38:183 Mr '18  
Pressure of military requirements curtails  
civilian wool resources and arouses dis-  
cussion for standardizing civilian cloth.  
S. B. Hollings. *Am Sheep B & W* 37:755 D  
'17  
Problem of making wool unshrinkable. C.  
Westgate. *Textile World* (461 8th av at  
34th st, N.Y. \$3 per yr.) 53:5575+ My 18 '18  
Rates on wool; I. C. C. opposes propriety of  
requirement of 19 lb. per cubic foot density.  
*Textile World* (461 8th av at 34th st, N.Y.  
\$3 per yr.) 54:133 Jl 6 '18  
Raw material wanted. S. B. Hollings. *Am*  
*Sheep B & W* 38:269 Ap '18  
Rearing of Angora rabbits for their wool.  
L. E. Moore. *J Bd Ag* 23:664-8 O '16  
Reason for a return to wool-growing. P. T.  
Cherington. *Textile World J* (461 8th av. at  
34th st., N.Y. \$3 per yr) 52:95+ D 2 '16  
Scouring western wools. *Nat Wool Grower*  
8:43+ F '18  
Shall we raise more sheep? S. W. McClure.  
*il Country Gent* 81:1016-17 My 13 '16  
Sheep and wool situation. H. B. Pier. *Neb Ag*  
*Ed B* 245:349-52 '18  
Sheep conference, Philadelphia, Nov. 23-24,  
1916. *Nat Stock & F* 40:901 D 2 '16  
Shoddy. W. W. Reynolds. *Ohio F* 138:202 S 2  
'16  
Shoddy and reworked wool; definitions. *Tex-*  
*tile World* (461 8th av at 34th st, N. Y. \$3  
per yr.) 53:4041 Mr 2 '18  
Shoddy and the future of the sheep industry;  
we must fight for pure wool. W. W. Rey-  
nolds. *il Rural N Y* 77:639 My 4 '18  
\* Shrapnel and shoddy. D. Jaspersen. Every-  
body's (Spring & Macdougall sts, N.Y. 20c)  
39:75 O '18  
Shrinkage of fine wools. J. W. Hammond. *Nat*  
*Stock & F* 42:388 Jl 20 '18; Same cond. *Ohio*  
*F* 142:75 Jl 27 '18  
Slight difference in the opinion of two breed-  
ers; B type fleece. S. M. Cleaver. *Am Sheep*  
*B & W* 36:198 Ap '16  
Spring lambs and wool. *Breeder's Gaz* 69:76+  
Ja 13 '16  
Tailor's viewpoint; a statement of the cloth  
problems that face the tailor. *Am Sheep*  
*B & W* 37:595-7 O '17  
Using more wool. Weekly *N L* 5:6 Ap 17 '18  
War and the wool grower. J. F. Walker. *Am*  
*Sheep B & W* 38:328 My '18  
What shall we breed? J. F. Walker. *Am*  
*Sheep B & W* 38:608 S '18  
Where shall we get wool? S. W. McClure. *il*  
*Country Gent* 82:1024 Je 16 '17

**Wool—Continued**

- Women wasting wool. *Am Sheep B & W* 38: 445 J1 '18
- Wool, a factor in war winning. H: F. Thurston. *il Am Coop J* 13:187-8 Ja '18
- Wool and mutton necessary in profitable sheep raising. *Prac F* 112:303 Ag 1 '16
- Wool and war. J: R. Munn. *Nat Stock & F* 41:1041 Ja 19 '18
- Wool embargo threatened. A. A. MacMillan. *J Ag (Quebec)* 20:226 My '17
- Wool growers stand pat. *Nat Stock & F* 41: 1327 Mr 16 '18
- Wool: its growth and uses. J. R. MacDonald. *J Ag New Zealand* 13:345-51 N '16
- Wool production. *Weekly N L* 4:3 Je 6 '17
- Wool required for soldiers. S. R. Winters. *Breeder's Gaz* 74:77 J1 18 '18
- Wool shrinkage rates; calculations of grease prices from a clean basis. *Textile World* 54:242 J1 13 '18
- Wool studies; washing before shearing; time of shearing. J. W. Hammond. *il Ohio Ag Exp B* 294:309-22 '16; Same cond. *Ohio Ag Exp B v* 1:131-5 My '16
- Wool substitute use. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:1339 O 6 '17
- Woolen fibers and fabrics. H. Mason. *Ohio F* 142:566 D 7 '18
- World famine in mutton and wool. F. H. Higgins. *Ag Digest* 2:584 Ag '17
- World wool demands. S. H. Hart. *Am Sheep B & W* 37:647-51 N '17
- See also Mohair; Sheep; Textile industry and fabrics; Wool tariff; Woolen and worsted manufacture

**Costs**

- Cost of last wool clip. W. W. Reynolds. *Ohio F* 142:551 D 7 '18
- Cost of producing wool. *Nat Stock & F* 42:806 D 7 '18
- Cost of the 1918 clip. W. W. Reynolds. *Nat Stock & F* 42:784 N 30 '18
- Cost of wool. J. Rustic. *Nat Stock & F* 42: 762 N 23 '18
- What wool will cost. E. R. Haines. *Nat Stock & F* 42:724 N 9 '18

**Disinfection**

- Disinfecting wool. *Nat Wool Grower* 7:56 F '17

**Exhibits**

- National wool warehouse exhibit at the International. *Am Sheep B & W* 36:712 D '16
- Wool exhibit of the Live stock branch. T. R. Arkell. *il Ag Gaz of Canada* 4:1032-5 D '17

**Grading**

- Assistance to wool growers' associations in grading and classifying wool for market. T. R. Arkell. *Ag Gaz of Canada* 3:411 My '16
- Australian and American classing. *Am Sheep B & W* 37:160-1 Mr '17
- Australian wool letter. E. H. Pearse. *Am Sheep B & W* 38:667-8 O '18
- Classifying the Savage clip. J. A. Hill. *Am Sheep B & W* 37:180 Mr '17
- Government requirements in grading of wool. C: J. Nichols. *Nat Wool Grower* 8:25 J1 '18
- How they sell the wool at Boston. H: A. Kidder. *Am Sheep B & W* 37:528-30 S '17
- Market classes of wool. *il Nat Stock & F* 40: 213 My 20 '16
- Review of co-operative wool sales in Canada. T. R. Arkell and J. K. King. 23p *il '17 Canada Ag*
- Shearing, grading and baling of wool. W. N. McGill. *il Nat Wool Grower* 7:9-10 F '17
- Study the fleece in handling clip. *Am Sheep B & W* 37:460 Ag '17
- Western wool terms. *il Nat Wool Grower* 7: 23-4 Ap '17
- Wool grading and sales in Quebec. A. A. Macmillan. *J Ag (Quebec)* 21:13 J1 '17

**Marketing**

- Assistance extended to associations in the co-operative sale of wool. T. R. Arkell. *il Ag Gaz of Canada* 5:141-3 F '18
- Better wool and higher prices. *il Field* 11 26: 18-19 Ja '16

- Better work with the wool clip. G: H. Dacy. *il Nat Wool Grower* 7:13-14 J1 '17
- Co-operation in wool marketing. R. W. Wade. (*In Report, Ontario ag. & exp. union, 1917, p. 23-4*) '18 Ontario ag. dept., Toronto
- Co-operative handling of wool in the provinces. *Ag Gaz of Canada* 5:959-71 O '18; Excerpt *J Ag (Quebec)* 22:79 N '18
- Co-operative marketing of wool. *Ag Gaz of Canada* 4:863-73 O '17
- Co-operative marketing of wool in the provinces. *il Ag Gaz of Canada* 3:880-4 O '16
- Co-operative sale of wool. *Int R Ag Econ* 74: 14-24 F '17
- Co-operative sale of wool. J. H. Tubbs. *Am Sheep B & W* 37:531 S '17
- Cooperative selling of wool. C. S. Plumb. *Breeder's Gaz* 74:154 Ag 1 '18
- Co-operative wool marketing. R. W. Duck. *Ohio F* 137:530 Ap 8 '16
- Cooperative wool marketing. J. Gelder. *il Am Sheep B & W* 38:174 Mr '18
- Co-operative wool marketing in Quebec—1918. A. E. MacLaurin. *J Ag (Quebec)* 22:26 Ag '18
- Cooperative wool-marketing system. J. H. McKenney. *Nat Stock & F* 40:916 D 9 '16; Same. *Breeder's Gaz* 71:1198 Je 14 '17
- Co-operative wool sales conducted in Canada. (*In Appendix to report, Live stock branch, 1917, p. 42-95*) '17 Ontario ag. dept., Toronto
- Cooperative wool-selling. *Nat Stock & F* 40: 427 J1 22 '16
- Future wool markets. *Nat Wool Grower* 8:29 N '18
- Government regulations for handling wool clip of 1918. 8p '18 U.S. War industries board, Washington, D.C.
- Marketing of Ohio wools. J. F. Walker. *Am Sheep B & W* 38:454 J1 '18
- Marketing of wool; with discussion. E. L. Richardson. (*In Report, Live stock branch, 1916, p. 53-7*) '17 Ontario ag. dept., Toronto, Canada
- Marketing the 1916 wool clip in Quebec co-operatively. *J Ag (Quebec)* 20:7 J1 '16
- Marketing wool with a tractor. W. O. Shultz. *il System on the Farm* 1:236 Ag '17
- New selling system. *Nat Wool Grower* 8:33 F '18
- Progress in handling the wool clip; development in the West. F. R. Marshall. *il plan U S Ag Yearbook* 1916:227-36; Same. Separate 709
- Sale of home-grown wool; classed and unclassified wool. D. B. Grist. *J Bd Ag* 23:41-7 Ap '16
- Saskatchewan issues instructions. W. W. Thomson. *Am Sheep B & W* 36:232 Ap '16
- Successful co-operative marketing of wool in old Quebec. *Am Sheep B & W* 36:96 F '16
- What put wool to 70 cents. J. F. Walker. *Ohio F* 142:139 Ag 17 '18

**Auction method**

- Are we to have auction wool sales in America? *Am Sheep B & W* 38:514 Ag '18
- For wool auctions. *Nat Wool Grower* 7:17 J1 '17

**Packing**

- Scot's favorite woolbox. L. McLachlan. *il Breeder's Gaz* 71:920 My 3 '17

**Prices**

- American grown wool reaches \$1 mark. *Am Sheep B & W* 36:641-2+ N '16
- Basis of wool valuations. *Breeder's Gaz* 73:981 My 9 '18
- Boston wool market. *Nat Wool Grower* 7:37+ Ja; 25-26 F; 25-7 Mr; 35-7 Ap; 19-21 My; 17-19 Je; 21-4 J1; 25-7 Ag; 19-21 O; 19-21 N; 31-3 D '17; 8:43+ Ja; 22-4 Mr; 23-5 Ap; 21-3 My; 17-19 Je; 21-3 J1; 23-5 Ag; 17-20 S; 17-19 O; 19-21 N '18
- British government controlling top market. *Am Sheep B & W* 36:550 S '16
- Co-operative wool sales conducted in Canada. (*In Appendix to report, Live stock branch, 1917, p. 42-95*) '17 Ontario ag. dept., Toronto
- Eat more lamb and fix wool prices. *Am Sheep B & W* 38:79-80 F '18



**Wool—Prices—Continued**

Excitement on Boston mart. Am Sheep B & W 37:677-8 N '17

Farm wool information. L: Penwell. Nat Wool Grower 8:50 J1 '18

Figuring on wool prices. W. W. Reynolds. Ohio F 142:582 D 14 '18

Fixing the price of wool. Nat Wool Grower 8: 11-13 My '18

Fixing wool prices. Nat Wool Grower 7:33 Ap '17

Further wool advances imminent. Am Sheep B & W 36:534-5 S '16

Government control of wool. Ag Digest 3:30 J1 '18

Government price fixing; wool too high. W. W. Reynolds. Am Sheep B & W 38:454 J1 '18

Government prices leaves wool firm. Am Sheep B & W 37:491 Ag '17

Government regulations for handling wool clip of 1918 issued by War industries board.

Am Sheep B & W 38: sup (opposite p. 328) My '18; Same cond. O Judd Farmer 64:573 Je 1 '18; Excerpt. Nat Stock & F 42:255 Je 1 '18

How they sell the wool at Boston. H: A. Kidder. Am Sheep B & W 37:528-30 S '17

Keep sheep and grow wool. il Ohio F 142:118 Ag 10 '18

More wool figures. Nat Stock & F 42:331 Je 29 '18

New price regulations now effective. Am Sheep B & W 38:404-6 Je '18

No combination of causes can stop wool advance. Am Sheep B & W 37:29-30 Ja '17

No marked change in wool market. Am Sheep B & W 37:552-4 S '17

Price of wool. W. W. Reynolds. Nat Stock & F 40:259 Je 3 '16

Prices of sheep and wool. Nat Wool Grower 8:40 N '18

Record prices for cape tops. S. B. Hollings. Am Sheep B & W 38:219 Mr '18

Sensation in wool. O Judd Farmer 64:506 My 11 '18

Sharp wool advances to new record levels. Am Sheep B & W 37:78-9 F '17

Shortage causes rising wool market. Am Sheep B & W 37:344 Je '17

Some woolly but not wild statements. J. F. Walker. Nat Stock & F 42:470 Ag 17 '18

Statement on fixing wool prices. F. J. Hagendarth. Nat Wool Grower 7:21 My '17

To fix the price of wool. Nat Wool Grower 7: 38 D '17

Tri-state wool growers' conference to discuss fixing of prices on wool. C. S. Plumb. Ohio F 141:698 My 25 '18

U.S. wool option exercised. Am Sheep B & W 38:195-6 Mr '18

U.S. wool option to continue. Am Sheep B & W 38:264-5 Ap '18

What put wool to 70 cents. J. F. Walker. Ohio F 142:139 Ag 17 '18

Why a fleece wool association. J. F. Walker. Am Sheep B & W 38:501-2 Ag '18

Why fleece wool prices were reduced. J. F. Walker. Nat Stock & F 42:290 Je 15 '18; Same cond. Ohio F 141:794 Je 22 '18

Wide variety of opinion in Boston; and quotations. Am Sheep B & W 36:406+ J1 '16

Wool conditions direct from Boston. Am Sheep B & W 37:282-3 My '17

Wool control. Nat Stock & F 42:147 My 4 '18

Wool price situation. A. W. North. Rural N Y 77:763 Je 8 '18

Wool regulations. Nat Stock & F 42:188 My 11 '18

**Storage**

Eastern storage for western wool clip. J: Bright. Ag Gaz of Canada 4:265-6 Ap '17

Investigator in wool warehousing. Nat Wool Grower 7:56 O '17

**Testing**

Tensile strength and elasticity of wool. R. F. Miller and W: D. Tallman. il J Ag Research 4:379-90 Ag '15

\* Test for wool. H. L. Gray. il J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c) 10:633-4 Ag '18

Wool and cotton testing. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:4566 Ap 6 '18

**Transportation**

Some congestion of wool transit. Nat Wool Grower 8:28 Ag '18

**Australia**

Australian wool classing. il Country Gent 81: 679 Mr 25 '16

Details of Australian clip purchase. Am Sheep B & W 37:50 Ja '17

Future of wool growing in Australia. R. H. Harrowell. il Nat Wool Grower 7:25-6 Ap '17

War's effect on Australia. W. Carson. il Am Sheep B & W 37:365-7 Je '17

Wool growing in Australia. R. H. Harrowell. Nat Wool Grower 7:11-12 O '17

Wool growing in Australia. R. H. Harrowell. il Nat Wool Grower 8:19-20 Mr '18

**Canada**

Preliminary statistics on Alberta's wool clip. H. D. Clum. (Commerce Reports no. 217) p 1016-17 (S 16) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.

Prizes for wool in the fleece at Canadian fairs. T. R. Arkell. Ag Gaz of Canada 3: 1055-6 D '16

**Great Britain**

Every British move favors American grower. Am Sheep B & W 36:400 J1 '16

**New Zealand**

New Zealand letter. W. Wright. Am Sheep B & W 36:233 Ap '16

Requisition of New Zealand wool. J Ag New Zealand 14:76-7 Ja '17

**Russia**

Fleece of Russian coarse-woolled sheep. S. N. Kovalevskij. Int R Sci & Prac Ag 7,no 6: 858-9 Je '16

**South Africa**

Wool the salvation of small farmers in South Africa. Am Sheep B & W 36:103 F '16

**Spain**

Spanish wools. Int R Sci & Prac Ag 7,no 5: 742-3 My '16

**United States**

More American wool. A. C. Bigelow. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2757 My 12 '17

New fleece record claimed; Laramie. W. Stemmons. Breeder's Gaz 69:1114 My 25 '16

Sheep and wool conference. Wallaces' F 41: 1601 D 8 '16

Sheep and wool day at Montana state college. C. H. Arnett. Am Sheep B & W 36:203 Ap '16

Western wool selling. S. W. McClure. Country Gent 81:1471 Ag 5 '16

Wool in United States on March 31, 1918. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:5407 My 11 '18

**Uruguay**

Uruguayan wool clip and market conditions. W: Dawson. (Commerce Reports no. 267) p 612-14 (N 14) '17 U.S. Bur. of foreign and domestic commerce, Washington, D.C.

**Wool combing**

Combing South American wools. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3819, 3913 F 16-23 '18

**Wool grease**

Recovery of grease and fertilizers from sewage. Eng News-Record (10th av at 36th st, N. Y. 15c) 80:320-1 F 14 '18; Same. Municipal J (243 W. 39th st, N. Y. 10c) 44: 239 Mr 23 '18

Wool growers' associations. See Sheep breeders' societies

**Wool handling**

Handling the fleece. *Prac F* 113:173 Ap 15 '17  
 Progress in handling the wool clip: development in the West. *F. R. Marshall. il plan U S Ag Yearbook* 1916:227-36; Same. Separate 709

**Wool scouring**

Recovery of potash from wool scouring waste. *R. S. Weston. Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3103+ Ja 12 '18  
 Utilization of wool scouring waste effluent. *C. F. Paul. il Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3577+ F 2 '18

**Wool tariff**

For specific wool duties. *B. L. Crouch. Am Sheep B & W* 36:22 Ja '16  
 Sheep industry in the United States. *A. J. Knollin. Am Sheep B & W* 36:32 F '16  
 Tariff on wool. *Nat Wool Grower* 7:48 Ja '17

**Wool trade and industry**

Accelerated wool clip movement promised. *Am Sheep B & W* 38:452-3 Jl '18  
 Adequacy of supplies being questioned in England. *Am Sheep B & W* 36:261-2 My '16  
 Advances follow in wake of embargo. *Am Sheep B & W* 36:351+ Je '16  
 Agricultural situation for 1918: wool; war makes more sheep and wool necessary. *U S Ag C* 93:1-14 '18

All round advance at Boston. *Am Sheep B & W* 36:466-7 Ag '16

America as a likely buyer. *S. B. Hollings. Am Sheep B & W* 38:531 Ag '18

Amount of wool scoured abroad. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:1499+ F 24 '17

Annual wool review for 1917, with estimate of domestic wool production and other statistical records. *W. J. Battison. Nat Assn Wool Manufacturers* (W. L. Marvin, sec., 50 State st, Boston 50c) B v 48, no 1:1-63 '18

Another record-breaking wool year. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:791+ Ja 13 '17

Attempts to modify wool merchants' service. *P. T. Cherington. Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:2064 Ap 7 '17

Auctioning of Australian wools. *il Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:1836-7 N 3 '17

Australian embargo anticipated in England. *Am Sheep B & W* 36:348-9 Je '16

Australian wool clip. *R. H. Harrowell. Nat Wool Grower* 8:13 N '18

Australian wool is promised for American wool trade. *S. B. Hollings. Am Sheep B & W* 37:502 Ag '17

Australian wool letter. *E. H. Pearse. Am Sheep B & W* 38:527-8 Ag '18

Boston wool market. *Nat Wool Grower* 7:37+ Ja; 25-6 F; 25-7 Mr; 35-7 Ap; 19-21 My; 17-19 Je; 21-4 Jl; 25-7 Ag; 19-21 O; 19-21 N; 31-3 D '17; 8:43+ Ja; 22-4 Mr; 23-5 Ap; 21-3 My; 17-19 Je; 21-3 Jl; 23-5 Ag; 17-20 S; 17-19 O; 19-21 N '18

Boston wool men want changes. *Am Sheep B & W* 38:734-5 N '18

Both arrivals and prices a record. *S. B. Hollings. Am Sheep B & W* 38:155 F '18

Bradford urges Americans not to contract. *Am Sheep B & W* 36:748 D '16

British manufacturing machinery cannot cope with trade in woollens. *Am Sheep B & W* 36:104 F '16

British wool trade in 1917. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3145-6 Ja 12 '18

Cold facts about the wool and mutton supply—why we need more sheep. *W. W. Burch. Am Sheep B & W* 37:71-2 F '17

Complete control of foreign wools. *Textile World* 54:349 Jl 20 '18

Conditions affecting the wool industry. *A. C. Bigelow. N Y Ag Dept B* 96:97-102 Je '17

Conservation of sheep and wool industry. *J. W. Hammond. il Ohio F* 139:65 Ja 20 '17

Co-operative wool sales. *T. R. Arkell. Ag Gaz of Canada* 4:23-4 Ja '17; Same abridged. *Am Sheep B & W* 37:237 Ap '17

Difficulties of wool auction system. *S. W. McClure. Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2184+ Ap 14 '17

Economic aspects of U. S. wool industry. *P. T. Cherington. Am Sheep B & W* 37:7-8 Ja '17

Encouraging wool situation. *O Judd Farmer* 60:10 My 6 '16

English government holds wool. *Am Sheep B & W* 37:244 Ap '17

English wools have record boom. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:797+ Ja 13 '17

Excitement on Boston mart. *Am Sheep B & W* 37:677-8 N '17

Export embargo opposed; wool stock graders recommend free shipments on woollen rags. *Textile World* 53:6365 Je 29 '18

Future holds big possibilities for U.S. growers. *Am Sheep B & W* 36:476 Ag '16

Future of wool in the United States. *H. A. Brauer. Nat Wool Grower* 8:31-3 Ja '18; Same. *Am Sheep B & W* 38:93-5 F '18

Government changes buying plan. *Am Sheep B & W* 38:644-6 O '18

Government controls woollen rag market. *Textile World* 54:346-7 Jl 20 '18

Government price fixing; wool too high. *W. W. Reynolds. Am Sheep B & W* 38:454 Jl '18

Government supplies and the quartermaster's dept. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2784-5+ Ja 5 '18

Government takes part of domestic clip. *Nat Wool Grower* 7:25-7 S '17

Great Britain's wool. *Nat Wool Grower* 7:53 Ag '17

Great interest in wool auctions; first sale of Australian wool in this country attracts representative buyers. *il Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2785 Ja 5 '18

How they sell the wool at Boston. *H. A. Kidder. Am Sheep B & W* 37:528-30 S '17

Increased wool manufacture in Australia. *H. A. Treat. (Commerce Reports no. 196) p* 694-5 (Ag 21) '18 *U. S. Bur. of foreign and domestic commerce, Washington, D. C.*

Italian woolen and worsted industry. *R. Sansone. Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:626+ Ja 13 '17

Manufacturers and dealers paying prices asked. *Am Sheep B & W* 36:284+ My '16

Marketing western Canadian wools. *C. M. McLennan. Breeder's Gaz* 72:317 S 6 '17

Mill buyers in Oregon. *C. M. Bishop. Am Sheep B & W* 36:346 Je '16

National wool and sheep bureau 1st convention. *Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 53:1034-5 S 15 '17

1917 wool growers' year. *Am Sheep B & W* 36:750+ D '16

Our English wool letter. *S. B. Hollings. See monthly numbers of American sheep breeder and wool grower*

Plan for wool control; trade submits plan regarding raw material to federal authorities. *Textile World* (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2246 D 1 '17

Present and future wool supply. *A. W. Elliott. Textile World J* (461 8th av. at 34th st., N.Y. \$3 per yr) 52:132-3 D 9 '16

Present wool boom likely to continue. *Am Sheep B & W* 36:164 Mr '16

Profits in sheep. *W. W. Reynolds. Nat Stock & F* 42:430 Ag 3 '18

Prosperous year in wool. *Am Sheep B & W* 38:12-14 Ja '18; Same cond. *Ag Digest* 2: 938 Ap '18

Question of price fixing argued. *W. M. Wood, jr. Textile World* 53:6102 Je 15 '18

Reply to the wool questionnaire. *L. Penwell. Textile World* 53:6009+ Je 8 '18

Review of co-operative wool sales in Canada. *T. R. Arkell and J. K. King. 23p il* '17 *Canada Ag*

Review of wool. *Nat Stock & F* 40:1089 Ja 20 '17

Review of wool imports in first six months of year. *W. L. Marvin. Textile World* (334 4th av. N. Y. \$3 per yr.) 54:1607 O 5 '18

Season prosperous in Argentine. *Am Sheep B & W* 37:609-10 O '17



**Wool trade and industry—Continued**

Second wool census figures; stocks on hand Sept. 30, 1917. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:1837 N 3 '17  
 Shall we export woollens; memorandum on subject by joint wool conservation committee. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2246+ D 1 '17  
 Sheep and wool industry, Queensland, Australia. L. N. Sullivan. (Commerce Reports no. 188) p 568-75 (Ag 12) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Shipments from South Africa. S. B. Hollings. Am Sheep B & W 38:418 Je '18  
 Slightly higher wool market. Am Sheep B & W 37:622-3 O '17  
 Stability and the wool market. J. E. Poole. il Nat Wool Grower 7:11-12 Jl '17  
 Temporary scarcity being experienced. S. B. Hollings. Am Sheep B & W 38:666 O '18  
 Territory wools now in limelight. Am Sheep B & W 36:146-7 Mr '16  
 To test local wool auctions. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr.) 52:2313+ Ap 21 '17  
 Unfair practice in wool trade. O Judd Farmer 62:18 F 10 '17  
 U.S. wool option exercised. Am Sheep B & W 38:195-6 Mr '18  
 U.S. wool option to continue. Am Sheep B & W 38:264-5 Ap '18  
 War and the wool trade. Breeder's Gaz 71: 826 Ap 19 '17  
 War, wool, Boston and Uncle Samuel. Am Sheep B & W 37:219+ Ap '17  
 We suffer not alone. R. A. Hayne. Nat Stock & F 42:344 Jl 6 '18  
 Wool disinfection ruling. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:1783 Mr 17 '17  
 Wool distribution more satisfactory. Am Sheep B & W 38:587-8 S '18  
 Wool growing in the Orient. I. Tanimura. Am Sheep B & W 38:98-101 F '18  
 Wool importations now controlled. Am Sheep B & W 38:516-18 Ag '18  
 Wool in 1917. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3133+ Ja 12 '18  
 Wool industry; photographs. Ag Digest 1:454-5 My '17  
 Wool market report; for a weekly report. Nat Wool Grower 8:33-4 Mr '18  
 Wool outlook in London, England. Nat Wool Grower 7:51 Ap '17  
 Wool outlook, 1918. A. Y. Cowen. Nat Wool Grower 8:25-6 My '18  
 Wool price situation. A. W. North. Rural N Y 77:763 Je 8 '18  
 Wool prices from 1907 to 1916, inclusive; chart. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:795 Ja 13 '17  
 Wool; production, foreign trade, supply, and consumption. G. K. Holmes. U S Ag Yearbook 1917:401-24; Same. Separate 751; Same (pt. 1). Nat Wool Grower 8:13-14 Je; 17-19 Jl '18  
 Wool shortage a disgrace. W. W. Reynolds. il Am Sheep B & W 38:646-7 O '18  
 Wool situation abroad. Nat Wool Grower 7: 64 Ag '17  
 Wool situation critical. Am Sheep B & W 38: 124-5 F '18  
 Wool strongest commodity in England. Am Sheep B & W 36:30 Ja '16  
 Wool supply and the war's demands. Textile World J (461 8th av. at 34th st., N.Y. \$3 per yr) 52:625+ Ja 13 '17  
 Wool supply committee resigns. Am Sheep B & W 37:736-7 D '17  
 Wool trade. Nat Wool Grower 8:30 O '18  
 Wool workers scarce in Britain. Am Sheep B & W 36:657 N '16  
 Woollens controlled by government purchases. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3099-100 Ja 12 '18  
 Woolgrower and the wool trade. F. R. Marshall and L. L. Heller. il U S Ag B 206:1-32 '15  
 World's wool prices soar. Am Sheep B & W 36:14-15 Ja '16

World's wool situation is extremely tense. Am Sheep B & W 36:66-7 F '16  
 See also Wool tariff; also National sheep and wool bureau

**Regulation**

Government control of wool clinched. Am Sheep B & W 38:336-8+ My '18  
 Government regulations for handling wool clip of 1918 issued by War industries board. Am Sheep B & W 38: sup (opposite p. 328) My '18; Same cond. O Judd Farmer 64:573 Je 1 '18; Excerpt. Nat Stock & F 42:255 Je 1 '18  
 New rulings governing imports and exports. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:2603+ D 22 '17  
 Wool at the government's price. G. F. Stratton. il Country Gent 83:13+ Je 29 '18  
 Wool regulations. Nat Stock & F 42:188 My 11 '18  
 Wool regulations announced; details for plan of handling new clip completed. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:5710-11 My 25 '18

**Statistics**

Census of manufactures: 1914; Wool manufactures including wool shoddy, wool pulling, and wool scouring. C. A. Freeman. map 48p '18 U. S. Bureau of the census, Washington, D. C.  
 Number and value on farms in the United States, international trade, prices, etc. See United States Department of agriculture Yearbooks, also published as Separates  
 Preliminary statistics on Alberta's wool clip. H. D. Clum. (Commerce Reports no. 217) p 1016-17 (S 16) '18 U. S. Bur. of foreign and domestic commerce, Washington, D. C.  
 Stocks of wool, tops and noils, in pounds, on hand June 30, 1917. Nat Wool Grower 7:37-8 Ag '17  
 Summary statement of wool graded in Quebec—1917 and 1918. J Ag (Quebec) 22:26 Ag '18  
 Wool imports. Nat Wool Grower 7:60 Ag '17  
 Wool product of the United States—1916; table. Nat Wool Grower 7:24 Mr '17  
 Wool product of the United States, 1917—National association wool manufacturers. Nat Wool Grower 8:22 Ap '18  
 Wool production, 1916. Monthly Crop Rep 3: 15 F '17  
 Wool productions by states. Monthly Crop Rep 3:84 S '17  
 Wool stocks on hand. Oregon Voter (Worcester bldg., Portland, Ore. 10c) 11:285 D 1 '17  
 World's sheep and their wool with special reference to the production in Australasia. Int R Sci & Prac Ag 7,no 11:1691-8 N '16

**Terminology**

Foreign and domestic wool terms. W. T. Ritch. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53:3063+ Ja 12 '18

**Wool waste as fertilizer**

Wool waste as fertilizer. H. D. Haskins. Rural N Y 77:791 Je 15 '18  
 Wool wastes for fertilizing. Textile World (461 8th av at 34th st, N.Y. \$3 per yr.) 53: 1275 S 29 '17

**Woolboxes.** See Wool—Packing

**Woolen and worsted manufacture**

How and why of wool manufacture. W. B. Tyrrell. Am Sheep B & W 37:142-4 Mr '17  
 Impending fabric legislation ineffective. Am Sheep B & W 36:11-13 Ja '16

See also Textile industry and fabrics

**Woolly aphid**

American blight. Gard Chron (Lond) 64:122 S 21 '18  
 Elm leaf rosette and woolly aphid of the apple. E. M. Patch. il Maine Ag Exp B 256: 329-44 '16  
 Further contribution to the study of eriosoma pyricola, the woolly pear aphid. A. C. Baker and W. M. Davidson. bibliog il J Ag Research 10:65-74 Ji 9 '17  
 Getting ahead of the woolly aphid. J. K. Shaw. Green's Am Fruit Grower 38:10 Mr '18

**Woolly aphid—Continued**

Investigation on spraying for woolly aphid 1916. E. L. Childs. Better Fruit 11:27 Ja '17  
Notes on the woolly aphid. G. G. Becker. il J Econ Entom 11:245-55 Ap '18  
Pear woolly aphid. W. M. Davidson. il Cal State Comm Hort B v 6:390-6 O '17  
Spray-testing at Arataki. T. E. Rodda. J Ag New Zealand 15:23-4 Jl '17

**Woolly aphid; how to fight it.** E. S. Black. Rural N Y 77:765 Je 8 '18

Woolly pear aphid. A. C. Baker and W. M. Davidson. il J Ag Research 6:351-60 Je 5 '16

**Work**

How much work? Nat Stock & F 40:286 Je 10 '16

**Workbenches**

Building a workbench. H. A. Roberts. Country Gent 81:653 Mr 18 '16

Workbench for the amateur. il J Dept Ag Victoria 16:634-6 O '18

**Workingmen's gardens**

Garden insurance against strikes. H. S. Stabler. il Country Gent 81:1020-1 My 13 '16

Value of a small plot of ground to the laboring man. W. C. Funk. il U S Ag B 602:1-10 '18

**Workmen's compensation**

Accident prevention means lower insurance. C. Abrams. Better Fruit 11:23 Mr '17

\* Extension to agricultural workers of compulsory accident insurance in Italy. Econ World (128 Water st, N.Y. 25c) n s 16:709 N 16 '18

Loi concernant les mutilés de la guerre victimes d'accidents du travail en France. Int Yearbook Ag Leg 1916:941-2 '17

Loi n. 205 sur l'assurance contre les accidents du travail au Danemark. Int Yearbook Ag Leg 1916:925-40 '17

Loi sur l'assurance contre les accidents du travail en Suède. Int Yearbook Ag Leg 1916:944-53 '17

New bill before the chamber of deputies for compulsory insurance against accidents in agricultural labour. Int R Ag Econ 66:61-7 Je '16

Proposal for a bill to extend compulsory insurance to accidents in agricultural labor. Int R Ag Econ 61:57-71 Ja '16

Workmen's compensation law of South Dakota. Am Coop J 12:671 Je '17

See also Insurance, Accident; Insurance, State and compulsory

**Workshops**

Carving independence with tools. J: R. McMahon. il Country Gent 81:1792-3 O 7 '16

Conveniences for the farm workshop. A. M. Worden. Prog F 31:440 Mr 25 '16

Farm shop. S. F. Aaron. Country Gent 81:1042 My 13 '16

Farm shop. R. F. Kuns. Ohio F 137:159 F 5 '16

Farm shop and garage. W. E. Frudden. il Hoard's D 51:455 Ap 7 '16

Farmer's workshop. plan Prog F 32:313 Mr 10 '17

Good work shop is a farm necessity. J: L. Shawver. il Power F 25:9 N '16

Handy utility shop for the farmer. G. W. McCuen. plan Ohio F 138:65 Jl 22 '16

How Marble uses his shop. O Judd Farmer 62:13 Ja 13 '17

Old man Haynes says: I aim to fix everything just a little before it needs fixing. W. C. Smith. Farm Eng 5:5 Ap '17

Practical farm repair shop; plan and equipment. I. W. Dickerson. il Country Gent 81:201+ Ja 29 '16

Use and care of machinery in November. G. H. Alford. plans Prog F 32:1121 O 27 '17

See also Workbenches

**Worms.** See Army worms; Bagworms; Canker worms; Cutworms; Dock false-worms; Fall army worms; Fall webworms; False wire-worms; Grape berry worms; Iris worms; Lungworms; Nematodes; Parasites; Wire-worms

**Wormwood**

Practical wormwood culture. G: D. Bartlett. il Country Life 30:62 S '16

**Worn-out farms.** See Farms, Worn-out

**Worry**

Two snakes in the modern business mind. S. L. Krebs. il Am Coop J 14:124 D '18

**Worthiest man in town;** story. B. E. McGee. Nat Stock & F 40:560 Ag 26 '16

**Wounds**

Abortive treatment of wound infections. Am Vet M Assn J 49:94-9 Ap '16

Antiseptic substances in the treatment of infected wounds. H. D. Dakin. Am Vet M Assn J 49:109-11 Ap '16

Bacteriotherapy and wounds. Am Vet M Assn J 49:450-2 Jl '16

New treatment for wounds and burns. H. C. Campbell. Am Vet M Assn J 51:554-6 Jl '17

Wound infection. C: Murray. Ia Ag Coll Offic Pub v 14, no 36:241-5 '16

Wound infection and wound pathology. D. H. Udall. Ia Ag Coll Offic Pub v 14, no 36:18-24 '16

Wounds and sera. Am Vet M Assn J 49:452-3 Jl '16

**Wounds (plant)**

Further observations on the wound reactions of the petioles of *pteris aquilina*. H. S. Holden. Ann Bot 30:127-34 Ja '16

**Wrenches**

Improved wrenches. C. H. Willey. il Country Gent 83:32 Mr 2 '18

**Wrens**

House wren. E. S. Jones. il Ohio F 139:207 F 10 '17

House wren. E. Swope. il Country Life 34:106 My '18

Wrens. A. A. Allen. il Am For 23:419-23 Jl '17

**Wyandottes (poultry)**

American poultrymen are proud of our white wyandottes. J: S. Martin. Reliable P J 23:967+ D '16

Are white wyandottes entitled to first place as layers? S. C. Babbie. Reliable P J 24:520 Ag '17

Chickens vs. results. H. D. Wilson. Am P Advocate 24:208 F '16

Columbian wyandottes. W. H. Card. il Country Gent 81:1037 My 13 '16

Columbian wyandottes. J. M. Long. il Am P Advocate 24:583 Je '16

Country's largest white wyandotte farm. F. W. Hallett. Am P Advocate 25:263-4 Mr '17

Golden laced wyandotte. M. F. Uphoff. Am P J 49:373+ Mr '18

Hen for the farmer; a plea for the general purpose white wyandotte. G: D. Black. il Country Gent 83:8 My 18 '18

Highest value Columbian wyandottes. S. Strong. Reliable P J 25:259 Ap '18

Improvement in Columbian wyandottes. R. Woodward. Am P Advocate 25:267 Mr '17

Keelerville, home of Keeler white wyandottes. S. Strong. il Reliable P J 24:1187 F '18

Mating white wyandottes. Wallaces' F 43:186 F 1 '18

Partridge wyandotte. W. H. Card. il Country Gent 81:1087 My 20 '16

Partridge wyandottes—the beauty breed. J: D. Bowman. Reliable P J 23:1243 F '17

Progress being made in breeding spangled wyandottes. L. Cook. il Reliable P J 23:872+ N '16

Silver laced and white wyandottes. Wallaces' F 41:19 Ja 7 '16

Silver penciled wyandotte. il Country Gent 81:1038 My 13 '16

Silver wyandotte. H. Barlow. J Ag (Quebec) 20:190 Mr '17

Silver wyandotte. W. H. Card. il Country Gent 81:275 F 5 '16

That beefy comb. Wallaces' F 42:922 Je 15 '17

Twenty-one years with one breed. E. Warren. Am P Advocate 26:452 Je '18

What the wyandotte needs. T. F. McGrew. Country Gent 81:1846 O 14 '16

White wyandotte. Ohio F 140:618 D 29 '17



**Wyandottes (poultry)—Continued**

- White wyandotte. E. Gossett. *Nat Stock & F* 40:112 Ap 22 '16  
 White wyandotte as a farmer's fowl. J. R. Ball. *J Ag (Quebec)* 20:242 Je '17  
 Wyandotte. T. F. McGrew. *il Am P Advocate* 24:93-6 Ja '16  
 Wyandotte, the bird of curves. C. F. Cusick. *Am P J* 48:712 Je '17  
 Wyandottes; no breed has more real merit. T. F. McGrew. *Am P Advocate* 26:395-6 My '18  
 Wyandottes—the economical breed. F. S. Jacoby and A. Bayes. *Ohio F* 138:190 Ag 26 '16

**Wyoming**

*See also* subhead Wyoming under special subjects, e.g. Agriculture—Wyoming, Dairying—Wyoming

**Dairy, food and oil department**

- 13th annual report of the dairy, food and oil commissioner; report of the state agronomist; a few words on food conservation; bulletin of analyses. (v. 2 no. 8) 61p '17 Wyo. Dairy, food and oil dept., Cheyenne  
 Includes list of food products examined

**Description and travel**

- Life zone investigation in Wyoming. M. Cary. *il map U S Ag No Am Fauna* 42:1-95 '17  
 Sheep and oil; Wyoming and its sheep ranges. W. C. Barnes. *il Am Sheep B & W* 38:642-3 O '18

**Sheep commissioners, Board of**

- 18th annual report, 1916. 28p '16 Wyo. Bd. of sheep comrs., Cheyenne

**Wyoming agricultural experiment station**

- 26th annual report 1915-1916. Wyo Ag Exp Rep 1916:64-98 n.d.  
 27th annual report, 1916-1917. Wyo Ag Exp Rep 1917:129-77 '17

**Wyoming state fair**

- 12th Wyoming state fair at Douglas. Breeder's Gaz 70:607 O 5 '16

**Wyoming university**

**College of agriculture**

- College in the Rockies; views. *Country Gent* 81:1405 Jl 22 '16

**Wyoming wool growers' association**

- 12th annual convention, Caspar, Wyo., Feb. 23-24, 1916. *Am Sheep B & W* 36:138-9 Mr '16  
 13th annual convention, Thermopolis, Jan. 15-17, 1917. *Nat Wool Grower* 7:43+ F '17

**X**

**Xanthium**

- Interesting modification in xanthium. C. A. Shull. *il Am J Bot* 4:40-3 Ja '17

**X-rays**

- Effect of Roentgen and ultraviolet rays upon fungi. H. L. Trumbull and J. W. Hotson. *il Phyt* 7:426-31 D '17  
 Effect of Röntgen rays on the tobacco, or cigarette, beetle. G. A. Runner. *J Ag Research* 6:383-8 Je 12 '16  
 Further studies in X-ray diagnosis in veterinary medicine. L. Griessman. *il Am Vet M Assn J* 49:830-5 S '16

**Xylaria rootrot. See Apple black rootrot**

**Xylometers**

- Practical xylometer. J. S. Illick. *il J For* 15: 859-63 N '17

**Xylose**

- \* Preparation of several useful substances from corn cobs. F. B. LaForge and C. S. Hudson. *J Industrial & Eng Chemistry (Am. Chemical Soc., Easton, Pa. 60c)* 10: 925-7 N '18

- \* Preparation of xylose from corn cobs. C. S. Hudson and T. S. Harding. *Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.)* 40:1601-2 O '18

**Y**

**Yachts and yachting**

- At home on a motor cruiser. A. F. Loomis. *il plan Country Life* 30:19-21 Ag '16  
 Mandolin yacht for inland waters. R. F. Frazer. *il Country Life* 29:22 Ap '16  
 They're in the navy now; yachting has gone to war in earnest. L. Perry. *il Country Life* 34:33-8 Ag '18  
 Waterman's manual. L. Perry. *il Country Life* 32:19-32 Jl '17  
 Yachting in southern California. P. Jeffers. *il Country Life* 32:76 O '17

**Yards, Poultry. See Poultry yards**

**Yarn**

- What is your yarn costing? *il Nat Wool Grower* 8:21 F '18

**Yawning**

- Apology for yawning. *il J Heredity* 7:447-9 O '16

**Yearbook of agricultural legislation, International. See International yearbook of agricultural legislation**

**Yeast**

- Contribution to the study of alcoholic ferments. E. Kayser. *Int R Sci & Prac Ag* 9,no 2:238-9 F '18  
 Detection of methyl alcohol in alcoholic beverages and its formation by the several kinds of yeasts. T. Takahashi and others. *Am Chemical Soc J (Box 505, Washington, D.C. \$6 per yr.)* 39:2723-6 D '17  
 New yeast preparation for use in the estimation of crystallizable sugar by inversion. H. Pellet. *Int R Sci & Prac Ag* 7,no 4:592 Ap '16  
 Vitamine content of brewers' yeast. A. Seidell. *Int R Sci & Prac Ag* 9,no 5:539 My '18  
*See also* Feeding and feeding stuffs—Yeast; Wine yeast

**Yellow-barred grass moth. See Grass moths**

**Yellow box gum. See Eucalyptus**

**Yellow-breasted chats**

- Yellow-breasted chat. E. S. Jones. *Ohio F* 129:622 Ap 28 '17

**Yellow currant and gooseberry fruit flies. See Fruit flies**

**Yellow-necked apple caterpillars**

- Two destructive fall caterpillars. J. S. Houser. *il Ohio Ag Exp B v* 1:300-3 O '16

**Yellow pine, Western. See Pine**

**Yellow poplar. See Tulip poplar**

**Yellow rocket**

- Yellow rocket (a dangerous weed). E. A. Bessey. *Mich Ag Exp Spec B* 80:1-4 '17; Same. *Mich Ag Bd Rep* 1917:482-4

**Yellow star thistles**

- Valuable pest—to beemen. C. D. Stuart. *il Am Bee J* 58:340 O '18  
 Yellow star thistle. O. W. Newman. *il Cal State Comm Hort B v* 6:27-9 Ja '17

**Yellowhammer woodpecker. See Flickers**

**Yellowstone national park**

- \* General information regarding Yellowstone national park. 84p bibliog maps '18 U.S. Nat. park service, Washington, D.C.  
 Yellowstone national park. M. Daniels. *il Am For* 22:458-63 Ag '16

**Yew**

- Canadian yew as a ground cover under trees. A. S. Warthin. *il Gard M* 24:10 Ag '16  
 English yew painted at tomb of Washington. *Gard Chron Am* 21:209 My '17  
 Gametophytes of *taxus canadensis* Marsh. A. W. Dupler. *bibliog il Bot Gaz* 64:115-36 Ag '17

**Yew—Continued**

Miscellaneous conifers of the Rocky Mountain region; family relationships of yew trees. G: B. Sudworth. *il U S Ag B* 680:39-44 '18

Yews. L. Barron. *il Country Life* 31:52 D '16

**Yogurt**

Fermented milks. L. A. Rogers. *bibliog U S Ag B* 319:20-4 '16

**Yorkshires**

Why I raise Yorkshires. B. A. Mackinnon. *Field* 11 28:421 Je '18

**Yosemite national park**

Yosemite national park. M. Daniels. *il Am For* 22:345-52 Je '16

**Young, Brigham, 1801-1877**

Brigham Young, an illustration of prepotency. *por J Heredity* 7:51-4 F '16

**Young men**

Rural church and the young man. S. Coulter. *Rural Manhood* 8:56-9 F '17; Same cond. *Purdue Ag* 10:14-15 My '16

**Young men's Christian association**

Advances on new territory continue. H. Israel. *maps Rural Manhood* 9:106-8 Mr '18

Advances to win war and the world. J: R. Mott. *Rural Manhood* 9:138-9 Ap '18

American farmers' interest in army Y. M. C. A. Jersey B 36:1786 N 14 '17

Arms around the world. J: T. Nichols. *il Wallaces' F* 42:1487 N 2 '17

Army Y. M. C. A. *il Wallaces' F* 42:811 My '18 '17

Boys in camp. Wallaces' F 42:941 Je 22 '17

Boys' work in the counties this fall. L. K. Hall. *Rural Manhood* 9:297-8 S '18

Brief which a judge filed. *Rural Manhood* 9:307-11 S '18

Clearing county finances successfully. J. H. Brown. *Rural Manhood* 9:99 Mr '18

County association nine years old. G. G. Cross. *Rural Manhood* 9:199 My '18

County and the rural Y.M.C.A. secretary. J. M. Horner. *il Penn State F* 9:339-40 Mr '16

County boys' conference time. E. J. Arnot. *Rural Manhood* 8:350-2 O '17

County conferences on life work; the purpose, plan and program. R. P. Anderson. *Rural Manhood* 9:53-4 F '18

County confidence and sound finance. H. F. Smith. *Rural Manhood* 8:64-6 F '17

County secretary's office system. A. C. Roberts. *Rural Manhood* 9:195-8 My '18

County work and the fellowship plan. C. K. Ober. *Rural Manhood* 7:96-7 Jl '16

County work on paper. *Rural Manhood* 7:144-6 O '16

County work promotion and principles. *Rural Manhood* 9:284-8 S '18

Day at camp. C: A. Gammons. *Rural Manhood* 7:130-3 O '16

Farmersville building enterprise. D. A. Petry. *il Rural Manhood* 8:296-8 S '17

Field study of eastern county work. H: Israel. *Rural Manhood* 8:359-61 O '17

Great country work drive. H: Israel. *map Rural Manhood* 8:204-7 My '17

Helping to keep up the back lines. C. K. Matson. *il Rural Manhood* 9:189-90 My '18

History of county work. E. J. Arnot. *Rural Manhood* 9:15-17, 50-2 Ja-F '18 (to be cont)

Interview with Mr Everyman. C: A. Gammons. *Rural Manhood* 7:33-5 Ja '16

Iowa's rural Y.M.C.A. work. *il Wallaces' F* 41:759+ My 19 '16

Khaki university. G: C. Creelman. *Ag Gaz of Canada* 5:1126-7 D '18

Link between the soldier and home. W: H. Crawford. *Better Fruit* 13:8 O '18

Making a better community; Oakdale, Tenn. J. D. Burton. *Prog F* 31:1469 D 23 '16

Ninety per cent of a community at work within nine weeks. E. L. Saxton. *Rural Manhood* 7:52-3 Ap '16

On the offensive in county work. H: Israel. *Rural Manhood* 8:302-5 S '17

Organizing men's community groups. B. B. Johnson. *Rural Manhood* 8:255-7 Je '17

Personal life of the employed officer—the development of his physical life. *Rural Manhood* 7:100-5 Jl '16

Publicity that made money grow. R. A. Donnan. *il Rural Manhood* 8:16-18 Ja '17

Raises hogs and builds boy character. *Rural Manhood* 9:100-1 Mr '18

Reaching the lonely ones. Wallaces' F 42:1596 N 23 '17

Red triangle helps men win war. *Rural Manhood* 8:407-11 N '17

Religious work activities as embodied in the county work program. E. T. Judd. *Rural Manhood* 9:15-17, 50-2, 93-5 Ja-Mr '18

Running a county on \$1,500.00. W. A. Terpenning. *Rural Manhood* 7:139-41 O '16

Rural service army dynamics. H: B. Wright. *Rural Manhood* 8:235-7 Je '17

Rural Y. M. C. A. C. McGuire. *il Purdue Ag* 11:12-14 Je '17

Some phases of the financial campaign. J. H. Brown. *Rural Manhood* 7:134-6 O '16

Some rear trench work. E. J. Arnot. *Rural Manhood* 9:289-90 S '18

Strategy of a great rural democracy. *Rural Manhood* 8:28-31 Ja '17

39th international convention. *Rural Manhood* 7:87-90 Jl '16

Three great standardization conferences. *Rural Manhood* 9:299-303 S '18

Untouched opportunity; percentage of foreign population in the states. P: Roberts. *Rural Manhood* 7:43-7 Ap '16

Values in county work. W. J. Campbell. *Rural Manhood* 9:135-7, 211-13, 259-61 Ap-Je '18

War greatly stimulates county work. *Rural Manhood* 9:29-30 Ja '18

What I told some business men about county work. R. C. Shoemaker. *Rural Manhood* 9:267-9 Je '18

What Mr County committeeman and Mr County secretary should be and do. *Rural Manhood* 8:362-3 O '17

What the army Y. M. C. A. is doing. *Power F* 26:40 D '17

Why of the Y. *il Am For* 24:591-2 O '18

Why the strongest men are needed in the country. K. L. Butterfield. *Rural Manhood* 7:98-100 Jl '16

With the Y.M.C.A. at the front. Mrs W. Ames. *il Power F* 27:47 O '18

Y.M.C.A. after the war. A. K. Yapp. *Rural Manhood* 9:183-5 My '18

Y.M.C.A. in France. Wallaces' F 43:1562 O 25 '18

See also Father and son week

**War service**

Cantonment a social laboratory. *Rural Manhood* 9:203-4 My '18

County work and a big cantonment. G. C. Hendry. *Rural Manhood* 9:73-4 F '18

In service at an army cantonment with the Y.M.C.A. H. H. Smith. *Rural Manhood* 9:157-9 Ap '18

Making the army camp homelike. *Prac F* 114:191 My 15 '18

With our boys among French villages. *Rural Manhood* 9:143-4 Ap '18

With the Y.M.C.A. in France. Wallaces' F 43:613 Ap 5 '18

Y.M.C.A. at the front. Wallaces' F 43:718 Ap 26 '18

Y. M. C. A. in France. Wallaces' F 43:13 Ja 4 '18

Young moose hunters. C. A. Stephens. See weekly numbers of Ohio farmer beginning May 11, 1918

**Young women's Christian association**

Busy big county makes farm life really attractive to its boys and girls. A. M. Loomis. *il Country Gent* 81:671 Mr 18 '16

Conserving woman power in war time. M. A. Hopkins. *J Home Econ* 10:171-3 Ap '18

County girls in the Y. W. C. A. *il Literary Digest* (354 4th av., N.Y. 10c) 54:130-1 Ja 20 '17

County girls organize. A. M. Clark. *il Country Gent* 81:489 F 26 '16

Hostesses' houses at camps. R. H. Moulton. *il Ohio F* 142:466 N 9 '18



**Young women's Christian association—Cont.**  
 War work program. N. M. Campbell. Rural  
 Manhood 8:384-5 N '17  
 Y. W. C. A.'s country girl. E. Bennett. il  
 Wallaces' F 43:1034 J1 12 '18  
**Yucca.** See Feeding and feeding stuffs—Yucca

## Z

**Zacaton**  
 New paper-making plant. Rural N Y 75:85 Ja  
 15 '16  
 Zacaton as a paper-making material. Int R  
 Sci & Prac Ag 7,no 1:142 Ja '16  
 Zacaton as a paper-making material. C. J.  
 Brand and J. L. Merrill. il U S Ag B 309:  
 1-27 '15; Abstract. Int R Sci & Prac Ag 7,  
 no 1:142 Ja '16  
**Zamang.** See Saman  
**Zebra caterpillars**  
 Notes on two unusual garden pests in Nova  
 Scotia. W. H. Brittain. (In Report, Entom.  
 Soc. of Ontario, 1917, p. 96-9) il '18 Ontario  
 ag. dept., Toronto  
**Zebus**  
 Breed immune. J. C. Knollin. il Country Gent  
 81:1105 My 27 '16  
 Breeding zebu hybrids. il O Judd Farmer 60:  
 10 Mr 25 '16  
**Zeiller, Charles René, 1847-1915**  
 Appreciation. E. C. Jeffrey. por Bot Gaz 61:  
 528-9 Je '16  
**Zeuzera pyrina.** See Leopard moths  
**Zimmerman pine moths.** See Pine moths  
**Zinc arsenite**  
 Analysis  
 Report on zinc arsenite. R. C. Roark. Assn  
 Offic Ag Chem J 3:174-8 My '17  
**Zion canyon**  
 Zion canyon—masterpiece among Utah's  
 scenic wonders. M. A. Byrne. il Irr Age 33:  
 137-42 J1 '18

**Zion hill; story.** E. Singmaster. il Country Gent  
 82:2012-13 D 22 '17  
**Zionism**  
 Co-operative colonization in Palestine; Zion-  
 ist movement. Int R Ag Econ 70:83-7 O '16  
**Zoocecidia.** See Galls (botany)  
**Zoologists.** See Entomologists  
**Zoology**  
 Anomalies in the animal world. R. W. Shu-  
 feldt. il Scientific Am Sup (233 Broadway,  
 N.Y. 10c) 83:84-7, 248-50, 333-4; 84:100-2,  
 325-6; 85:4-5, 68-9, 168-70, 245-6 F 10, Ap  
 21, My 26, Ag 18, N 24 '17, Ja 5, F 2, Mr 16,  
 Ap 20 '18  
 Value of zoology to humanity; significance of  
 studies on animal parasites. H. B. Ward.  
 Science (Science Press, Garrison, N.Y. 15c)  
 n s 47:302-6 Mr 29 '18  
 See also Animals; Biology; Birds; Color of  
 animals; Embryology; Evolution; Heredity;  
 Individuality (physiological); Insects; Men-  
 delism; Parasites; also headings beginning  
 Animal, and names of animals and classes  
 of animals  
**Ecology**  
 Ethology of the fauna in beech forest. For  
 Quar 14:112-14 Mr '16  
**Zoology, Economic**  
 Useful pests. F. E. Mashburn. il Illustrated  
 World (Drexel av. and 58th st., Chicago 15c)  
 26:906-9 F '17  
 See also Animals, Predatory; Birds, Injuri-  
 ous and beneficial; Insects, Injurious and  
 beneficial  
**Zootechnology.** See Breeding  
**Zurich, Switzerland**  
 Consumverein shop (and the lady). E. H.  
 Wilson. J Home Econ 9:521-2 N '17  
**Zygademus.** See Death camas  
**Zygnema**  
 Morphology and ecology of an extreme terres-  
 trial form of zygnema ericetorum. F. E.  
 Fritsch. bibliog Ann Bot 30:135-49 Ja '16  
 Starch formation in zygnema. H. Bourquin.  
 Bot Gaz 64:426-34 N '17  
**Zymotic diseases.** See Infectious diseases







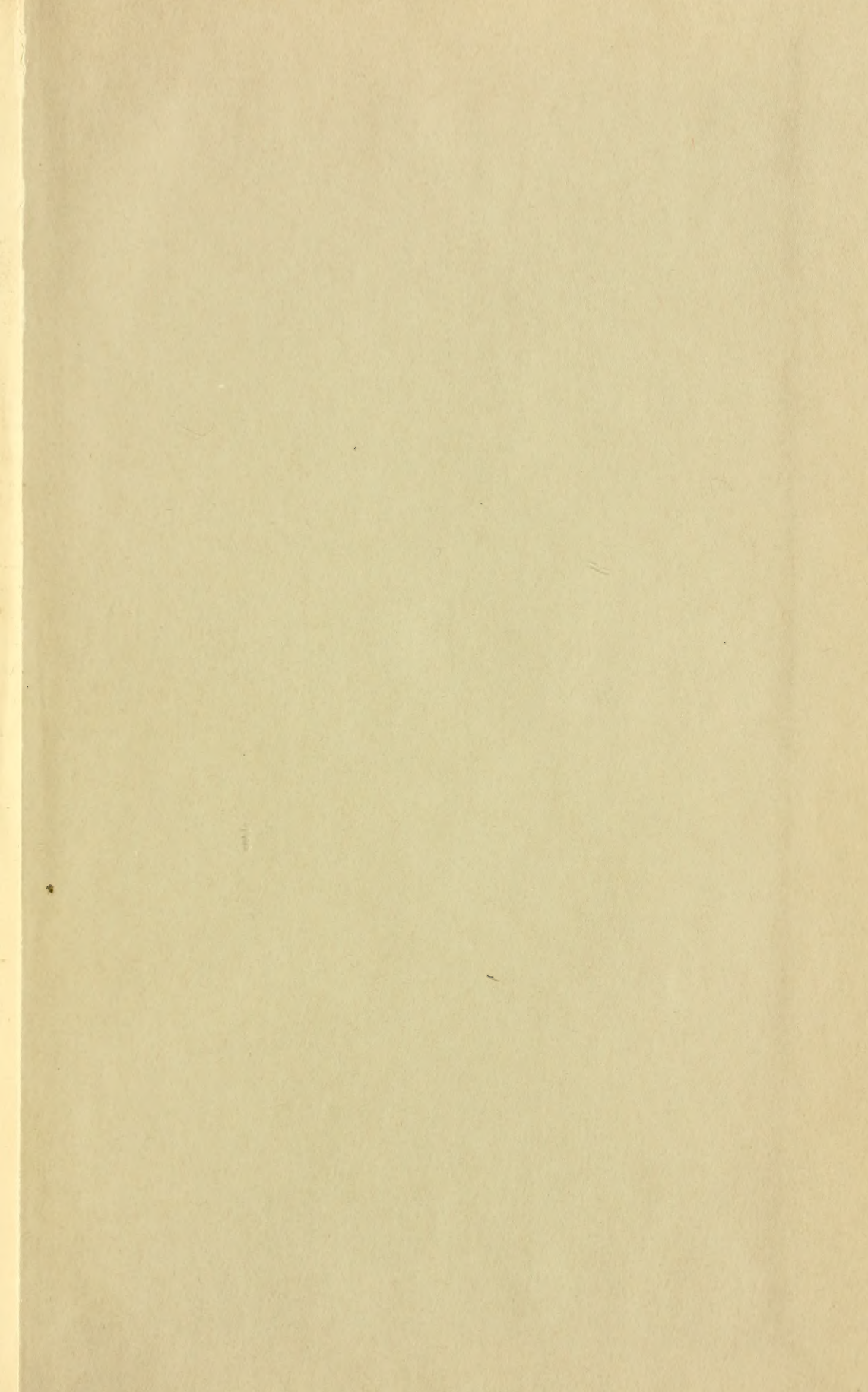












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